

8th ENTRE 2016 Conference Proceedings

Advancing Research in Entrepreneurship in the Global Context

edited by
Krzysztof Wach
Agnieszka Żur



CRACOW UNIVERSITY OF ECONOMICS
Faculty of Economics and International Relations
Centre for Strategic and International Entrepreneurship



Advancing Research in Entrepreneurship in the Global Context

**Conference Proceedings
of the 8th ENTRE Conference
which took place in Kraków on April 7-8, 2016**

edited by
Krzysztof Wach and Agnieszka Żur

Kraków 2016

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**Centre for Strategic and International Entrepreneurship
& Department of Entrepreneurship and Innovation**

Faculty of Economics and International Relations
Cracow University of Economics
(Krakow, Poland)

8th International Scientific Conference ENTRE 2016

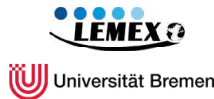
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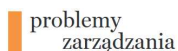
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Garry D. Bruton is a Professor of Management in the Neeley School of Business at Texas Christian University. He is associate editor at the *Strategic Entrepreneurship Journal*. In addition, he serves on the editorial board of several other academic journals. Garry Bruton is a former general editor at *Journal of Management Studies*, former president of the Asia Academy of Management and former editor of *the Academy of Management Perspectives*. He has published over 100 academic articles in leading journals such as *the Academy of Management Journal*, *Academy of Management Review*, *Strategic Management Journal*, *Journal of Business Venturing*, *Journal of International Business Studies*, *Journal of Management Studies*, and *Entrepreneurship Theory & Practice*.



Prof. Jonathan Levie, PhD

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Jonathan Levie is a Professor at the Hunter Centre for Entrepreneurship at the University of Strathclyde, where he is Director of Knowledge Exchange. Professor Levie was Associate Coordinator of GEM in its founding year and has served as an elected member of the board of the Global Entrepreneurship Research Association (GERA). He is also a co-investigator at the UK's Enterprise Research Centre. Professor Levie is currently a member of an EC DG Employment expert panel on entrepreneurship and social exclusion and an EC DG Education and Culture expert panel on data and indicators on entrepreneurial learning. His most recent articles have appeared in *Journal of Management Studies*, *Research Policy*, *Entrepreneurship Theory & Practice*, *Small Business Economics* and *Family Business Review*, among others.



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Welcome Letter

Dear ENTRE 2016 Participants,

Welcome to Cracow for the 8th International Scientific ENTRE Conference 2016 “Advancing Research in Entrepreneurship in the Global Context”!

Entrepreneurship is a wondrous human activity, expression of our creativity and basic fuel of our development. The overarching aim of ENTRE conferences has been to promote and advance research on entrepreneurship through meeting, research dissemination and cooperation of academics from different parts of the world. We believe we all have much to share and much to learn from each other. We hope this ENTRE conference will once again foster inspiring exchange between researchers and result in enhanced collaboration between our guests.

During the first day we start with an excellent keynote address delivered by esteemed professors from very different backgrounds and different parts of the world. The conference working sessions embrace and illustrate the many faces of entrepreneurship. We are certain that you will find many occasions to engage in lively discussions during our various working sessions during these two days. After a long conference day on Thursday, we cordially invite you to a time of integration and fine dining in Cracow Old Town.

During day two of the conference we have the pleasure to invite all PhD students to a special session designed especially for them where they will have a unique chance to learn from the best and discuss issues related to their dissertation with our keynote speakers. In the afternoon, after working sessions, we have planned a city tour for our guests. We want to share with you the many wonders of our city and hope you will discover and experience its unique atmosphere.

We want to thank all those who contributed to this event including the organizing committee team, volunteers, authors and our invaluable reviewers.

We wish you a fruitful and beneficiary stay in Cracow, a fascinating city where history and tradition meet with innovation and modern life style. We trust the 8th International Scientific ENTRE Conference will bring long lasting research insights, numerous opportunities for network and academic collaborations and, last but not least, many lasting memories to take home.

Krzysztof Wach
Agnieszka Żur

Kraków, April 2016



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The Most Influential Factors in Venture Capitals' exit Decision: A Qualitative Study Among Spanish Venture Capitalists

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Abstract

The objective of this research is to determine and draw the attention of venture capitals toward the most important factors that they should consider for making a proper exit decision. A list of suggested influential factors in venture capitals' exit decision was extracted from the literature. The list is refined and developed by the Delphi method through three rounds of Delphi with a Delphi group composed of 15 Spanish venture capitalists. A list of the 14 most influential factors in an exit decision is developed and is divided into four categories (venture capitals, investees, entrepreneurs and external environment). Some of the factors have been neglected in previous studies and some seldom have been studied. It is recommended that venture capitals consider a combination of the suggested factors to make an exit decision. Also when making the exit decision, venture capitals should not only pay attention to the factors regarding themselves and the investee, but also they should consider the factors regarding the entrepreneurs and external environment. The research brings together different factors in venture capitals' exit decision from different categories, refines and develops them, and produces a precise and actionable list of the most important ones.

Keywords: venture capital; divestment; exit decision; Delphi method; Spain

JEL codes: G24, G32, G33

INTRODUCTION

The investment process of venture capitals is divided into three general steps, pre-investment, post-investment and exit (De Clercq et al., 2006). Getting out of an investment is the natural end to any venture capital deal and finally a day would come that the venture capital would decide to divest and exit the deal (Zider, 1998) by selling its shares in it, partially or fully (Cumming & MacIntosh, 2003a).

According to Wall and Smith (1997) more than 70% of venture capitals have difficulty in determining the proper time of their exit from a deal; and this problem still keeps on straining venture capitals (Hege et al., 2009; Oehler et al., 2007; Cumming & MacIntosh, 2003b).

The main question of this research is: 'What are the most important factors which influence a venture capital's exit decision?' The main objective of this research is to determine and draw the attention of venture capitals toward the most important factors that they should consider for making a proper exit decision.

This research is a qualitative and applied one. It is done based on literature review and by using the Delphi method with a panel consisting of 15 Spanish venture capitalists.

In this article, first, the literature on venture capitals' exit decision is reviewed. During the review the factors which are considered influential in venture capitals' exit decision are highlighted. After that, the research method (the Delphi method) is first introduced briefly and then how it is used for conducting this research is described. Later on, the results are reported and commented on and finally conclusions are drawn and future research opportunities are suggested.

LITERATURE REVIEW

First of all, there are two jargons which their difference needs to be clarified to prevent any misunderstanding and mix-up before moving forward. It is important to have in mind that an entrepreneur is a person who comes with a business idea. An 'investee' is a legal entity (usually in form of a company) which has been started by one or more entrepreneurs to convert a business idea into a business, and has been invested in by others such as venture capitals.

Venture capitals are one of the most important financial sources for micro-enterprises and SMEs. Venture capitals invest in those types of companies not in the hope of an instantaneous gain, but hoping that those companies would grow and consequently their investment value would grow. For this reason, venture capitals prefer to invest in companies with fast growth potential (Kaliski, 2006).

A venture capital enters a deal in hope of great return on its investment, usually 10 to 20 times of its investment; but the venture capital would be still satisfied with 3 to 5 times of it. Anything under that would be considered as a 'sideways deal' which means a low quality and an inferior deal (Berkery, 2007, p. 70). But in any case, whether the investee succeeds to achieve its promise or fails to do so; at some point, the venture capital have to divest and collect its profit or accept its loss. This process of divestment is called 'exit' (Félix et al., 2014; Nadeau, 2011; Bienz & Walz, 2010; Gladstone & Gladstone, 2004, p. 9; Zider, 1998).

Cumming (2008) says a venture capital faces many challenges while going through the exit step. For example, there usually would be disputes and confrontations between

the entrepreneurs and the venture capital in evaluating the investee's value when the time of exit comes. Also, severe information asymmetry against the venture capital, would negatively affect its ability to exit a deal; it especially makes it hard to exit the deal by an IPO (Amit et al., 1998) – which is the preferred type of exit for a venture capital in terms of return on investment (Gompers, 1995).

Scholars have identified and studied different factors which affect venture capitals' exit decision. Berkery (2007, pp. 178–211) mentions five major factors which influence the exit decision of a venture capital:

- possibilities of different exit options such as IPO, stock buyback, merger and acquisition;
- the investee's life cycle stage such as seed stage, early stage, formative stage, later stage, balanced stage;
- other investment opportunities that the venture capital is facing, such as access to better deals or lack of that;
- dividends of the venture capital's current shares in the investee;
- the venture capital's strategic decision to reduce its shares in the investee.

Puri and Zarutskie (2012) show that an 'investee's life cycle stage' is a significant factor in the investee's value; hence, it plays a major role in a venture capital's exit decision. Also, when an innovative company is small and near its beginning; it is less valuable than when it matures and commercializes its innovative ideas (Chemmanur et al., 2014). As the investee grows, although it gets more valuable but also its capital needs grows too; hence, the venture capital faces several options; it could continue and invest more or invites other venture capitals for a syndicated investment or exits.

Hawkey (2002, pp. 3–52) provides eight factors which have an impact on a venture capital's exit decision, which are:

- The 'why': the reason that the venture capital is seeking to exit the deal. This factor in Hawkey's opinion is also the most important factor and would consequently determine when and how to exit the deal. For example, the venture capital could be facing another more lucrative deal and be in need of cash to invest in that, or the investee is not growing according to the expectations and the venture capital prefers to cash in on its investment as soon as possible or the venture capital could be in conflict with the entrepreneurs.
- Value: does the chosen exit option maximise the venture capital's return on investment?
- Control: how much control does the venture capital has over the chosen exit's transaction? And furthermore, does the venture capital still want to keep some degree of control over the investee after the exit?
- Risk: how risky is the chosen exit's transaction?
- Financial expectations: how much does the chosen exit option fulfil the venture capital's expected financial gain?
- Gratification and satisfaction: how much does the chosen exit option satisfy the venture capital's non-financial expectations such as reputational incentives?
- Payment certainty: The probability that the venture capital be fully paid based on what is agreed upon with the buyer(s).
- Deal flexibility: How much flexibility the chosen exit would provide for the venture capital such as suitable payment terms and possibility of future involvement in the investee.

Kuratko and Hornsby (2009, p. 220) consider 'continuous assessment of an investee's performance and financial status' to be a key factor in a venture capital's exit decision. They also suggest that venture capitals should prevent reaching an emergency situation by periodically calculating 'Altman Z-Score' (Altman, 1968) to monitor possibility of bankruptcy in near future; in order to take the proper exit measures before an exigency happens.

Fried and Ganor (2006) examine the relationship between use of 'venture capitals' preferred stock and control rights' and their exit decision. They found out that venture capitals are practical and opt toward an exit option which maximises their financial gains; and that is not necessarily the option which has the best consequences for the entrepreneurs. On the other hand, the exit process and its consequences have more importance for entrepreneurs. Thus, in case venture capitals have preferred stock and control rights, they tend to use them for taking an exit decision which leans toward their preferred exit option.

Also, the role of 'contractual control rights' is important in venture capitals' decision to exit. Those rights come from the contract between a venture capital and entrepreneurs which is the legal basis of the deal. The amount of control that a deal bestows to a venture capital over entrepreneurs eventually affects the venture capital's exit decision (Cumming, 2008; Smith, 2005; Bascha & Walz, 2001; Hellmann, 1998).

Existence of a 'call or put agreement' in a deal between a venture capital and entrepreneurs is another factor in the venture capital's exit decision (Gladstone & Gladstone, 2004, pp. 286–289; Black & Gilson, 1998). A 'call agreement' is an agreement which obliges the venture capital to offer a pre-determined quantity of its shares to the entrepreneurs based on a pre-agreed timetable and pricing formula. However, the entrepreneurs are not obligated to execute their option, which in this case, the venture capital could keep the shares or offer them to other parties.

On the other hand, a 'put agreement' is an agreement which obliges the entrepreneurs to buy a pre-determined quantity of the venture capital's shares based on a pre-agreed timetable and pricing formula. However, the venture capital is not obligated to execute its option, which means the venture capital could keep the shares.

Wang and Zhou (2004) show an increase in the 'number of stages that a venture capital invested in an investee' reduces the risk of a bad exit. Besides, another factor in a venture capital's exit decision and choosing a proper exit option is the 'investee's age' (Giot & Schwienbacher, 2007).

'Entrepreneur's satisfaction' is another factor which influences the performance of an investee and consequently affects the venture capital's exit decision (Wijbenga et al., 2007; Zahra, 1996).

Other factors which affect a venture capital's exit decision are:

- NPV (Net Present Value) of the investee and its deviation from the venture capital's previous projections and current expectation (Neus & Walz, 2005; Cumming & MacIntosh, 2001; Gompers & Lerner, 2001; McGrath, 1999; Gompers, 1995);
- the ability of the buyer(s) to help the investee's growth and development in the future and by that maintaining a positive image of the venture capital and adding to its credibility (Bayar & Chemmanur, 2012);

- the venture capital's social capital, network ties and especially its relationship with financial markets' players (Lungeanu & Zajac, 2015; Ozmel, Robinson, & Stuart, 2013; Hallen & Eisenhardt, 2012; Hochberg et al., 2007);
- the buyback ability of the entrepreneurs (Cumming & Johan, 2008; Cumming et al., 2005);
- the venture capital's experience (Giot & Schwienbacher, 2007; Cumming et al., 2006).

As it is obvious different authors have focused on different factors that affect a venture capitals' exit decision. What is missing in the literature is a study which first of all gathers all those factors in one place, and secondly, specifies the most influential one so it could be of practical use for the industry. This study aims to fill this gap.

The influential factors on venture capitals' exit decision which are scattered through the literature and are identified above are used to form a raw list which this research aims to refine and develops it into a multi-dimensional and clear-cut list of the most influential factors on venture capitals' exit decision.

MATERIAL AND METHODS

To answer the main question of this research – which is: What are the most important factors which influence a venture capital's exit decision? – and also to probe how theoretical and practical influential factors on a venture capital's exit decision relate to each other, a qualitative method that is called "The Delphi Method" was employed.

The Delphi method is based on collecting and converging the views of a group of experts in the study's subject (The Delphi Group) which is led and handled by a coordinator. The aim is to reach a consensus among the experts over the subject.

Consensus is achieved by going through a systematic process. The process starts with defining the problem by the coordinator and guiding the Delphi group's discussion, and continues by receiving the comments and views of the Delphi group members. The discussion is summarized by the coordinator.

Afterwards, the synopsis of the discussion and the comments is fed back to the Delphi group by the coordinator. This procedure of discussion, summarizing and feeding back is called a "Round of Delphi". The rounds of Delphi usually continue until there is a consensus among at least two-thirds of the Delphi group members on the subject at hand.

It should be mentioned that the quality of the Delphi method directly depends on the quality of the assembled Delphi group. Also, it is recommended to have at least 15 members in the Delphi group and with larger groups it gives better results (Hsu & Sandford, 2007; Linstone & Turoff, 1975; Dalkey, 1969). There are several weaknesses associated with the Delphi method such as being time consuming and possibility of getting more general answers than specific ones (Hsu & Sandford, 2007).

For this study, primarily a group consisting of three high-ranking Spanish venture capitalists were formed (High-ranking means that they were head of a venture capital firm or a senior manager in one). Then, they each were asked to introduce four more expert venture capitalists; and by adding those experts, the Delphi group with 15 members was formed. The researcher took the role of the coordinator.

First, the coordinator – based on the literature – made a list of influential factors in a venture capital's exit decision. The coordinator then briefed the Delphi group on the research's objective and main question; and then, they were asked to comment

on the factors list. By applying the comments and suggestions, a primary list of factors were formed to start the rounds of Delphi with.

During each round of Delphi, first, the experts discussed the factors list and then graded them by assigning a mark (0 to 100) to each one of the factors. Also, they could suggest corrections or new factors. Those suggestions would be put to vote and the chosen ones would be applied to the list for the next round.

RESULTS AND DISCUSSION

The finishing criterion of the rounds of Delphi was set to reach to a minimum of two-third consensus among the Delphi group members and absence of new suggestions; which by the end of the third round both conditions were achieved. A final list of 14 factors was agreed upon with a 73.1% average mark and also valuable commentary on them was accumulated during the rounds of Delphi. Table 1 summarizes those three rounds of Delphi.

Table 1. Statistics of the rounds of Delphi on influential factors in a venture capital's exit decision

Indicator	First Round	Second Round	Third Round
Number of suggested addition / correction to apply for the next round	5	2	0
Final number of factors	7	12	14
Average mark	41.3	62.6	73.1
Changes in the average mark	-	+21.3	+10.5

Source: own study.

The final list of the 14 most influential factors in a venture capital's exit decision has been furthered distributed in four key categories which demonstrate different dimensions of the exit decision (Table 2).

The first noticeable point in the results is that venture capitals have detailed factors when it comes to making an exit decision. It is in the contrast with major part of the factors that are mentioned in the literature which are mostly pointing toward general factors. The results are not contradictory with the factors offered by the literature, but they are finer, more detailed and practical while the factors mentioned in the literature are general, conceptual and in some cases vague.

As it is shown in table 2, there are five factors regarding investees. It is important to consider that those do not solely depend on the entrepreneurs or the venture capitals, but they are the result of the cooperation between the entrepreneurs and all the venture capitals and other stakeholders involved with the investee.

An interesting result – which is not discussed in any previous study – is that a venture capital updates the initial investee's business plan based on the current realities of the investee and external environment, and takes this updated version of the business plan into consideration for making an exit decision.

Also, it should be taken into account that a venture capital's quantitative and qualitative performance criteria depends on many elements especially the source of its funds.

Venture capitals that have more access to governmental funds have different criteria than the ones who have limited or no access to such funds.

Table 2. Final list of the 14 most influential factors in a venture capital's exit decision

Factors' Category	Factors List
Factors regarding investees	<ul style="list-style-type: none"> - NPV (Net Present Value) of the investee and its deviation from the venture capital's previous projections and current expectation (mark: 87), - the investee's life cycle stage and if it is passed its fast-growth stage (mark: 84), - comparison of the investee's performance with its updated business plan (mark: 72), - comparison of the investee's performance with the venture capital's quantitative and qualitative performance criteria (mark: 69), - assessment of the investee's financial status and its Altman Z-Score (mark: 68).
Factors regarding venture capitals	<ul style="list-style-type: none"> - attractiveness of the venture capital's alternative investment opportunities in comparison with keeping the current investment (mark: 79), - the venture capital's access to financial resources and its cache requirements (mark: 74), - the venture capital's contractual control rights and existence of a put agreement (mark: 70), - availability of buyers who are interested in the investee (mark: 68).
Factors regarding entrepreneurs	<ul style="list-style-type: none"> - the buyback ability of the entrepreneurs and existence of a call agreement (mark: 75), - the entrepreneurs' potential in attracting more funds and their previous records (mark: 71).
Factors regarding external environment	<ul style="list-style-type: none"> - priorities and preferences of the venture capital's fund providers and the capital markets (mark: 72), - financial legal system (mark: 68), - changes in the market of the investee's products/services (mark: 67).

Source: own study.

Venture capitals which have access to governmental funds consider the government's strategic plans and non-profit objectives into their decision making process. For example, if the government is funding an especial industry, then the profit is less important as a criterion to the government than knowledge creation.

A venture capital considers if an investee is passed the fast-growth stage in its life-cycle. In this situation if there is not much possibility of a lucrative exit in the future (such as an IPO) then the venture capital prefers to exit and invests the earning into another deal with fast-growth possibility.

In the factors regarding venture capitals, 'attractiveness of the venture capital's alternative investment opportunities in comparison with keeping the current investment' means that in the same situation depending on what alternatives a venture capital has, it may or may not keep its shares in an investee. So, if there are not any better alternatives, a venture capital prefers to keep its shares in a weak investee.

Also, in case there is not any suitable buyer, a venture capital may prefer to hold on to its shares in a weak investee. In the factors regarding entrepreneurs, an entrepreneur's potential in attracting new funds and previous record is important to a venture capital. For example, venture capitals are more tolerant and patient with serial entre-

preneurs than new entrepreneurs. Also, as another example, they are more tolerant with famous entrepreneurs who could attract new funds from other sources.

In the factors regarding external environment, changes in the market of an investee's products/services is influential in a venture capitals exit decision, which has been neglected in the previous studies. Some of the Delphi group members mentioned that they had had experiences of investing in investees with attractive products which later on, foreign cheaper products took their market and they had been forced to exit the deals.

CONCLUSIONS

Choosing the timing of an exit is one of the major concerns of venture capitals (Hege *et al.*, 2009; Oehler *et al.*, 2007; Cumming & MacIntosh, 2003b; Wall & Smith, 1997). They are hopeful to do it on the right time in the right manner to maximize their profit or minimize their loss. A review of literature shows that many factors could influence a venture capital's exit decision. Additionally, most of the literature has its focus on successful exits and unsuccessful exits and early exits have been studied less.

This research composed a comprehensive list of factors extracted from the literature and discussed them with a Delphi group of Spanish venture capitalists and finally arrived to a list of the 14 most influential factors, which some of them were neglected by the literature or have been studied rarely. The factors regarding external environment which could affect a venture capital's exit decision seldom have been studied. And the same goes for studies of call or put agreements. Also, the results show that Altman Z-Score is an important factor that could help a venture capital to make an early exit decision. Based on the results, venture capitals are advised to consider a mixture of important factors regarding four different dimensions – themselves, the investees, the entrepreneurs and external environment – to make a proper exit decision. Also, they are strongly advised to pay more attention to external environment factors.

It should be considered that although the results does not seem to be location bound and country specific but, anyhow, the Delphi group was consisted of homogeneous members in the sense that all were Spanish venture capitalists, and that may have influenced the results although there is no clear indication of that. Also, it should be taken into account that the results not only are based on the thoughts and ideas of a group of Spanish venture capitalists but they are also affected by the reality of current economic situation of the country and the continent. Thus, further researches are required to show the degree of extendibility of the results to different places, times and situations. Moreover, based on this research and for the future studies, it is suggested that scholars consider prioritizing and weighing up those 14 factors. Additionally, designing a general model based on them could be helpful and valuable.

REFERENCES

- Altman, E.I. (1968). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *The Journal of Finance*, 23(4), 589-609. doi: <http://doi.org/10.1111/j.1540-6261.1968.tb00843.x>.

- Amit, R., Brander, J., & Zott, C. (1998). Why Do Venture Capital Firms Exist? Theory and Canadian Evidence. *Journal of Business Venturing*, 13(6), 441-466. doi: [http://doi.org/10.1016/S0883-9026\(97\)00061-X](http://doi.org/10.1016/S0883-9026(97)00061-X).
- Bascha, A., & Walz, U. (2001). Convertible Securities and Optimal Exit Decisions in Venture Capital Finance. *Journal of Corporate Finance*, 7(3), 285-306.
- Bayar, O., & Chemmanur, T.J. (2012). IPOs versus Acquisitions and the Valuation Premium Puzzle: A Theory of Exit Choice by Entrepreneurs and Venture Capitalists. *Journal of Financial and Quantitative Analysis*, 46(06), 1755-1793.
- Berkery, D. (2007). *Raising Venture Capital for the Serious Entrepreneur*. New York, NY: McGraw Hill Professional.
- Bienz, C., & Walz, U. (2010). Venture Capital Exit Rights. *Journal of Economics & Management Strategy*, 19(4), 1071-1116. doi: <http://doi.org/10.1111/j.1530-9134.2010.00278.x>.
- Black, B.S., & Gilson, R.J. (1998). Venture Capital and the Structure of Capital Markets: Banks versus Stock Markets. *Journal of Financial Economics*, 47(3), 243-277. doi: [http://doi.org/10.1016/S0304-405X\(97\)00045-7](http://doi.org/10.1016/S0304-405X(97)00045-7).
- Chemmanur, T.J., Loutschina, E., & Tian, X. (2014). Corporate Venture Capital, Value Creation, and Innovation. *Review of Financial Studies*, 27(8), 2434-2473. doi: <http://doi.org/10.1093/rfs/hhu033>.
- Cumming, D.J. (2008). Contracts and Exits in Venture Capital Finance. *Review of Financial Studies*, 21(5), 1947-1982. doi: <http://doi.org/10.1093/rfs/hhn072>.
- Cumming, D.J., Fleming, G., & Schwenbacher, A. (2006). Legality and Venture Capital Exits. *Journal of Corporate Finance*, 12(2), 214-245. doi: <http://doi.org/10.1016/j.jcorpfin.2004.12.004>.
- Cumming, D.J., Fleming, G., & Suchard, J.-A. (2005). Venture Capitalist Value-Added Activities, Fundraising and Drawdowns. *Journal of Banking & Finance*, 29(2), 295-331. doi: <http://doi.org/10.1016/j.jbankfin.2004.05.007>.
- Cumming, D.J., & Johan, S.A. (2008). Preplanned Exit Strategies in Venture Capital. *European Economic Review*, 52(7), 1209-1241. doi: <http://doi.org/10.1016/j.eurocorev.2008.01.001>.
- Cumming, D.J., & MacIntosh, J.G. (2001). Venture Capital Investment Duration in Canada and the United States. *Journal of Multinational Financial Management*, 11(4-5), 445-463. doi: [http://doi.org/10.1016/S1042-444X\(01\)00034-2](http://doi.org/10.1016/S1042-444X(01)00034-2).
- Cumming, D.J., & MacIntosh, J.G. (2003a). A Cross-Country Comparison of Full and Partial Venture Capital Exits. *Journal of Banking & Finance*, 27(3), 511-548. doi: [http://doi.org/10.1016/S0378-4266\(02\)00389-8](http://doi.org/10.1016/S0378-4266(02)00389-8).
- Cumming, D.J., & MacIntosh, J.G. (2003b). Venture-Capital Exits in Canada and the United States. *The University of Toronto Law Journal*, 53(2), 101-199.
- Dalkey, N. (1969). An Experimental Study of Group Opinion: The Delphi Method. *Futures*, 1(5), 408-426. doi: [http://doi.org/10.1016/S0016-3287\(69\)80025-X](http://doi.org/10.1016/S0016-3287(69)80025-X).
- De Clercq, D., Fried, V.H., Lehtonen, O., & Sapienza, H.J. (2006). An Entrepreneur's Guide To The Venture Capital Galaxy. *The Academy of Management Perspectives*, 20(3), 90-112.
- Félix, E.G.S., Pires, C.P., & Gulamhussen, M.A. (2014). The Exit Decision in the European Venture Capital Market. *Quantitative Finance*, 14(6), 1115-1130.
- Fried, J., & Ganor, M. (2006). The Vulnerability of Common Shareholders in VC Backed Firms. *New York University Law Review*, 81, 967-1025.
- Giot, P., & Schwenbacher, A. (2007). IPOs, Trade Sales and Liquidations: Modelling Venture Capital Exits Using Survival Analysis. *Journal of Banking & Finance*, 31(3), 679-702. doi: <http://doi.org/10.1016/j.jbankfin.2006.06.010>.

- Gladstone, D., & Gladstone, L. (2004). *Venture Capital Investing: The Complete Handbook for Investing in Private Businesses for Outstanding Profits*. Upper Saddle River, NJ: Financial Times Prentice Hall.
- Gompers, P.A. (1995). Optimal Investment, Monitoring, and the Staging of Venture Capital. *Journal of Finance*, 1461–1489.
- Gompers, P., & Lerner, J. (2001). The Venture Capital Revolution. *Journal of Economic Perspectives*, 145–168.
- Hallen, B.L., & Eisenhardt, K.M. (2012). Catalyzing Strategies and Efficient Tie Formation: How Entrepreneurial Firms Obtain Investment Ties. *Academy of Management Journal*, 55(1), 35–70. doi: <http://doi.org/10.5465/amj.2009.0620>.
- Hawkey, J. (2002). *Exit Strategy Planning*. Hampshire, UK: Gower Publishing, Ltd.
- Hege, U., Palomino, F., & Schwiabacher, A. (2009). Venture Capital Performance: The Disparity Between Europe and the United States. *Finance*, 30(1), 7–50.
- Hellmann, T. (1998). The Allocation of Control Rights in Venture Capital Contracts. *The RAND Journal of Economics*, 29(1), 57–76. doi: <http://doi.org/10.2307/2555816>
- Hochberg, Y.V., Ljungqvist, A., & Lu, Y. (2007). Whom You Know Matters: Venture Capital Networks and Investment Performance. *The Journal of Finance*, 62(1), 251–301. doi: <http://doi.org/10.1111/j.1540-6261.2007.01207.x>
- Hsu, C.-C., & Sandford, B.A. (2007). The Delphi Technique: Making Sense of Consensus. *Practical Assessment, Research & Evaluation*, 12(10), 1–8.
- Kaliski, B.S. (Ed.). (2006). *Encyclopedia of Business & Finance*. 2 Volume Set (2nd Edition). Macmillan Reference USA.
- Kuratko, D.F., & Hornsby, J.S. (2009). *New Venture Management: The Entrepreneur's Roadmap*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Linstone, H.A., & Turoff, M. (1975). *The Delphi Method: Techniques and Applications*. Boston, MA: Addison-Wesley Publishing Company.
- Lungeanu, R., & Zajac, E. (2015). Venture Capital Ownership as a Contingent Resource: How Owner/Firm Fit Influences IPO Outcomes. *Academy of Management Journal*, 3. doi: <http://doi.org/10.5465/amj.2012.0871>.
- McGrath, R.G. (1999). Falling Forward: Real Options Reasoning and Entrepreneurial Failure. *Academy of Management Review*, 24(1), 13–30.
- Nadeau, P. (2011). Innovation and Venture Capital Exit Performance. *Strategic Change*, 20(7-8), 233–252. <http://doi.org/10.1002/jsc.898>.
- Neus, W., & Walz, U. (2005). Exit Timing of Venture Capitalists in the Course of an Initial Public Offering. *Journal of Financial Intermediation*, 14(2), 253–277.
- Oehler, A., Pukthuanthong, K., Rummer, M., & Thomas, W. (2007). Venture Capital in Europe: Closing the Gap to the U.S. In G.N. Gregoriou, M. Kooli & R. Kraeusl (Eds.), *Venture Capital in Europe* (pp. 3–17). Oxford, UK: Butterworth-Heinemann.
- Ozmel, U., Robinson, D.T., & Stuart, T.E. (2013). Strategic Alliances, Venture Capital, and Exit Decisions in Early Stage High-Tech Firms. *Journal of Financial Economics*, 107(3), 655–670. doi: <http://doi.org/10.1016/j.jfineco.2012.09.009>.
- Puri, M., & Zarutskie, R. (2012). On the Life Cycle Dynamics of Venture-Capital- and Non-Venture-Capital-Financed Firms. *The Journal of Finance*, 67(6), 2247–2293. doi: <http://doi.org/10.1111/j.1540-6261.2012.01786.x>.
- Smith, D.G. (2005). The Exit Structure of Venture Capital. *UCLA Law Review*, 53, 315.

- Wall, J., & Smith, J. (1997). Better Exits. *The Journal of Private Equity*, 1(2), 31–43. doi: <http://doi.org/10.3905/jpe.1997.409667>.
- Wang, S., & Zhou, H. (2004). Staged Financing in Venture Capital: Moral Hazard and Risks. *Journal of Corporate Finance*, 10(1), 131–155. doi: [http://doi.org/10.1016/S0929-1199\(02\)00045-7](http://doi.org/10.1016/S0929-1199(02)00045-7).
- Wijbenga, F.H., Postma, T., & Stratling, R. (2007). The Influence of the Venture Capitalist's Governance Activities on the Entrepreneurial Firm's Control Systems and Performance. *Entrepreneurship Theory and Practice*, 31(2), 257–277. doi: <http://doi.org/10.1111/j.1540-6520.2007.00172.x>.
- Zahra, S.A. (1996). Technology Strategy and New Venture Performance: A Study Of Corporate-Sponsored and Independent Biotechnology Ventures. *Journal of Business Venturing*, 11(4), 289–321. doi: [http://doi.org/10.1016/0883-9026\(95\)00128-X](http://doi.org/10.1016/0883-9026(95)00128-X).
- Zider, B. (1998). How Venture Capital Works. *Harvard Business Review*, 76(6), 131–139.

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The Concept of Technological Entrepreneurship: The Example of Business Implementation

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Abstract

The objective of this paper is to identify the role of factors influencing the development of technological entrepreneurship using as example a company with academic origin in the IT sector. The scientific purpose of the study is to compile the views of scholars on technological entrepreneurship. The first part of the study is of descriptive character and based on literature review, while the second part is empirical. The application of the empirical method of a case study has made it possible to characterize the essence of technological entrepreneurship and illustrate the development of the studied phenomenon in business practice. The first part of the study is of descriptive character and based on literature review, while the second part is empirical. The application of the empirical method of a case study has made it possible to characterize the essence of technological entrepreneurship and illustrate the development of the studied phenomenon in business practice. The concept of technological entrepreneurship is based on increasing innovation, new assets and competitiveness through more efficient use of research results leading to development of products and services. The process of creating technological entrepreneurship is conditioned largely by endogenous factors of organizations and also by the business ecosystem. It is necessary to further develop current theory of technological entrepreneurship through discussion on the methodological dilemmas associated with conducting research in this area.

Keywords: academic entrepreneurship; ICT solutions; technological entrepreneurship; technological innovation; technology start-up

JEL codes: O31, O32, O33

INTRODUCTION

An important problem in the process of developing and increasing competitiveness of young companies is the level of technological innovativeness and uniqueness of products and services. In pursuing these objectives an important role can be played by the concept of technological entrepreneurship understood as a process involving greater practical usefulness of scientific research findings on modern technologies. An essential element of this process is effective cooperation between research institutions, research and development centres, capital market institutions, business-related sphere and enterprises in order to diffuse knowledge and scientific potential into commercial solutions regarding technological innovations (Badzińska, 2015). The basis for the development of technological entrepreneurship is formed, therefore, through interactions between science, technology and business (Poznańska, 2010). This is a creative and innovative ability of knowledge-based companies and an adaptation response to the real business environment (Nacu & Avasilcăi, 2014). All the activities of this phenomenon relate to “the identification of potential entrepreneurial opportunities arising from technological developments, and the exploitation of these opportunities through the successful commercialization of innovative products” (Petti, 2012, p. xi).

The process of creating technological entrepreneurship is conditioned largely by endogenous factors of organizations, including primarily the qualifications and expertise of employees and their ability to implement innovative solutions into business practice. A significant impact on the development of technological entrepreneurship is also made by the business ecosystem covering a wide spectrum of cooperation with business environment institutions and by “external factors that influence the formation of technology firms” (Bailetti, 2012, p. 6). The history of technological entrepreneurship is strewn with solutions in search of problems (Venkataraman & Sarasvathy, 2001).

The scientific purpose of the study is to compile and synthesize the views of scholars on technological entrepreneurship. Attention was paid to a widely accepted conceptual apparatus and the multidimensionality of the phenomenon. In this part the paper refers to both Polish and foreign literature concerning the notion of technological entrepreneurship. The author presents also its own interpretation of the concept. The empirical part of the paper is an attempt to indicate the role of endogenous factors influencing the development of technological entrepreneurship using a case-study of a knowledge-based small company with academic origins from the IT industry. Particular attention was paid to the potential of human resources and organizational culture based on knowledge. The next part of the paper provides examples of how to use the potential of the company's external environment and its co-operation with the institutions of business environment, which determine the development of technological entrepreneurship. This paper may provide a starting point for an in-depth empirical research and contribution to the discussion on the methodological dilemmas associated with conducting research in this area.

LITERATURE REVIEW

The Multidimensionality of Entrepreneurship

The starting point in defining the notion of technological entrepreneurship and proposing the operationalization of this term is to present the interpretation of the concept of entrepreneurship. The multidimensionality of this phenomenon raises a number of difficulties in assessing its size and effects, hence literature and business practice have both adopted different criteria and measures for entrepreneurship (Dyduch, 2008). This is also evidenced by widely described kinds, types and models of entrepreneurship. Entrepreneurship is manifested in innovative actions, in introducing new products and technologies and in unconventional problem solving. One useful way of thinking about entrepreneurship is that it is concerned with understanding how, in the absence of markets for future goods and services, these goods and services manage to come into existence (Venkataraman, 1997). The term is also used to determine people's attitude towards the surrounding world and other individuals. This is expressed in creative and active improvement of existing states of affairs and readiness to take up new activities. Entrepreneurship consists in matching up the products of human imagination with human aspirations to create markets for goods and services that did not exist before the entrepreneurial act (Venkataraman & Sarasvathy, 2001).

A look at entrepreneurship from the angle of entrepreneurs allows one to capture its capacity for creative action, building businesses, selecting the right people to work with, as well as acquiring and properly allocating resources and taking personal risks. Drucker (2008) sees in an entrepreneur not only a person who creates organizations but, above all, someone who always searches for change, responds to it and turns it into an opportunity. Shane (2003, p. 9) proposes "the nexus between enterprising individuals and valuable opportunities" as the general framework to understand entrepreneurship. The entrepreneurship literature describes an entrepreneur as an innovative individual who introduces "new combinations" of ideas and resources and "dynamically shakes up the economy out of its previous equilibrium state" (Schumpeter, 1934, pp. 74-75). Historically, opportunities have been supposed to exist and the entrepreneur either is alert to them (Kirzner, 1979) or discovers them (Schumpeter, 1976). "...for Schumpeter the essence of entrepreneurship is the ability to break away from routine, to destroy existing structures, to move the system away from the even, circular flow of equilibrium" (Kirzner, 1973, p. 127). In turn, Shane and Venkataraman (2000; Shane, 2003) argued the entrepreneur is an alert individual who discovers existing opportunities and profits from them while Foss and Klein (2004) describe an entrepreneur as an experienced individual making judgments about an unknowable future. According to von Mises (1949), an entrepreneur "not only bears uncertainty in his judgments about deploying the resources he owns and controls, but is also alert, creative, and leader — and not some abstract, hypothetical discoverer — who is the driving force of the market" (Foss & Klein, 2012, p. 69). In turn, Hood and Young (1993) emphasize that entrepreneur is an individual with certain personality traits and in the opinion of Witt (1998) he is a charismatic leader.

A process approach to entrepreneurship is popular in literature. It involves "identifying and implementing opportunities arising in the environment" (Glinka & Gudkova, 2011, p. 55). "Entrepreneurship is seen as a process of searching for market opportuni-

ties and organizational resources necessary to exploit these opportunities in order to gain results on a long term. (...) It can be distinguished as independent risk taking ability to achieve the biggest gains in the market” (Nacu & Avasilcăi, 2014, p. 229). Entrepreneurial opportunities are extremely context specific. This means that entrepreneurial opportunities do not necessarily lie around waiting to be discovered by the entrepreneurial geniuses. Entrepreneurial opportunities often have to be “created” by using the entrepreneurial imagination to embody human aspirations in concrete products and markets (Venkataraman & Sarasvathy, 2001).

The creativity, capabilities, dynamism, and innovativeness of entrepreneurs in a country are important aspects of the absorptive capacity, which is such a distinctive characteristic of successful development experiences (Szirmai, Naude & Goedhuys, 2011). Moreover, the most important in the entrepreneurial process is “the decision to enter new international markets or to enhance the presence into international markets, which can be considered as innovation” (Wach, 2015, p. 19).

Conceptualisation of Technological Entrepreneurship

Technological entrepreneurship is a complex phenomenon that encompasses not only multiple disciplines and levels of analysis to be investigated using different perspectives, but also a case-by-case approach for the analysis to be meaningful. According to Petti (2009), the concept of technological entrepreneurship incorporates four main sets of activities relating to (i) creating new technologies or identify existing technologies (but previously undeveloped), (ii) the recognition and matching of opportunities arising from the application of these technologies to emerging market needs, (iii) technology development / application and (iv) business creation.

The dominant theme of studies on technological entrepreneurship focuses on small technology firms and on external factors that influence the formation of technology firms (Bailetti, 2012). Another theme addresses the consequences of technology based business and engineering entrepreneurship (Nicholas & Armstrong, 2003). Another important theme is the interdependence between small-firm initiatives and the external infrastructure that contributes to science and technology advances. This theme describes the systems that support the foundation of new technology firms, establishment of a new technology venture and different types of technical entrepreneurs (Jones-Evans, 1995). Liu, Chu, Hung and Wu (2005) represent ways in which entrepreneurs draw on resources and structures to exploit emerging technology opportunities. Other articles cover topics on: university and business incubators, firm spin-off and technology transfer mechanisms, government programs that support technological entrepreneurship and entrepreneurship education. The results of research conducted by Bailetti suggest that “the number of scholars contributing to the field of technological entrepreneurship is not large” (2012, p. 7). In the literature, the terms: technological entrepreneurship, technology entrepreneurship, technical entrepreneurship and techno-entrepreneurship are used synonymously (Petti, 2012).

Bailetti proposes a definition of technology entrepreneurship, and describes its distinguishing aspects. The author argues that “technology entrepreneurship is an investment in a project that assembles and deploys specialized individuals and heterogeneous assets that are intricately related to advances in scientific and technological knowledge for the purpose of creating and capturing value for a firm” (Bailetti, 2012, p. 9). The pro-

ject exploits or explores scientific and technology knowledge. External and internal individuals and organizations co-produce the project's outputs. "What distinguishes technology entrepreneurship from other entrepreneurship types is the collaborative experimentation and production of new products, assets, and their attributes, which are related to advances in scientific and technological knowledge and the firm's asset ownership rights" (Bailetti, 2012, p. 5).

Technological entrepreneurship is about managing joint exploration and exploitation, where each individual has roles and responsibilities in cooperatively moving forward toward accomplishing shared goals (Lindenberg & Foss, 2011). It focuses on investing in and executing the firms' projects, not just recognizing technology or market opportunities. Technological entrepreneurship is understood therefore, as a joint-production phenomenon that draws from a team of specialized individuals from multiple domains, some or all of whom become embedded in the technology path they try to shape in real time (Garud & Karnøe, 2003). The firm's owners and employees have no way of knowing or predicting the relevant attributes of all the assets. Asset attributes need to be created by the whole team. Technological entrepreneurship identifies, selects, and develops new attributes for the purpose of creating value for the firm and its customers.

The concept of technological entrepreneurship in Polish literature focuses on efforts to connect the scientific potential of universities and research and development centres with capital market institutions and business activities (Flaszewska & Lachiewicz, 2013). It is important to ensure optimal conditions for the commercialization of research results and their usage in enterprises in the form of new products and services through effective collaboration with research centres and the business-related sphere. Poznańska (2010) emphasizes that technological entrepreneurship provides a practical usability of research results through an effective collaboration between science, technology and the commercial world. Inventions, discoveries and new technologies – as a result of the implementation and development of the commercial market – form technological innovations that determine further development of products and processes.

Technological entrepreneurship which must be combined with innovativeness is an ability to allocate resources efficiently. The development and implementation of innovation require cooperation with institutions of business environment, including those that provide funding for such projects. In this respect, "technological entrepreneurship is related to the basic pillars of knowledge-based economy which include the following: the systems of innovativeness, education, information and communication, knowledge management processes at the organization level, regional aspects, as well as institutional and business environment" (Lachiewicz & Matejun, 2010, p. 189).

All approaches to technological entrepreneurship share the same key to its creation, namely the interactions between science and technology and the commercial world. A special role here should be attributed to centres involved in pilot deployments, market analyses, education on new technologies regarding the process of their transfer to the economic sphere. All these segments and types of institutions create a system of activities which compose the process of technological entrepreneurship. A special role is played here by the business ecosystem; a wide range of cooperation ranging from consortia or research centres, through consultancy, organizational, funding and infrastruc-

ture services, to relations with business environment institutions in the field of incubation (Badzińska, 2014).

Technological entrepreneurship formula combines both intellectual entrepreneurship and academic entrepreneurship. This perspective encompasses spin-offs, also known as professorial or academic companies, industrial and technological parks, business incubators and other forms organizing the first phase of technological entrepreneurship. Academic entrepreneurship is an expression of new jobs and opportunities that open up for college community and research and development sector. This is a manifestation of intellectual entrepreneurship coined by Kwiatkowski (2000) as laying the foundations for material wealth of individuals, social groups and nations out of immaterial knowledge. Technology start-ups represent the mainstream of academic entrepreneurship and one of the active mechanisms of the commercialization of research results.

In this study the author proposes the understanding of technological entrepreneurship as a process that combines the elements of academic and intellectual entrepreneurship with the entrepreneurship of commercial organizations – owners, managers and employees implementing new technologies and innovative business solutions in the market environment. Technological entrepreneurship is in its essence based precisely on the cooperation of companies with both the science sector and the business environment.

MATERIAL AND METHODS

Research Design and Data Collection

For the scientific purpose of this paper, a review of Polish and foreign literature has been conducted along with the analysis of secondary research results on the nature and importance of technological entrepreneurship in the modern economy. Much attention has been drawn to the concept and the characteristics of this phenomenon. The author presented also her own interpretation of the concept. The following methods were used: defining, comparing, attribute analysis, inference. The wide problem area of entrepreneurship requires the acceptance of the limitations of the study area.

The empirical part of the paper is an attempt to indicate the role of endogenous factors and external environment influencing the development of technological entrepreneurship using a case-study method on the example of a small technology company. The subject of the research is a technology Start-up – GLIP Ltd. The exploratory research was designed to identify the problem of technological entrepreneurship in business practice and the direction of further in-depth research.

Primary data acted as a basis to identify the factors influencing the development of the studied process. The necessity to confront a variety of data sources forced the application of the principle of triangulation (a multimethod research approach). Triangulation involves a conscious combination of quantitative and qualitative methods as a powerful solution to strengthen the research design. The logic is based on the fact that a single method can never adequately solve the problem of rival causal factors (Denzin, 1978; Jick, 1979; Patton, 1990).

Qualitative data was obtained from direct (in-depth) interviews conducted with the owner of the analyzed enterprise, who is responsible for innovation management. An interview questionnaire was prepared. Semi-structured interview guide contained the

following: (i) general questions about the company and its organizational structure; (ii) questions about all innovation products and projects; (iii) questions about idea generation, idea selection and project development; (iv) questions about events before its formalization and commercialization; (v) questions about the sources of financing innovative projects and the cooperation with business environment institutions and different enterprises.

In order to verify the gathered information, further telephone conversations with the manager of the company were conducted and materials were sent in an electronic form. To expand the database on the company an analysis of materials from the available secondary sources research was also conducted. This included the analysis of websites, publications and customers' opinions on opineo.pl website. An important source of data was the information obtained from Poznan Science and Technology Park of Adam Mickiewicz University Foundation, which is a strategic shareholder of the company.

Case Study

The empirical method makes use of a case study involving the analysis of processes implemented in the selected enterprise (Dyer & Nobeoka, 2000). The rationale for the use of the case study is its usefulness related to the timeliness of technological entrepreneurship phenomenon and the dynamism of its effects. There is a need to conduct a practice-oriented empirical research for better understanding of reality and to help managers choose their own path (Czakov, 2011). The applied case study should help recognize the analyzed phenomenon under real conditions (Yin, 1984), and its purpose has been the practical orientation (executive research) of the concept of technological entrepreneurship. Both descriptive and explanatory techniques were used in the presented case study. The procedure for the case study consisted of the following sequence of steps:

– Research question;

To exemplify the concept of technological entrepreneurship in business practice, the following driving research question was erected: What endogenous factors and what external environment potential determine the development of technological innovations in the analyzed company?

– The selection of case;

The case study should be a clear example to illustrate the studied correctness (Flyvberg, 2004). The example of business implementation of technological entrepreneurship was selected with a purposeful sampling technique (Merriam, 1998; Maxwell, 2005; Patton, 1990). The purposeful selection of Glip technology Start-up resulted from the following (i) the pragmatic criterion of availability of data, (ii) clarity of the explained phenomenon of technological entrepreneurship, (iii) the observed influencing factors of technological innovation. The above criteria lead to the conclusion that a single case study would help to attain the objectives of the research.

– The development of data gathering tools;

The author adopted an iterative procedure, in which the stage of verification of data gathering tools is repeated because of the information obtained or problems encountered. Data from secondary sources do not provide sufficient saturation of information for the research objectives. The need to obtain primary data on the subject determined the carrying out of field studies (in the premises of Glip Ltd.). The confron-

tation of multiple data sources justifies the cyclical nature of data collection procedures in the case under examination.

- The formulation of conclusions and implications for research and practice;

The application of these research methods has made it possible to characterize the essence of technological entrepreneurship and illustrate the progress and development of the studied phenomenon in practice. The presented case study may act as a starting point for an in-depth empirical research on endogenous and exogenous factors influencing the development of technological entrepreneurship in academic start-ups. Despite the fact that the research is based on a single case study, there are some interesting implications for business practice, as described in the conclusions section.

RESULTS AND DISCUSSION

The Technology Start-up Glip Ltd

The subject of the study – Glip Ltd – is a young Polish company manufacturing multimedia touch platforms (Glip Multitouch Solutions, 2015). The founders (two men) of the technology Start-up are graduates of the Poznan University of Technology, who, on the basis of interdisciplinary knowledge and experience related to the IT industry, marketing, finance and economics, have created a modern business model. “We share passion and desire to create innovative ICT solutions for business” – declare the entrepreneurs from Glip. The company has been on the market since 2013 and currently employs 8 full-time employees, but the first multimedia devices were presented by these young entrepreneurs in 2012. ICT tools created by Glip facilitate clear and engaging communication, both within the company and around it, taking into account the realities of the fast-growing B2B and B2C markets. In its solutions the company uses modern tools of interactive communication and focuses on the customization of services dedicated to individual customer needs.

The company offers equipment based on the technology of touch, motion detection and holographic projection. The offer includes touch tables, totems and screens, as well as interactive floors and holographic pyramids. This equipment is available in a wide range of sizes and types tailored to individual projects. Glip also offers copyright software created per requests of different groups of consumers, freely customized and designed in accordance with company logo. The products are dedicated for business customers, cultural and educational institutions and local government units. Transforming the concept into a coherent and valuable application, service or device, created on the basis of professional consulting and support for the project in this phase of its implementation is a challenge faced by the young entrepreneurs of Glip.

The Influencing Factors of Technological Entrepreneurship in the Studied Company

In order to obtain an answer to the driving research question: “What endogenous factors and what external environment potential determine the development of technological innovations in the analyzed company?” – an attempt has been made to diagnose these factors. The influencing factors of technological entrepreneurship in the studied company include a set of endogenous components.

Company managers have pointed to the human factors and more precisely – the potential of staff members and organizational culture based on knowledge. The pillars of technologically entrepreneurial culture of organization should include an ability to implement technology (innovation) and take actions towards technology development (Disselkamp, 2005). The company Glip emphasizes both the individual characteristics of employees (providing them with a wide range of creative freedom) and the creativity of the team. Emphasis is laid upon the ability to generate new ideas and solutions and to improve adaptation to the changing environment. Managers attach great importance to building their own developmental base (both physical and intellectual) and to the commercialization of solutions and applications designed by employees. Responsible leadership, commitment and great determination of employees to reach objectives constitute the challenges posed by young entrepreneurs from Glip.

The concept of technological entrepreneurship is permanently inscribed in the strategy of the company. The main purpose of the team of young entrepreneurs is to create and promote innovative projects that will explore new opportunities and offer unique business solutions with the support of ICT. The mission of the team is to break standards, avoid boilerplate solutions and undertake interesting challenges. “Glip wants to stay ahead of the needs of the users and even create such needs” – says the manager of the company. A clearly defined purpose, aims and priorities allow the company to point towards development and fulfill its mission. A common vision of development strategy concerns the creation of new ICT solutions tailored to the specific needs of clients. In the analyzed company the basis for the creation of the management style is to build a climate of dialogue, partnership relations and free flow of information. The organizational structure and motivation procedures are tailored to the needs of the implemented ICT solutions. An important role in the development of technological entrepreneurship is played by the management through objectives and the delegation of powers for self-learning and acquiring new skills.

Organizational culture constitutes a common system of meanings, which is the basis of communication and mutual understanding. On the one hand, the culture of organization shapes its style and atmosphere, governs the approach to work and attitudes of people on how to perform tasks. On the other hand, it determines the effectiveness of the organization and carries significant implications for the motivation of employees. By building an entrepreneurial organizational culture the analyzed company creates its own patterns of behaviour and patterns of action, thus gaining unique expertise and the ability to cope with the changing environment. The basis of organizational culture at Glip is the awareness of the importance of knowledge, commitment to shared values and the creation of an attitude of cooperation and not rivalry. These are the necessary conditions to create a culture of creative thinking to support the development of technological entrepreneurship. An important aspect is also the consistency of operations and customer-oriented employees with high attention to the quality of services. Creating a culture based on knowledge, identifying employees with the company and the continuous technological development are key values of the analyzed organization. Knowledge management supports both innovative processes and technological entrepreneurship in order to effectively implement and commercialize the designed solutions and applications.

An important aspect in the development of technological entrepreneurship is to create an attitude of openness among employees regarding knowledge, study the environment in terms of demand for new ICT solutions and look for external sources of information to fill gaps in intellectual resources. In this context, the important role is played by cooperation with selected research institutions and organizations supporting technology transfer. The external environment potentially determines the development of technological innovations in the analyzed company. Building a network for the exchange of information and the diffusion of knowledge between employees and cooperators takes place through the implementation of joint projects. Company managers attach great importance to creating an attitude of openness to new solutions and to the dissemination of information and communication technologies. The pro-innovation attitude is something more than just a search for new solutions in a changing environment. The external knowledge search plays a key role in achieving variety through the identification and acquisition of new information and ideas that, in combination with their internal knowledge base, lead firms to generate solutions for emerging problems and new opportunities (Cruz-Gonzalez, Lopez-Saez, Navas-Lopez & Delgado-Verde, 2015).

Among the activities undertaken by the company in the field of cooperation with the business ecosystem and in creating favorable institutional environment to support the transfer of technology, it is necessary to mention strict scientific and research cooperation between Glip and Poznan Science and Technology Park of Adam Mickiewicz University Foundation. The project called InQbator Seed co-financed by the European Union under the Innovative Economy Operational Programme aided the company in 2013 with the amount of 500 000 PLN (Mam Startup, 2013). It was an important financial aid determining the development of the young technology start-up. The funds have enabled further research and progress on the construction of large-format touch surfaces and specialized software.

Another example of the co-operation with the institutions of business environment is taking part in the prestigious competition called Poznan Leader of Entrepreneurship 2014 in the category Start-up 2014. The competition is aimed at young, innovative companies based on knowledge and new technologies. It is organized jointly by Poznan City Hall and County Office and designed to support outstanding enterprises from the SME sector which have been building their strong market position (Poznan Leader of Entrepreneurship, 2014). Technological innovations and the entrepreneurship of young people employed by Glip were fundamental for the company to win the first place in the Poznan Leader of Entrepreneurship 2014 competition (Winner in the category Start-up, 2015). In 2014, Glip also won the VII edition of the Award of the Marshal of Greater Poland "i-Greater Poland – The Innovative for Greater Poland". This is a special award for entrepreneurs who, through their creativity and openness to new scientific thought, bring innovative solutions to the market.

The cooperation of the company with business institutions in the field of science and culture supports the transfer of knowledge into commercial solutions in the field of technological innovations. Glip's technology has been used in the Mobile Museum of the Greater Poland Uprising. It is an example of cooperation with the Foundation of Greater Poland Brand – the main organizer of the project. With Glip's technological support some private family heirlooms of people associated with this historic event were scanned.

During the show, Glip unveiled nearly 30 square meters of interactive space – touch tables, floors, screens and holograms. The collected documents, dates, places and characters are presented using technology based on motion detection and touch.

The cooperation with the institutions of business environment in consulting, organizing and financing innovative ICT solutions constitute the condition for development for this company. These examples confirm that the environment and the conditions conducive to the process of technological entrepreneurship can be found on various grounds of companies and institutions as well as surrounding entities. The conducted exploratory research aimed at problem identification and determination of the direction of further research. The data analysis connecting with the examined phenomenon suggests that the concept of technological entrepreneurship is based on increasing innovation, new assets and competitiveness through more efficient use of research results leading to development of products and services. Both endogenous factors and external environment undoubtedly play an important role in the process of technological entrepreneurship associated with the basic pillars of knowledge economy. However, there is a need for conducting a broader quantitative research confirming the importance of the listed endogenous and exogenous factors.

CONCLUSIONS

The process of creating technological entrepreneurship is a joint achievement of the team from the studied company Glip, which offers support with knowledge and expertise. Employees in this process show a tendency to take actions aimed at continuous development and risk taking, while managers manifest the characteristics of leaders who are open to innovativeness. It is worth keeping in mind that people are the basis for the functioning of every company. Their attitude, creativity, invention and courage impact the overall innovativeness. However, this requires full acceptance of goals, motivation and commitment to tasks.

The empirical findings are reflected in the light of development of technological entrepreneurship with regard to Glip technology Start-up. The paper finds that both the potential of human resources and the potential of the company's external environment contribute to firms' recognition of entrepreneurial opportunities as well as to development of technological entrepreneurship. Young, technology start-ups are able to create and use intellectual potential. It is necessary, however, to support them in the process of technology transfer. It is also worth pointing out the interactive nature of this process, in which various feedback loops take place between the senders and receivers of knowledge and new technological and organizational solutions (Matusiak, 2011). Supporting the development of innovative technology start-ups and accelerating the process of intellectual property commercialization may significantly contribute to further integration of academics and practitioners in the implementation of the concept of technological entrepreneurship.

The study confirms that case studies in the field of technological entrepreneurship should develop the existing theory and provide explanations of the hitherto unrecognized phenomena. However, the rationale for conduct of a practice-oriented empirical research is its usefulness for managers and business reality. In addition, they will allow for a better understand and development of the analyzed processes, taking into account

the economic, social and cultural characteristics of the region. The wide problem area of entrepreneurship requires the acceptance of the limitations of the study area. The empirical method makes use of a case study which has helped to recognize the analyzed phenomenon under real conditions (Yin, 1984), however, there is a need for conducting a broader research. The presented case study can be a starting point for an in-depth empirical theory-creating research (for instance the multiple-case studies approach as suggested by Eisenhardt (1989), Yin (1984), Voss, Tsiriktsis and Frohlich (2002) and Eisenhardt and Graebner (2007) recommendations), providing hypotheses for quantitative research, or making room for exploration that was previously perceived differently or simply overlooked. The findings of case studies can help practitioners in designing processes more adapted to the characteristics of their projects and contingencies, which may lead to a better allocation of resources and better efficiency in general (Salerno *et al.*, 2015). Furthermore, a quantitative research confirming the importance of factors influencing the development of technological entrepreneurship would have a greater cognitive value and impact on the business practice.

It is necessary to develop the current theory of technological entrepreneurship and provide the discussion on the methodological dilemmas associated with conducting research in this area. The contribution of the author to the research theme is both an attempted synthesis of the views of scholars on technological entrepreneurship and own interpretation of the concept. The author proposes the understanding of technological entrepreneurship as a process that combines the elements of academic and intellectual entrepreneurship with the entrepreneurship of commercial organizations implementing new technologies and innovative business solutions in the market environment. Technological entrepreneurship is in its essence based precisely on the cooperation of companies from both the science sector and the business environment.

Despite the fact that the research is based on a single case study, there are some implications and recommendations for business practice. The creation by Glip of innovative ICT solutions and multimedia devices may allow the company the early internationalization of its business activity (Oviatt & McDougall, 2005; Cavusgil & Knight, 2009) and become a key tool in generating wealth in international business environment. Opportunity recognition is an important aspect on entrepreneurship, especially for technology-based ventures. However, to successfully compete on the global market entrepreneurs have to break standards, avoid boilerplate solutions and undertake interesting challenges.

Furthermore, the author emphasizes that important stimuli for the process of creating technological entrepreneurship are both the local climate and the commitment of local government and business institutions. The lack of any formulated innovation strategy for the region undoubtedly inhibits the development of entrepreneurial activities and pro-innovation structures of the region itself. It is vital, therefore, to create an effective system of support from financial institutions, non-profit organizations and EU programs for entrepreneurship infrastructure development and technology transfer. The formation of regional innovation policy and the assurance of international cooperation in terms of technology transfer from research centres to technology start-ups both constitute essential conditions for effective implementation of the concept of technological entrepreneurship into economic practice.

REFERENCES

- Badzińska, E. (2014). Indywidualizacja rozwiązań ICT w praktyce gospodarczej na przykładzie start-upów akademickich. *Business Informatics*, 2(32), 24-32.
- Badzińska, E. (2015). Technology entrepreneurship as a condition for the transfer of innovative solutions to business practice. In *16th EBES Conference – Istanbul Program and abstract book* (p. 112). Istanbul: EBES Publications.
- Bailetti, T. (2012). Technology Entrepreneurship: Overview, Definition, and Distinctive Aspects. *Technology Innovation Management Review*, 2(2), 5-12.
- Cavusgil, S.T., & Knight, G. (2009). *Born global firms: A new international enterprise*. New York: Business Expert Press.
- Cruz-González, J., López-Sáez, P., Navas-López, J.E., & Delgado-Verde, M. (2015). Open search strategies and firm performance: The different moderating role of technological environmental dynamism. *Technovation*, 35, 32-45. <http://dx.doi.org/10.1016/j.technovation.2014.09.001>
- Czakon, W. (2011). Zastosowanie studiów przypadku w badaniach nauk o zarządzaniu. In W. Czakon (Ed.), *Podstawy metodologii badań w naukach o zarządzaniu* (pp. 46-63). Warszawa: Wolters Kluwer Business.
- Denzin, N.K. (1978). *The Research Act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Disselkamp, M. (2005). *Innovationsmanagement: Instrumente und Methoden zur Umsetzung im Unternehmen*. Wiesbaden: Gabler Verlag.
- Dyduch, W. (2008). *Pomiar przedsiębiorczości organizacyjnej*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.
- Dyer, J., & Nobeoka, K. (2000). Creating and Managing a High Performance Knowledge-Sharing Network: The Toyota Case. *Strategic Management Journal*, Special Issue: Strategic Networks, 21(3), 345–367. doi: 10.1002/(SICI)1097-0266(200003)21:3<345::AID-SMJ96>3.0.CO;2-N
- Drucker, P.F. (2008). *Myśli przewodnie*. Warszawa: Wydawnictwo MT Biznes.
- Eisenhardt, K.M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K.M., & Graebner, M.E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.
- Flaszewska, S., & Lachiewicz, S. (2013). Przedsiębiorczość technologiczna we współczesnej gospodarce. In S. Lachiewicz, M. Matejun, & A. Walecka (Eds.), *Przedsiębiorczość technologiczna w małych i średnich firmach* (pp. 11-24). Warszawa: Wydawnictwo WNT.
- Flyvbjerg, B. (2004). Five Misunderstandings About Case-Study Research. In C. Seale, G. Gobo, J.F. Gubrium, & D. Silverman (Eds.), *Qualitative Research Practice* (pp. 390-404). London and Thousand Oaks: Sage Publications.
- Foss, N.J., & Klein, P.G. (2004). *Entrepreneurship and the Economic Theory of the Firm: Any Gains from Trade?* Copenhagen Business School CKG: Working Paper No. 11.
- Foss, N.J., & Klein, P.G. (2012). *Organizing Entrepreneurial Judgment: A New Approach to the Firm*. Cambridge: Cambridge University Press.
- Garud, R., & Karnøe, P. (2003). Bricolage versus breakthrough: distributed and embedded agency in technology entrepreneurship. *Research Policy*, 32(2), 277-300. doi: [http://dx.doi.org/10.1016/S0048-7333\(02\)00100-2](http://dx.doi.org/10.1016/S0048-7333(02)00100-2)
- Glinka, B., & Gudkova, S. (2011). *Przedsiębiorczość*. Warszawa: Wolters Kluwer Business.

- Glip Multitouch Solutions. (2015). Retrieved on June 10, 2015 from <http://glip.pl/index.html>
- Hood, J.N., & Young, J.E. (1993). Entrepreneurship's requisite areas of development: A survey of top executives in successful entrepreneurial firms. *Journal of Business Venturing*, 8(2), 115-135. doi: [http://dx.doi.org/10.1016/0883-9026\(93\)90015-W](http://dx.doi.org/10.1016/0883-9026(93)90015-W)
- Jick, T.D. (1979). Mixing Qualitative and Quantitative Methods: Triangulation in Action. *Administrative Science Quarterly*, 24(4), 602-611.
- Jones-Evans, D. (1995). A typology of technology-based entrepreneurs: A model based on previous occupational background. *International Journal of Entrepreneurial Behavior & Research*, 1(1), 26-47. doi: <http://dx.doi.org/10.1108/13552559510079751>
- Kirzner, I. (1979). *Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship*. Chicago: University of Chicago Press.
- Kwiatkowski, S. (2000). *Przedsiębiorczość intelektualna. Bogactwo z wiedzy*. Warszawa: PWN.
- Lachiewicz, S., & Matejun, M. (2010). The role of External Environment in Creating Technology Entrepreneurship in Small and Medium-Sized Enterprises. *Management*, 14(1), 187-202.
- Lindenberg, S., & Foss, N.J. (2011). Managing joint production motivation: The role of goal framing and governance mechanisms. *Academy of Management Review*, 36(3), 500-525.
- Liu, T.H., Chu, Y.Y., Hung, S.Ch., & Wu, S.Y. (2005). Technology entrepreneurial styles: a comparison of UMC and TSMC. *International Journal of Technology Management*, 29(1/2), 92-115.
- Mam Startup 2013. InQbator Seed inwestuje w interaktywne stoły z Poznania. Retrieved on March 4, 2015, from <http://mamstartup.pl/pressroom/4583/inqbator-seed-inwestuje-w-interaktywne-stoly-z-poznania>
- Matusiak, K.B. (Ed.). (2011). *Innowacje i transfer technologii. Słownik pojęć*. Warszawa: PARP.
- Maxwell, J.A. (2005). *Qualitative Research Design: an Interactive Approach* (2nd edition). Thousand Oaks, CA: Sage Publications.
- Merriam, S.B. (1998). *Qualitative Research and Case Studies Applications in Education*. San Francisco: Jossey-Bass Publications.
- Nacu, C.M., & Avasilcăi, S. (2014). Technological ecopreneurship: conceptual approaches. *Procedia – Social and Behavioral Sciences*, 124, 229-235. doi:10.1016/j.sbspro.2014.02.481
- Nichols, S.P., & Armstrong, N.E. (2003). Engineering Entrepreneurship: does entrepreneurship have a role in engineering education? *Antennas and Propagation Magazine*, 45(1), 134-138. doi: <http://dx.doi.org/10.1109/MAP.2003.1189659>
- Oviatt, B.M., & McDougall, P.P. (2005). Defining International Entrepreneurship and Modeling the Speed of Internationalization. *Entrepreneurship: Theory and Practice*, 29(5), 537-554. doi: <http://dx.doi.org/10.1111/j.1540-6520.2005.00097.x>
- Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods* (2nd edition). Newbury Park: Sage Publications.
- Petti, C. (Ed.) (2009). *Cases in technological entrepreneurship: Converting ideas into value*. Northampton, MA: Edward Elgar Publishing.
- Petti, C. (Ed.) (2012). *Technological Entrepreneurship in China: How Does it Work?* Northampton, MA: Edward Elgar Publishing.
- Poznan Leader of Entrepreneurship. (2014). Retrieved on April 20, 2015, from <http://www.poznan.pl/mim/lidermisp/poznanscy-liderzy-przedsiębiorczosci,p,9019,9025.html>
- Poznańska, K. (2010). *Przedsiębiorczość technologiczna*. Retrieved on April 20, 2015 from http://www.pol-nord.eu/IP_Workshop/Prof._Krystyna_Poznanska_-_Przedsiębiorczosc_technologiczna.pdf

- Salerno, M.S., de Vasconcelos Gomes, L.A., da Silva, D.O., Bagno, R.B., & Freitas, S.L.T.U. (2015). Innovation processes: Which process for which project? *Technovation*, 35, 59-70. doi:10.1016/j.technovation.2014.07.012
- Schumpeter, J.A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle* (2nd edition). Cambridge: Harvard University Press.
- Schumpeter, J.A. (1976). *Capitalism, Socialism, and Democracy*. New York: Harper Row.
- Shane, S. (2003). *A general theory of entrepreneurship: the individual-opportunity nexus*. Northampton, MA: Edward Elgar Publishing.
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25(1), 217-227.
- Szirmai, A., Naudé, W., & Goedhuys, M. (2011). *Entrepreneurship, Innovation, and Economic Development: An Overview*. Oxford: Oxford University Press.
- Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research. In J. Katz (Ed.), *Advances in Entrepreneurship, Firm Emergence, and Growth* (pp. 119-138). JAI Press, Vol. 3.
- Venkataraman, S., & Sarasvathy, D. (2001). Strategy and Entrepreneurship: Outlines of an Untold Story. *Darden Business School Working Paper*, 01-06, 1-34.
- Von Mises, L. (1949). *Human Action: A Treatise on Economics*. Yale University Press.
- Voss, C., Tsiriktsis, N., & Frohlich, M. (2002). Case research in operations management. *International Journal of Operations & Production Management*, 22(2), 195-219. doi: <http://dx.doi.org/10.1108/01443570210414329>
- Wach, K. (2015). Entrepreneurial Orientation and Business Internationalization Process: The Theoretical Foundations of International Entrepreneurship. *Entrepreneurial Business and Economics Review*, 3(2), 9-24. doi: <http://dx.doi.org/10.15678/EBER.2015.030202>
- Winner in the category Start-up. (2014). Retrieved on April 20, 2015, from <http://www.poznan.pl/mim/main/laureat-w-kategorii-start-up-glip-sp-z-o-o,poi,4680/laureat-w-kategorii-start-up-glip-sp-z-o-o,55210.html>
- Witt, U. (1998). Imagination and leadership – The neglected dimension of an evolutionary theory of the firm. *Journal of Economic Behavior & Organization*, 35(2), 161-177. doi:10.1016/S0167-2681(98)00058-4
- Yin, R.K. (1984). *Case Study Research: Design and Methods*. Thousand Oaks: Sage Publications.

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Getting off the Track to Found. Path-Dependence and Path-Breaking within the Entrepreneurial Process

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Abstract

The concept of path dependence describes mechanisms which can lead organizations to a lock-in on a certain path of development. Sydow et al. (2009) describe four basic self-reinforcing mechanisms (learning effects, adaptive expectations, coordination effects and complementary effects) and argue how they can lead to organizational lock-in along three distinct phases. This study raises the research question of the influence of these mechanisms on the entrepreneurial venture creation process (Berger 2014) and concludes in an argumentation that this process is by no means a determined path. Instead, the forces of path dependence actually lead entities out of the entrepreneurial gestation process in each single step. Therefore, becoming an entrepreneur requires repeated processes of breaking the determined path, which explains another and still unexplored dimension why starting a venture can be so challenging. The study employs research on organizational path dependence and seeks to develop causalities that explain the need for path breaking in terms of venturing.

Keywords: path dependence; path breaking; entrepreneurial funnel; nascent entrepreneurs; entrepreneurial process

JEL codes: L26; M 13

INTRODUCTION

There are two different ways to understand the topic of this article. One interpretation would be about the problems of leaving the track to successfully launching a new venture. The other interpretation focuses the need to break with typical habits and procedures to make a successful venture happen. This article is about

the second interpretation and employs the lens of research on path dependence for a better understanding of the underlying factors.

For an individual founder, entrepreneurship is a longer process from developing the general willingness to found a company, through generating a specific idea, to finally founding the venture and making it successful (Berger 2014; Sánchez López 2012; Kelley et al. 2011; Brixy et al. 2011; Bhave 1994). To understand how entrepreneurial venture creation works, we need to identify the mechanisms to proceed from one foundation step to another. Potential entrepreneurs who do not proceed to the next step eventually reduce the overall number of successfully founded companies (Berger 2014). Therefore, the process of entrepreneurial activity has to be understood to identify leaks in the whole pipeline and to understand which forces are in place keeping potential entrepreneurs in the process or driving them out. The process step before actually founding a company plays a crucial role here, as it is the last filter before substantial amounts of investments occur. Especially for potential entrepreneurs with promising profiles (Chandler & Jansen 1992; Brüderl et al. 1992; Cooper et al. 1988; Cooper et al. 1994; Jo & Lee 1996; Stuart & Abetti 1990; Gompers et al. 2006; Berger 2014), it would be a huge waste of economic potential not to take this hurdle. To achieve a successful new venture, the entrepreneurs have to move through the entire path of the entrepreneurial process.

Path dependence is a concept about mechanisms which make organizations stay on a certain track of development (David 1985; David 2001; Arthur 1989; Arthur 1990; Stack & Gartland 2003; Sydow et al. 2009). This study will apply insights of path dependence research to the context of the entrepreneurial venture creation process and investigate if there are reinforcing mechanisms which lead to the subsequent process step or, on the contrary, to a drop-out. The study assumes that these mechanisms do not determine a path through the gestation process towards a successful company, but instead force a potential entrepreneur to break a running process to create a prosperous new venture. While generally path dependence research sheds new light on the foundation process and illuminates commitments and frames, this study stresses the need for path breaking, particularly in earlier phases of the development of young firms. Understanding these mechanisms lays the ground for interventions from policy makers, academic educators, etc. to shape the environmental conditions in a way that is more supportive for promising founders and helps them to stay within the entrepreneurial process.

The paper intends to develop a different view of start-up processes by employing path dependence research in a novel way. Due to the need to combine research from different areas as conceptual foundations and to develop a novel perspective, the paper in its very nature is conceptual to avoid an overload. The conceptual considerations are used for developing first research hypotheses that should guide follow-up empirical research on the topic.

THE VENTURE CREATION PROCESS

As for the foundation process of a new venture (Bhave 1994), Kelley et al. (2010) developed a process illustration to be used in the annual Global Entrepreneurship Monitor (Kelley et al. 2010; Brixy et al. 2011). In this model, there are four states in the process. The first one is called '*potential entrepreneur*' and describes entrepreneurs as individuals who consider the idea of founding a business. This stage does not clearly define how

concrete these plans of a person are. It could include people who could just generally imagine becoming self-employed as well as potential entrepreneurs with a concrete idea just before starting. In a later illustration of the process, Kelley et al. (2011) distinguished between potential entrepreneurs and those with intentions to found. The items in the second stage are called '*nascent entrepreneurs*' and are defined as individuals who seriously started the conception of a company. Once they implement their plan and actually found a business, they become an '*owner-manager of a new business*' in stage three. Kelley et al. (2011) define this stage as lasting 3.5 years. During this time, the founders are young entrepreneurs, according to their definition. Stages two and three are aggregated and labeled '*total early-stage entrepreneurial activity*' in Kelley et al.'s (2011) model. If these young entrepreneurs have not quit their businesses after 3.5 years, they proceed to step four as '*owner-manager of an established business*'. Apart from the possibility of moving on to the next step, the model allows a step back to a previous stage at two points. Both young entrepreneurs and established entrepreneurs can discontinue their respective businesses and consequently move back to become potential entrepreneurs again (Kelley et al. 2010; Brixy et al. 2011).

Sanchez López (2012) developed a similar framework to better understand the venture creation process. Similar to Kelley et al.'s (2010) model, it consists of four stages. However, they do not describe the same situations. To address the problem of categorizing individuals who cannot imagine founding a company at all, a further stage at the beginning of the process is suggested. This upstream stage describes the attitude towards entrepreneurship and can be interpreted as the general willingness to found a company. Once this general willingness developed into a concrete intention to start, these individuals have reached the first actual stage in Sanchez López' (2012) process model. He labels this first step as '*potential entrepreneurs*' and defines it as individuals with an intention to start a business. Once they developed a concept of their potential business, they move on to the second stage. The third stage describes the gestation phase of a new company when the individuals start to set up the organization of their venture. Sanchez López (2012) labels stages two and three as '*nascent entrepreneurs*'. Once the set-up is completed, the individuals become real '*entrepreneurs*' and participate in the market exchange.

The framework of the 'Entrepreneurial Funnel' by Berger (2014) provides a structure of both simplicity and high explanatory power, while being compatible with both existing conceptual models of the entrepreneurial process (Kelley et al. 2011; Sánchez López 2012) and present empirical research findings (Fritsch et al. 2006; Fritsch & Weyh 2006; Kelley et al. 2011; Brixy et al. 2011; Fiet 2001) in this area. Therefore, this paper will build on the entrepreneurial process of Berger's entrepreneurial funnel.

The entrepreneurial funnel differentiates between six steps of the process (Berger 2014). The first one represents the people who cannot (yet) imagine founding a company (Berger 2014; Sánchez López 2012). The process models this step as the very first one, which every entrepreneur as a member of the entire population relevant to this study has to pass through. This is due to the assumption that every human being starts with not being ready to found a company. Participants in this process step are, by definition, not yet potential entrepreneurs, as they obviate the possibility to found a business. The second step represents the potential entrepreneurs – people who could generally imagine

founding a company (Berger 2014; Sánchez López 2012; Kelley et al. 2011). This includes a wide span of people who could imagine founding a company, from people who just not definitely exclude the possibility to people who concretely plan to become self-employed. The individuals in this process step can then proceed to the next step once they have their first actual business idea (Berger 2014; Sánchez López 2012; Kelley et al. 2011). Having an idea what company to found shows progress in the process as planning gets more concrete and hence commitment increases. Once they evaluated an idea as positive in the meaning of being worth trying to implement it, they progress to the fourth step in the process. Having evaluated ideas and considering one or more of them worth trying shows a further escalation of commitment towards starting a business. Once they eventually implement their idea and found an actual business, they become real entrepreneurs and are categorized in the next process step (Berger 2014; Sánchez López 2012; Kelley et al. 2011). Fear can be an important factor that hinders reaching this step (Berger 2014). From then on, the entrepreneurs struggle to reach the next step of the process by making their endeavor profitable. Since it is not possible to give a collectively covering definition of success to the manifold ventures, 'profitable' should be interpreted in the sense of the aim of the venture. For non-profit enterprises or social entrepreneurship endeavors, for example, success could be measured by non-monetary profit definitions like illiteracy or infant mortality rates, reflecting the project's targets (Berger 2014). For a discussion on the definitions of entrepreneurial failure see also research by Watson and Everett (1993).

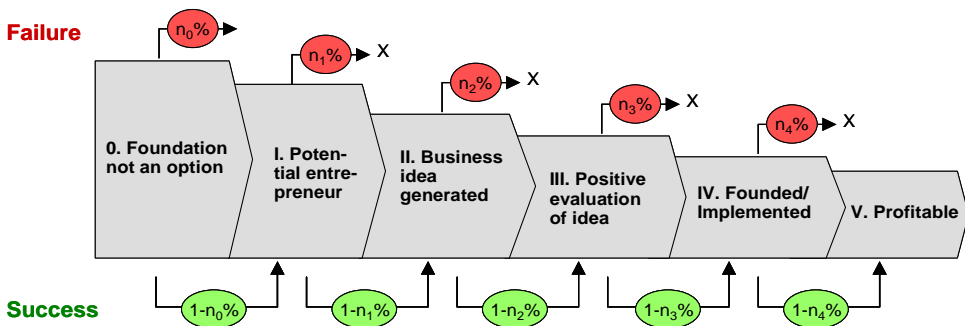


Figure 1. The Entrepreneurial Funnel

Source: Berger 2014.

The aim of the entrepreneur should be to move all the way through the funnel to the foundation of a profitable company. However, there are bifurcations of success and failure in each step, so the items passing through the process will become fewer and fewer. To reflect this, the model of a funnel is used additionally to the process diagram with entrepreneurs as items passing through the funnel. For each funnel step, there is an empirical probability to reach the next funnel step ('success' according to the definition of this framework) or to drop out of the funnel ('failure' according to the definition of this framework) with corresponding underlying causes (Berger 2014). Existing research suggests that the failure rate from funnel step IV: *Founded/Implemented* to step V: *Profitable* (n_4) is about 50% within the first 5 years (Fritsch et al. 2006; Fritsch & Weyh 2006).

THE CONCEPT OF PATH DEPENDENCE

Research on path dependence of organization is a key to better understand the process of venture creation and causal chains in connection with success or failure (David 1985; David 2001; Arthur 1989; Arthur 1990; Stack & Gartland 2003; Sydow et al. 2009). According to Sydow et al. (2009), the concept of path dependence provides a framework that explains the process of organizations getting into situations with limited and/or decreasing managerial discretion. As figure 2 suggests, an organization starts with a wide scope of possible options to choose from (Phase I). The process of becoming path dependent, i.e. locked in, starts with certain events as a root cause. Under certain circumstances, these events can trigger self-reinforcing dynamics due to a number of economic and social patterns. As these dynamics get stronger, a critical juncture is reached where the operating range of an organization narrows (Phase II). When this juncture is passed, the organization inevitably ends up in a lock-in situation with a “corridor of limited scope of action that is strategically inefficient” (Sydow et al. 2009). In this state (Phase III), decisions and commitments taken in the past cannot be undone anymore and trigger follow-up decisions and eventually a lock-in situation (Freiling et al. 2010; Sydow et al. 2009). The organization then finds itself in a state of inertia and suffers from the effect that its ‘history matters’ (Sydow et al. 2009; Freiling et al. 2010). Usually the path the organization is doomed to follow at this point in time is not the most favorable one anymore.

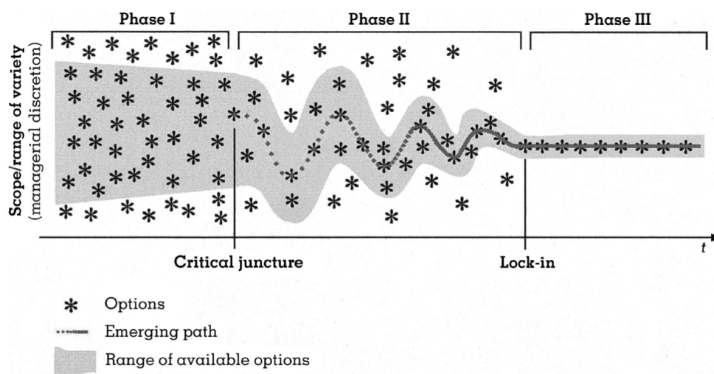


Figure 2. The constitution of an organizational path

Source: Sydow et al. 2009: 692

To distinguish path dependence from other phenomena, Sydow et al. (2009) characterize the process by four differentiation properties. The first one is *non-predictability*. The historic events functioning as root causes for developing path dependence do not allow estimating the future outcomes. Even more, usually it cannot be foreseen which types of events can lead to a lock-in situation at all. The second property of the process is *non-ergodicity*. This means that the destiny of the organization was not determined before, so it could develop in multiple ways and, thus, achieve different outcomes. However, the historic events limit the flexibility and determine the path towards a particular outcome out of all previous alternatives. This

leads to the third property of the path dependence process, the resulting *inflexibility*. The process is defined by the eventual situation where the actors are locked in and restricted in their decision-making. At this point in time, it is not possible to switch to other options outside the predetermined path. Since path dependence describes a concept of becoming trapped in an unfavorable position, the process is also defined by *inefficiency*. Usually the path does not lead to a superior position in the market (Sydow et al. 2009). Apart from the fact that it is usually not the most favorable event of the previously possible ones that finally happens, it is a disadvantage by itself to be limited in decision-making and the choice of options. In today's dynamic environment, the flexibility to react to changes in the market can condition success or failure.

To gain a better understanding which historic events can lead to path dependence, it is important to investigate how the self-reinforcing mechanisms work. These mechanisms in Phase II of the path dependence process "mean more than the mere existence of timeworn routines, cognitive rigidities, or structural inertia" (Sydow et al. 2009) and will be detailed further in the next section.

Self-Reinforcing Effects Triggering Path Dependence

Sydow et al. (2009) identify four major self-reinforcing effects that can potentially trigger states of path dependence in organizations: learning effects, adaptive expectations, coordination effects and complementary effects.

Learning Effects

Learning effects describe the phenomenon of efficiency gains by repetition. With each iteration of an operation, learning effects occur which allow performing the subsequent operation with increased efficiency (Sydow et al. 2009). This is a universal concept that applies to most actions requiring a common skill or experience set, not only to exactly repeated actions like operations on a conveyor belt. They can also occur with unique events as long as they share a common underlying pattern, for example decision-making rules or approaches to deal with an unknown situation. The concept of decision-making grounded in heuristics is also based on increased efficiency by repeating patterns of previous decision-making. Even complex decisions are often taken on the basis of mental models and dominant logics to increase efficiency and reduce complexity (Pralhad & Bettis 1986). Learning effects can create self-reinforcing situations (Sydow et al. 2009). If certain actions were taken for some time in the past, accumulated skills due to learning effects cause efficiency gains and enable performing the operation with either lower resource inputs or better outputs. This makes the choice to perform the operation in the same way again in the future more attractive. This phenomenon prevents considering other options that could prove to be superior in the long run (Sydow et al. 2009). It also applies to new ventures, particularly in case of entrepreneurs being successful with first steps they made. In these situations, they receive confirmation based on first feedback that increases their belief that the chosen way is the 'right' one.

Adaptive Expectations

Sydow et al. (2009) describe the concept of adaptive expectations as the adaption of behavior based on the experiences and expectations of other persons' reactions to the behavior. Preferences can vary in response to the expectations of others (Sydow et al.

2009). This behavior can be explained by the uncertainty people face in their decisions and the reduced complexity and feeling of security if other people make similar decisions or show similar behaviors or at least appreciate them. The reason for this behavior is the human “need for social belonging and the desire to end up on the winning side” (Sydow et al. 2009). Individuals are subconsciously afraid of breaking out of the mainstream and being stigmatized as ‘outsiders’ (Kulik et al. 2008). Since expectations are influenced by others, it can become a self-fulfilling prophecy if everybody does what everybody else does (Sydow et al. 2009). This can result in a self-reinforcing system. If an individual takes a decision to meet the expectations of a group, the group feels its expectations are confirmed and tends to strengthen them. This increases the pressure on subsequent decision-makers to behave in a way that conforms to these expectations (Sydow et al. 2009). Due to the resulting determination of decisions, an organization gets more and more path dependent. In the context of entrepreneurship, the founders and their organizations are in constant exchange with other entities and exposed to their behaviors and expectations. Founders adopt behaviors they observe with others and consider them ‘best practices’ without reflecting if this is the best solution for their individual situation (Freiling et al. 2010). Decision-makers are also influenced by cognitive biases when estimating expected behavior. For example, people tend to rely more on negative than on positive information (Baron 2004). This fact can lead to distorted reactions of entrepreneurs who being more affected by negative, e.g., risks, than positive information, e.g., chances. Subsequently entrepreneurs can take exaggerated defensive actions (Freiling et al. 2010). Since resources are scarce especially in the entrepreneurial context, this exaggerated behavior is not efficient and can in be a barrier to success (Freiling et al. 2010).

Coordination Effects

A further effect which can lead to path dependence is the coordination effect (Sydow et al. 2009). It describes the influence of predicted reactions on the decision-making behavior. In environments where the actors know each other well and play in well-rehearsed teams, the reactions of the other actors to their own decisions can be predicted. There are implicit or even explicit codes of conduct that lead to rule-guided behavior. By using these rules, the reactions of the other actors are predictable so that uncertainty is reducible. This decreases complexity and facilitates decision-making (Sydow et al. 2009). Similar to network effects, using these rules gets more attractive, the more other actors use these rules as well. Coordination effects allow more efficient interaction among these actors so that coordination costs can be significantly reduced (Sydow et al. 2009). In the context of entrepreneurship, coordination effects can cause escalating commitment and organizational rigidities (Freiling et al. 2010). These can lead to inappropriate adherence to current behaviors and ways of decision-making due to previous experiences of affirmation by various stakeholders like co-founders or investors. This can also distort the evaluation of previous investments of time or other resources. They are no longer considered sunk costs which are irrelevant for future decision-making but show a path of historic approval that seems appropriate to be continued – regardless of whether they were efficient or not. These coordination effects restrict appropriate reactions and adaptation to the market, competition and changing environmental conditions (Freiling et al. 2010). When own decisions follow the rules of a group, this code of conduct gets more and more cemented and triggers further decisions following it. This causes a self-

reinforcing effect that narrows down the scope of future decisions and can lead to path dependence (Sydow et al. 2009). An example that radically illustrates this effect is right-hand traffic. Since the reaction of the other actors – in this case, the side of the road they are going to use – can be predicted from historic experiences and rules, it determines the choice of the side of the road the actor will use. Not only the decision is less complex, it also increases efficiency when performing the action of the chosen option because of coordination with others (Sydow et al. 2009).

Complementary Effects

According to Sydow et al. (2009), these effects are similar to the concept of economies of scope, which states that two or more goods or services have lower average costs when developed, produced or marketed jointly rather than separately (Panzar & Willig 1981). This effect can also apply to efficiency gains through a combination of production resources. An example that comes to mind when thinking of complementary effects is Apple. Due to the synergies that can be achieved by different entities working together as an established ‘dream team’, deviation from this state involves switching costs (Prahalad & Hamel 1990). Apple took another approach and leveraged their complementary effects of combined software and hardware development in the personal computer segment to enter the phone market to introduce revolutionary new ways to think about mobile phones and initiated the era of today’s smartphones (Lin & Ye 2009; Kenney & Pon 2011; West & Mace 2010).

The previous example illustrates a dilemma businesses can face in view of complementary effects. Leonard-Barton (1992) highlights the paradox of companies wanting to leverage their own strengths and build on best practices, but at the same time being innovative. “[T]raditional core capabilities have a down side that inhibits innovation, here called core rigidities” (Leonard-Barton 1992). This rigidity is a sign of the path dependence the company is stuck with. Since the established way of doing things is working so well or at least worked so well in the past, new behaviors, routines and rules are only introduced when they are in line with the current modus operandi and, hence, further complementary synergies may be expected (Sydow et al. 2009). The more of these informal rules are established additionally, the more the incentives grow to choose a system-conform behavior again. This leads to a self-reinforcement of the complementary effects and supports becoming path dependent. The challenge for companies is to benefit from the efficiency given by their core capabilities, at the same time staying flexible enough to be innovative (Leonard-Barton 1992).

Self-Reinforcement

The four effects described above can drive self-reinforcing mechanisms and path dependence. The reasons for these dynamics partly lie in human behavior and decision-making. Emotional reactions like uncertainty avoidance, the need to feel a sense of belonging to a group or to be politically correct and to act according to social desirability play an important role (Sydow et al. 2009). Just like in all human decision-making, cognitive biases like selective perception or confirmation biases are an important factor here as well (Sydow et al. 2009; Kahneman & Tversky 1979). The phenomena of adaptive expectations, coordination effects and complementary effects fall into these categories. On the other hand, learning effects represent a more objective, economic reason to be stuck in the current path. In the short run, sticking to the current practice is often more efficient – independently of potential cognitive

distortions. This is similar to other resource-based lock-in situations with high switching costs (Sydow et al. 2009). An example is the use of today's standard keyboards with 'QWERTY' layout (David 1985). It is not the most ergonomic and efficient way to type and solely results from historic typewriters to prevent the letter levers from jamming. Since generations of people were used to typing with this layout, it was maintained in the electronic age. Switching to a more ergonomic keyboard layout would have been technically possible then and far more efficient, but at the price of switching costs with related initial inefficiency (Sydow et al. 2009). This example shows how not only a single organization but the whole society is caught in path dependence. Next, we relate the considerations on path dependence with the entrepreneurial funnel of founding a company to develop first causal relationships.

FOUNDATION AS REPEATED PATH BREAKING: DEVELOPING RESEARCH PROPOSITIONS

Viewing the entrepreneurial funnel or similar models of entrepreneurial venture creation, it might appear that a path leads through the funnel steps from generally considering becoming an entrepreneur, through generating business ideas, to finally founding a company. As these steps occur in sequence in the process, it may seem natural to progress from one step to another and dropping out of a step would be rather an exception. However, it can be argued that the opposite is the case. When applying the concept of path dependence (David 1985; David 2001; Arthur 1989; Arthur 1990; Stack & Gartland 2003; Sydow et al. 2009) to the entrepreneurial funnel, staying within the funnel is an exception. The path in every single step in the funnel tends to lead out of the funnel – as illustrated in figure 3. This study assumes that staying in the process and finally becoming a founder requires *breaking the path constantly*. The following sections will substantiate this thought.

To understand this surprising phenomenon, the four single effects that lead to path dependence, introduced in the previous section, have to be analyzed: learning effects, adaptive expectations, coordination effects and complementary effects (Sydow et al. 2009). As these effects rest on cognitive and emotional barriers of decision makers, the concept relates to organizations and individuals as well.

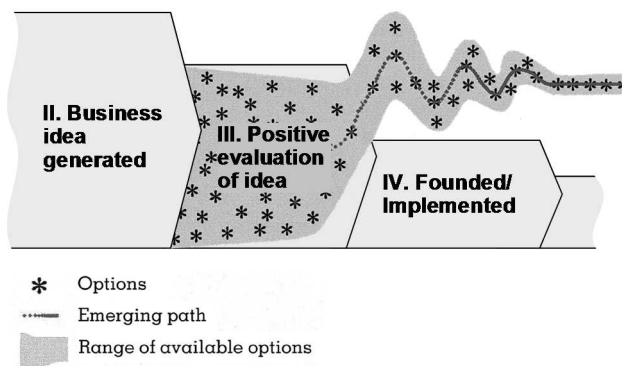


Figure 3. The concept of path dependence (Sydow et al. 2009) applied to the entrepreneurial funnel.

Source: own elaboration.

Learning Effects

The learning curve is a concept with a long history in research (Yelle 1979; Spence 1981; Adler & Clark 1991). Learning effects are based on the fact that “the more often an operation is performed, the more efficiency will be gained with subsequent iterations” (Sydow et al. 2009). As repetition usually creates efficiency, there is an incentive to stick to the same actions as performed before. Whatever an individual has done before, stopping to do it and becoming an entrepreneur is something different and new. Previous experience and subsequent efficiency gains of continuation cannot be used directly and the same level of efficiency as before when becoming an entrepreneur. This situation can be compared to established companies with a high staff turnover, where new employees enter the company at another level of the learning curve. Research shows that such companies “significantly underperform their rivals” (Hatch & Dyer 2004: 1155). Usually, the longer an individual was in his/her current occupation, the better he/she performed (Spence 1981). This generates opportunity costs and makes it harder to give up this current occupation.

Also, with every change in occupation over time, learning gets more difficult, since “[v]iewed as a learning machine, a man may become less and less productive as he grows older” (Ben-Porath 1970: 153). Changing the occupation might therefore not only require starting at another point of the learning curve but also on a learning curve with a flatter slope (Ben-Porath 1970: 153). This argumentation can be further supported by using theories of human capital which argue that investments in human resources can increase productivity (Werner 2011). A link between the human capital theory and learning effects can be established, since investments in human capital, for example through training programs, can “significantly improve learning by doing, which in turn improves performance” (Hatch & Dyer 2004: 1155). That means that “firm-specific human capital” (Hatch & Dyer 2004: 1155) can increase the slope of the learning curve within a particular company. Starting over as a new venture again comparatively decreases the slope of the learning curve.

The same learning effects apply to the use of heuristics and mental models for decision-making (Pralhad & Bettis 1986). They are also used to reduce complexity in the human brain and lead to higher efficiency in decision-making (Pralhad & Bettis 1986). To engage oneself in an entirely new situation, like becoming an entrepreneur, which requires a total different mindset can lead to inefficient decision-making. The supposable path is to continue the current situation in the same way as before. Becoming an entrepreneur therefore requires breaking the path. Against this background, we propose:

P1 [Learning effects]. Learning outcomes related to prior employment positions makes path breaking harder.

Adaptive Expectations

The adaptive expectations effect describes the phenomenon that preferences “vary in response to the expectations of others” (Sydow et al. 2009: 700). Decision makers tend to anticipate what others expect from them and to decide accordingly. They do not want to be ‘outsiders’ who deviate from the group (Kulik et al. 2008). As people usually expect for the future what they experienced in the past, this causes a continuous path (Sydow et al. 2009). Certain practices evolve in organizations, which is generally not a bad thing, as they might increase competitiveness (Szulanski 1996). Members of the organization tend to

follow these proven practices in expectation that others would do the same, since they want to be part of the mainstream (Kulik et al. 2008). This adaptation reinforces these practices, since “[a]daptation creates rules (and even rituals) of behavior” (Luhmann 1995: 122). Before a person becomes an entrepreneur, he/she is in another context, for example in a previous occupation, still in education or even in unemployment. Whatever the previous state is, the potential entrepreneur faces certain expectations of his/her environment. Being in an employment situation, supervisors, co-workers and even external parties who interact within the business context expect the individual to continue the current occupation. At most, they expect changes within the organization, for example by being promoted to a superior position or switching to another division. What they do not expect is that the potential entrepreneur leaves the company. Even if the prospective founder is not in an employment situation, his/her environment has certain expectations. When one completes university education, professors, friends and family might expect him/her to get a safe job in an employment situation with a fixed salary and to gather money and work experience. Even though there might be supporters of the idea of starting an own venture, negative opinions might prevail, since cognitive biases often lead human beings to rely more on negative than positive information when estimating expected behavior (Baron 2004). Taking the risk of becoming an entrepreneur right away might distract the social environment of the founder. This is the case also if the entrepreneur has no previous occupation at all and is e.g. coming out of unemployment. The social context, like family and friends as well as authorities, like the employment bureau or social security agencies, expect the individual to find secure employment with a work contract. These examples illustrate that in most situations the potential entrepreneur could come out of before founding, the social environment has strong expectations of the individual not to become an entrepreneur. If the prospective founder still does so, he/she does not live up to the peers’ expectations and takes the risk of becoming an ‘outsider’ of his/her social group (Kulik et al. 2008). It is also hard to build up a new social group whose expectations support entrepreneurship at the moment of taking the decision to found. This is because the founder just starts to be an entrepreneur and probably has not yet built up a strong network in the entrepreneurial community. Also shortly after foundation, it might be hard to build up a new social group where he/she can feel as an ‘insider’ again, because usually the founder is quite alone at the top of the company. Potential employees are in another social context, as they are not founders. To find real peers who can support the entrepreneurial decisions, he/she would have to reach out to other founders or mentors. The above argument shows that taking the decision to found, actually founding and being an early entrepreneur requires ignoring the expectations of others and not adapting to them. This means that the natural path leads out of the entrepreneurial funnel at this stage and staying within the process and becoming an entrepreneur requires breaking the path. Again, we propose:

P2 [Adaptive expectations]. With growing social expectations towards the potential entrepreneur of keeping the relationship as it is, path breaking becomes harder.

Coordination Effects

Coordination effects describe the phenomenon that sticking with established teams and processes makes the outcomes predictable as well as more efficient and comfortable. Implicit or explicit rules facilitate coordination among different people much more, the

more people use them (North 1990). This creates a “[m]ore efficient interaction among these actors” (Sydow et al. 2009: 699) and hence “coordination costs can be significantly reduced” (Sydow et al. 2009: 699). In the previous occupation, the prospective entrepreneur benefited from this coordination and the resulting synergies and cognitive confirmation. The entrepreneur comes out of a professional as well as private social situation that is well-rehearsed. He/she knows the way to behave in this context. In the situation of entrepreneurship, this effect can cause escalating commitment towards the current choice of decisions and actions (Freiling et al. 2010). This does not only apply to a new venture in a start-up company but also an innovative venture within an established company. Sydow et al. (2009) connect such examples to coordination effects of path dependence. For example, newspaper companies which were too much locked in their rigid routines to capture opportunities in the online market (Gilbert 2005) or the photo company Polaroid, which did not manage to reallocate its R&D structures towards the development of a new product suited to the new market requirements (Tripsas & Gavetti 2000). The same may be the case in a – thanks to social security systems – often convenient and well-settled employment situation and lead to sticking to the current occupation. Often employees have developed a certain feeling over time which behavior in the job is appreciated and leads to acceptance and success and which does not (Sydow et al. 2009). Becoming an entrepreneur, the prospective founder has to give up this efficient, predictable context and move into an unknown territory. This step is even harder than just switching jobs to a new company, because as a new company already exists, there are these unwritten rules and cultural behavior guidelines already in place (Luhmann 1995; Szulanski 1996). They just have to be learned and adapted to, but not newly developed. In a new venture, however, usually there is no established team and also the cultural and organizational environment within the start-up is yet to be created. Therefore, there are no explicit or implicit rules and codes of conduct that would guide how to behave and how to take decisions. All the coordination has to be built up from scratch. This increases not only uncertainty but also pure effort. These coordination effects incentivize the potential entrepreneur to stay in his/her previous well-rehearsed situation and not take the step to give up this developed efficiency by starting a new venture. Again, this self-reinforcing effect creates path dependence to the obvious path leading out of the entrepreneurial funnel. Staying within the process and finally becoming an entrepreneur requires breaking the path.

P3.1 [Coordination effects]. Sunk costs-based investments in employment career paths makes path breaking harder.

P3.2 [Coordination effects]. Expecting benefits from social security systems makes path breaking harder.

Complementary Effects

Complementary effects mean that a combination of certain input factors, processes or output factors can create additional value due to ‘economies of scope’ (Panzar & Willig 1981). This could apply to two or more single employees or business divisions working together as an established ‘dream team’ (Sydow et al. 2009). The same holds when certain products or services are provided as an entire solution rather than providing them stand-alone – at a lower level of efficiency (Panzar & Willig 1981; Sydow et al. 2009). This leads to a situation where new rules and behaviors are only introduced if they are in line

with the current practices and therefore are complementary (Sydow et al. 2009; Freiling et al. 2010). The complementary effect could simply be a combination of the workplace and the employee. A potential entrepreneur can take advantage of these complementary effects in his/her previous occupation. Having other components provided by the organization reinforces the impact of the own components. These could be input factors like a well-established cooperation between two divisions. For example, a strong market research department could boost the efficiency and effectiveness of the market communication department by providing them with exact descriptions of target groups, thus allowing creating perfectly targeted advertising messages (Prahalad & Hamel 1990). These could also be output factors that reinforce each other in sales. For example, a strong research and development and production division of batteries could complement the division of power units of an automotive OEM in the development of electrical cars. There might be no particular separate demand for high capacity batteries but in the combination with an electrical car they get a whole new meaning and value. Vice versa, the electrical car might have a superior design and power unit, but the value increases considerably if a market leading battery quality is part of the offering. David refers to such fruitful combinations as 'institutional clusters' (David 1994: 214). These interactions determine a path of sticking to the current complementary entities, which are getting increasingly dominant as action patterns (Leonard-Barton 1995). When a potential entrepreneur leaves such established clusters, he/she has to leave the resulting benefits behind. Complementary units have to be built up from scratch in a newly founded venture. Therefore, complementary effects tend to force a prospective entrepreneur to stay on the current path and continue the previous occupation. Implementing his/her idea and actually founding a company requires breaking this path. We conclude:

P4.1 [Complementary effects]. Lacking complementarity makes path breaking harder.

The same holds in case of personal relationships to other people being relevant to the new business creation directly or indirectly.

P4.2 [Complementary effects]. Social embeddedness makes path breaking harder.

Path Dependence in the Single Steps of the Entrepreneurial Funnel

The investigation of the self-reinforcing effects that can lead to path dependence (Sydow et al. 2009) shows that all of them counteract becoming an entrepreneur. However, so far the discussion above has mainly focused on changing from an employee position to self-employment, so on the overall entrepreneurial process. However, it can also be applied to the single steps within the entrepreneurial funnel. While no irreversible steps have been taken to start an own venture, for example quitting the previous job, a potential entrepreneur always has the fallback option of discarding the idea of founding a company and continuing with the current occupation (McGrath 1999). Therefore, for every funnel step before the actual foundation of a company (funnel steps 0-IV), the above arguments can be made to support the thought of the path leading out of the funnel. The most crucial one here is the transition from step III ("Positive evaluation of idea") to step IV ("Founded/Implemented"), as this move might likely create hardly reversible facts. However, also reaching the next step ("V. Profitable") can be hindered from the perspective of path dependence, since the entrepreneur always has the chances to give up the chosen path of running an own venture and return to an occupation

similar to his/her previous one. From the viewpoint of real options reasoning (Collan et al. 2014), the entrepreneur can constantly weigh up his/her different options and turn to a more favorable one (McGrath 1999). So if the company does not immediately show the desired results, the entrepreneur has to withstand a dry spell in his/her venture and can abandon the company and turn to another available option of occupation (McGrath 1999). There are also opposing views of real options thinking in the entrepreneurial context. Landier (2006) argues that entrepreneurs often have a highly subjective evaluation of the current performance and future prospects of their venture. They often overvalue the impact of a failure and the related feared stigma of failure (Landier 2006; McGrath 1999) and hence hold on to start-ups, even though they are not promising any more (Landier 2006). This finding further supports the thought of path dependence towards failure, as it describes a situation where an entrepreneur who already founded a company (step “IV. Founded/Implemented”) does not reach the subsequent step (“V. Profitable”). Due to the irrational hesitance to terminate the project and start over again with a more promising option (Landier 2006), for example going back to the previous occupation or starting again with another business idea, he/she fails to reach the next step.

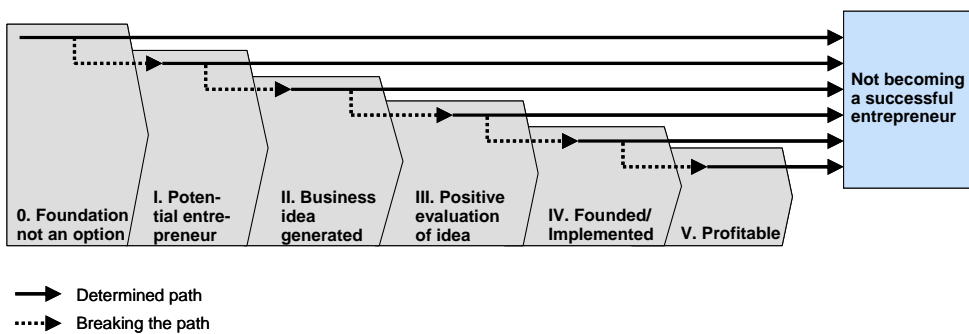


Figure 4. Path Dependence in the different steps of the entrepreneurial funnel

Source: own elaboration

The argument above concludes in supporting the idea that moving through the entrepreneurial funnel requires leaving the predetermined path repeatedly. This might be counterintuitive, because the steps of becoming an entrepreneur from the process point of view seem to follow one another subsequently. However, in reality, moving all the way through the process is rather an exception. The following figure illustrates this circumstance.

CONCLUSIONS, LIMITATIONS AND OUTLOOK

The concept of path dependence has a long history in research (David 1985; Arthur 1989). In the entrepreneurial context, it has been mainly applied to understand success and failure of existing ventures. Sydow et al. (2009) presented an appealing line of reasoning in this context. This study built on their arguments, but applied the concept of path dependence of the process of venture creation as a path-breaking process to explain why some potentially promising ventures are not founded in the first place.

The findings of this study trigger the discussion that moving through the entrepreneurial process might not be a natural sequence, but instead principles of path dependence lead entities out of the process at each step. Staying in the process and founding a company and making it successful hence might require multiple breaches of the determined path. This insight opens up a new perspective on why it is so hard to start a new company.

It also raises the question if measures to overcome path dependence can be used to facilitate moving through the entrepreneurial process. To regain the flexibility in line with the available choices, a path dependent organization in Phase III has to break the path (Sydow et al. 2009). The aim can be either to return to the full set of choices of Phase I, just to broaden the corridor of available choices, or to generally accept the path dependence but at least try to switch to another, more favorable path. Breaking the path means leaving the current patterns of decision-making and actions behind. This is not an easy endeavor, as the causes are often emotional and cognitive barriers, as described above, which are hard to overcome (Sydow et al. 2009). External impulses might be required to change the lens through which to look at things and evaluate the current situation. For organizations, this outside impulse could be, e.g., advice from external consultants or newly hired management staff. For individuals, these could be mentors or coaches (Kets de Vries 2006). To cope with emotional barriers, individuals might need psychological and psychoanalytical approaches (Sydow et al. 2009; Kets de Vries 2006) such as Neuro Linguistic Programming (NLP) tools like reframing (Bandler et al. 1982) or psychoanalytical leadership coaching (Kets de Vries 2006).

Further research should conceptually follow up on the initiated discussion that moving through the entrepreneurial process might require breaking a determined path repeatedly, as it brings a new perspective to both concepts of entrepreneurial process and path dependence. A starting point here could be an investigation of the corresponding success and failure causes in every single step of the entrepreneurial process to draw connections to the mechanisms of path dependence. Future research should further intensify the quantification of the entrepreneurial funnel. A representative quantification would allow calculating the chances for a single entrepreneur to proceed from each one to the next funnel step and thereby identify the most important leaks in the pipeline towards becoming a successful entrepreneur.

The developed propositions are derived from theory and previous findings. Insofar, they are founded. However, there is no indication that this set of causalities is already complete. Case study research (Yin 2013) could be one empirical option that allows researchers to complete the set of causalities by, e.g., semi-structured interviews. In the first part of these interviews, the interview partners could be asked for other factors not considered by theory or prior research.

Another limitation is the use of a mono-theoretical approach. Path dependence research seems to be a fertile background to understand the venturing process. However, the lens of this approach illuminates certain issues but ignores others. Thus, applying other theories of evolutionary nature could allow identifying other important constructs.

REFERENCES

- Adler, P.S. & Clark, K.B. (1991). Behind the learning curve: A sketch of the learning process. *Management Science*, 37(3), 267-281.
- Arthur, W.B. (1989). Competing Technologies, Increasing Returns, and Lock-In by Historical Events. *The Economic Journal*, 99(394), 116-131.
- Arthur, W.B. (1990). Positive feedbacks in the economy. *Scientific American*, 262(2), 92-99.
- Bandler, R., Grinder, J. & Andreas, S. (1982). *Neuro-Linguistic Programming™ and the Transformation of Meaning*. Moab: Real People.
- Baron, R.A. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing*, 19(2), 221-239.
- Ben-Porath, Y. (1970). The production of human capital over time. In: *Education, income, and human capital*. NBER, 129-154.
- Berger, P.K. (2014). *The Role of Fear for Entrepreneurial Venture Creation Causes of Failure before and after Foundation*. Wiesbaden: Springer.
- Bhave, M.P. (1994). A process model of entrepreneurial venture creation. *Journal of Business Venturing*, 9(3), 223-242.
- Brixy, U., Sternberg, R. & Vorderwülbecke, A. (2011). *Global Entrepreneurship Monitor - Unternehmensgründungen im weltweiten Vergleich - Länderbericht Deutschland 2011*, Available at: http://www.wigeo.uni-hannover.de/fileadmin/wigeo/Geographie/Forschung/Wirtschaftsgeographie/Forschungsprojekte/laufende/GEM_2011/gem2011.pdf [Accessed June 17, 2012].
- Brüderl, J., Preisendörfer, P. & Ziegler, R. (1992). Survival chances of newly founded business organizations. *American Sociological Review*, 227-242.
- Chandler, G.N. & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3), 223-236.
- Collan, M., Freiling, J., Kyläheiko, K., Roemer, E. (2014). Entrepreneurship and the art of tackling technological crises: a strategic real options framework, in: *International Journal of Technology Intelligence and Planning*, 10(2), 166-185
- Cooper, A.C., Gimeno-Gascon, F.J. & Woo, C.Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing*, 9(5), 371-395.
- Cooper, A.C., Woo, C.Y. & Dunkelberg, W.C. (1988). Entrepreneurs' perceived chances for success. *Journal of Business Venturing*, 3(2), 97-108.
- David, P.A. (1985). Clio and the Economics of QWERTY. *American Economic Review*, 332-337.
- David, P.A. (2001). Path dependence, its critics and the quest for "historical economics". In: P. Garoust & S. Iannoides (eds). *Evolution and path dependence in economic ideas: Past and present* (pp. 15-40). Cheltenham: Edward Elgar.
- Fiet, J.O. (2001). The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*, 16(2), 101-117.
- Freiling, J., Laudien, S.M., Schmidt, M., Wessels, J. (2010). *Entrepreneurial failure in the spotlight of the entrepreneurship theory*. In 7th AGBA Annual World Congress. Putrajaya (Malaysia).
- Fritsch, M., Brixy, U. & Falck, O. (2006). The Effect of Industry, Region, and Time on New Business Survival – A Multi-Dimensional Analysis. *Review of Industrial Organization*, 28(3), 285-306.
- Fritsch, M. & Weyh, A. (2006). How Large are the Direct Employment Effects of New Businesses? An Empirical Investigation for West Germany. *Small Business Economics*, 27(2-3), 245-260.

- Gilbert, C.G. (2005). Unbundling the structure of inertia: Resource versus routine rigidity. *Academy of Management Journal*, 48(5), 741-763.
- Gompers, P., Kovner, A., Lerner, J., Scharfstein, D. (2006). *Skill vs. luck in entrepreneurship and venture capital: Evidence from serial entrepreneurs*. National Bureau of Economic Research. Available at: <http://www.nber.org/papers/w12592> [Accessed June 11, 2014].
- Hatch, N.W. & Dyer, J.H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic management journal*, 25(12), 1155-1178.
- Jo, H. & Lee, J. (1996). The relationship between an entrepreneur's background and performance in a new venture. *Technovation*, 16(4), 161-211.
- Kahneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 263-291.
- Kelley, D.J., Singer, S. & Herrington, M.D. (2010). The Global Entrepreneurship Monitor 2010. Available at: http://www.gemconsortium.org/assets/uploads/1330429931GEM_2011_Global_Report_-_EDIT_FEB_2012.pdf [Accessed January 20, 2013].
- Kelley, D.J., Singer, S. & Herrington, M.D. (2011). The Global Entrepreneurship Monitor 2011. Available at: <http://155.48.10.202/Academics/centers/blank-center/global-research/gem/Documents/GEM%20Global%202011%20Report.pdf> [Accessed July 3, 2012].
- Kenney, M. & Pon, B. (2011). Structuring the Smartphone Industry: Is the Mobile Internet OS Platform the Key? *Journal of Industry, Competition and Trade*, 11(3), 239-261.
- Kets de Vries, M.F.R. (2006). *The leader on the couch: a clinical approach to changing people and organizations*. San Francisco CA: Wiley.
- Kulik, C.T., Bainbridge, H.T.J. & Cregan, C. (2008). Known by the Company We Keep: Stigma-By-Association Effects in the Workplace. *Academy of Management Review*, 33(1), 216-230.
- Landier, A. (2006). *Entrepreneurship and the Stigma of Failure*. Unpublished manuscript.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal*, 13(1), 111-125.
- Leonard-Barton, D. (1995). *Wellsprings of knowledge: Building and sustaining the sources of innovation*. Harvard Business Press.
- Lin, F. & Ye, W. (2009). *Operating System Battle in the Ecosystem of Smartphone Industry*. In International Symposium on Information Engineering and Electronic Commerce. Ternopil: IEEE, pp. 617-621. Available at: <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=5175193> [Accessed June 15, 2014].
- Luhmann, N. (1995). *Social systems*. Stanford, CA: Stanford University Press.
- McGrath, R.G. (1999). Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management Review*, 24(1), 13-30.
- North, D.C. (1990). *Institutions, institutional change, and economic performance*. Cambridge: Cambridge University Press.
- Panzar, J.C. & Willig, R.D. (1981). Economies of scope. *American Economic Review*, 71(2), 268-272.
- Prahalad, C.K. & Bettis, R.A. (1986). The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal*, 7(6), 485-501.
- Prahalad, C.K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.
- Sánchez López, A.M. (2012). *The venture creation process in Puerto Rico: From entrepreneurial potential to firm birth*, Barcelona.
- Spence, A.M. (1981). The learning curve and competition. *Bell Journal of Economics*, 12(1), 49-70.

- Stack, M. & Gartland, M.P. (2003). Path creation, path dependency, and alternative theories of the firm. *Journal of Economic Issues*, 487-494.
- Stuart, R.W. & Abetti, P.A. (1990). Impact of entrepreneurial and management experience on early performance. *Journal of Business Venturing*, 5(3), 151-162.
- Sydow, J., Schreyögg, G. & Koch, J. (2009). Organizational path dependence: Opening the black box. *Academy of Management Review*, 34(4), 689-709.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic management journal*, 17(WINTER), 27-43.
- Tripsas, M. & Gavetti, G. (2000). Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal*, 21(10-11), 1147-1161.
- Watson, J. & Everett, J. (1993). Defining Small Business Failure. *International Small Business Journal*, 11(3), 35-48.
- Werner, A. (2011). *Abbruch und Aufschub von Gründungsvorhaben*. Bonn.
- West, J. & Mace, M. (2010). Browsing as the killer app: Explaining the rapid success of Apple's iPhone. *Telecommunications Policy*, 34(5-6), 270-286.
- Yelle, L.E. (1979). The learning curve: Historical review and comprehensive survey. *Decision Sciences*, 10(2), 302-328.
- Yin, R.K. (2014). *Case Study Research: Design and Methods*, 5th Ed., New York: Sage.

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Empirical Studies Concerning the Relationship Between Knowledge Management and Effective Performance in Small and Medium-Sized Enterprises – Selected Preliminary Results

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Abstract

This article presents preliminary results of empirical studies concerning the relationship between knowledge management and effective performance in small and medium-sized enterprises. 120 small and medium-sized enterprises from the Lower Silesia province were studied. Quantitative research was carried out. Articles published in professional literature point to a relationship between market orientation and knowledge management. Pilot studies allowed to further develop the research tool. Relevant quantitative empirical studies have shown that knowledge management with respect to market orientation is a determinant of the growth and development of contemporary small and medium-sized enterprises. Both market orientation and knowledge management place knowledge in the centre of attention. Implementing by entrepreneurs knowledge management with respect to market orientation allows them to gain competitive advantage over others and is one of effective methods of development of an organisation.

Keywords: knowledge management; small and medium companies

JEL codes: M14, O31

INTRODUCTION

The aim of this paper is to present selected results of empirical studies concerning the relationship between knowledge management, market orientation, effective perfor-

mance in small and medium-sized enterprises, (special attention was devoted in this paper to a part of the study concerning the relationship between knowledge management and effective performance of the enterprise). Knowledge management is considered as an important factor facilitating adaptation to market requirements and enhancing efficiency and innovativeness (Bosua & Venkitachalam, 2013, p.331-346). A substantial number of studies have shown that large enterprises successfully utilise knowledge management and that there is a positive correlation between knowledge management and the enterprise's growth and development rates (Zack & McKeen & Singh, 2009, p. 392-409). At the same time, however, studies reveal that small and medium-sized enterprises do not fully exploit knowledge management tools (Durst & Edvardsson, 2012, p. 879-903). As the specific features of SMEs are different from those of large enterprises, it should not be assumed that the correlation between market orientation and knowledge management, and their impact on the enterprise's operating efficiency, are shaped in the same manner. Although studies suggest that SMEs do benefit from applying knowledge management mechanisms, the dependence between market orientation, knowledge management and enterprises' operating efficiency is not clear and requires further analysis. Therefore, a justified need arises to conduct comprehensive studies into the impact of knowledge management and market orientation of SMEs on their operating efficiency. Small and medium-sized enterprises located in the Lower Silesia province were studied. A survey questionnaire addressed to the owners/managers and employees of SME was used as a research tool. In the study statistical methods and structural equation modelling were used. As a result of the study, the empirical dimensions of the relationship between knowledge management, market orientation and effective performance in small and medium-sized enterprises were identified.

THE CHARACTERISTICS OF OPERATION OF SMALL AND MEDIUM-SIZED ENTERPRISES IN THE CONTEXT OF KNOWLEDGE MANAGEMENT

Much attention in both domestic and foreign literature is devoted to the issues associated with the functioning of the sector of small and medium-sized enterprises (hereinafter referred to as SME)¹. The issues concerning SME are given special attention by the European Commission, which indicates that enterprises in this sector play a major role in the creation of jobs and are a factor of social stability and economic development². The report published by the World Bank "SME Exchange in emerging market economies. A stocktaking of development practices" (Harwood & Konidaris, 2015, p. 14-16) pointed out the important role of the SME sector in the economic life of individual countries. The authors of the report propose facilitating in acquiring capital by the SME sector, including through stock exchanges. The importance of SME financing through the stock exchange is also emphasised in the Report on the Newconnect market³. SMEs are predominant quantitatively in the overwhelming majority of de-

¹ More on this topic: (Katua, 2014; Lundström et al. 2009; Wymenga, Spanikova, Barker, Konings, & Canton, 2012; Nvárová & Vrchota, 2013)

² Commission Regulation (EC) No 70/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to State aid to small and medium-sized enterprises. *Official Journal of the European Union*.

³ Report on the Newconnect market - a summary of the functioning of the first alternative trading platform in Poland. (2015). Warsaw Stock Exchange.

veloped and developing world's economies and within the European Union approximately 20 million companies operate, 99.8% of which are companies of the SME sector. In this community micro enterprises definitely prevail. There are about 18 million of them, which constitutes 91.8% of entities. According to the report of the Polish Agency for Enterprise Development, SMEs are responsible for almost 3/4 of Polish GDP, and share of small and medium-sized enterprises is at 48,5%⁴.

In the available literature there is no conclusive indication when it comes to the direction of the relationship between knowledge management and market orientation. Studies carried out in large enterprises confirm that there is a significant and positive relationship between these concepts (Escher, 2013), (Nofal & Surachman & Salim & Djumahir, 2014, p.8-17), (Michna & Kmiecik, 2012, p. 204). This is due to the fact that the lack of appropriate mechanisms for knowledge management in enterprises significantly impairs the effective creation and dissemination of knowledge of the market. Effective knowledge management creates the conditions for processing, interpreting and using the knowledge about market trends. The specificity of knowledge management in SMEs:

- often has informal and unaware nature,
- often has insufficient information system,
- simpler organisational structure,
- more favourable situation to acquire knowledge of the customers,
- forgetting knowledge,
- no demarcation of responsibility,
- insufficient level of delegation of tasks and powers,
- fast applicability of new knowledge [contributing to the flexibility and agility].

For the purpose of the study, its authors adopted the following definitions of knowledge management and market orientation: knowledge management is an integrated set of actions, aimed at shaping and utilising those knowledge resources which are conducive to boosting the enterprise's operating efficiency; market orientation, in turn, consists in the systematic observation of the activities of competitors, suppliers, customers and other market actors, which is followed by dissemination of knowledge about the needs of the business environment within the organisation with a view to determining and satisfying customers' needs. The concept of enterprise's operating efficiency was derived from the work of J. Penc who defined this term as follows (Penc, 1997, 100): "(...) it is the ability of an enterprise to adapt, on an ongoing and strategic basis, to changes in its business environment, and to utilise its resources in a productive and cost-efficient manner in order to implement the adopted structure of goals".

Integration of knowledge management and market orientation may be a key element of the competence and improvement of the competitive position of the company (Wang & Hult & Ahmed, 209, p.99-122). In addition, both market orientation and knowledge management place knowledge in the centre of attention. Both these concepts are perceived, along with a number of other aspects, as significant for the growth and development of an enterprise. (Brzostek & Michna, 2014, p. 471-482). An important factor inducing extensive research in the area of market orientation is the importance of the re-

⁴ Report on the status of small and medium enterprises sector in Poland in the years 2013-2014. (2014). Warsaw, Polish Agency for Enterprise Development, 9.

sources of knowledge in the economy and individual enterprises. Research in market orientation was carried out using quantitative research methods. However, some authors indicate (Van Raaij & Stoelhorst, 2008, p. 37-55), (Gebhardt & Carpenter & Sherry, 2006, p. 37-55) that qualitative methods may provide a source of new insights into the relationship between market orientation and knowledge management. Analysis of the research carried out by various authors indicates that there is a research and methodological gap in the field of knowledge management, market orientation and effective performance. Research carried out by various authors concerning the relationship between market orientation and the growth and development of SMEs indicate an indirect or direct relationship between the orientation and measures of growth and development.

Based on the analysis of both foreign and domestic literature it can be concluded that there have been no comprehensive studies so far concerning the relationship between knowledge management, market orientation and effective performance in small and medium-sized enterprises. Thus, there is a justified need to carry out a comprehensive study concerning the impact of knowledge management and market orientation of SMEs on their effective performance.

CHARACTERISTICS OF EMPIRICAL STUDIES CARRIED OUT

The study covered 120 small and medium-sized enterprises from the Lower Silesia province. Micro enterprises employing up to 9 people were excluded from the study. Quantitative research was carried out in the first and second quarter of 2015. Survey questionnaires were used as a research tool for quantitative analyses. The source of the individual variables in the questionnaires was literature research. The questionnaire was designed, *inter alia*, with the use of papers by the following authors: [Zieba, 2014, p. 358-465; Zack & McKeen & Singh, 2009, p. 392-409; Narver & Slater, 1990, p. 20-35]. The questions were prepared on the basis of the 7-point Likert scale. The survey questionnaires used in quantitative studies were developed in a paper and electronic version using survey tools: <https://www.google.com/intl/pl/drive/>. In addition to questions directly related to knowledge management, the questionnaire included those pertaining to aspects and processes exerting a major impact on the SMEs' ability to shape market orientation. After the most important, potential determinants of knowledge management and market orientation in SMEs were selected through an analysis of literature on the subject, questions were added to the questionnaire regarding issues such as formalisation in an enterprise, decision-making centralisation, social interactions in an enterprise, knowledge management and market orientation. The following measures were used to assess SMEs' operating efficiency: increase in revenue, increase in the number of employees, increase in return on sales, market share, customer satisfaction, the quality of products/services offered, the number of new products/services.

Enterprises covered by the study are affiliated with chambers of commerce and business associations from the Lower Silesia region. At the first stage of the study, the questionnaire, on behalf of its authors, was distributed via email by business organisations among their affiliated members. After this stage, a response rate of 3% was recorded. At the second stage, the authors contacted each entrepreneur in person, providing them with hard copies of the questionnaire. Here, the response rate reached 38%.

Pilot studies were carried out in January and February 2015. The pilot studies covered managers/owners of small and medium-sized enterprises and their employees. The pilot studies were carried out on the same groups that were covered by the main study, thereby ensuring methodological correctness. The pilot stage of the study covered 10 managers and 10 employees of small and medium-sized enterprises. Particular attention at this pilot stage was paid to whether the respondents had any difficulties in understanding the questions – those not clearly understandable were reformulated or, in certain cases, deleted.

Table 1. The SME sector taking into account a section of the Polish Classification of Activities and comparing data of the research sample to the data presented by GUS

	Fre- quency	Percent- age	Percentage of valid survey responses	Cumulative percentage
A. Agriculture, forestry, hunting and fishing	2	1.7	1.7	1.7
B. Mining and quarrying	3	2.5	2.5	4.2
C. Industrial processing	12	10.0	10.0	14.2
D. Electricity, gas, steam, hot water and air conditioning manufacturing and supply	1	0.8	0.8	15.0
E. Water supply; waste and waste water management and remediation activities	1	0.8	0.8	15.8
F. Construction	8	6.7	6.7	22.5
G. Wholesale and retail trade; repair of motor vehicles, including motorcycles	17	14.2	14.2	36.7
I. Accommodation and food service activities	4	3.3	3.3	40.0
J. Information and communication	14	11.7	11.7	51.7
K. Financial and insurance activities	10	8.3	8.3	60.0
L. Real estate activities	4	3.3	3.3	63.3
M. Professional, scientific and technical activities	8	6.7	6.7	70.0
Q. Human health and social work activities	2	1.7	1.7	71.7
R. Arts, entertainment and recreation	2	1.7	1.7	73.3
S. Other personal service activities	31	25.8	25.8	99.2
T. Households as employers of domestic personnel; service-producing activities of private households for own use	1	0.8	0.8	100.0
Total	120	100.0	100.0	

Source: own study.

The studied enterprises were analyzed considering the type of business, taking into account a section of the Polish Classification of Activities 2007 and comparing data of the research sample to the data presented by GUS (Table 1., Figure 1).

SMEs were divided considering the sector of activity. The most numerous group among the surveyed SMEs are service companies (86%), the industrial sector represents 12 % of respondents and the agricultural sector represents less than 2 % of the respondents.

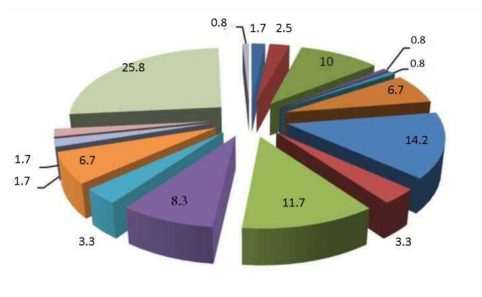


Figure 1. The SME sector taking into account a section of the Polish Classification of Activities and comparing data of the research sample to the data presented by GUS – diagram

Source: own study.

The most numerous group are companies operating in the administrative district area (36.29%) and Lower Silesia province (17.98 %). 15.2% of the surveyed enterprises operate all over the country and 9.3 % within the county in which they are registered. Only 8.36 % of SMEs conduct export activities and 15.2 % operate within several provinces (Figure 2.).

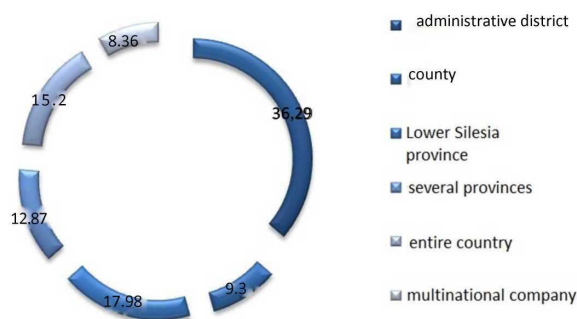


Figure 2. Areas of business of the surveyed SMEs

Source: own study

In the group of surveyed managers (business owners) most, as many as 75.8 %, were male. In the surveyed companies 37.5% of the people who filled in the survey questionnaire were owners or co-owners of enterprises covered by the study.

In the surveyed companies the numbers of employees in relation to the previous year have not changed in 50 entities, which represents 40 % of all the surveyed companies (Table 2. and 3.).

Changes in the effective performance of the surveyed companies in relation to the previous year indicate that most companies recorded an increase in revenues in relation to the previous year (60.8%) with the simultaneous decrease in profitability (40%).

Table 2. Changes in revenues in relation to the previous year

Changes in revenues in relation to the previous year: (N = 120)		
	Frequency	Percentage
Decreased	29	24.2
No changes	18	15.0
Increased	73	60.8
Total	120	100.0

Source: own study.

Table 3. Changes in revenues in relation to the previous year

Changes in net profitability in relation to the previous year: (N = 120)		
	Frequency	Percentage
Decreased	48	40.0
No changes	26	21.7
Increased	46	38.3
Total	120	100.0

Source: own study.

Among the surveyed companies 42 indicated that the value of their total assets does not exceed 2 million. The second largest category are entities whose value of assets is from 2 to 10 million euro (45 of all surveyed companies). None of the surveyed companies declared ownership of assets worth over 43 million euro (Table 4. and 5.).

Table 4. Structure of the sample with respect to rate of employment and the annual income

Annual income (million euro)	Rate of employment					Total
	From 10 to 26	From 26 to 50	From 51 to 100	From 101 to 200	From 201 to 249	
(0;2>	34	7	0	1	0	42
(2; 10>	17	11	11	4	2	45
(10; 50>	8	6	8	8	3	33
Over 50	0	0	0	0	0	0
Total	59	24	19	13	5	120

Source: own study.

Table 5. Structure of the sample with respect to rate of employment and the value of total as-sets

Annual income (million euro)	Rate of employment					Total
	From 10 to 26	From 26 to 50	From 51 to 100	From 101 to 200	From 201 to 249	
(0;2>	36	6	0	4	0	46
(2; 10>	16	13	15	4	4	52
(10; 43>	7	5	4	5	1	22
Over 43	0	0	0	0	0	0
Total	59	24	19	13	5	120

Source: own study.

RELATIONSHIP BETWEEN EMPIRICAL DIMENSIONS OF KNOWLEDGE MANAGEMENT AND EFFECTIVE PERFORMANCE OF SMES

The presented model (Figure 3) is a part of wider analyses of the relationship between knowledge management, market orientation and effective performance of SMEs. Taking into account the carried out analyses of relationships between knowledge management, market orientation and effective performance of an enterprise, including the analysis of literature, analysis of correlation and analysis of regression, structural models were developed. Most structural equation models can be expressed in the form of path diagrams. This program uses (PATH1) language, which is much like the path diagram. Individual models vary in the latent and exogenous variables adopted for the analysis and the proposed structure of mutual cause and effect relationships.

In the group of organizational impacts there is silent knowledge, whose occurrence may influence the effective performance of an organization. Silent knowledge is an individual knowledge difficult to formalise. Silent knowledge can also be intuition, this knowledge is rooted in the expertise of an individual, values and emotions. The study carried out by A. Rajan from the Centre for Research in Employment and Technology in Europe on a group of 6000 companies has shown that a key factor in knowledge management is the use of hidden information and skills of employees (Gierszewska, 2003, p. 62-88). In the presented model manifest variables were taken as selected processes of knowledge management, resulting from the model adopted by the author. In the proposed model latent variables comprise the contexts related to silent knowledge.

Model taking into account the above dependencies obtained convergence in the 12th iteration step (the obtained discrepancy function is 0.000873. The method of ML estimation was applied. The maximum likelihood (ML)- when selecting this option, the program performs Wishart maximum likelihood estimation for correlation or covariance analysis, and the normal maximum likelihood estimation in the case of the torque analysis). The analysis of the values of path parameters (Table 6.) draws attention to the negative value of the relationship between "knowledge use" and "silent knowledge". At the same time, a high value of the parameter (6.162) is noted between "silent knowledge" and "effective performance of the enterprise". This confirms that the use of silent knowledge has significant meaning for the enterprise. The model reveals a more complex structure of the relationship as it allows the differentiation of the relationship between the assumed variables related to knowledge management and the corresponding silent knowledge. It is indicated in the literature that developing knowledge of employees through actions aimed at the development of creativity and social capacity is one of the most important directions of the research and development of the concept of knowledge management (Carleton, 2011, p. 459-469).

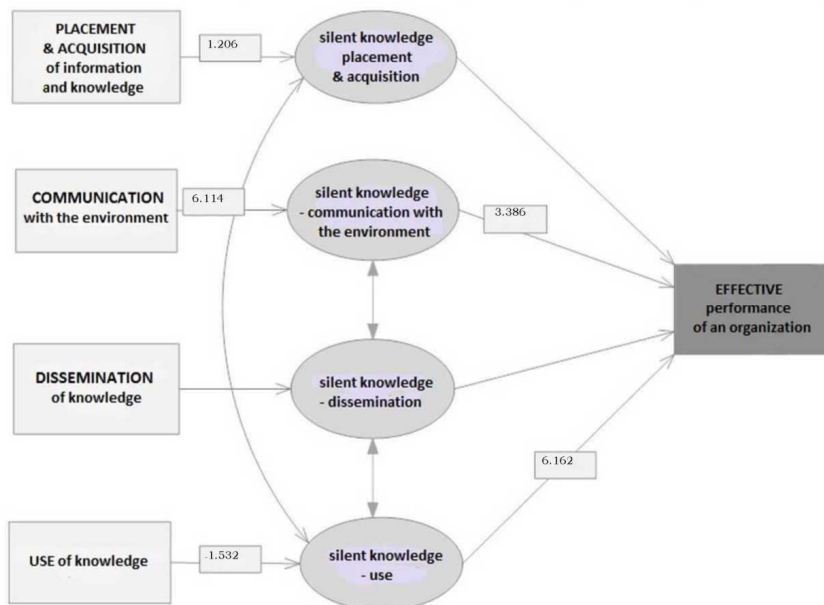


Figure 3. Knowledge Management and enterprise performance

Source: own study.

The model indicates important links between “communication with the environment” and “silent knowledge”, which, as a result, translates into a high value of the parameter connecting “silent knowledge” with “effective performance of the enterprise”. Communication with the environment includes both the growth of customer and supplier requirements but also maintaining contact with them (both formal and informal one), participation in training courses, conferences, technological progress, which gives each employee opportunities to obtain information and knowledge in a virtually unlimited manner. G. P. Huber assumes that the incidental, unintended acquisition of information and knowledge is a common way of learning in learning organizations. M. Huysman indicates that the organization learns based on cases. An enterprise's learning process is largely spontaneous (Malara, 2012, p. 146). The calculated indicators of the fit of the model indicate a good fit of the model to the data.

Table 6. Model assessment (Correlations: Managers. Management. Effectiveness)

	Model assessment (Correlations: Managers. Management. Effectiveness)			
	Parameter assessment	Standard error	Statistics T	Likelihood
[LOCATING]-1->(LOCAL _C)	1.206	0.000		
[COM]-2->(COM _C)	6.114	0.000	5,535990E+00	0.000
[SPREAD]-3->(SPREAD _C)	4.405	0.000		
[UTILI]-4->(UTILI _C)	-1.532	0.324	4,722401E+00	0.000
(LOCAL _C)-5->(WYKORZ _C)	0.866	0.000		
(COM _C)-6->(SPREAD _C)	-2.685	0.000		
(SPREAD _C)-7->(COM _C)	0.332	0.000		
(SPREAD _C)-8->(UTILI _C)				
(UTILI _C)-9->(LOCAL _C)	4.155	0.000		
(UTILI _C)-10->(SPREAD _C)				
(LOCAL _C)-11->[EFEKT]	0.114	0.040	2.870663E+00	0.004
(COM _C)-12->[EFEKT]	3.386	0.070	7.447363E+00	0.000
(SPREAD _C)-13->[EFEKT]	0.647	0.095	6.812749E+00	0.000
(UTILI _C)-14->[EFEKT]	6.162	0.763	-8.447363E+00	0.000

Source: own study.

CONCLUSIONS

A conclusion which can be drawn from the study is that the key factor in knowledge management is to make effective use of employees' latent information and skills. High scores obtained by relations connected with communicating with the business environment, localising and obtaining information and knowledge as well as disseminating knowledge, show how important these knowledge management processes are for disseminating customer- and competition-related information, organisation and a coordinated action aimed at utilising knowledge resources available in this regard to the organisation. Communicating with the business environment; maintaining contacts (both formal and informal) with customers and business partners; attending training courses and conferences; technological progress which provides every employee with almost endless possibilities when it comes to acquiring knowledge and information. By communicating with the business environment, each party can articulate its needs and expectations, and therefore have its interests duly acknowledged. This, in turn, may translate into improved operating efficiency for the organisation.

The conducted analyses open an interesting research perspective. In the focus of further research attention should be paid to the need for research of a qualitative nature. An analysis conducted by Dwivedi shows that the use of qualitative and quantitative research methods is a common approach within the framework of the issues concerning knowledge management (Dwivedi, Venkitachalam, Sharif, Al-Karaghoul, Weerakkody, 2011, p. 43-56). This will allow for the development of practical recommendations for owners/managers of SMEs and going forward, for the increase in the effective performance and the opportunities of development.

REFERENCES

- Baker, W.E., & Sinkula, J.M. (1999). The Synergistic Effect of Market Orientation and Learning Orientation on Organizational Performance. *Journal of Academy of Marketing Science*, 27(4), 411-427.
- Brzostek, K., & Michna, A. (2014). Behavioral perspective of market orientation. *Scientific Papers Of Silesian University Of Technology*, 74, 471-482.
- Bosua, R., Venkitachalam, K. (2013). Aligning strategies and processes in knowledge management: a framework. *Journal of Knowledge Management*, 17(3), 331-346.
- Carleton K. (2011). How to Motivate and Retain Knowledge Workers in Organizations : A Review of the Literature. *International Journal of Management*, 28 (2), 459-469.
- Commission Regulation (EC) No 70/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to State aid to small and medium-sized enterprises. *Official Journal of the European Union*.
- Daud, S., & Yusoff, W. F. W. (2010). Knowledge management and firm performance in SMEs: The role of social capital as a mediating variable. *Asian Academy of Management Journal*, 15(2), 135-155.
- Durst, S.; Edvardsson, I.R. (2012). Knowledge management in SMEs: A literature review. *Journal of Knowledge Management*, 16, 879-903.
- Dwivedi, Y.K., & Venkitachalam, K., Sharif, A.M., Al-Karaghoul, W., Weerakkody, V. (2011). Research Trends in Knowledge Management: Analyzing the Past and Predicting the Future. *Information Systems Management*, 28.
- Escher I. (2013). Marketing and market reorientation of the organization and its relationship with the process of adaptation of the organization, Toruń, *Acta Universitatis Nicolai Copernici, Management XL*, 413.
- Gebhardt, G. F., & Carpenter, G. S., & Sherry J. F. Jr. (2006). Creating a Market Orientation: A Longitudinal, Multifirm, Grounded Analysis of Cultural Transformation. *Journal of Marketing*, 70, 37-55.
- Gierszewska, G. (2003). Building a strategy for knowledge management in enterprises. (in:) Kisielnicki J. (scientific ed.). *Knowledge Management in contemporary organizations*. The Lazarski Higher School of Commerce and Law, 4, 62-88.
- Harwood, A., & Konidaris, T. (2015). SME Exchange in emerging market economies. A stocktaking of development practices. *Finance and Markets Global Practice Group*, 14-16.
- Katua, N. T. (2014). The Role of SMEs in Employment Creation and Economic Growth in Selected Countries, *International Journal of Education and Research*, 2(12), 461-472.
- Malara, Z. (2012). An enterprise in the global economy. Challenges of the contemporary world. Warszawa, PWN, 146.
- Narver, J.C., & Slater S.F. (1990). The Effect of a Market Orientation on Business Profitability. *Journal of Marketing*, 54(4), 20-35.
- Nofal, N., & Surachman, & Ubud, S., & Djumahir. (2014). Entrepreneurship Orientation, Market Orientation, Business Strategy, Management Capabilities On Business Performance; Study At Small And Medium Enterprise Printing In Kendari. *International Journal of Business and Management Invention*, 3(12), 8-17.
- Ňvárová, M., & Vrchota J. (2013). Strategic Management in Micro, Small and Medium-Sized Businesses in Relation to Financial Success of the Enterprise. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, LXI (7), 2859-2866.
- Penc, J. (1997). *Lexicon of Business*. Warsaw, published by Agencja Wydawnicza Placet, 100.

- Report on the Newconnect market - a summary of the functioning of the first alternative trading platform in Poland. (2015). Warsaw Stock Exchange.
- Report on the status of small and medium enterprises sector in Poland in the years 2013-2014. (2014). Warsaw, Polish Agency for Enterprise Development, 9.
- The Role of SMEs and Entrepreneurship in a Globalised Economy. Lundström A. (red). (2009). *Expert Report Number 34 To Sweden's Globalisation Council*.
- Van Raaij, E. M., & Stoelhorst, J. W. (2008). The implementation of market orientation. *European Journal of Marketing*, 42(11/12), 1265-129.
- Wang, L. C., & Hult, M. T. G., & Ahmed, K. P. (2009). Knowledge Management Orientation, Market Orientation, and Firm Performance: An Integration and Empirical Examination. *Journal of Strategic Marketing*, 17(2), 99-122.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-Based Resources, Entrepreneurial Orientation, and the Performance of Small and Medium-Sized Businesses. *Strategic Management Journal*, 24, 1307-1314.
- Wymenga, P., & Spanikova, V., & Barker, A., & Konings, J., & Canton, E. (2012). EU SMEs in 2012: at the Crossroads. Annual Report on Small and Medium-Sized Enterprises in the EU, 2011/12 Ecorys Nederland BV, Rotterdam.
- Zack, M., & McKeen, J., & Singh, S. (2009). Knowledge Management and Organizational Performance: an Exploratory Analysis. *Journal of Knowledge Management*, 13(6), 392-409.
- Zięba, M., & Zięba K. (2014). Knowledge Management Critical Success Factors and the Innovativeness of KIBS Companies. *Engineering Economics*, 25(4), 358-465.

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Review Of Network Research In Scientific Journal 'Entrepreneurship Theory And Practice'

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Abstract

This article aims at presenting a systematic review of publications that verified the network theory and the theory of networks empirically, published in the entrepreneurship journal with the highest Impact Factor: "Entrepreneurship Theory and Practice". We present how publication frequency evolved over time, and classify papers into major streams of entrepreneurship re-search. Our findings suggest the theory of networks is an under-researched area promising for further advancing the theory of entrepreneurship. We also find increasing publication frequency of network related research over time. Results oriented research were most often present in reviewed articles, while relationship among network variables and innovation was only tested in two articles so far which suggests that more research is needed in this direction in the future. We believe that verification of theories of networks in entrepreneurship and verification of relationship between network variables and innovation within the network theory are most promising. The originality of this work lies in identification of research opportunities and dynamics of empirical verification of network studies in the field of entrepreneurship.

Keywords: network theory; theory of networks; literature review; entrepreneurship; network society

JEL codes: L26, D85

INTRODUCTION

Entrepreneurs and organisations established by them operate in a complex mix of relationships. To explain antecedents of these relationships, find patterns that enable to

understand their complexity, and inquire into consequences of observed patterns, Entrepreneurship scholars increasingly use network theorizing. The study of entrepreneurship through network lenses has been increasingly visible, as indicated by earlier review of the field (Hoang & Antoncic, 2003). This review identified 70 papers that have been published on the role of networks in the entrepreneurial context in scholarly journals specializing in entrepreneurship, sociology, and strategic management already in 2003. Since that time number of publications that use network approach in organization science has increased substantially, that enabled clarification on network related theorizing in social science (Borgatti & Halgin, 2011). Building on advances in network theory we decided to apply two major categories of network theorizing: the theory of networks and the network theory in systematic review of network research in the leading journal in the field – Entrepreneurship Theory and Practice.

Network theorizing raised out of a metaphor that was creatively used and turned into rigorous theoretical propositions, inter alia, by Harrison White, the founder of Harvard Revolution in sociology, and Bruno Latour, the author of the actor-network theory. Harrison White (1992) put forward a general sociological theory based on organisations (and individuals) seeking to control their identities through embeddedness in networks. Bruno Latour (1988) wrote that the network metaphor indicates concentration of resources in few network nodes. His actor-network theory treats both machines and humans as actors of social processes, emphasizing the key importance of their interactions in today's organisations and societies. That theory anticipates phenomena that have been recently called the Internet of things or the Internet of everything, visions of a global network connecting not only people but also objects. In the world where hundreds of millions of Internet users are constantly exchanging huge amounts of information, the network metaphor seems to be commonly comprehensible. Thinking about social networks, we imagine the world entangled by relationships among exchange participants who use modern information technologies.

The network metaphor usefulness is not confined to explaining the Internet phenomena solely or even those that occur in social systems. The widespread existence of networks is evidenced by a growing number of studies and theoretical proposals developed by physicists, mathematicians, computer scientists, biologists and epidemiologists. Also artists are interested in networks, as exemplified exquisitely by Mark Lombardi's drawings collected by the Museum of Modern Art (MoMA) in New York. Understanding the rules of information and resources flow within a network structure also has crucial practical implications. For example, it allowed for designing Google PageRank algorithm (Brin & Page, 1998), reducing costs and improving effectiveness of the fight against addiction to nicotine (Christakis & Fowler, 2008), detecting and combating terrorist networks (Krebs, 2002), and effectively placing innovations in the market (Valente, 1996).

In institutional economics, Powell (1990) points to networks as the third mechanism of economic organisation, along with markets and hierarchies. White (2001) and Granovetter (1985) argue that markets are theoretical concepts separated from reality, whereas, in fact, economic processes unfold primarily in social networks of exchange and cooperation. Granovetter's (1985) theory of social embeddedness of economic processes contrasted with classical economic theories that disregarded the social aspect and were dominated by individualistic, transactional explanations of economic mechanisms. Cas-

tells (1996) writes about an emerging network society that develops as modern communication technologies become widespread and global actors become more and more interconnected. The network metaphor allows him to reveal a comprehensive picture of the organisation of modern societies that are being constantly reconfigured. The network society processes cannot be effectively regulated by national laws since the network extends beyond the borders of a single country. Citizens of the network society smoothly switch between organisations, associations or coalitions of interests.

In the network society, where interrelated individuals are involved in the exchange of resources and information, an entrepreneur's success inevitably depends on his or her position and characteristics of the network in which he or she operates. Position in the network structure determines opportunities and imposes restrictions on freedom of action. Network characteristics govern dynamics and possibilities of exchange and access to resources and information.

Our article aims at presenting a systematic review of publications that verified the network theory and the theory of networks empirically and were printed in the entrepreneurship journal with the highest Impact Factor: "Entrepreneurship Theory and Practice". Our literature review outlines key theoretical proposals for a network approach: the network theory and theory of networks. To introduce this theoretical approaches we briefly introduced their key assumptions and illustrated each by example of a seminal study conducted in these traditions. Then, we introduce methodology of our study and present the results of our systematic literature review of "Entrepreneurship Theory and Practice" publications in 1995–2015. Resorting to the Scopus database, we selected 71 articles published in the last 20 years that use the word "network" in their abstracts. Subsequently, we divided the articles into those addressing theoretical proposals and those reporting empirical research to verify the theories. Since our review seeks to establish how advanced empirical research into links between networks where entrepreneurs operate and their performance is, the next step left out articles aimed at examining other relationships. We do not analyse in detail theoretical articles that contain no empirical research results, either. We selected 38 articles for our final analysis, considering them as an attempt to verify two broad theoretical traditions that we introduced earlier. Our literature review indicates popularity of these two approaches in the journal when mainstream entrepreneurship research is presented. We also describe changes in the number of publications in question in the studied period of 20 years. In conclusions, we identify promising areas of future research that strives to verify the network theories in the field of entrepreneurship.

NETWORK THEORY AND THE THEORY OF NETWORKS

The growing importance of the network approach in the organisation and management theory was mentioned by Borgatti and Foster (2003), who indicated that its popularity increased exponentially, as measured by the number of publications in scientific journals. A network may be made up of any set of objects connected by relationships that form analysable patterns. Objects may be alternatively referred to as actors, nodes or vertices, and their interrelations may be termed ties, lines, connections or edges of a network. A network analysis highlights the fundamental importance of relationship patterns that

form the ground for explaining the phenomena addressed by social sciences and for the entrepreneurship theory developed based on such sciences.

A social network analysis aims at clarifying links between the structure of relationships and connections and characteristics of the social system. It comprises two key aspects: mechanisms governing the formation of the social system and its characteristics, and consequences of network configuration (Tsai & Ghoshal, 1998; Rowley, Behrens & Krackhardt, 2000). Borgatti and Halgin (2011, p. 1168) point to the distinction between those two theoretical network issues that are analytically separate, defining them as the theory of networks and the network theory.

The theory of networks explains the origins and characteristics of an observed network, for example its non-scalability, i.e. the fact that the relationships between network nodes are distributed exponentially. Such a distribution may result from preferential connections, namely the tendency of nodes to establish relationships with popular network objects (Barabasi & Albert, 1999). Another research project, in line with the theory of networks, would define network properties, for instance its density as a measure of network relationships in proportion to all possible relationships. Networks where entrepreneurs operate are expected to have different densities, depending on the culture of a country. If entrepreneurs tend to be driven by more individualistic values, the network density is expected to be low, resulting in slower dissemination of practices and innovation and greater differentiation of entrepreneurs' attitudes. Empirical studies under the theory of networks are, therefore, conducted as macro-analyses of entrepreneurship determinants described by measurements of global network properties.

Research under the theory of networks is also exemplified by analyses of the extent to which the structure examined has the characteristics of a small-world network. The concept of small-world network refers to the classical theoretical proposal put forward by Milgram (1967), who stated that actors of even very extensive networks are separated by only a few direct connections, usually not more than six. A small-world network is a specific class of networks with many strongly interrelated subgroups and a relatively short path of connections between nodes (Watts & Strogatz, 1998). Uzzi, Amaral and Reed-Tsochas (2007) discussed the applications of small-world network research methods, pointing to the existence of such networks in a wide variety of organisational systems, for instance networks of relationships between musicians and actors, networks of alliances, research networks examined through mutual citations, inter-organisational networks built through personal relationships among board members, patent cooperation and energy networks. The fact that small-world networks prevail in different types of inter-organisational and personal networks proves high efficiency of network action coordination mechanisms and resilience of those systems to disruptions.

The network theory aims at explaining the consequences of network variables such as centrality, operation in structural holes and characteristics of ties for the performance of network participants (Granovetter, 1973; Freeman, 1979; Burt, 1992). Granovetter used the characteristics of ties to develop the theory of strength of weak ties (SWT) (Granovetter, 1973). He was directly inspired by research into the job seeking process that found that weak ties provide valuable information about job offers. It is the information from acquaintances weakly tied with job seekers, rather than from closely related friends, that increase the probability of success in the labour market. This is because

persons closely related with job seekers live in the same environment and usually have access to similar information. Valuable information is communicated by people who have access to multiple groups with different information. Weak ties accelerate flows in a network and provide fast access to its remote parts.

Examination of links between the effects of action and the quality of relationships is also well illustrated by one of the most frequently cited scientific articles addressing networks (Uzzi, 1997). Its author investigated women's fashion companies in New York and found that two distinctive types of relationships existed between those companies and their suppliers. Those types are also included in the SWT theory described above. Respondents talked about them in different ways. The first type includes relationships marked by social embeddedness and called "close" or "special" by CEOs of examined companies. Such relationships are based on reciprocity, emotional involvement, intensive exchange of information, trust, joint problem solving and a longer time horizon. The second type comprises market transactions (arm's length ties), individual agreements where suppliers were selected chiefly according to the lowest price criterion. Uzzi stated that embeddedness was associated with saving time (economies of time), i.e. the ability to seize emerging market opportunities quickly. Embeddedness also reduces transaction costs because partners having a long-term relationship tend to trust each other. He also highlighted that excessive embeddedness restricted access to information about changes outside the network of a company's close relationships.

The theory of structural holes is a perfect example of reasoning in the context of the network theory, which states that the positions of nodes affect their performance. It was developed by Ron Burt (1992) on the basis of research into issues similar to those that became the foundation for Granovetter's theory of strength of weak ties. Burt focused on the impact of a diversified egocentric network structure, i.e. a network of people directly related with candidates, on the speed of promotion. He put forward the hypothesis that promotion is linked with structural holes in egocentric networks. Holes also exist where two people tied with a candidate for promotion do not have mutual relationships. Structural holes allow the candidate to control information flow between unrelated contacts and access knowledge from many sources. This affects his or her expert position and should be positively correlated with promotion likelihood, as confirmed by that author's research. In his argumentation, he does not focus on the quality of relationships but on their structure and the position of candidates for promotion.

We have drawn a distinction between the network theory and the theory of networks in this section. We introduced the essence of each of these theories and discussed seminal studies that illustrate both. In order to achieve this we have chosen the most frequently cited works that examined network structures and effects of network actors' positions. In the next chapter, we analyse those two types of theories in the entrepreneurship literature based on a review of texts published in "Entrepreneurship Theory and Practice" during 20 years. We were curious how often in mentioned journal the issue of network was the topic of articles and, considering the entrepreneurship field, in what context it was analysed. The aim was to determine what areas were taken into consideration in the analysis of the network in ETP.

MATERIAL AND METHODS

In this article, we report preliminary research that we want to develop into a systematic review of entrepreneurship literature. We intend to provide a comprehensive review of publications aimed at verifying network theories empirically. We would like to include more scientific journals addressing entrepreneurship and expand the scope of our analyses. At the present stage of preliminary research, we have chosen to analyse the entrepreneurship journal with the highest IF: "Entrepreneurship Theory and Practice". Based on the Scopus database, we limited our selection of articles to 1995–2015.

Initially, we tried to look for texts addressing the network theory and the theory of networks. However, regardless of the search phrase, the results comprised the same 16 articles. We, therefore, decided to broaden our search and selected articles that contained the word "network" in their abstracts. This resulted in more texts, namely 71. Thus, we were able to prepare a broader analysis of the issue in question and verify which theory is actually used for data analysis.

Following the initial selection, we rejected 9 thematically irrelevant articles that contained the word "network" in a meaning different from "a network of relationships" or that concerned, for example, citation links between entrepreneurship researchers (Grégoire, Noël, Déry & Béchar, 2006). One article covered a literature review of research into networks in entrepreneurship (Slotte-Kock & Coviello, 2010). 23 publications presented studies on the impact of a network on a selected phenomenon. The objective of our review was to identify articles that verified empirically the network theory and the theory of networks described in the previous chapter. We wanted to find out how researchers analyse networks, what they research and what network characteristics are described, which helped us to outline the research programme in the conclusions. Based on the review of abstracts and an overview of the methodology and methods of analysis of the collected data, we classified 38 articles for final analysis.

When reviewing publications on networks, we wanted to answer the following questions:

- Which theory is mainly used to do research into networks in entrepreneurship (theory of networks vs. network theory)?
- In which context of entrepreneurship are networks most frequently researched?
- Which network characteristics are most often analysed in research into networks in entrepreneurship?

We divided the selected articles according to the area researched, network theory used and the method of network analysis, and matched the articles to network characteristics that were described in the studies: size, density, relationship type, centrality, structure or content. We also identified 6 themes that were discussed in the articles in the entrepreneurship context of research: innovation, company development understood also as company growth, resources and resource accumulation, achievement understood also as the number of agreements concluded, effectiveness, etc., financing – all methods of financing, collaboration with banks, lending and cooperation including texts describing cooperation between companies, suppliers, entrepreneurs and institutions. Above themes arose from the grouping of articles in the thematic area. Reviewing articles enabled us to define the main topics which

were discussed, and categorize them into thematic categories. Our main analytical frame was to distinguish papers as either fitting concepts of network theory or theory of networks as proposed by Borgatti and Halgin (2011). At more detailed level we assigned papers according to specific measures and network concepts used by their authors. We have looked for commonly used network concepts such as: density, centrality, type of relationship, structure and content. Some articles are classified in several categories as the use of concepts and measures is not mutually exclusive.

RESULTS AND DISCUSSION

The analysis of abstracts of 39 articles selected for review allowed us to classify them to two theoretical areas mentioned in the preliminary literature analysis and to one of 6 research area categories. We classified them independently, and when opinions differed, we read whole articles in order to assign them to appropriate categories. The results of our review are provided in Table 1 below.

It appeared that most studies – as many as 14 or 37% of all articles on network research published in the journal that we chose – focused on business achievements. As illustrated in Table 1, researchers concentrated primarily on analysing the type of relationship and its impact on entrepreneurs' achievements, hence used the network theory more frequently, although network structures and sizes were also examined. Among the selected texts, the article by Greve and Salaff (2003) has most citations and describes networking patterns among entrepreneurs and their impact on business operations, exemplified for 4 different countries. The second most frequently cited article is that by Louise, Althanassiou and Crittenden (2000), who presented the influence of the founder's central position on strategic business management, and thus on company performance. Based on the concept of social network and the founder's central position, they developed a model for further examination of strategic business management. The third most often cited (150) text by Hite (2005) builds on case studies and analyses embeddedness of entrepreneurs in the context of recognising opportunities, seeking resources and effective management. The next most often cited (121 citations) study presents the network structure of academic entrepreneurs managing companies in various stages of development (Mosey & Wright, 2007). The research involved interviews with academic entrepreneurs who were asked to describe the structure, content and management of their networks at the beginning of the research and again after one year. In his text, cited 82 times, Westhead (1995) addresses achievements depending on the type of high-technology company managers and the type of their relationships. A quite often cited article (70 citations) by Lester and Cannella (2006) is about building social capital by family businesses and its impact on their survival. Other articles in this group focused mainly on the type of relationships, type of persons in the network and their impact on achievements (Godwin, Stevens & Brenner, 2006; Wu, Wang, Chen & Pan, 2008; Huse & Swartz, 2010; Scarbrough et al., 2013; Sautet, 2013; Ebbers, 2014), also with reference to success achieved by transnational entrepreneurs (Wenhong & Tan, 2009).

Table 1. Division of articles by area, theory and network analysis area

Area	No. of articles	Network theory	Theory of networks	Size of network	Density of network	Type of relationship in the network	Centrality	Structure of the network	Content of the network
Innovation	2	1	1		1	1	1		
Company development	4	2	2		1	3		1	1
Resources	5	4	1	2		4	1	1	1
Achievements	14	9	5	5		9	2	5	3
Financing	7	6	1			6		3	1
Cooperation	7	6	1	3		7		3	1
Total	39	28	11	10	2	30	4	13	7

Source: own elaboration.

We assigned seven texts to the thematic area of cooperation and seven articles to the topic of raising funds by entrepreneurs.

As regards articles describing research into the impact of networks on cooperation among entrepreneurs, investors etc., it can also be noted that the researchers concentrated chiefly on studying types of network relationships (Webb et al., 2010; Karra, Tracey & Phillips, 2006), then the network structure (Ring, Peredo & Chrisman, 2010) and the network size (Kuhn & Galloway, 2015; Patel & Conklin, 2009). Only one article used the theory of networks (Ring, Peredo & Chrisman, 2010) and others employed the network theory (i.a. Bartholomew & Smith, 2006; Daspit & Long, 2014).

That was also the case for articles on the impact of networks on the search for financing by entrepreneurs where the authors also primarily analysed relationship types, chiefly using the network theory (i.a. Chen & Tan, 2009; Du, Guariglia & Newman, 2015), with only one article resorting to the theory of networks (Fiet, 1996). The research mostly concerned methods of building networks in order to gain easier access to loans (Saparito, Elam & Brush, 2013; Du, Guariglia & Newman, 2015) or generally to raise funds more effectively (Jonsson & Lindbergh, 2013; Kreiser, Patel & Fiet, 2013).

Another group of five articles (13%) presented networks in the context of resource accumulation. Again, what could be noticed was the popularity of network relationship type analyses with account being taken of those relationships that allowed for successful use of resources (Haug, 2007; Khayesi, George & Antonakis, 2014), then the popularity of network size analyses (Semrau & Werner, 2014), and finally centrality (Keil, Maula & Wilson, 2010) and generally network structure and content (Sullivan & Ford, 2014). No article assigned to the topic of resources and their accumulation used the theory of networks.

Four articles were categorised as addressing company development and the fewest texts dealt with innovation (2 articles). In analysing networks in the context of company development, the first study examined the impact of relationship types on company operations in different stages of development (Arregle et al., 2015), whereas the second one focused on the role played by networks and their densities in interna-

tionalisation of companies (Musteen, Datta & Butts, 2014). In their research, De Carolis, Litzky and Eddieston (2009) attempted to find out what type of networks and network relationships has a positive effect on company development. Their research results are quite often cited – 70 citations. They analysed the types of people involved in entrepreneurs' networks. Hansen (1995) studied growing organisations with a focus on the types and frequency of interactions among their members.

In the area of innovation, one article addressed network density and centrality and their consequences for business innovation (Tan, Zhang & Wang, 2015). The authors of the second study analysed the type of network relationships and commercialisation of innovations (Partanen, Chetty & Rajala, 2014). Tan, Zhang and Wang's (2015) publication used both network theory and theory of networks.

To summarise, based on our analysis, we noticed that research into networks in entrepreneurship mostly concentrated on types of relationships and their effects on achievements, financing, cooperation and resource accumulation. The fewest studies addressed density, centrality and other network variables. Researchers least frequently referred to studies related to the theory of networks, which means that there is a gap in the entrepreneurship literature.

What we also found interesting was an analysis of the number of articles based on network research over the last 20 years, as presented in the table below.

As can be observed, articles reporting network analyses are not very popular in "Entrepreneurship Theory and Practice". By 2005, only single or no texts were actually published. It was only after 2005 when we can notice an increased interest in research into networks in the field of entrepreneurship. Especially over the last 5 years, this subject seems to have been attracting more and more interest, although the number of publications has remained more or less the same since 2010. In recent years, roughly since 2006, such topics as cooperation, financing, search for resources have earned recognition, and since quite recently, innovation and company development have become more popular.

Table 2. Distribution of 39 selected articles in 1995–2015 by year and popularity of the topic

Year/thematic area	1995	1996	2000	2003	2005	2006	2007	2008	2009	2010	2013	2014	2015
Innovation								1				1	1
Company development	1											1	1
Resources							1			1		3	
Achievements	1		1	1	1	2	1	1	2	1	2	1	
Financing		1							2		3		1
Cooperation						2			1	2		1	1
Total no. of articles	2	1	1	1	1	4	2	2	5	4	5	7	4

Source: own elaboration.

CONCLUSIONS

Our analysis allowed us to answer the questions that we asked. It turned out that research to verify the theory of networks empirically is much less frequently published in the entrepreneurship literature than research aimed at verifying the network theory. This offers a huge potential for exploring that scientific branch and looking at entrepreneurship from a different perspective than before. It is worth reflecting on projects intending to describe global network structures among entrepreneurs, examine network density and other characteristics and reasons for the formation of networks whose importance cannot be overemphasised in modern entrepreneurship. It seems interesting to study the differences in relationship types and other characteristics across individual countries and examine them in the context of cultural differences. Cultural differences, for example individualism versus collectivism, should be relevant to the characteristics of networks of entrepreneurs operating in different countries. A promising research field should also cover analyses of transnational networks of entrepreneurs and their adaptation to various structures that determine dynamics of the flow and exchange of resources and information. It is noteworthy that studies of embeddedness-initiated in economic sociology by Granovetter (1973) are very promising in the field of entrepreneurship. In particular, exploring effects of weak and strong ties (Granovetter, 1973; Burt, 1992) on entrepreneurial behaviour in different context and across geographies could extend our knowledge of determinants of success.

Studies based on the network theory are rarely published in the journal "Entrepreneurship Theory and Practice", although the dynamics of publications that we have presented indicates their growing popularity. Particularly promising research directions that will verify the importance of entrepreneurs' position within networks seem to be those that will explore links between networks and innovation processes. Network models explaining the dynamics of innovation spread indicate different roles of network nodes, depending on their position (Valente, 1996). The small number of articles could be caused by the fact that that issue is still under researched. Other reason could be that researchers from the entrepreneurship field consider this area as a not very suitable for entrepreneurship research. The biggest problem is that our review is narrowed to one journal and this topic could be not very suitable for the journal requirements.

Another promising direction of such research where we have seen relatively few publications so far is an analysis of correlations between constraints and opportunities for company development, ensuing from the position in the network structure. Although researchers mostly paid attention to relationship types and their impact on achievements, that topic has not been exhausted. Investigation done by Uzzi (1997) should be useful for researchers in these area. Few of the studies presented use standard measures of centrality, density and occurrence in structural holes that were operationalised as part of the social network analysis. This suggests that this discipline may be developed by applying social network analysis methods in entrepreneurship.

The biggest limitation of our review is probably the focus on only one scientific journal. However, the goal of our article was to highlight the fact that network analysis is very useful and interesting and to indicate a possible direction for entrepreneurship research development. We are aware that the issue of networks in innovation may be

more frequently addressed in journals focused primarily on innovation, hence the small number of texts on this topic, though perhaps network analyses are not conducted in that direction. This requires verification. A weakness of our analysis also lies in confining it mostly to reading abstracts, with hardly skimming whole articles. This makes information incomplete. Nonetheless, it is a good suggestion for in-depth analyses.

Our literature review shows that the network theory and the theory of networks are becoming important approaches that make it possible to look at key and unchanged issues of entrepreneurship from a new perspective. In the network society, where the importance of relationships for the results achieved by individuals seems to be growing, we expect further dynamic expansion of entrepreneurship research resorting to theoretical perspectives discussed in this article. Our classification of articles could be helpful in identifying areas where the network approach is rarely used.

REFERENCES

- Arregle, J.-L., Batjargal, B., Hitt, M.A., Webb, J.W., Miller, T., & Tsui, A. S. (2015). Family Ties in Entrepreneurs' Social Networks and New Venture Growth. *Entrepreneurship Theory & Practice*, 39(2), 313–344. doi: 10.1111/etap.12044.
- Barabasi, L., & Albert, R. (1999). Emergence of Scaling in Random Networks. *Nature*, 286, 509-512. doi: 10.1126/science.286.5439.509.
- Bartholomew, S., & Smith, A.D. (2006). Improving Survey Response Rates from Chief Executive Officers in Small Firms: The Importance of Social Networks. *Entrepreneurship Theory & Practice*, 30(1), 83–96. doi: 10.1111/j.1540-6520.2006.00111.x.
- Borgatti, S.P., & Foster, P. (2003). The Network Paradigm in Organizational Research: A Review of Typology. *Journal of Management*, 29, 991-1013. doi: 10.1016/S0149-2063_03_00087-4.
- Borgatti, S., & Halgin, D. (2011). On network theory. *Organization Science*, 22(5), 1168-1181. doi:10.1287/orsc.1100.0641.
- Brin, S., & Page, L. (1998). *Anatomy of a large-scale hypertextual web search engine*. Proceedings of the 7th International World Wide Web Conference (107-117). Brisbane, Australia: Elsevier Science Publishers B.V. Amsterdam, The Netherlands. doi:10.1016/S0169-7552(98)00110-X.
- Burt, R. (1992). *Structural Holes*. Cambridge, Massachusetts: Harvard University Press.
- Chen, W., & Tan, J. (2009). Understanding Transnational Entrepreneurship Through a Network Lens: Theoretical and Methodological Considerations. *Entrepreneurship Theory & Practice*, 33(5), 1079–1091. doi: 10.1111/j.1540-6520.2009.00335.x.
- Christakis, N., & Fowler, J. (2008). The Collective Dynamics of Smoking in a Large Social Network. *The New England Journal of Medicine*, 358(21), 2249-2258. doi: 10.1056/NEJMsa0706154.
- Daspit, J.J., & Long, R.G. (2014). Mitigating Moral Hazard in Entrepreneurial Networks: Examining Structural and Relational Social Capital in East Africa. *Entrepreneurship Theory & Practice*, 38(6), 1343–1350. doi: 10.1111/etap.12128.
- De Carolis, D.M., Litzky, B.E., & Eddleston, K.A. (2009). Why Networks Enhance the Progress of New Venture Creation: The Influence of Social Capital and Cognition. *Entrepreneurship Theory & Practice*, 33(2), 527–545. doi: 10.1111/j.1540-6520.2009.00302.x.
- Du, J., Guariglia, A., & Newman, A. (2015). Do Social Capital Building Strategies Influence the Financing Behavior of Chinese Private Small and Medium-Sized Enterprises? *Entrepreneurship Theory & Practice*, 39(3), 601–631. doi: 10.1111/etap.12051.

- Freeman, L. (1979). Centrality in social networks. Conceptual clarification. *Social Networks*, 1, 215-239. doi: 10.1016/0378-8733(78)90021-7.
- Ebbers, J.J. (2014). Networking Behavior and Contracting Relationships Among Entrepreneurs in Business Incubators. *Entrepreneurship Theory & Practice*, 38(5), 1159–1181. doi: 10.1111/etap.12032.
- Fiet, J.O. (1996). Fragmentation in the market for venture capital. *Entrepreneurship Theory & Practice*, 21(2), 5-20.
- Godwin, L.N., Stevens, C.E., & Brenner, N.L. (2006). Forced to Play by the Rules? Theorizing How Mixed-Sex Founding Teams Benefit Women Entrepreneurs in Male-Dominated Contexts. *Entrepreneurship: Theory & Practice*, 30(5), 623-642. doi: 10.1111/j.1540-6520.2006.00139.x
- Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Granovetter, M. (1985). Economic action and social structure: the problem of embeddedness. *American Journal of Sociology*, 91, 481-510. doi:10.1086/228311
- Grégoire, D.A., Noël, M.X., Déry, R., & Béchar, J.-P. (2006). Is There Conceptual Convergence in Entrepreneurship Research? A Co-Citation Analysis of Frontiers of Entrepreneurship Research, 1981–2004. *Entrepreneurship: Theory & Practice*, 30(3), 333-373. doi: 10.1111/j.1540-6520.2006.00124.x.
- Hansen, E.L. (1995). Entrepreneurial Networks and New Organization Growth. *Entrepreneurship: Theory & Practice*, 19(4), 7-19.
- Haugh, H. (2007). Community-Led Social Venture Creation. *Entrepreneurship Theory & Practice*, 31(2), 161–182. doi: 10.1111/j.1540-6520.2007.00168.x.
- Hite, J.M. (2005). Evolutionary Processes and Paths of Relationally Embedded Network Ties in Emerging Entrepreneurial Firms. *Entrepreneurship: Theory & Practice*, 29(1), 113-144. doi: 10.1111/j.1540-6520.2005.00072.x.
- Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing*, 18(2), 165-187.
- Huser, E.A., & Swartz, E. (2010). Note to Instructors for Opt-e-scrip, Inc. *Entrepreneurship: Theory & Practice*, 34(2), 416-418. doi: 10.1111/j.1540-6520.2010.00380_2.x.
- Jonsson, S., & Lindbergh, J. (2013). The Development of Social Capital and Financing of Entrepreneurial Firms: From Financial Bootstrapping to Bank Funding. *Entrepreneurship Theory & Practice*, 37(4), 661–686. doi: 10.1111/j.1540-6520.2011.00485.x.
- Karra, N., Tracey, P., & Phillips, N. (2006). Altruism and Agency in the Family Firm: Exploring the Role of Family, Kinship, and Ethnicity. *Entrepreneurship Theory & Practice*, 30(6), 861–877. doi: 10.1111/j.1540-6520.2006.00157.x.
- Keil, T., Maula, M. V.J., & Wilson, C. (2010). Unique Resources of Corporate Venture Capitalists as a Key to Entry Into Rigid Venture Capital Syndication Networks. *Entrepreneurship Theory & Practice*, 34(1), 83–103. doi: 10.1111/j.1540-6520.2009.00366.x.
- Khayesi, J.N.O., George, G., & Antonakis, J. (2014). Kinship in Entrepreneur Networks: Performance Effects of Resource Assembly in Africa. *Entrepreneurship Theory & Practice*, 38(6), 1323–1342. doi: 10.1111/etap.12127.
- Krebs, V. (2002). Unlocking Terrorist Networks. *First Monday*, 7(4). doi:doi:10.5210/fm.v7i4.941.
- Kreiser, P.M., Patel, P.C., & Fiet, J.O. (2013). The Influence of Changes in Social Capital on Firm-Founding Activities. *Entrepreneurship Theory & Practice*, 37(3), 539–568. doi: 10.1111/etap.12039.

- Kuhn, K.M., & Galloway, T.L. (2015). With a Little Help From My Competitors: Peer Networking Among Artisan Entrepreneurs. *Entrepreneurship Theory & Practice*, 39(3), 571–600. doi: 10.1111/etap.12053.
- Latour, B. (1988). *Science in Action: How to Follow Scientists and Engineers through Society*. Boston: Harvard University Press.
- Latour, B. (2010). *Splatając na nowo to, co społeczne. Wprowadzenie do teorii aktora-sieci*. Kraków: Wydawnictwo Universitas.
- Lester, R.H., & Cannella, A.A. (2006). Interorganizational Familiness: How Family Firms Use Interlocking Directorates to Build Community-Level Social Capital. *Entrepreneurship: Theory & Practice*, 30(6), 755–775. doi: 10.1111/j.1540-6520.2006.00149.x.
- Louise, K., Althanassiou, N., & Crittenden, W. (2000). Founder Centrality and Strategic Behavior in the Family Owned Firm. *Entrepreneurship: Theory & Practice*, 25(2), 27–42.
- Milgram, S. (1967). The small world problem. *Psychology today*, 2(1), 60–67.
- Mosey, S., & Wright, M. (2007). From Human Capital to Social Capital: A Longitudinal Study of Technology-Based Academic Entrepreneurs. *Entrepreneurship: Theory & Practice*, 31(6), 909–935. doi: 10.1111/j.1540-6520.2007.00203.x.
- Musteen, M., Datta, D.K., & Butts, M.M. (2014). Do International Networks and Foreign Market Knowledge Facilitate SME Internationalization? Evidence From the Czech Republic. *Entrepreneurship Theory & Practice*, 38(4), 749–774. doi: 10.1111/etap.12025.
- Partanen, J., Chetty, S. K., & Rajala, A. (2014). Innovation Types and Network Relationships. *Entrepreneurship Theory & Practice*, 38(5), 1027–1055. doi: 10.1111/j.1540-6520.2011.00474.x
- Patel, P.C., & Conklin, B. (2009). The Balancing Act: The Role of Transnational Habitus and Social Networks in Balancing Transnational Entrepreneurial Activities. *Entrepreneurship Theory & Practice*, 33(5), 1045–1078. doi: 10.1111/j.1540-6520.2009.00334.x
- Powell, W. (1990). Neither market nor hierarchy: network forms of organization. *Research in Organizational Behavior*, 12, 295–336.
- Ring, J.K., Peredo, A.M., & Chrisman, J.J. (2010). Business Networks and Economic Development in Rural Communities in the United States. *Entrepreneurship Theory & Practice*, 34(1), 171–195. doi: 10.1111/j.1540-6520.2009.00307.x
- Rowley, B., Behrens, D., & Krackhardt, D. (2000). Redundant governance structures: An analysis of structural and relational embeddedness in the steel and semiconductor industries. *Strategic Management Journal*, 21(3), 363–386. doi: 10.1002/(SICI)1097-0266(200003)21:3<369::AID-SMJ93>3.0.CO;2-M.
- Saparito, P., Elam, A., & Brush, C. (2013). Bank–Firm Relationships: Do Perceptions Vary by Gender?. *Entrepreneurship Theory & Practice*, 37(4), 837–858. doi: 10.1111/j.1540-6520.2012.00524.x
- Sautet, F. (2013). Local and Systemic Entrepreneurship: Solving the Puzzle of Entrepreneurship and Economic Development. *Entrepreneurship Theory & Practice*, 37(2), 387–402. doi: 10.1111/j.1540-6520.2011.00469.x
- Scarbrough, H., Swan, J., Amaeshi, K., & Briggs, T. (2013). Exploring the Role of Trust in the Deal-Making Process for Early-Stage Technology Ventures. *Entrepreneurship Theory & Practice*, 37(5), 1203–1228. doi: 10.1111/etap.12031
- Semrau, T., & Werner, A. (2014). How Exactly Do Network Relationships Pay Off? The Effects of Network Size and Relationship Quality on Access to Start-Up Resources. *Entrepreneurship Theory & Practice*, 38(3), 501–525. doi: 10.1111/etap.12011

- Slotte-Kock, S., & Coviello, N. (2010). Entrepreneurship Research on Network Processes: A Review and Ways Forward. *Entrepreneurship: Theory & Practice*, 34(1), 31-57. doi: 10.1111/j.1540-6520.2009.00311.x
- Sullivan, D.M., & Ford, C.M. (2014). How Entrepreneurs Use Networks to Address Changing Resource Requirements During Early Venture Development. *Entrepreneurship Theory & Practice*, 38(3), 551–574. doi: 10.1111/etap.12009
- Tan, J., Zhang, H., & Wang, L. (2015). Network Closure or Structural Hole? The Conditioning Effects of Network-Level Social Capital on Innovation Performance. *Entrepreneurship Theory & Practice*, 39(5), 1189–1212. doi: 10.1111/etap.12102
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41, 225-249. doi:10.2307/257085
- Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35-67.
- Uzzi, B., Amaral, L., & Reed-Tsochas, F. (2007). Small-world networks and management science research: a review. *Nature*, 4, 77-91.
- Valente, T. (1996). Social network thresholds in the diffusion of innovations. *Social networks*, 18(1), 69-89. doi:0.1016/0378-8733(95)00256-1
- Watts, D., & Strogatz, S. (1998). Collective dynamics of 'small-world' networks. *Nature*, 393, 440-442. doi:
- Webb, J.W., Kistruck, G.M., Ireland, R.D., & Ketchen, Jr., D.J. (2010). The Entrepreneurship Process in Base of the Pyramid Markets: The Case of Multinational Enterprise/Nongovernment Organization Alliances. *Entrepreneurship Theory & Practice*, 34(3), 555–581. doi: 10.1111/j.1540-6520.2009.00349.x
- Wenhong, C., & Tan, J. (2009). Understanding Transnational Entrepreneurship Through a Network Lens: Theoretical and Methodological Considerations. *Entrepreneurship: Theory & Practice*, 33(5), 1079-1091.
- Westhead, P. (1995). Survival and Employment Growth Contrasts Between Types of Owner-Managed High-Technology Firms. *Entrepreneurship: Theory & Practice*, 20(1), 5-27.
- White, H. (1992). *Identity and Control: A Structural Theory of Social Action*. Princeton, NJ: Princeton University Press.
- Wu, L.-Y., Wang, C.-J., Chen, C.-P., & Pan, L.-Y. (2008). Internal Resources, External Network, and Competitiveness during the Growth Stage: A Study of Taiwanese High-Tech Ventures. *Entrepreneurship Theory & Practice*, 32(3), 529–549.

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Metaphors of Entrepreneurship among Polish Students: Preliminary Research Findings

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Abstract

In Poland entrepreneurship is often perceived as an extremely risky process and entrepreneurs are often portrayed in a negative light. The research goals of our exploratory study is to identify the entrepreneurship metaphors among Polish management students. Authors decided to run both qualitative and quantitative research. In the first part we addressed 124 management students on three levels BA, MA and MBA. The respondents were asked to give their metaphorical expressions on paper. The next step was to prepare a questionnaire based on 7 point Likert scale. This questionnaire was run among BA management student group composed of 82 students. Our results suggest that there are several major entrepreneurial narratives evident among all three groups including creativity and innovation, competition, war, journey, risk, adventure and exploitation. The empirical findings serve as a starting point for further in-depth research on entrepreneurship metaphors. It is recommended that in order to gain a complete picture of the issues underlying the results, both qualitative and quantitative research on a bigger sample should be undertaken. The originality of this work lies in studying some aspects of entrepreneurship metaphors among non-entrepreneurs in Poland. With regards to the research limitation, it must be highlighted that it was a pilot study and the results cannot be generalized.

Keywords: metaphors of entrepreneurship; entrepreneurship; metaphors; research; entrepreneurship education; Poland

JEL codes: M12, L26

INTRODUCTION

Entrepreneurship, has always been at the heart of economy's dynamics. Entrepreneurship continues to gain momentum as a significant and relevant research field. Policy makers in the rush to stimulate entrepreneurship in various countries, CEOs and company owners are looking for entrepreneurial employees (Chmielecki, 2013). Focus on entrepreneurship has been spurred by enormous popularity of start-up firms in high technology industries, the expansion of venture capital financing, successes of regional clusters, notably Silicon Valley and possibilities of crowdfunding. Some management scholars and social scientists interested in entrepreneurship focused their attention on studying metaphors of entrepreneurship. Unfortunately not much on this subject have been written in Polish context. As culture influences entrepreneurship, different nations have their own concepts of entrepreneurs and entrepreneurship.

The objective of this article is to identify the existing entrepreneurship metaphors among Polish management students, and this is an exploratory study at the very initial stage.

The article is divided into three main parts. At first literature is discussed, and the special attention was paid to metaphors in economic discourse. The second part briefly presents the methodological assumptions and the survey design. Finally, the articles elaborates on the survey results conducted among Polish students.

LITERATURE REVIEW

Defining Entrepreneurship

Entrepreneurship has always been a dominant force in economy. It changes the way we work, the way we communicate, the way we live. It generates Innovation, improves the quality of goods and services. Since the early 1980s, entrepreneurship has emerged as a topic of growing interest among social scientists and numerous management scholars (Cooper, 2003). Literature on entrepreneurs and entrepreneurship has stemmed from three main sources (Deakins, 1999):

1. economic authors who stress the role of the entrepreneur in economic development;
2. social and business authors who stress the influence of the social and business environment on entrepreneurship;
3. psychologists who focus on the personality traits of entrepreneurs.

A bit more detailed typology of entrepreneurship was proposed by Wach (2015), who tried to combine both economics and business studies, which resulted in distinguishing four primary and three secondary functions of entrepreneurship (Figure 1).

What is more, entrepreneurship is one of the most studied topics in economics and business research (Table 1). Concepts of entrepreneurship have been changing overtime.

Table 1. Definitions and variables that describe entrepreneurship

Author	The concept of entrepreneurship	Variables describing entrepreneurship
Schumpeter (1934)	Recognising opportunities for implementation of ventures that are profitable and risk-taking to implement them.	1. The tendency to operate in conditions of uncertainty 2. Exploration and exploitation of market opportunities
Churchill (1983)	The process of discovery and development of capabilities to create new value through innovation, acquisition of necessary resources and managing the process of value creation.	1. Technological and organizational innovation 2. Exploration and exploitation of market opportunities
Timmons (1990)	The process of creating or identifying opportunities and using them despite of their current resources (...). It is an creative act of an entrepreneur who finds in him and devotes enough energy to initiate and build a company or organization, rather than just observe, analyse and describe it.	1. The tendency to operate in conditions of uncertainty 2. Exploration and exploitation of market opportunities 3. Entrepreneurial personality of a manager
Hisrich & Peters (1992)	The process of creating something different, because of its value in the framework of which necessary time and effort is devoted to achieve this goal, assuming the accompanying financial, psychological and social risk, and expecting obtaining financial rewards and personal satisfaction.	1. Technological and organizational innovation 2. The tendency to operate in conditions of uncertainty 3. Exploration and exploitation of market opportunities 4. Entrepreneurial personality of a manager
Frey (1993)	Starting a venture and (or) its growth, which occurs through the use of innovation, by management assuming the risk.	1. Technological and organizational innovation 2. The tendency to operate in conditions of uncertainty
Piasecki (1998)	Entrepreneurship is the process: - which includes the action taken for the analysis of opportunities of start and development (or just development) of the venture, its financing and the possibility of meeting the effects of such action; - which can take many different forms and shapes, including initiation of a venture, creativity and innovation in developing new products or services, managing an existing venture in such a way that it develops quickly and continuously, seeking financial and material supply sources for potentially growing number of ventures, accepting risk in the development of new or expansion of existing ventures (these elements are the part of the entrepreneurial process, although not all of them must participate in each activity).	1. Technological and organizational innovation 2. The tendency to operate in conditions of uncertainty 3. Market and intraorganizational flexibility 4. Exploration and exploitation of market opportunities 5. Entrepreneurial personality of a manager
Kraśnicka (2001)	Entrepreneurship is an activity that stands out by: activity and dynamism, innovation, looking for changes and reacting to them, perceiving opportunities and their use, regardless of the resources (at the moment), willingness to take risks, which main motive is to multiply the capital.	1. The tendency to operate in conditions of uncertainty 2. Technological and organizational innovation 3. Market and intraorganizational flexibility 4. Exploration and exploitation of market opportunities
Sudoł (2008)	Feature (way of behaving) of entrepreneurs and companies, that means the willingness and ability to undertake and solve creative and innovative new problems, while taking into consideration its risks, the ability to use the available opportunities and flexibility to adapt to changing conditions	1. Technological and organizational innovation 2. Market and intraorganizational flexibility 3. Exploration and exploitation of market opportunities 4. Entrepreneurial personality of a manager

Source: own compilation based on the cited references.

As Sułkowski (2012) noticed “in many of the listed definitions, the following variables describe entrepreneurship as:

1. a process of innovative and creative markets activities or organizational changes (technological and organizational innovation);
2. taking risks in business or tolerance of uncertainty aiming at the development of the venture (the tendency to act under uncertainty);
3. flexibility in relation to strategy and market activities and the willingness to change and intraorganizational flexibility (market and organizational flexibility);
4. exploration and exploitation of opportunities inherent in the environment of the organization and the unique competitive advantages of having support in the organizational resources (exploration opportunities);
5. a set of entrepreneurial characteristics such as innovation, creativity, willingness to take risks, and orientation to change (the entrepreneurial personality).

Summarizing the above definitions we can agree that entrepreneurship is the transformation of an innovation into an enterprise generating value.

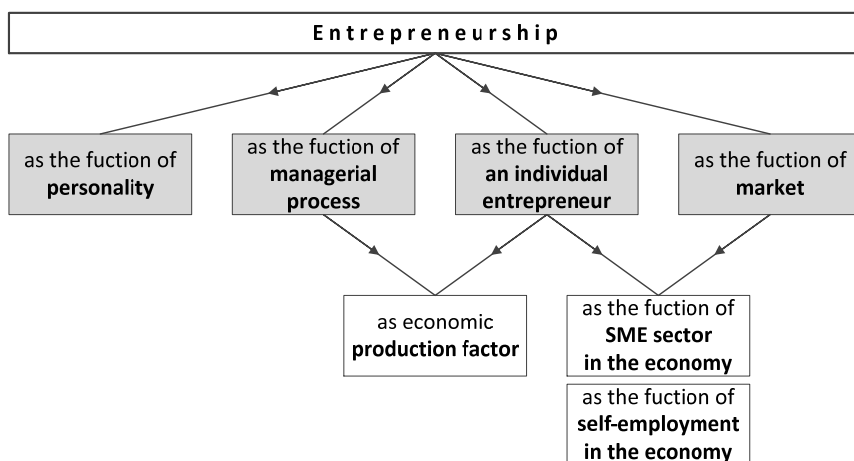


Figure 1. Basic functions of entrepreneurship in economics and business studies

Source: Wach (2015, p. 14).

Metaphors in Economic Discourse

Metaphors have been an important object of interest along centuries. It has been the focus of various studies, research, analysis and theory, starting from Aristotle and going on till now. Contrary to standard thought, metaphors pervade our thinking and conceptualization rather than serving a poetic and rhetorical device. In the field of communication and to be more precise, linguistics, it has been accepted that our thoughts and cognitive processes are highly metaphorical i.e. metaphors constitute and construct human thoughts (Lakoff & Johnson, 1980; 2003). Deignan (2005, p. 18) believes that language is hardly metaphor-free suggesting that people think in metaphors and become familiar with new domains due to metaphorical thinking (Lakoff & Johnson, 1980; Gentner

& Jeziorski, 1993), since analogical reasoning leads to new insights in either a new or familiar concepts (Schön, 1993; Walsh, 1995).

Metaphor is common in economic discourse (McCloskey, 1995). Many terms in economics such as inflation, depression or expansion, are metaphorical in their very own nature. However, it was 1982, when W. Henderson opened the discussion of metaphor in economics, emphasizing the scarcity of analyses of metaphor in economics, in spite of the wide and deliberate use of metaphor in economic texts. Finally, the 1980s brought the emergence of metaphors from the closet. Lakoff and Johnson (1980) were the pioneers in this field. They demonstrated the pervasiveness of metaphorical reasoning. According to them, metaphors were necessary for humankind's understanding. In the twenty-five years since the Peters and Waterman's triumph, the use of metaphors gained strength. Every imaginable academic discipline started using metaphors (Knowles & Moon, 2006). This was more so in the business and management fields.

This "metaphoromania" of the last three decades resulted in a lot of research, which deals with the following processes: identification, comparison and juxtaposition, and the two dimensions of metaphor, i.e. the instrument of thinking used to shape a certain discipline and, paradoxically, the outcome of the light shed upon the metaphorical process itself. Thus, metaphor is considered both a tool of forming various sciences and a result of the way in which these sciences developed (Vasiloaia, Gaisoa, & Vergara, 2011).

Metaphors of Entrepreneurship

Charteris-Black (2004) emphasizes that metaphors involve a transfer of meanings. The use of a metaphor allows people to map a schema, well-known to them onto a new domain and assess the fit of relationships between variables from one to another (Wickman, Daniels, White & Fesmire, 1999). This facilitates understanding of complex and abstract ideas (Palmer & Dunford, 1996), such as entrepreneurship. Metaphors are known to capture experience and emotions better than literal discourse (Palmer & Dunford, 1996).

Research concerning metaphors is well established within the entrepreneurship field. Scholars have studied the metaphors for entrepreneurship used by entrepreneurs (Hyrsky, 1999; Dodd, 2002) and non-entrepreneurs (Koiranen, 1995). Many have studied the metaphors media use to portray entrepreneurs (Nicholson & Anderson, 2005). The use of metaphors for sense-making and sense-giving among entrepreneurs was also a subject of research (Hill & Levenhagen, 1995). However, the use of metaphors for entrepreneurship in Poland is still heavily under-researched.

MATERIAL AND METHODS

The research goals of our exploratory study is to identify entrepreneurship metaphors among Polish management students. This research will focus on metaphors of entrepreneurship used by non-entrepreneurs. The research procedure employed was qualitative in nature. We reached students of the University of Social Sciences in Łódź in late 2015. We reached the students we had classes with, so it was not a random sample. Thus, the presented results are not representative, but they can illustrate the basic image in the undertaken theme among students from Poland.

We had two stages of the investigation. We addressed 124 management students on three levels, namely bachelor (BA), master (MA) and post-graduate (MBA) and they con-

stituted the first research group. The second research group consisted of 82 students at the bachelor level only. The first group was used for experimental phase of research and the second group was used for the survey questionnaire.

RESULTS AND DISCUSSION

The first research group consisted of 124 students. The respondents were asked to give their metaphorical expressions on paper. As far sex is concerned the group was diversified as 54% of the respondents were female and 46% were male. The average age of respondents was 29 years and the average number of years of employment among respondents was 6.8. 33% of the respondents said that either their parents or close relatives were or had been business owners. None of the respondents had any experience either in setting up or in running their own business.

Student respondents were asked to create the metaphors of their own accord. They were encouraged to follow their first instincts in forming lexical associations depicting the essential characteristics of a entrepreneurship. Metaphors were grouped into 8 different clusters based on their semantic properties (Table 2). Our results suggest that there are several major entrepreneurial narratives evident among all three groups including creativity and innovation, competition, war, journey, risk, adventure and exploitation.

The next step was to prepare a questionnaire based on 7-point Likert scale. This questionnaire was run among BA management student group composed of 82 students only (the second research group).

As for sex the sample was diversified as 50 of the respondents were female and 32 were male. The average age of respondents was 27 years and the average number of years of employment among respondents was 5.6. 12 respondents said that either their parents or close relatives were or had been business owners. None of the respondents had any experience either in setting up or in running their own business.

Based on 7-point Likert scale, in order to generalize results we calculated the basics descriptive statistics – mean and standard deviation. Although some statisticians negate such solutions, numerous studies published even in the top-ranking journals of business studies accept such an approach (Ozaralli & Rivenburgh, 2016; Wach & Wojciechowski, 2016). The results are depicted in Table 3.

Hayton, George and Zahra (2002) stress that cultural values serve as a filter for the degree to which a society considers certain entrepreneurial behaviours as desirable. Moreover, numerous authors have emphasized the importance of understanding the impact of cultural norms on entrepreneurship. Several researchers acknowledge the importance of the cultural context for career decisions as entrepreneurs (Flores, Robitschek, Celebi, Andersen & Hoang, 2010; Leong, 2010).

Table 2. The content analysis of the metaphors of entrepreneurship among surveyed students

No.	Metaphor Category	Examples
1.	Creativity or innovation	The respondents provided for example the following expressions to emphasize the ideas of creativity and innovations: "Entrepreneurship is building something out of elements which are initially not connected" "Entrepreneurship is like constant problem solving exercise" "Entrepreneurship is creating solutions" "Entrepreneurship is building a fast path to the future you want."
2.	Competition	The metaphors indicating competition: "Entrepreneurship is a race for money" "Entrepreneurship is a track race" "Entrepreneurship is like wrestling" "Entrepreneurship is a marathon race" "Entrepreneurship is a competition"
3.	Journey	The metaphors indicating journey: "Entrepreneurship is like conquering a steep hill, one after another" "Entrepreneurship is a never ending journey full of new people, places and situations"
4.	War	The metaphors indicating war: "Entrepreneurship is a war" "Entrepreneurship is a war game against taxes and taxcouncil" "Entrepreneurship is a constant battle" "Entrepreneurship is a survival game" "Entrepreneurship is like being on a battlefield, every day, all day long"
5.	Adventure	The metaphors indicating adventurers: "Entrepreneurship is blazing new trails" "Entrepreneurship is swimming across a stormy seas"
6.	Exploitation	Metaphors indicating exploitation of others: "Entrepreneurship is exploiting other people" "Entrepreneurship is taking advantage of employees" "Entrepreneurship is squeezing as much as you can form others"
7.	Risk	Metaphors indicating risk: "Entrepreneurship is like walking on a tightrope" "Entrepreneurship is like skating on thin ice" "Entrepreneurship is like a Russian roulette"
8.	Miscellaneous	Some miscellaneous metaphors were used, such as: "Entrepreneurship is the key to success in life" "Entrepreneurship is dreaming big, and getting big" "Entrepreneurship is like workaholism but in a positive way" "Entrepreneurship as a style of living" "Entrepreneurship is like harvesting – you reap what you sow" "Entrepreneurship is hunting for clients"

Source: own study based on open questions ($n = 124$).

Table 3. Entrepreneurship metaphors among surveyed students

Metaphor	Mean	Std. Dev.
Creativity/innovation	3.353	1.399
Competition	5.061	1.390
Journey	2.902	1.384
War	5.695	1.038
Adventure	3.975	1.333
Exploitation	2.353	1.115
Risk	5.195	1.261

Source: own study based on the survey ($n = 82$).

Metaphors of entrepreneurship are under the influence of certain well-established patterns and stereotypes in Polish culture. There were numerous negative metaphors indicating exploitation of others. “Exploiting other people” or “taking advantage of employees” were just a few examples of metaphors with negative, cynical or downgrading undertones.

However, findings illustrate the change in the perception of entrepreneurship among non-entrepreneurs in Poland. Although as we have expected in our introductory research most of the metaphors would reflect competition (“a race for money”, “a marathon race”), war (“war against taxes and tax council” and risk (“skating on thin ice” or “Russian roulette”), we may observe many optimistic metaphors. According to this perception entrepreneurship is oftentimes viewed a “key to success in life” or “building a fast path to the future you want”. It’s very often associated with good and innovative ideas, creativity, freshness and breaking stereotypes.

Some metaphors illustrate the approach to entrepreneurship as part of a lifestyle providing self-direction and self-control. Here comes the tendency to escape from competing and fighting, and move towards balancing and harmonizing own life in relation to business.

CONCLUSIONS

The metaphorical statements revealed the paradoxical nature of respondents' perceptions of entrepreneurship. A majority of the metaphors contained quite negative images. Especially in the least educated group sample they seemed to conjure up most negative images of entrepreneurship as some kind of modern day “slave owners” or exploiters.

We believe that metaphors play an important role in popularizing business and business related concepts and enhance our understanding in the nature of the different metaphors used in economics discourse. Because metaphors shape the way we think, our choices of metaphors are important. Gartner (1993) has suggested that “the words we use to talk about entrepreneurship influence our ability to think about this phenomenon”. Subsequently these thoughts are able change the discourse about entrepreneurship and direct actions toward entrepreneurial activities which ultimately affect culture and support the activation of entrepreneurial attitudes in social circles.

The main research limitation is the non-representativeness of the sample as well as small sample size ($n = 124$ at the first stage and $n = 84$ at the second stage). The results presented in the article are very preliminary and further investigations in this

field are needed. It seems necessary to conduct a survey among a larger sample of students and to include more explaining variables.

REFERENCES

- Charteris-Black, J. (2004). *Corpus Approaches to Critical Metaphor Analysis*. New York: Palgrave Macmillan.
- Chmielecki, M. (2013). Development of corporate entrepreneurship in the context of human resource management and organizational culture in Polish organizations – research results. *Przedsiębiorczość i Zarządzanie*, 14(9), 101-116.
- Churchill, N., & Levis, V. (1983). The Five Stages of Small Business Growth. *Harvard Business Review*, May-June.
- Cooper, A. (2003). Entrepreneurship: The Past, the Present, the Future. In Z.J. Acs & D. Audretsch (Eds.), *Handbook of Entrepreneurship Research* (pp. 21-34). Boston: Kluwer.
- Deakins, D. (1999). *Entrepreneurship and Small Firms*. London: McGraw-Hill.
- Deignan, A. (2005). *Metaphor and corpus linguistics*. Amsterdam – Philadelphia: John Benjamins.
- Dodd, S.D. (2002). Metaphors and meaning: A grounded cultural model of US entrepreneurship. *Journal of Business Venturing*, 17(5), 519-535.
- Frey, R.F. (1993). *Enterprenaurship. A Planing Approach*. Eagan: West Publishing Company.
- Gartener, W.C. (1993). Image formation process. *Journal of Travel and Tourism Marketing*, 2(2-3), 191-216.
- Gentner, D., & Jeziorski, M. (1993). The Shift From Metaphor To Analogy In Western Science. In A. Ortony (Ed.), *Metaphor and Thought* (pp. 447-480). Cambridge, England: Cambridge University Press.
- Flores, L.Y., Robitschek, C., Celebi, E., Andersen, C., & Hoang, U. (2010). Social cognitive influences on Mexican Americans' career choices across Holland's themes. *Journal of Vocational Behavior*, 76, 198-210.
- Hayton, J.C., George, G., & Zahra, S.A. (2002). National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship Theory and Practice*, 26(4), 33-52.
- Henderson, W. (1982). Metaphor in Economics. *Economics*, 18(4), 147-157.
- Hill, R.C., & Levenhagen, M. (1995). Metaphors and mental models: Sensemaking and sensegiving in innovative and entrepreneurial activities. *Journal of Management*, (21)6, 1057-1074.
- Hisrich, R.D., & Peters, M.P. (1992). *Entrepreneurship. Starting, Developing and Managing a New Enterprise*. 2nd ed. Boston: IRWING.
- Hyrsky, K. (1999). Entrepreneurial metaphors and concepts: An exploratory study. *International Small Business Journal*, 18(1), 13-34.
- Knowles, M., & Moon, R. (2006). *Introducing Metaphor*. Abingdon: Routledge.
- Koiranen, M. (1995). North-European metaphors and of 'entrepreneurship' and 'an entrepreneur'. *Frontiers of Entrepreneurship Research*, 1995 Edition, pp. 203-216.
- Kraśnicka, T. (2001). Przedsiębiorczość jako przedmiot badań ekonomistów. *Ekonomia*, 4, 187-200.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Leong, F.T.L. (2010). A Cultural Formulation Approach to Career Assessment and Career Counseling: Guest Editor's Introduction. *Journal of Career Development*, 37, 375-390.
- McCloskey, D. (1995). Metaphors Economists Live By. *Social Research*, 62(2), 215-237.

- Nicholson, L., & Anderson, A. (2005). News and nuances of the entrepreneurial myth and metaphor: Linguistic games in entrepreneurial sense-making and sense-giving. *Entrepreneurship Theory and Practice*, 29, 153-172.
- Ozaralli, N., & Rivenburgh, N.K. (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *Journal of Global Entrepreneurship Research*, 6(3). doi: 10.1186/s40497-016-0047-x
- Palmer, I., & Dunford, R. (1996). Conflicting uses of metaphors: Reconceptualizing their use in the field of organizational change. *Academy of Management Review*, 21(3), 691-717.
- Timmons, J. (1990). *New Venture Creation*. Boston: IRVIN.
- Piasecki, B. (1998). *Przedsiębiorczość i mała firma*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Schumpeter, J.A. (1934|2008). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. New Brunswick – London: Transaction Publishers.
- Schön, D.A. (1979). Generative Metaphor: A Perspective On Problem Setting in Social Policy. In A. Ortony (Ed.), *Metaphor and Thought* (pp. 137-163). Cambridge, England: Cambridge University Press.
- Sudoł, S. (2008). Przedsiębiorczość – jej pojmowanie, typy i czynniki ją kształtujące. *Problemy Zarządzania*, 6(2), 9-26.
- Sułkowski, Ł. (2012). Barriers to entrepreneurship in the management of hospitals in Poland. In C. Martin & T. Rkibi (Eds.), *L'entrepreneur face aux politiques publiques europeennes* (pp. 382-388). Lisboa: PGV/ISLA.
- Vasiloaia, M., Gaisoa, M., & Vergara, N. (2011). Metaphors business linguistic culture lives by. *Economy Transdisciplinarity Cognition*, 14(1), 231-240.
- Wach, K. (2015). Przedsiębiorczość jako czynnik rozwoju społeczno-gospodarczego: przegląd literatury. *Przedsiębiorczość – Edukacja*, 11, 24-36.
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 4(1), 83-94. doi: <http://dx.doi.org/10.15678/EBER.2016.040106>
- Walsh, J.P. (1995). Managerial and organizational cognition: Notes from a trip down memory lane. *Organization Science*, 6, 280-321.
- Wickman, S., Daniels, M., White, L., & Fesmire, S. (1999). A primer in conceptual metaphor for counselors. *Journal of Counseling & Development*, 77(4), 389-394.

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Innovations and Export Performance: Firm-level Evidence from Poland

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Abstract

The main objective of this article is to study the empirical relationship between innovations and export performance of Polish firms. Our analytical framework refers to the most recent strand in the new trade theory literature based on the Melitz (2003) model that stresses the role of firm heterogeneity and the importance of firm productivity in entering export markets. We treat innovations as a key element that can increase the level of productivity and study the significance of both product and process innovations. The empirical implementation of the theoretical framework is based on the probit model and the unique Polish CIS firm-level dataset covering the period 2008-2010. Our estimation results indicate that the probability of exporting is positively related to product and process innovations, firm size, the share of university graduates in productive employment and foreign capital participation. The results depend also on the level of technology used in the analysed sector and the relative importance of export market. It is necessary to develop an innovation supporting mechanism that would stimulate both product and process innovations in Poland. The originality of this work lies in the use of the unique Polish CIS firm level dataset that allows distinguishing between product and process innovations.

Keywords: export performance; firm heterogeneity; innovations; Poland; probit model

JEL codes: F14, P33

INTRODUCTION

Innovation is one of the key terms related to the modernization and development of the EU economy. However, empirical studies devoted to the subject in the context of international competitiveness at firm level are relatively few. Innovation activities cover product and process innovations as well as the creation of intellectual property rights related to patents and trademarks. Previous studies have focused almost exclusively on the analysis of companies in developed countries such as Germany or the United Kingdom, with a high levels of firm innovation. These studies have mainly focused on product and process innovation.

One of the key elements of innovation activity, analysed in the context of firm export performance in the old EU-15 member states, is research and development (R&D) activity. This activity is described as the process of systematic creative work that combines both basic and applied research aimed at extending the company's knowledge resources and its practical application. Measures of innovative activity of companies can include spending on R&D as well as its effects, such as patents and share of new products in total sales. R&D may result in improved efficiency of the company.

The main objective of this paper is to study the relationship between innovation of Polish firms and their export competitiveness. In particular, we empirically validate the main hypothesis concerning the positive relationship between innovation activities and exports performance using the probit model. In contrast to previous studies that use R&D spending as a measure of innovation, we focus on innovation outcomes. Our detailed hypotheses postulate the existence of positive relationships between firm export performance and different types of innovation activities: product and process innovations. We seek to determine which of the aforementioned types of innovation activity is of the greatest importance for exporting and whether it depends on firm size, the level of internationalization, the use of human capital and its sector of activity. In addition, we take into account the intellectual property creation at firm-level. Our study is based on Polish firm-level data for the period 2008-2010.

The results of our study can contribute to proposing a set of policy conclusions that can apply to Poland and other New Member States (NMS) of the European Union. The firms from those countries are lagging behind in terms of innovation activities and their presence in foreign markets is still limited compared to the firms from the old EU-15. This is particularly important in the light of changes in the allocation of the EU funds in the current Financial Perspective, i.e. increasing expenditure for innovative firms, aimed at increasing their presence in the global markets. This study should also contribute to a better understanding of the mechanisms of cooperation between managers, engineers, scientists and research centres serving to create new processes, products and technological progress as well as social development of the NMS.

The structure of this paper is as follows. In the next section we provide the literature review. Then, we describe the dataset and the analytical framework. Subsequently, we present and discuss our empirical results. The last section summarizes and concludes.

LITERATURE REVIEW

There is an extensive theoretical literature on the determinants of innovation and their consequences for productivity and exporting. In particular, a key hypothesis in this literature is that innovation is a driver of productivity improvement that in turn could stimulate exports. This literature has identified two main types of innovation: product innovation and process innovation. Product innovation is a key factor for successful market entry in models of creative destruction and Schumpeterian growth while process innovation reduces costs of production and improves firm's market position. Both modes of innovation are expected to raise firm's productivity and propensity to export.

The early endogenous growth theory literature traditionally stressed the importance of product innovation in for economic growth in a world where consumers have a desire for variety and/or a high quality of available products (Grossman & Helpman, 1991).¹ Later, economists started to explore the potential differences between product and process innovation focusing on heterogeneous agents and technological unemployment (Foellmi & Zweimüller, 2006). In dynamic models with heterogeneous firms (Jovanovic, 1982; Hopenhayn, 1992; Melitz, 2003; Grossman, Helpman & Szeidl, 2006), investment in firm-specific assets that could be associated with product innovation led to a selection of firms. The least productive ones did not participate in the market at all and the most productive ones supplied consumers not only at home but also abroad (through exports), while those with an intermediate productivity only faced demand from domestic consumers. In this context, investment in firm-specific assets and a high total factor productivity were considered as the key determinants of a firm's export propensity.²

Most recently, Atkeson and Burstein (2007) and Constantini and Melitz (2008) have analysed dynamic industry models to formalize the relationships between firm-level productivity and the choices of both to export and to invest in R&D or adopt new technology. In these models, productivity distinguishes heterogeneous firms, and its evolution is endogenous and affected by innovation decisions at the firm level apart from a stochastic component.

There is also extensive empirical literature that points to a positive impact of innovation as such on exports at the firm- or plant-level. The majority of the existing studies rely on R&D expenditures as an indirect measure of innovations (Hirsch & Bijaoui, 1985; Kumar & Siddharthan, 1994; Braunerhjelm, 1996; Basile, 2001). Early empirical studies (Hirsch & Bijaoui, 1985; Schlegelmilch & Crook, 1988) that looked into the effects of innovations on exports used measures of innovation input and arrived at mixed conclusions (Ebling & Janz, 1999).

¹ However, the literature on the relationship between innovation and international trade is much less numerous. International economics focuses on the role of product innovation for trade in open economy growth models (Dollar, 1986; Jensen & Thursby, 1987; Grossman & Helpman, 1989; 1990; 1991; Segerstrom, Anant & Dinopoulos, 1990).

² At the same time the early industrial organization literature stressed the role of marginal cost-reducing innovations (i.e. expenditures for research and development for the sake of process innovation) in international oligopoly models (Spencer & Brander, 1983). According to this literature a higher investment in such process innovations increases a firm's output sold in domestic and foreign markets. Subsequent research focused on the relationship between process innovation and competitive pressure at the local (Martin, 1993) and the global level (Baily & Gersbach, 1995).

In addition, there is a limited number of studies that employ survey data with explicit information on the actual innovations (Wakelin, 1998; Bernard & Jensen, 1999; Roper & Love, 2002; Lachenmaier & Wößmann, 2006). In particular, firm-level studies which used more direct measures of innovation output (i.e., actual innovations) are those of Wagner (1996) and Wakelin (1997; 1998). Wagner (1996) used a sample of firms in the German State of Lower Saxony and found a positive impact of new products introduced on exports. Wakelin (1998) employed British data and reported a positive impact of innovating on the intensive and extensive margins of exports at the firm level. Overall, these studies find a strong positive impact of innovations on export performance.

There is also some evidence on a systematic determination of innovation. Probably, the first empirical study on the impact of endogenous innovations on exports is the one by Entorf, Krader and Pohlmeier (1988). They estimated a simultaneous equation system of exports, innovation, and labour demand and identify not only a positive impact of innovations (captured by an indicator variable) on exports but also one of exports on innovations based on data from the Ifo Innovation Survey. Ebling and Janz (1999) studied the impact of innovations (captured by a binary variable) on the extensive margin of exports in the service sector, using data for 1997 from the Mannheim Innovation Panel. Their results were based on a two-step probit model and simultaneous probit models and pointed to a positive impact of innovations on exports, but not vice versa.

Van Beveren and Vandebussche (2010) analysed the relationship between firm-level innovation activities and firms' propensity to start exporting for Belgian firms. They measured innovation by innovative effort (R&D) as well as by innovative output (product and process innovation). Their evidence pointed to firms self-selecting into innovation in anticipation of their entry into export markets, rather than product and process innovation triggering entry into the export market. Their results suggested that governments could foster firm-level innovation through trade liberalization.

While Cassiman and Martínez-Ros (2007) found support for the product innovation–productivity–export link in data on Spanish firms, the reverse causal direction (exporting–process innovation–productivity growth) was investigated with a less success. Cassiman, Golovko and Martínez-Ros (2010) argued that the positive association found between firm productivity and exports in the literature relates to the firm's innovation decisions. Using a panel of Spanish manufacturing firms they find strong evidence that product innovation – and not process innovation – affects productivity and induces small non-exporting firms to enter the export market.

Caldera (2010) investigated the relationship between innovation and the export behaviour of Spanish firms over the period 1991–2002. He presented a simple theoretical model of the firm decision to export and innovate that guides the econometric analysis. Consistent with the predictions of the theoretical model, the econometric results suggested a positive effect of firm innovation on the probability of participation in export markets. The results further revealed the heterogeneous effects of different types of innovations on the firm export participation. In particular, product upgrading appears to have a larger effect on the firm export participation than the introduction of cost-saving innovations. These findings were robust to firm unobserved heterogeneity, dynamic specifications, and to the use of instrumental variables to control for the potential endogeneity between innovation and exporting.

Lachenmaier and Wößmann (2006) used instrumental-variables procedures to estimate the impact of potentially endogenous innovations on exports based on the firm level data on 981 German firms for the year 2002. Their focus was on total innovations, but they also looked into product versus process innovations in one of their specifications. In broad terms, they found that impediments to innovations matter and that such variables could be used as identifying instruments for innovations. Their results showed that treating innovations as exogenous may lead to largely downward-biased estimates of the impact of innovations on firm-level exports.

Most recently, Becker and Egger (2013) also studied the effects of new product versus process innovations on export propensity at the firm level in Germany. They hypothesized that in line with the new trade theory product innovation should be relatively more important than process innovation. They investigated this hypothesis in a rich survey panel data set with information about new innovations of either type. With a set of indicators regarding innovation motives and impediments and continuous variables at the firm and industry level at hand, they determined the probability of launching new innovations and their impact on export propensity at the firm level through a double treatment approach to account for self-selection of firms into either type of innovation. Their results point to the importance of product innovation relative to process innovation for the decision to export. Firms that perform both process and product innovations have a higher probability to export than firms that do not innovate; however, when performed alone, product innovation is more important in the exporting behaviour of a firm than is process innovation. This can be viewed as evidence on the importance of the extensive margin in product space for a firm's entry into export markets. While process innovations increase a firm's probability to export only when being combined with product innovations, they marginally raise a firm's export-to-sales ratio at the intensive margin.

Hence, the majority of empirical studies for the old EU-15 countries find support for the positive relationship between various types of innovations and exporting. In particular, these studies find that firms that introduce either process or product innovations exhibit a higher probability to export than firms that do not innovate. However, product innovations seem to be more important in determining the export performance of firms than process innovations.

In the context of the new EU member states empirical evidence on the relationship between innovation and exporting is scarce. The only exception, to the best of our knowledge, is the study by Damijan, Kostevc and Polanec (2010) who explored the causal links between innovation and export activities of firms in Slovenia. First, from product innovation to productivity and to decision to export may effectively explain how a firm's decision to invest in R&D and to innovate a product drives its productivity and triggers the decision to start exporting. Second, in the opposite direction, the link going from exporting to process innovation to productivity growth may be crucial to understand how export activity can force a firm to engage in process innovation, which in turn improves its productivity growth in the long run. Their empirical approach is to tackle both sides of this causality link using Slovenian micro-data, including financial data, innovation survey data, industrial survey data, as well as information on trade flows, for the period 1996-2002. Their dataset allows them to test the prediction that a firm's innovation enhances its probability of becoming an

exporter, and the prediction that learning effects of exporting will translate to a greater effort to innovate and thus to improvements in productivity.

They found no evidence that either product or process innovations increases the likelihood that a firm becomes a first-time exporter. However, they found evidence that past exporting status increases the probability that medium and large firms will become process innovators. At the same time they found no impact of past exporting on product innovations. Thus, their results did not confirm the implications of the Constantini and Melitz (2008) model and the findings of Aw, Roberts and Xu (2009) that in the case of Slovenian firms the linkage from product innovation to productivity growth drives the self-selection of more productive firms into exporting. However, they found some evidence in favour of learning-by-exporting of Slovenian firms, which was already indicated by Damijan and Kostevc (2006), De Loecker (2007) and Hagemeyer and Kolasa (2008). In particular, Damijan and Kostevc (2006) demonstrated that these learning-by-exporting effects occur through the mechanism of process innovation enhancing firm technical efficiency and not through introduction of new products. It is important to note, however, that the results of the study by Damjan *et al.* (2010) may not generalize to the whole group of the new EU member states as Slovenia is a small open economy with the highest level of development among the NMS.

The empirical evidence on the link between innovation and export performance for Poland is virtually non-existent. The previous studies such as Cieřlik *et al.* (2012; 2013; 2014; 2015) stress the importance of R&D expenditure for the probability of exporting. However, so far no attempt has been made to study the link between innovation outcomes and the probability of exporting for Poland. Therefore, in this article we investigate empirically whether various innovative activities contribute to increased efficiency of firms from Poland and whether they improve their ability to compete and stay at international markets. First, in contrast to previous studies conducted for selected EU-15 countries, our study is based on the unique firm-level dataset collected by the Polish Central Statistical Office (CSO). This allows us to analyse the relationship between innovative activities and exporting for both all the Polish as well as particular groups of the firms depending on the origin of their ownership. Second, in contrast to previous empirical studies we distinguish and examine the relative importance for exports of two main types of innovation: product and process innovations as well as patents and trademarks that reflect the investment in firm-specific assets. Moreover, we identify the relative importance of specific types of innovation activities for the international competitiveness of firms from Poland, which are much less innovative when compared to companies from the old EU-15 member states. Finally, we distinguish between all exporters and firms for which exporting constitutes an important fraction of their sales.

In addition, our study will allow formulating specific recommendations for economic policy in Poland and other NMS, especially for policies to encourage innovation in these countries which differ from the old EU member states in terms of the level of economic development. As regards possible conclusions for economic policy for the old EU-15 countries, the findings of the previous studies suggest that policy instruments should be targeted towards specific innovations rather than innovation input, if these countries want to improve their export competitiveness in world markets. In particular, some authors have argued that in the case of the old EU-15 countries

subsidies and other programs aiming at product innovations should be on average more likely to cause entry into export markets than general expenditures on R&D or legal environments which particularly favour process innovations.

MATERIAL AND METHODS

The new strand in the trade theory argues that the level of firm productivity is critical for exporting. In particular, the Melitz (2003) model points at the existence of a positive relationship between firm productivity and export performance. In his model productivity differences among firms are exogenously given and each firm has to pay fixed costs of entry into domestic and foreign markets. The majority of empirical studies find support for the theoretical prediction of the Melitz model, i.e. that more productive firms self-select into foreign markets. The survey of early empirical evidence on the relationship between firm productivity and exporting was provided by Tybout (2003). The extensive summaries of more recent empirical evidence on this relationship in particular countries were offered by Wagner (2007, 2012). According to the first survey by Wagner (2007), a large number of studies using data from different countries, report results showing that exporters and importers are more productive than non-exporters and non-importers. In particular, he argued that future exporters tend to be more productive than future non-exporters in the years before they enter the export market. Moreover, the empirical results for post-entry differences in performance between exporters and non-exporters point to faster productivity growth for the former group in only some studies. This picture was largely confirmed in the recent survey by Wagner (2012), i.e. his review provides extensive evidence in favour of the self-selection hypothesis. Therefore, in our paper we refer to the self-selection hypothesis.

As the main objective of this article is to study the relationship between innovation of Polish firms and their export performance we use the unique Polish CIS firm-level dataset covering the period 2008-2010. The Community Innovation Survey (CIS) is the principal survey of the innovation activities of firms in the European Economic Area and the EU candidate and associate countries. The methodology of the survey is based on the Oslo Manual, first published in 1992 and then revised in 1996 and 2005. The CIS contains questions referring to revenue and expenditure in the most recent years (e.g. in 2010 in CIS 2008-2010), as well as questions about various aspects of innovation in the three years preceding each edition of the survey (e.g. in 2008-2010). Apart from innovation-related information firms are required to answer questions about their revenue; the number of staff; whether they are members of groups of firms (where a group of firms is defined as a set of companies owned by the same person or entity), and if so then where is the mother company located; whether they have exporting activities and what is the main markets to which they sell.

However, the firm-level data from the CIS are not easily available for Poland. They are not available for researchers at the Eurostat's Safecentre in Luxembourg. It is possible to purchase raw data, but the information about revenues and expenditure is considered confidential, resulting in considerable restrictions with respect to the scope of data made available to researchers.

This study is based on the Polish dataset for manufacturing companies patterned on CIS 2010 with some alterations. Due to the confidentiality conditions imposed by the Polish Central Statistical Office (CSO), data on revenue and the exact number of staff was unavailable; instead we only had information on the firm size category (i.e. small, medium, big). Data on innovation expenditure was available only on a per-capita basis. In comparison to the CIS survey in the Polish dataset there is additional information on the number of production lines both automatic and controlled by computers. All of the manufacturing firms employing more than 49 persons were surveyed, as well as a sample of firms employing 10-49 people. This resulted in 9,841 in the 2010 CIS.

In our study we refer to the classification of manufacturing industries proposed by the OECD (2012). According to this classification there are 4 categories based on R&D intensities described in detail in the Annex.³

Our dependent variable, export performance, indicating the export status of the firm takes two main forms based on the Polish CSO questionnaire. The first form of the variable (*exporter*) takes value zero if the firm sells its output only in the domestic market, and one otherwise, i.e. if it sells also some of its output abroad. The second form of the variable (*exporter_plus*) takes value one if the foreign market is declared by the firm as *the* most important market for its output and zero otherwise.

It is worth stressing that, given the nature of our research problem, we have to rely on binary variables as dependent variables. This is due to the nature of the CIS questionnaire that includes neither the information on absolute export revenue, nor the information on the share of export revenue in firm's total turnover.⁴

In our study we selected a number of independent variables chosen from the survey, which should reflect the innovation efforts and important characteristics of analysed firms. The definitions of independent variables are presented in the Table 1. We interpret variables 1 through 4 as characteristics of a firm's production factor endowment. In particular, *prod_lines* reflects capital endowment, *HC* – human capital endowment, and the dummy variables for firm size (*medium*, *large*) – labour endowment. Variables 5 through 7 are key characteristics of firm innovation performance, while variables 8-13 refer to the membership of firms in domestic or foreign capital groups. Finally, variables 14-16 characterize the sectors in which firms operate according to their technology intensity: controlling for sectoral effects is standard in innovation studies.

Since our dependent variables are binary variables to estimate the postulated relationship between the probability of exporting and various forms of innovation we use the probit model. The main advantage of this approach is that the dependent variable does not have to be continuous.

³ In the past the methodology used three indicators of technology intensity reflecting, (1) R&D expenditures divided by value added; (2) R&D expenditures divided by production; and (3) R&D expenditures plus technology embodied in intermediate and investment goods divided by production. The updated 2001 Scoreboard used ISIC Rev. 3 R&D expenditure and output data to develop an updated technology classification based on an evaluation of R&D intensities for 13 OECD countries for the period 1991-1997. The new edition extends the analysis to cover the period 1991-99, although for only 12 OECD countries.

⁴ In their study of innovation complementarities, Lewandowska, Szymura-Tyc and Gołębiowski (2016) use the percentage of export revenues from new products in firm's total export revenues as the dependent variable. While this information is available in the CIS database, we cannot, unfortunately, use it to validate our hypothesis, which refers to firm's export orientation (as opposed to the focus on the domestic market).

Table 1. List of independent variables used in the empirical analysis

No.	Variable	Explanation of the variable
1.	<i>prod_lines</i>	Number of automatic product lines and controlled by the computers
2.	<i>medium</i>	Dummy variable indicating employment between 50 and 249 persons
3.	<i>large</i>	Dummy variable indicating employment exceeding 250 persons
4.	<i>HC</i>	Human Capital: the percentage of employees with tertiary education
5.	<i>product_innov</i>	Dummy variable indicating the market introduction of a new or significantly improved good or service with respect to its capabilities, user friendliness, components or sub-systems.
6.	<i>process_innov</i>	Dummy variable indicating the implementation of a new or significantly improved production process, distribution method, or supporting activity.
7.	<i>intell_prop</i>	Dummy variable indicating applications for patents, inventions, trademarks, made in the Polish Patent Office
8.	<i>group_pl</i>	Dummy variable for the membership in the Polish capital group
9.	<i>group_fdi</i>	Dummy variable for the membership in the foreign capital group
10.	<i>group_de</i>	Dummy variable for the membership in the German capital group
11.	<i>group_fr</i>	Dummy variable for the membership in the French capital group
12.	<i>group_us</i>	Dummy variable for the membership in the American capital group
13.	<i>group_other</i>	Dummy variable for the membership in the other foreign capital group
14.	<i>ht</i>	Dummy variable for the high technology industry. The technology intensity of the manufacturing industries depends on R&D intensities. See: the Eurostat classification of R&D intensities in the Annex.
15.	<i>mht</i>	Dummy variable for the medium-high technology industry. See: the Eurostat classification of R&D intensities in the Annex.
16.	<i>mlt</i>	Dummy variable for the medium-low technology industry. See: the Eurostat classification of R&D intensities in the Annex.

Comment: The variable *prod_lines* was used only in the Polish version of the questionnaire, as applied by the Polish Central Statistical Office (CSO).

Source: own study.

Our dependent variable indicating the export status of firm i is denoted by Y_i^* . Instead of observing the volume of exports, we observe only a binary variable Y_i indicating the sign of Y_i^* , i.e. whether the firm sells its output in the domestic market (local, regional or national) or it exports. Moreover, we assume that the variable Y_i^* follows $Y_i^* = \mathbf{X}_i\boldsymbol{\Theta} + \varepsilon_i$, where the error term ε_i is independent of \mathbf{X}_i which is a vector containing explanatory variables that affect exports with the first term equal to unity for all i , $\boldsymbol{\Theta}$ is the vector of parameters on these variables that needs to be estimated and ε_i is assumed to be normally distributed with a zero mean.

Our dependent variable follows a binary distribution and takes the value 1 when the firm exports and 0 otherwise:

$$Y_i = \begin{cases} 1 & \text{if } Y_i^* > 0 \\ 0 & \text{if } Y_i^* = 0 \end{cases} \quad (1)$$

We can obtain the distribution of Y_i given \mathbf{X}_i . Hence, the probability that a firm exports can be written as:

$$P(Y_i = 1|\mathbf{X}_i) = \Phi(\mathbf{X}_i\boldsymbol{\theta}) \quad (2)$$

where:

$\Phi(\cdot)$ - denotes the standard normal cumulative distribution function (cdf).

To be able to successfully employ the probit model, it is important to know how to interpret the vector of estimated parameters on the explanatory variables $\boldsymbol{\theta}$. Consider a specific explanatory variable x_{ij} , which is an element of vector \mathbf{X}_i . The partial effect of x_{ij} on the probability of exporting can be written as:

$$\frac{\partial P(Y_i = 1|\mathbf{X}_i)}{\partial x_{ij}} = \frac{\partial p(\mathbf{X}_i)}{\partial x_{ij}} \quad (3)$$

When multiplied by Δx_{ij} equation (3) gives the approximate change in $P(Y_i = 1|\mathbf{X}_i)$ when x_{ij} increases by Δx_{ij} , holding all other variables constant.

RESULTS AND DISCUSSION

In this section we present and discuss two sets of estimation results using two different definitions of dependent variables. First, in column (1) and (2) we discuss the results for firms that do export at least some of their output, and then in columns (3) and (4) for those for which export markets constitute the main market. The estimation covers period 2008-2010 and is obtained using the robust standard errors. The results of estimations are reported in the Table 2.

In column (1) of Table 2 we report the benchmark results on the relationship between innovation activities and export performance obtained for firms that do export at least some output. These results reveal that the estimated parameter on both measures of innovations, i.e. on product and process innovations, display expected positive signs, similar magnitudes and are statistically significant at 1% level. This means that the higher level of both product and process innovations are positively related to the higher probability of exporting.

We also investigated whether the probability of exports depends on the in-house creation of firm specific intangible assets by Polish firms. The control (*intell_prop*) variable used here is the measured by the number of firm applications for patents, inventions, trademarks, made in the Polish Patent Office. The estimated parameter for this variable is positive, but statistically not significant.

The other control variables are statistically significant at 1% level and reveal the expected signs. In particular, both variables describing firm size (*medium* and *large*) display large values and positive signs. The estimated parameter for large firms is bigger in comparison to medium firms, indicating the importance of economies of scale for exporting. The estimated parameter on the stock human capital (HC) variable, describing percentage of employees with tertiary education, also displays a positive signs and is statistically significant at 1% level. Thus, a larger percentage of educated employees can be positively associated with probability of exporting. The number of product lines (*prod-lines*), proxying for the stock of capital and the differentiation of production profile, also reveals a positive sign, and is statistically significant at 1% lev-

el. Thus, the larger number of products offered, reflecting probably the larger stock of capital, can positively affect the probability of exporting.

Table 2. The list of estimated models

Dependent variable:	exporter (1)	exporter (2)	exporter_plus (3)	exporter_plus (4)
Independent variables:				
prod_lines	0.013*** (0.004)			0.000 (0.002)
HC	0.006*** (0.001)			-0.006*** (0.001)
medium	0.605*** (0.031)			0.344*** (0.034)
large	0.968*** (0.061)			0.656*** (0.052)
product_innov	0.223*** (0.049)			-0.197*** (0.047)
process_innov	0.245*** (0.047)			0.025 (0.043)
intell_prop	-0.001 (0.006)			-0.012** (0.005)
group_pl	-0.216*** (0.051)			-0.331*** (0.056)
group_fdi	1.030*** (0.109)			
group_de		1.104*** (0.148)		0.903*** (0.096)
group_fr		1.596*** (0.342)		0.816*** (0.146)
group_us		0.819*** (0.233)		0.904*** (0.162)
group_other		0.937*** (0.124)		0.798*** (0.086)
group_fdi x product_innov	-0.148 (0.156)	-0.142 (0.157)	0.209** (0.091)	0.211** (0.091)
group_fdi x HC	-0.012*** (0.003)	-0.011*** (0.003)	-0.005* (0.003)	-0.005* (0.003)
group_fdi x intell_prop	0.046 (0.052)	0.049 (0.055)	-0.042 (0.026)	-0.042 (0.026)
mlt	0.257*** (0.032)	0.257*** (0.032)	0.133*** (0.033)	0.134*** (0.033)
mht	0.445*** (0.041)	0.446*** (0.041)	0.360*** (0.038)	0.359*** (0.038)
Ht	0.060 (0.082)	0.066 (0.082)	0.203** (0.085)	0.204** (0.084)
constant	-0.344*** (0.029)	-0.344*** (0.029)	-0.995*** (0.033)	-0.995*** (0.033)
Observations	9,846	9,846	9,846	9,846
Pseudo R ²	0.136	0.137	0.0825	0.0826
Log-likelihood	-5358	-5354	-5192	-5191

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: own calculations in STATA.

Furthermore, the probability of exporting in Poland depends on the sector of economic activity. Our estimations results reveal that the largest probability of exporting exists in the medium-high technology sectors, such as of electrical equipment, motor vehicles, trailers or other transport equipment. The estimated parameter for *medium-high-tech* variable is positive and statistically significant at 1% level. The parameter for *medium-low-tech* is also positive and statistically significant at 1% level. Thus, Polish firms active in the sectors such as manufacturing of coke, basic metals or rubber and plastics have higher chances to be exporters. On the other hand, the firms active in *low-tech* sectors – such as production of food products, beverages and tobacco, textiles or wearing apparel and in *high-tech* sectors (e.g. production of pharmaceutical products, computers or electronic products) are also less export oriented. This pattern of export propensities in Poland reflects neoclassical pattern of trade analysed in other studies (Michałek & Śledziwska, 2003). Poland, in comparison to other major partners from the EU-15, has revealed comparative advantage in more labour intensive sectors and capital intensive sectors.

Finally, the propensity to exports depends on the ownership structure. The variable *group-pl* displays a negative sign and is statistically significant at 1% level. This result indicates the Polish-owned firms organized in capital groups are less export oriented compared to non-organized firms. On the other hand, the variable describing membership in foreign capital group *group_fdi* displays a positive sign and is statistically significant at 1% level. Therefore, one can argue, the membership in the foreign capital group increases the probability of exporting. The similar results have been demonstrated in other empirical studies for other EU countries.

In column (2) of Table 2 we extend the study of the ownership structure and split the *group_fdi* variable into its major components. The variable *group-pl* still displays a negative sign and is statistically significant at 1% level. This result indicates the Polish-owned firms are less export oriented. On the other hand, all variables describing foreign ownership display positive signs and are statistically significant mostly at 1% level. The highest values of estimated parameters are reported in the case of French (*group_fr*) and German (*group_de*) owned firms. Both of them are significant at 1% level. The lower values of parameters are displayed in the case of the US owned firms and firms from other countries.

In column (3) we report the results obtained for firms heavily depending on exports, for which the foreign market is the principal one. These results reveal some degree of similarity compared to the results reported in column (1). Main similarities include the importance for exporting and statistical significance of the size of the firm (medium and large), the ownership group variables and to some extent also the sectors of economic activity. The same sectors include medium low and medium high sectors which are more export oriented compared to the low tech sector.

The main difference with respect to the previous results is in the high technology sector which is more export oriented in the case of firms heavily depending on exports. On the other hand, the variables related to product innovations (*product_innov*), human capital (*HC*) and intangible assets (*intell_prop*) are statistically significant but display counterintuitive, negative signs. We try to explore these counterintuitive results in column (4) in which we add three interaction variables: *group_fdi x product_innov*, *HC x group_fdi* and *intell_Prop x group_fdi*.

The first interaction term displays a positive sign and is statistically significant at 1% level. This means that firms that belong to a foreign group and introduce more new or significantly improved products have higher propensity to export. The second interaction term also displays a positive sign and is statistically significant at 1% level. This means that firms that belong to a foreign group and employ more educated employees have higher propensity to export. Finally, the third interaction term displays a negative sign and is statistically significant at 1% level. This means that firms that belong to a foreign group and make less applications for patents, inventions, trademarks in the Polish Patent Office, have higher propensity to export. This result might be due to the fact that a large fraction of Polish exports is accounted for by subsidiaries of multinational firms that do not register their patents and trademarks in Poland, but rather use the intellectual property created and protected by their parent firms. It can be also the case that large exporters may benefit from large scale of production that reduces average costs of production and are less interested in introducing innovations.

CONCLUSIONS

In this paper we studied the relationship between various types of innovations and export performance of Polish firms. Our analytical framework referred to the most recent strand in the new trade theory literature based on the Melitz (2003) model that stresses the importance of firm productivity in entering the export markets. The empirical implementation of the theoretical framework was based on the probit model and the unique Polish firm level data set covering the period 2008-2010.

In our approach we treated innovations as a key element that can increase the level of productivity and focused our analysis on both product and process innovations as well as intellectual property creation. We also tried to control for human capital and physical capital proxied by the percentage of employees with tertiary education and the number of production lines, respectively. In addition, we studied the role of foreign capital participation in determining firm export performance. In particular, we controlled for the country of origin of major investors in Poland.

Our estimation results indicate that the probability of exporting was positively related to product and process innovations, firm size, the share of university graduates in productive employment and foreign capital participation in the case of firms that export at least some fraction of their output. These results suggest the need for development of an innovation supporting mechanism that would stimulate both product and process innovations in Poland.

In the case of firms heavily dependent on exports the roles of innovations and intellectual property creation were obvious. The results depended also on the level of technology used in the analysed sector. In particular, the firms that operated in the medium high technology and medium low technology sectors were more export oriented in the case of all firms that export. Moreover, firms that were heavily dependent on exports revealed a higher propensity to export in the high technology sector but were less interested in introducing innovations. In future studies it would be desirable to investigate the robustness of these results using other estimation methods. In particular, the use of the logit model would be highly recommended.

REFERENCES

- Atkeson, A., & Burstein, A. (2007). Innovation, firm dynamics, and international trade. *NBER Working Paper*, No. 13326.
- Aw, B.Y., Roberts, M.J., & Xu, D.Y. (2009). R&D investment, exporting, and productivity dynamics. *NBER Working Paper*, No. 14670.
- Baily, M.N., & Gersbach, H. (1995). Efficiency in manufacturing and the need for global competition. *Brookings Papers on Economic Activity: Microeconomics*, 307-358.
- Basile, R. (2001). Export behavior of Italian manufacturing firms over the nineties: the role of innovation. *Research Policy*, 30, 1185-1201.
- Becker, S.O., & Egger, P.H. (2013). Endogenous product versus process innovation and a firm's propensity to export. *Empirical Economics*, 44, 329-354.

- Bernard, A., & Jensen, J.B. (1999). Exceptional export performance: cause, effect, or both? *Journal of International Economics*, 47, 1-25.
- Braunerhjelm, P. (1996). The relation between firm specific intangibles and exports. *Economic Letters*, 53, 213-219.
- Caldera, A. (2010). Innovation and exporting: evidence from Spanish manufacturing firms. *Review of World Economy*, 146, 657-689.
- Cassiman, B., & Martínez-Ros, E. (2007). *Innovation and exports: evidence from Spanish manufacturing*. Unpublished manuscript, IESE Business School.
- Cassiman, B., Golovko, E., & Martínez-Ros, E. (2010). Innovation, exports and productivity. *International Journal of Industrial Organization*, 28, 372-376.
- Cieřlik, A., Michaćek, J.J., & Michaćek, A. (2012). Determinanty działalności eksportowej polskich przedsiębiorstw. *Gospodarka narodowa*, LXXX/XXI (7-8), 67-84.
- Cieřlik, A., Michaćek, J.J., & Michaćek, A. (2013). Export activity in Visegrad-4 countries: Firm level investigation. *Ekonomia*, 30, 5-24.
- Cieřlik, A., Michaćek, J.J., & Michaćek, A. (2014). The influence of firm characteristics and export performance in Central and Eastern Europe: Comparisons of Visegrad Baltic and Caucasus states. *Entrepreneurial Business and Economics Review*, 2(1), 4-18.
- Cieřlik, A., Michaćek, J.J., Michaćek, A., & Mycielski, J. (2015). Determinants of export performance: Comparison of Central European and Baltic firms. *Czech Journal of Economics and Finance (Finance a uver)*, 65(3), 211-229.
- Constantini, J.A., & Melitz, M.J. (2008). The dynamics of firm-level adjustment to trade liberalization. In E. Helpman, D. Marin & T. Verdier (Eds.), *The organization of firms in a global economy*. Cambridge, MA: Harvard University Press.
- Damijan, J.P., Kostevc, C., & Polanec, S. (2010). From innovation to exporting or vice versa? *World Economy*, 33(3), 374-398.
- Damijan, J.P., & Kostevc, C. (2006). Learning-by-exporting: Continuous productivity improvements or capacity utilization effects? Evidence from Slovenian firms. *Review of World Economics*, 142(3), 599-614.
- De Loecker, J. (2007). Do exports generate higher productivity? Evidence from Slovenia. *Journal of International Economics*, 73(1), 69-98.
- Dollar, D. (1986). Technological innovation, capital mobility, and the product cycle in North-South trade. *American Economic Review*, 76(1), 177-190.
- Ebling, G., & Janz, N. (1999). *Export and innovation activities in the German service sector. Empirical evidence at the firm level*. ZEW discussion paper, 99-53, Mannheim: Zentrum für Europäische Wirtschaftsforschung.
- Entorf, H., Krader, W., & Pohlmeier, W. (1988). Entscheidungen über Innovation, Beschäftigung und Außenhandel: Empirische Ergebnisse eines simultanen Probitansatzes. In H. Kräger (Ed.), *Empirische Wirtschaftsforschung* (pp. 27-49). Frankfurt: Campus Verlag.
- Eurostat (2016). *Eurostat indicators on High-tech industry and Knowledge – intensive services Annex 3 – High-tech aggregation by NACE Rev.2*. Retrieved on August 10, 2016 from [http://ec.europa.eu/eurostat/cache/metadata/Annexes/htec_esms_an3 .pdf](http://ec.europa.eu/eurostat/cache/metadata/Annexes/htec_esms_an3.pdf)

- Foellmi, R., & Zweimüller, J. (2006). *Mass consumption, exclusion, and unemployment*. University of Zurich IEW working paper 296.
- Grossman, G.M., & Helpman, E. (1989). Product development and international trade. *Journal of Political Economy*, 97, 1261-1283.
- Grossman, G.M., & Helpman, E. (1990). Comparative advantage and long-run growth. *American Economic Review*, 80, 796-815.
- Grossman, G.M., & Helpman, E. (1991). *Innovation and growth in the global economy*. Cambridge, MA: MIT Press.
- Grossman, G.M., Helpman, E., & Szeidl, A. (2006). Optimal integration strategies for the multinational firm. *Journal of International Economics*, 70, 216-238.
- Hagemeyer, J., & Kolasa, M. (2011). Internationalisation and economic performance of enterprises: Evidence from Polish firm-level Data. *World Economy*, 34(1), 74-100.
- Hirsch, S., & Bijaoui, I. (1985). R&D Intensity and export performance: a micro view. *Weltwirtschaftliches Archiv*, 121, 138-151
- Hopenhayn, H.A. (1992). Entry, exit, and firm dynamics in long run equilibrium. *Econometrica*, 60, 1127-1150.
- Jensen, R., & Thursby, M. (1987). A decision theoretic model of innovation, technology transfer, and trade. *Review of Economic Studies*, 54, 631-647.
- Jovanovic, B. (1982). Selection and the evolution of industry. *Econometrica*, 50, 649-670.
- Kumar, N., & Siddharthan, N.S. (1994). Technology, firm size and export behavior in developing countries: the case of Indian enterprise. *Journal of Development Studies*, 32, 288-309.
- Lachenmaier, S., & Wößmann, L.W. (2006). Does innovation cause exports? Evidence from exogenous innovation impulses and obstacles using German micro data. *Oxford Economic Papers*, 58, 317-350.
- Lewandowska, M.S., Szymura-Tyc, M., & Gołębiowski, T. (2016). Innovation complementarity, cooperation partners, and new product export: Evidence from Poland. *Journal of Business Research*, 69(9), 3673-3681.
- Martin, S. (1993). Endogenous firm efficiency in a Cournot principal-agent model. *Journal of Economic Theory*, 59, 445-450.
- Melitz, M.J. (2003). The impact of trade on intra-industry reallocations and aggregate industry productivity. *Econometrica*, 71, 1695-1725.
- Michałek, J.J., & Śledziwska, K. (2003). Analiza handlu międzygałęziowego pomiędzy Polską a Unią Europejską. In J.J. Michałek, W. Siwiński & M. Socha (Eds.), *Od liberalizacji do integracji Polski z Unią Europejską. Mechanizmy i skutki gospodarcze* (pp. 43-61). Warszawa: Wydawnictwo Naukowe PWN.
- Roper, S., & Love, J.H. (2002). Innovation and export performance: evidence from the UK and German manufacturing plants. *Research Policy*, 31, 1087-1102.
- Schlegelmilch, B.B., & Crook, J.N. (1988). Firm-level determinants of export intensity. *Managerial Decision Economics*, 9, 291-300.
- Segerstrom, P.S., Anant, T.C.A., & Dinopoulos, E. (1990). A Schumpeterian model of the product life cycle. *American Economic Review*, 80, 1077-1091.

- Spencer, B.J., & Brander, J.A. (1983). International R&D rivalry and industrial strategy. *Review of Economic Studies*, 50(4), 707-722.
- Tybout, J.R. (2003). Plant- and Firm-Level Evidence on "New Trade Theories". In E.K. Choi & J. Harrigan (Eds.), *Handbook of International Trade* (Chapter 13). Oxford: Basil Blackwell.
- Van Beveren, I., & Vandebussche, H. (2010). Product and process innovation and firms' decision to export. *Journal of Economic Policy Reform*, 13(1), 3-24.
- Wagner, J. (1996). Export performance, human capital, and product innovation in Germany: a micro view. *Jahrbuch für Wirtschaftswissenschaften*, 47, 40-45.
- Wagner, J. (2007). Exports and Productivity: A Survey of the Evidence from Firm-level Data. *The World Economy*, 30(1), 60-82.
- Wagner, J. (2012). A Comparison of Alternative Indicators for the Risk of Nonresponse Bias. *Public Opinion Quarterly*, 76(3), 555-575. doi: 10.1093/poq/nfs032
- Wakelin, K. (1997). *Trade and Innovation*. Theory and Evidence. Cheltenham: Edward Elgar.
- Wakelin, K. (1998). Innovation and export behaviour at the firm level. *Research Policy*, 26(7-8), 829-841.

Appendix

Table A1. Classification of manufacturing industries into categories based on R&D intensities

High-technology industries	NACE-Rev-2 classification
Manufacture of basic pharmaceutical products and pharmaceutical preparations	21
Manufacture of computer, electronic and optical products	26
Medium-high-technology industries	
Manufacture of chemicals and chemical products	20
Manufacture of electrical equipment	27
Manufacture of machinery and equipment n.e.c.	28
Manufacture of motor vehicles, trailers and semi-trailers	29
Manufacture of other transport equipment	30
Medium-low-technology industries	
Manufacture of coke and refined petroleum products	19
Manufacture of rubber and plastic products	22
Manufacture of other non-metallic mineral products	23
Manufacture of basic metals	24
Manufacture of fabricated metal products, except machinery and equipment	25
Low-technology industries	
Manufacture of food products	10
Manufacture of beverages	11
Manufacture of tobacco products	12
Manufacture of textiles	13
Manufacture of wearing apparel	14
Manufacture of leather and related products	15
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	16
Manufacture of paper and paper products	17
Printing and reproduction of recorded media	18
Manufacture of furniture	31
Other manufacturing	32

OECD Directorate for Science, Technology and Industry 7 July, 2011 Economic Analysis and Statistics Division, ISIC Rev. 3 Technology Intensity Definition, 7 July, 2011

Source: Eurostat (2016).

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Foreign Market Knowledge and SME's International Performance: Moderating Effects of Strategic Intent and Time-to-Internationalization

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Abstract

The objective of the article are threefold. First, to examine the significance of knowledge based resources for internationalization of small and medium sized enterprises. Second, to verify the strategic intent as a factor enhancing SMEs' ability to accumulate the knowledge about foreign markets. Third, to examine whether and how strategic intent and time-to-internationalization moderate the relationship between foreign market knowledge and SMEs' international performance. The study was conducted on a sample of 89 Polish firms operating in a low-tech but fairly internationalized sector. In line with a theoretical background, hypotheses are developed and tested with linear regression models. The findings reveal that foreign market knowledge (FMK) is positively associated with international performance (IP), and both, strategic intent and firm's age at internationalization are moderators of FMK-IP relationship. Firms' ability to clearly formulate the strategic intent brings important consequences for ability to accumulate knowledge. Strategic intent enhances the development of the stock of foreign market knowledge, which in turn enables firms to achieve better performance in international markets.

Keywords: foreign market knowledge; strategic intent; age at internationalization; international performance; SMEs

JEL codes: F23

INTRODUCTION

Foreign market knowledge (FMK) is one of central concepts within international business strategy research. Its importance has been recognized in the incremental model of internationalization, i.e. the Uppsala Model (Johanson & Vahlne, 1977) that explains the pro-

cess of international expansion in terms of experiential learning and accumulation of foreign market knowledge. Researchers have also validated the significance of foreign market knowledge for the firm performance in international markets (Eriksson, Johanson, Majkgard & Sharma, 2000; Mogos Descotes & Walliser, 2013; Musteen, Datta & Butts, 2014), triggering the studies examining learning processes of internationally oriented firms, sources of foreign market knowledge, or antecedents/factors enhancing accumulation of foreign market knowledge (Musteen *et al.*, 2014; Fink & Kraus, 2007). Knowledge about foreign markets is particularly important for small firms (Liesch & Knight, 1999) that originate from transition economies (Musteen & Datta, 2011), as they often lack resources and capabilities.

While prior studies have cumulatively formed the sound body of knowledge, much of them focus on samples originating from developed economies. Given that emerging market firms, both large and small, are increasingly active in the international marketplace, undertaking research in this context is well-justified to fill in this gap. Foreign market knowledge can be particularly important for firms originating from such economies, as liberalization of trade and foreign direct investments have opened their home markets to foreign competitors, which in turn forced firms to search for international growth opportunities (Luo & Tung, 2007). Thus, this paper enriches extant research on foreign market knowledge within the context of Central East European region, by providing evidence from Polish SMEs.

Another gap in the extant literature refers to factors enhancing the accumulation of foreign market knowledge. Factors other than firm's international experience, network ties, technological orientation or firm size have been seldom examined. In this respect, the concept of strategic intent (Hamel & Prahalad, 1989; 1993; 1994) seems to be largely sidelined. The current study investigates the significance of strategic intent for developing the stock of knowledge about foreign markets, while controlling for other, above mentioned variables. It is proposed that the strategic intent perspective should be included in research examining organizational learning and the accumulation of foreign market knowledge. I argue that strong strategic intent, by providing direction of organizational efforts oriented on learning, leads to the accumulation of knowledge about foreign markets, which in turn increases the likelihood of achieving greater international performance by small and medium sized enterprises. Additionally, the study examines how the relationship between foreign market knowledge and international performance is moderated by the firm age at internationalization.

Therefore, the objectives of the paper are threefold. First, to examine the significance of knowledge based resources for SMEs' internationalization. Second, to verify the role of strategic intent as a factor enhancing SMEs' ability to accumulate the knowledge about foreign markets. Third, to identify conditions affecting the relationship between knowledge of foreign markets and performance (including as moderators strategic intent and age at internationalization). In order to test the hypothesised relationships, the study employs a sample of 89 Polish firms that operate in the furniture manufacturing sector.

The present study contributes to extant understanding of foreign market knowledge in the successful internationalization of small and medium sized firms in three ways. The first is by proposing a novel factor, i.e. strategic intent that explains the accumulation of foreign market knowledge, leading in that way to greater international performance. The

second is by verifying the significance of strategic intent and a firm's age at internationalization for the relationship between foreign market knowledge and international performance, thus bringing empirical support for the conditions explaining the relationship.

The article is structured as follows. In the first section, theoretical background is discussed and research hypotheses are developed. The second section presents details on the sample, data selection procedure, and operationalization of variables. Then, results of statistical analyses and key findings are provided. The paper closes with conclusions and future research recommendations.

LITERATURE REVIEW

Foreign Market Knowledge and International Performance

In line with prior research (Johanson & Vahlne, 1977; Musteen & Datta, 2011), foreign market knowledge (FMK) is defined as "the knowledge of business practices and potential opportunities as they relate to foreign markets. It includes knowledge related to local culture, competitive conditions, customer needs, and the broader institutional environment" (Musteen & Datta, 2011, p. 93). Internationalization literature postulates that knowledge about foreign markets is an essential concept that explains internationalization behaviour/commitment of firms. According to Uppsala model such knowledge has experiential character and is growing along with a firm's international experience.

FMK is seen as one of the most important resources in the internationalization process (Johanson & Vahlne, 2003; Autio, Sapienza & Almeida, 2000), as it is necessary to understand opportunities and deal with uncertainties (Andersen, 1993) and risks (Liesch, Welch & Buckley, 2011). The lack of FMK represents a significant barrier to firm's internationalization (Eriksson *et al.*, 1997). Numerous studies confirm this thesis, providing evidence that lack of FMK deteriorates directly or indirectly performance in the foreign markets, both in the context of developed market firms (Mogos Descotes & Walliser, 2013), and emerging market firms (Musteen & Datta, 2011; Musteen *et al.*, 2014; Elango & Pattnaik, 2007). For instance, Musteen and Datta (2011, p. 96) argue that "superior understanding of the foreign competitive and political environments should mitigate the liability of foreignness, enabling entrant firms overcome the barriers set up by incumbent firms and governments and allow them to compete more effectively in international markets". However the incremental character of internationalization, and the assumption that knowledge is acquired via first-hand experience have been questioned by numerous researchers, pointing to the abundance of born-global (BG) firms (Zhou, 2007) and other than experiential modes of learning (Forsgren, 2002). Searching for explanations of the phenomenon of early internationalization, where firms have no or very limited knowledge about foreign markets, scholars have pointed either to learning advantages of newness or/and others sources of learning and knowledge accumulation, that can be used by BGs, in general agreeing with the value of foreign market knowledge for the performance. Thus, in line with traditional theorizing it is hypothesized that:

- H1:** Foreign market knowledge is positively related to a firm's international performance.

Strategic Intent and Foreign Market Knowledge

Antecedents or predictors of knowledge about foreign markets constitute another popular research theme. Among most often employed predictors are prior international experience, network ties, size, and technological orientation (Fink & Kraus, 2007; Ellis, 2011; Musteen *et al.*, 2014). While controlling for the typically employed predictors of FMK, this paper builds on strategic intent perspective (Hamel & Prahalad, 1989; 1993; 1994) to shed novel light on organizational learning and the resulting stock of foreign market knowledge.

The term strategic intent was developed and popularized by Hamel and Prahalad (1989). Analysing the post-war growth of Japanese firms they argued that these firms have used a different approach to strategy formation than their Western peers. Hamel and Prahalad (1993) posit that long term competitiveness of global companies is determined by managers' willingness to challenge continually the assumptions, premises, and accepted wisdom ('managerial frames', 'mindset') that relate to how companies compete. According to the authors, competition takes place not so much at the level of products, but at the level of managerial mindsets. They contend that "creating stretch, a misfit between resources and aspirations, is the single most important task senior management faces" (Hamel & Prahalad, 1993, p. 78). It demands more creativity in finding or creating new market space, identifying unmet needs of customers, avoiding competitive confrontation (focus is rather on encirclement or making competition irrelevant) – in short, finding ways to achieve more, while possessing less or "getting the most from the least" (Hamel & Prahalad, 1993, p. 78). They argued that clearly defined and communicated strategic intent (which gives the sense of direction, destiny, and discovery) is critical for firms' success, as it creates the misfit between goals and resources and opens the way to leveraging resources.

However, in the field of international business and international entrepreneurship, the concept of strategic intent is rather forgotten. Some exceptions in this respect, include the arguments on strategic intentionality of Johanson and Vahlne (2009) who point to the importance of strategic intentions, that may determine the focus of managerial attention, how managers interpret information, and what decisions and actions they may undertake. Such arguments lead to the use of strategic intent (measured as export intention) as a moderator of the relationship between learning and export intensity (Casillas, Barbero & Sapienza, 2015), or – more broadly – the concept of strategic thinking for the pace of internationalization (Wach, 2015).

This study puts forward the notion that clearly defined and shared strategic intent can be invaluable to create proper organizational conditions for accumulating foreign market knowledge. One reason for that is strategic intent helps organizations to focus their efforts to gain new knowledge, helps to identify opportunities, including opportunities to learn. Thus:

- H2:** Strategic intent is positively associated with the accumulation of foreign market knowledge.

Strategic Intent and Age at Internationalization as Moderators

In the field of international business, Johanson and Vahlne (2009) suggest that intentions determine the focus of managerial attention, efforts, the way of interpreting infor-

mation, as well as decisions and resulting actions. Following this reasoning, I argue that firms that have clearly formulated strategic intent will increase their ability to learn “by actively seeking knowledge about international markets, potential customers, competitors” (Zhou, 2007, p. 284). In other words, the ability to learn about foreign markets and accumulate knowledge increases when owners and managers provide and effectively communicate the strategic intent (the sense of direction, destiny, and discovery); so that organizational efforts are focused on spotting and exploiting new opportunities, an important source of knowledge. Therefore, it is expected that the relationship between FMK and performance will be stronger in case of firms with clearly formulated strategic intent than in case of firms with ambiguous strategic intent. Therefore:

H3a: The relationship between foreign market knowledge and international performance is moderated by the strategic intent, so that in case of firms with clearly formulated strategic intent, the positive relationship between FMK and performance will be stronger.

Age at internationalization (in other words, time-to-internationalization) is another moderator of the relationship between FMK and performance, which is employed in this study. Age at internationalization refers to the phenomenon of early internationalization, which questions the logic of gradual internationalization process (Johanson & Vahlne, 1977). One of arguments explaining the phenomenon of early internationalization refers to the learning advantages of newness (LAN). According to Zhou and Wu (2014, p. 134), learning advantages of newness characterizes new ventures that “tend to possess fewer deeply embedded routines (from domestic operations), face fewer inertial constraints (past-dependent cognitive biases), and thus are in a forward-looking position to explore new opportunities in international markets.” However, young and small firms also suffer from the lack of managerial, human and financial resources, and they may not have enough time and experience to develop organizational routines supporting learning. When they try to develop their business simultaneously in domestic and foreign markets, such resource shortages may become even more evident. In the context of SMEs originating from post-transition economies. Cieřlik and Kaciak (2009, p. 381) observe that “The shift from a communist to a market economy opens new opportunities for firms to expand internationally but also poses serious risks because of these firms’ lack of international experience and relevant skills.” Therefore, in contrast to the ‘learning advantages of newness’ argument, this article postulates that absorptive capacity (i.e. the ability to recognize the importance of new knowledge, absorb and use) (Cohen & Levinthal, 1990) of small firms originating from post-transition economies increase with time so that in case of firms that are older at the time of internationalization, the relationship between FMK and performance will be stronger.

H3b: The relationship between foreign market knowledge and international performance is moderated by the firm age at internationalization, so that in case of firms that were older at the time of internationalization will benefit more from accumulation of foreign market knowledge.

Figure 1 presents all hypothesized relationships.



Figure 1. Conceptual model

Source: own elaboration.

MATERIAL AND METHODS

Sample and Data Collection

The sample was drawn from the population of Polish firms operating in the furniture manufacturing sector, which were actively involved in international operations in 2013. Furniture manufacturing is among the most competitive manufacturing sectors in Poland – it generates app. 2% of Polish GDP, and has a significant surplus in foreign trade (Polish Furniture Magazine, 2012). The sector is important to Poland's exports (accounting for approximately 5-6% of Polish exports, which is one of the highest shares in exports). Approximately 90% of furniture produced in Poland is exported (Polish Furniture Magazine, 2012). Moreover, Poland is among largest worldwide exporters of furniture (in 2011 following China, Germany, and Italy), which makes furniture manufacturing one of globally visible manufacturing sectors in Poland. Polish exports of furniture is constantly growing over the last decades, and according to Eurostat data the value of Polish furniture exports in 2014 equalled to 8.037 billion EUR, which grew in comparison to 2013 by 13.2% (in 2013 the value of Polish furniture exports was equal to 7.1 billion EUR) (OIGPM, 2015). Thus, the sector was chosen due to its importance to the Polish economy and its global visibility.

The findings presented in this paper are based on a larger project that examined internationalization strategies of Polish firms operating in the furniture manufacturing sector. A total of 1100 firms with international sales were identified (with the cooperation of Eniro Polska, which owns the largest and, supposedly, the most up-to-date database of Polish firms) and contacted by telephone in February/March 2014. The interviewer asked for permission to conduct a telephone interview with managers, owners or chief executive officers directly responsible for key decisions concerning the firm's internationalization. Regarding internationalization issues in the context of SMEs, they are the most knowledgeable informants (Nummela, Saarenketo & Puumalainen, 2004). After rejecting non-existing firms and firms with 100% foreign ownership, and after receiving permission to conduct a telephone interview, the final sample consisted of 121 firms of different size. For the purpose of this study the large firms, and surveys that were incomplete, were dropped from the sample. Thus, the final sample comprises 89 micro, small and medium sized firms that each employed between 1-250 employees.

The questionnaire was pretested on several firms in order to provide reliability of the results. Then, interviewers from the research agency were trained in the questions. The questionnaire was targeted to chief executive officers (CEOs), owners, and managers

directly responsible for making key internationalization decisions because they are the most knowledgeable informants regarding internationalization issues in SMEs (Nummela *et al.*, 2004). As the survey was conducted over a phone with a single informant, and predictor and criterion measures were obtained from the same source, common method variance (CMV) may be a concern (Podsakoff, MacKenzie, Lee & Podsakoff, 2003; Chang, Witteloostuijn & Eden, 2010). To ensure the reliability of the study, several procedural remedies were used ex-ante (e.g., the questionnaire was pretested to eliminate any ambiguity, vagueness, or unfamiliarity), response anonymity and confidentiality were guaranteed, and single-common-method-factor approach was taken ex-post to detect CMV. Harman's single-factor test revealed that CMV should not be a problem in the present study as loading all items into exploratory factor analysis revealed neither the single factor nor the general factor¹ that would account for a majority of covariance between the measures (Podsakoff *et al.*, 2003).

Dependent Variables

Foreign market knowledge. The items applies as measures of foreign market knowledge covered: foreign regulations and law, foreign competitors, foreign customers, foreign distribution channels, and foreign business opportunities. This approach is in line with prior research (Musteen *et al.*, 2014) and covers the dimensions of foreign institutional and business knowledge (Eriksson *et al.*, 1997; Autio *et al.*, 2000; Hadley & Wilson, 2003). Specifically, the respondents were asked to evaluate the top managers' knowledge using 5-point scale (1=very low level of knowledge; 5=very high level of knowledge) concerning a firm's major overseas markets, in terms of: (i) the foreign law and industry regulations; (ii) the policies and actions of foreign competitors; (iii) the expectations of foreign customers; (iv) the effectiveness of foreign distribution channels; (v) business opportunities in foreign markets such as opportunities for partnering, and/or for potential new customers. The factor analysis indicated that the items' loadings were between 0.746 and 0.846. The construct has a satisfactory Cronbach's alpha of 0.852 (Nunnally & Berstein, 1994), as well as the composite/construct reliability (CR=0.895), and average variance extracted (AVE=0.632) (Fornell & Larcker, 1981).

International performance. Musteen and Datta (2011, p. 98) argue that "firms in transition economies are generally very reluctant to provide earnings information. Indeed,[...] requests for earnings data is viewed very suspiciously by SME managers". Therefore, perceptual/subjective measures are often used in performance operationalization (Zahra, Neubaum & Huse, 1997; Nummela *et al.*, 2004; Musteen & Datta, 2011; Musteen *et al.*, 2014). Although such measurement may be vulnerable to personal bias, there is a research evidence confirming that subjective and objective measures are highly correlated (Dollinger & Golden, 1992; Wall *et al.*, 2004), and thus can be used when objective measures are not available (Musteen *et al.*, 2014). In this study, international performance was measured on a 5-point scale by two items. First respondents were asked to indicate their satisfaction with the firm's international performance (1 = very dissatisfied, 5 = very satisfied), and second, to evaluate the firm's success in foreign mar-

¹ The unrotated principal component factor analysis revealed the presence of four distinct factors with eigenvalue greater than 1.0 (thus no single factor emerged). The four factors together accounted for 59.8% of the total variance; and the first factor did not account for a majority of the variance (23.10%).

kets in comparison to its main competitors (1 = much worse, 5 = much better than main competitors). The construct has a rather unsatisfactory Cronbach's alpha of 0.579 (Nunnally & Berstein, 1994), but the composite/construct reliability (CR = 0.826), and average variance extracted (AVE = 0.704) met the recommended thresholds (CR > 0.6 and AVE > 0.5), which supports the construct internal consistency (Fornell & Larcker, 1981).

Independent Variables

Strategic intent. The construct of strategic intent was operationalized in the past different ways. For instance, Casillas *et al.* (2015) operationalized strategic intent as an export intention, while Mariadoss, Johnson and Martin (2014, p. 2396) as overall strategic aggressiveness, a multi-item measure focused on aggression, ambition, winning, and market leadership. This paper, however, builds on the original work of Hamel and Prahalad (1989; 1994). The construct was thus operationalized using three items: a sense of direction, destiny, and discovery. Respondents were asked to indicate the extent to which they agreed with each of the following statements (5-point scale, 1 = strongly disagree, 5 = strongly agree): (i) the overall aim of our company clearly indicates the direction in which we are going, (ii) the overall aim of our company is well known to and shared by employees, (iii) in comparison with our main competitors, the overall aim of our company is far more ambitious. The factor analysis revealed that the items' loadings were between 0.680 and 0.814. The construct has a satisfactory Cronbach's alpha of 0.613 (Nunnally & Berstein, 1994), as well as the composite/construct reliability (CR = 0.797), and average variance extracted (AVE = 0.569) (Fornell & Larcker, 1981).

Time to internationalization. In line with prior operationalization (Cieřlik & Kaciak, 2009; Musteen *et al.*, 2014; Wach, 2015), time to internationalization, (or firm age at internationalization) was measured by the number of years that passed from the firm's founding until the first foreign market sales.

Control Variables

The study employs several control variables based on prior research. First, firm international experience was captured by the number of years a firm has carried out sales in foreign markets. In line with a conventional theorizing it is argued that a longer time may lead to foreign market knowledge accumulation (Musteen & Datta, 2011) and enhance international performance. The second control variable refers to network ties. As evidenced by prior research, ties with foreign partners may foster both, development of foreign market knowledge and firm international performance (Fink & Kraus, 2007). The significance of foreign customers (suppliers) in a firm network was computed as ratio of foreign customers (suppliers) in a total number of a firm's customers (suppliers), including both foreign and domestic customers (suppliers). Third, ownership was treated as a dichotomous variable indicating whether the firm is domestic (coded as '0'), or has a minority or majority share of foreign capital (coded as '1'). Firms with 100% foreign ownership were not included in the study. As argued by Zahra, Ireland and Hitt (2000), ownership may exert influence on a firm international operations and resources that are available for them. According to prior research, firms with foreign ownership (full or partial) are more internationalized, and have a higher level of sales and exports per employee than firms with only domestic/Polish

capital (Cieřlik, 2010; Kolasa, Rubaszek & Taglioni, 2010). Additionally, firm size was controlled with the log of total number of employees.

Correlations for all variables are shown in Table 1. In order to detect potential issues with multicollinearity, the variance inflation factors (VIF) were calculated for all the variables in key models (Table 1). The VIFs for all the variables in both models were below 1.61, which is substantially lower than the recommended cut-off, indicating that multicollinearity should not be a problem (Neter, Kutner, Nachtsheim & Wasserman, 1996). An assessment of the normality of the random component was performed with Shapiro-Wilk and Kolmogorov-Smirnov's tests (probabilities > 0.05).

Table 1. Correlations of the key variables (n = 89)

Variables	1	2	3	4	5	6	7	8	VIF ^a	VIF ^b
1. International performance	1									
2. Foreign market knowledge	0.58**	1								1.607
3. Strategic intent	0.41**	0.60**	1						1.073	1.417
4. Age at internationalization	0.01	0.02	0.01	1					1.063	1.064
5. Firm size	0.32**	0.37**	0.15	0.07	1				1.174	1.301
6. Firm international experience	0.13	0.15	0.12	0.12	0.24*	1			1.208	1.209
7. Ownership	0.39**	0.17	0.13	-0.20	0.16	-0.12	1		1.162	1.164
8. Foreign partners (suppliers)	0.04	-0.00	-0.04	-0.02	0.06	0.04	0.03	1	1.071	1.076
9. Foreign partners (customers)	0.38**	0.19	0.10	-0.16	0.09	0.11	0.23*	0.25*	1.166	1.204

Note: Correlation is significant: ** at the 0.01 level (2-tailed); * at the 0.05 level (2-tailed).

^a Refers to Model 1 in Table 2; ^b refers to Model 2 in Table 2.

Source: own study.

RESULTS AND FINDINGS

Research hypotheses were tested with the hierarchical linear regression models. In order to examine the significance of strategic intent for the accumulation of foreign market knowledge we run two regressions (Table 2).

The baseline model (Model 0) includes only control variables, and the full model (Model 1) includes the independent variable. A comparison of baseline and full model indicates whether the explanatory power increased. The regression results show that both models are significant, and the full model (Model 1) has significantly greater explanatory power (change in R-squared = 0.199, F-change = 19.850, $p < 0.001$). According to the results, strategic intent ($p < 0.001$) contributes to the accumulation of foreign market knowledge, thus H1 was supported.

Regression results for hypotheses examining the significance of foreign market knowledge for international performance (H2), and the moderating effects of strategic intent (H3a) and age at internationalization (H3b) are presented in Table 2, Model 0', Model 2, and Model 3. The baseline model (Model 0') includes only control variables and moderators, the main effects model (Model 2) includes additionally independent variable (FMK), and full models (Model 3) includes interaction effects (FMK x strategic intent, FMK x age at internationalization). All models are statistically significant. As evidenced in Model 2, foreign market knowledge ($p < 0.01$) is significantly associated with international perfor-

mance, thus, H2 is supported. In comparison with Model 0', Model 2 has significantly greater explanatory power (change in R-squared = 0.093, F-change = 10.960, $p < 0.001$).

Table 2. Linear regression results

Dependent Independent	Foreign Market Knowledge		International Performance		
	Model 0	Model 1	Model 0'	Model 2	Model 3
Foreign market knowledge [FMK]	n/a	n/a		0.387** (3.311)	0.410*** (4.057)
Strategic intent	n/a	0.462*** (4.455)	0.227* (2.212)	0.049 (0.444)	0.091 (0.976)
Age at internationalization	0.001 (0.009)	-0.021 (-0.204)	0.064 (0.624)	0.072 (0.758)	0.022 (0.265)
FMK x Intent	n/a	n/a	n/a	n/a	0.195* (2.393)
FMK x Age at int.	n/a	n/a	n/a	n/a	0.333*** (3.909)
Firm international experience	0.052 (0.422)	-0.028 (-0.253)	0.017 (0.160)	0.028 (0.278)	-0.017 (-0.195)
Firm size	0.299* (2.419)	0.281* (2.594)	0.180+ (1.670)	0.071 (0.673)	0.100 (1.121)
Ownership	0.103 (0.848)	0.035 (0.321)	0.325** (3.039)	0.312** (3.137)	0.314*** (3.722)
Foreign partners (suppliers)	-0.079 (-0.667)	-0.054 (-0.524)	-0.040 (-0.388)	-0.019 (-0.197)	-0.008 (-0.103)
Foreign partners (customers)	0.191 (1.558)	0.154 (1.425)	0.297** (2.766)	0.237* (2.343)	0.192** (3.105)
<i>Model summary</i>					
R2	0.179	0.378	0.389	0.482	0.644
Adjusted R2	0.100	0.308	0.320	0.414	0.584
F	2.284*	5.379***	5.644***	7.101***	10.671***
Change in R2		0.199		0.093	0.162
F-change		19.850***		10.960**	13.401***

Note: † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Source: own study.

In order to examine the hypotheses 3a and 3b assuming the moderation effects, the interaction terms (FMK x strategic intent, FMX x age at internationalization) were computed by multiplying the centred values of corresponding components (i.e. values of foreign market knowledge, strategic intent, and age at internationalization were standardized). Model 3 includes interaction effects and has significantly greater explanatory power than Model 2. Increase in explanatory power, captured by the change in R-squared (Model 3: change in R-squared = 0.162, F-change = 13.401, $p < 0.001$), confirms that both moderation effects exist (Cohen & Cohen, 1983).

To understand the interactive effects, two graphs were plotted (Figure 2 and Figure 3). They present the effect of foreign market knowledge on international performance, indicating that firm performance in foreign markets market increases with the stock of foreign market knowledge, and this relationship is accentuated when: (a) a firm started its international operation early (i.e. within three years since its inception; Figure

2); (b) a firm has a clearly formulated strategic intent (Figure 3). Implications of these findings are discussed in the next section.

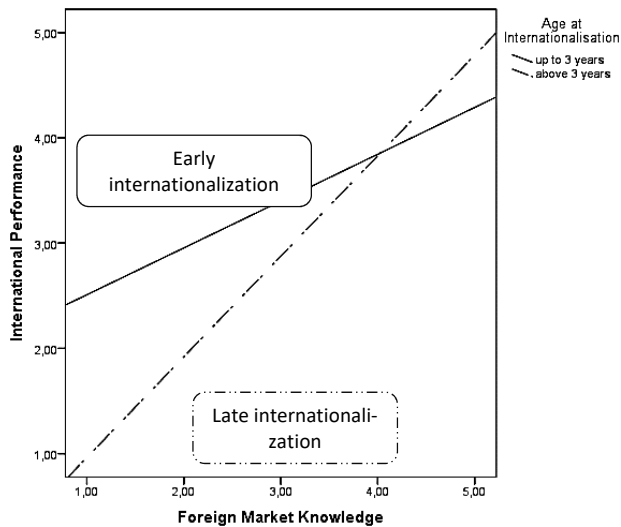


Figure 2. Moderation effect of age at internationalization
Source: own elaboration.

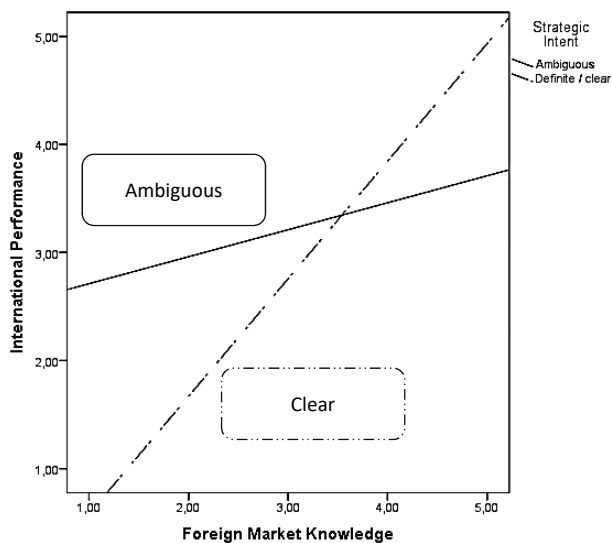


Figure 3. Moderation effect of strategic intent
Source: own elaboration.

DISCUSSION AND CONCLUSIONS

The current study sheds novel light on the foreign market knowledge and its relevance for a firm international performance by focusing on two aspects. First, the study findings

suggest that differences in SMEs' ability to accumulate FMK can be explained by the strategic intent (Hamel & Prahalad, 1989), which is a new variable in this stream of research. The strategic intent (characterized by the sense of direction, destiny, and discovery) enables firms' ability to accumulate new knowledge. Therefore, the inclusion of strategic intent perspective, which in a broad sense was postulated by Johanson and Vahlne (2009) is justified, as well as bringing into discussion the original meaning of strategic intent as proposed by Hamel and Prahalad (1994). This way the study answers the call to enrich existing research "on what enhances the acquisition of foreign market knowledge in SMEs" (Mustee & Datta, 2011, p. 93).

Second, the study provides additional explanations to better understand when foreign market knowledge is particularly beneficial for firm international performance. As evidenced by the research results, the stock of accumulated knowledge is positively associated with the firm international performance (which is measured subjectively, by managers' satisfaction with their firms' international performance). This finding is generally in line with prior theoretical and empirical studies, indicating positive, direct or indirect, relationship between processes of learning and knowledge accumulation, and performance in foreign markets (Johanson & Vahlne, 1977; Eriksson *et al.*, 2000; Mogos Descotes & Walliser, 2013; Musteen *et al.*, 2014). However, more theoretically interesting contribution of this paper points to the conditions that affect this relationship. Indeed, the relationship is accentuated by both moderators i.e. strategic intent and time-to-internationalization.

In case of companies that have clearly formulated strategic intent, assimilation of new FMK results in greater performance gains than in case of firm with ambiguous or unclear strategic intent. It is postulated that strategic intent promotes/enhances the accumulation of FMK through focusing organizational efforts on spotting new opportunities in the marketplace which leads to the acquisition of new knowledge resulting from pursuing such opportunities. Strategic intent activates and directs the process of acquiring knowledge about foreign markets, increase efforts to acquire new knowledge and openness to multiple sources. Therefore, it can be argued that it sharpens attention to the identification and utilization of market opportunities. These findings resonate well with the postulated significance of managerial intentions for the resulting actions (Johanson & Vahlne, 2009) – in other words, the paper provides empirical evidence that strategic intent not only has a positive impact on FMK, but it also moderates the FMK-performance relationship.

Considering the effect of age at internationalization (i.e. time-to-internationalization), the study results reveal that in case of firms that were older than three years at the time of internationalization, the FMK-performance relationship was stronger. A time frame of three years was adapted in this study, as it is most often used in rapid internationalization literature (Knight, Bell & McNaughton, 2001; Aspelund & Moen, 2005). This finding supports the notion that small firms that decided to enter foreign markets after operating for at least four years in the domestic market, most likely had the chance to develop their absorption capacity (i.e. the ability to recognize the importance of new knowledge, absorb and use) (Cohen & Levinthal, 1990), so that they could expect later to achieve more pronounced performance gains resulting from the acquisition of FMK. As suggested in the literature, absorptive capacity increases along with the existing stock of knowledge (Cohen

& Levinthal, 1990). In the light of the study results, it could be hypothesised that domestic knowledge and learning abilities (developed in the first years when firms focused solely on the domestic market) occurred later beneficial for the use of foreign market knowledge.

From the managerial point of view, the paper offers two implications. First, it provides evidence that SMEs' that are able to develop and accumulate the stock of foreign market knowledge, may expect to achieve better international performance. Therefore, investing organizational efforts, time and resources to develop international learning routines is reasonable from 'business' perspective and most likely should be perceived by SMEs' owners and managers as 'an investment', not unnecessary a cost. Second, the paper offers at least partial explanation to the question 'what helps SMEs to accumulate this knowledge'. Here, the role of strategic intent should not be overlooked. Those SMEs, whose owners and managers are willing and able to define and communicate the strategic intent (that provides organizationally shared sense in terms of direction, destiny and discovery), are better prepared and predisposed to accumulate foreign market knowledge.

Although the empirical findings discussed in this paper broaden our understanding of conditions moderating the relationship between FMK and performance, and bring into discussion strategic intent perspective, the current study obviously suffers from several limitations. First, the sample comprised of firms operating within only one highly internationalized sector. Therefore, it should be recognized that the presented results are context-specific and their application to other industry contexts may be limited. In particular, it may concern the moderating effect of age at internationalization. In other contexts, for instance high-tech industries, results could be different, supporting rather learning advantage of newness' arguments. Second, the operationalization of the key construct, strategic intent, was not applied in prior research. The operationalization is based, however, on the description presented in original works of Hamel and Prahalad (1989), and its reliability scale is satisfactory. Thus, future studies should include more diversified, cross-industrial samples to validate the presented findings and proposed measurement of strategic intent. Finally, a promising research stream could examine through in-depth study design how exactly strategic intent is related to the absorptive capacity (i.e. the ability to recognize, absorb, and use the new knowledge (Zahra & George, 2002) in the context of "early and late internationalizers".

REFERENCES

- Andersen, O. (1993). On the internationalization process of firms: A critical analysis. *Journal of International Business Studies*, 24(2), 209-231.
- Aspelund, A., & Moen, O. (2005). Small international firms: Typology, performance and implications. *Management International Review*, 45, 37-57.
- Autio, E., Sapienza, H.J., & Almeida, J.G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909-924.
- Casillas, J.C., Barbero, J., & Sapienza, H.J. (2015). Knowledge acquisition, learning, and the initial pace of internationalization. *International Business Review*, 24(1), 102-114.
- Chang, S.-J., Witteloostuijn, A., & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Business Studies*, 41, 178-184.
- Cieślak, J. (2010). *Internacjonalizacja polskich przedsiębiorstw. Aktualne tendencje – implikacje dla polityki gospodarczej*. Warszawa: Akademia Leona Koźmińskiego. Centrum Przedsiębiorczości.

- Cieślík, J., & Kaciak, E. (2009). The speed of internationalization of entrepreneurial start-ups in a transition environment. *Journal of Developmental Entrepreneurship*, 14(4), 375-392.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, W., & Levinthal, D.A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Dollinger, M.J., & Golden, P.A. (1992). Interorganizational and collective strategies in small firms: environmental effects and performance. *Journal of Management*, 18(4), 695-715.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: a study of Indian firms. *Journal of International Business Studies*, 38(4), 541-555.
- Ellis, P.D. (2011). Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, 42(1), 99-127.
- Eriksson, K., Johanson, J., Majkgard, A., & Sharma, D.D. (1997). Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies*, 28(2), 337-360.
- Eriksson, K., Johanson, J., Majkgard, A., & Sharma, D.D. (2000). Effects of variation on knowledge acquisition in the internationalization process. *International Studies of Management and Organization*, 30(1), 26-44.
- Fink, M., & Kraus, S. (2007). Mutual trust as a key to internationalization of SMEs. *Management Research News*, 30(9), 674-688.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Forsgren, M. (2002). The concept of learning in the Uppsala internationalization process model: a critical review. *International Business Review*, 11(3), 257-277.
- Hadley, R.D., & Wilson, H.I.M. (2003). The network model of internationalization and experiential knowledge. *International Business Review*, 12(6), 697-717.
- Hamel, G., & Prahalad, C.K. (1989). Strategic intent. *Harvard Business Review*, 67(3), 63-78.
- Hamel, G., & Prahalad, C.K. (1993). Strategy as a stretch and leverage. *Harvard Business Review*, 71(2), 75-84.
- Hamel, G., & Prahalad, C.K. (1994). *Competing for the future*. Harvard Business School Press.
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm – a model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies*, 8(1), 23-32.
- Johanson, J., & Vahlne, J.E. (2003). Business relationship learning and commitment in the internationalization process. *Journal of International Entrepreneurship*, 1(1), 83-101.
- Johanson, J., & Vahlne, J. (2009). The Uppsala model revisited: from liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411-1431.
- Knight, J., Bell, J., & McNaughton, R. (2001). The 'born global' phenomenon: A re-birth of an old concept? In *Researching New Frontiers 2*. 4th McGill Conference on International Entrepreneurship, Glasgow.
- Kolasa, M., Rubaszek, M., & Taglioni, D. (2010). Firms in the great global recession: The role of foreign ownership and financial dependence. *Emerging Markets Review*, 11(4), 341-357.
- Liesch, P.W., & Knight, G.A. (1999) Information internalization and hurdle rates in small and medium enterprise internationalization. *Journal of International Business Studies*, 31, 383-394.
- Liesch, P., Welch, L., & Buckley, P. (2011). Risk and uncertainty in internationalisation and international entrepreneurship studies. *Management International Review*, 51(6), 851-873.
- Luo, Y., & Tung, R.L. (2007). International expansion of emerging market enterprises: a springboard perspective. *Journal of International Business Studies*, 38(4), 481-498.
- Mariadoss, B.J., Johnson, J.L., & Martin, K.D. (2014). Strategic intent and performance: The role of resource allocation decisions. *Journal of Business Research*, 67(11), 2393-2402.
- Mogos Descotes, R., & Walliser, B. (2013). Foreign market-related knowledge absorption and the international financial performance of SMEs. *Management International*, 17(4), 179-193.

- Musteen, M., & Datta, D. (2011). Learning about foreign markets: A study of Czech SMEs. *Journal of International Entrepreneurship*, 9(2), 91-109.
- Musteen, M., Datta, D.K., & Butts, M.M. (2014). Networks and Foreign Market Knowledge Facilitate SME Internationalization? Evidence From the Czech Republic. *Entrepreneurship: Theory and Practice*, 38(4), 749-774.
- Neter, J., Kutner, M.H., Nachtsheim, C.J., & Wasserman, W. (1996). *Applied Linear Regression Models*. Illinois: Irwin Press.
- Nummela, N., Saarenketo, S., & Puumalainen, K. (2004). A global mindset: a prerequisite for successful internationalization? *Canadian Journal of Administrative Sciences*, 21(1), 51-64.
- Nunnally, J.C., & Berstein, I.H. (1994). *Psychometric Theory*. New York: McGraw-Hill.
- OIGPM (2015). *Eksport mebli jedynym kierunkiem rozwoju w 2015 (aktualności)*. Retrieved on 10 January, 2016 from <http://www.oigpm.org.pl/212/eksport-mebli-jedynym-kierunkiem-rozwoju-w-2015-r>.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Polish Furniture Magazine (2012). Retrieved on 11 January, 2016 from http://www.mg.gov.pl/files/upload/13691/Polish_Furniture_Magazine_nr12012.pdf
- Wach, K. (2015). Incremental versus Rapid Internationalisation of Firms: Results of Exploratory Investigation from Poland. *Entrepreneurial Business and Economics Review*, 3(4), 37-48.
- Wall, T.D., Michie, J., Patterson, M., Wood, S.J., Sheehan, M., Clegg, C.W. et al. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95-118.
- Zahra, S.A., & George, G. (2002). Absorptive capacity: A review, reconceptualization and extension. *Academy of Management Review*, 27(2), 185-203.
- Zahra, S.A., Neubaum, D.O., & Huse, M. (1997). The effect of the environment on export performance among telecommunications new venture. *Entrepreneurship: Theory & Practice*, 22(1), 25-46.
- Zahra, S.A., Ireland, R.D., & Hitt, M.A. (2000). International Expansion by New Venture Firms: International Diversity, Mode of Market Entry, Technological Learning, and Performance. *The Academy of Management Journal*, 43(5), 925-950.
- Zhou, L. (2007). The effects of entrepreneurial proclivity and foreign market knowledge on early internationalization. *Journal of World Business*, 42(3), 281-293.
- Zhou, L., & Wu, A. (2014). Earliness of internationalization and performance outcomes: Exploring the moderating effects of venture age and international commitment. *Journal of World Business*, 49(1), 132-142.

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University Business Incubators: An Institutional Demand Side Perspective on Value Adding Features

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Abstract

The purpose of this article is to investigate differing demands for university business incubator's value adding features. It introduces an institution based perspective to guide the argumentation. A framework has been developed, which is grounded in recent entrepreneurship theory and studies related to business incubator development. An exploratory empirical study has been conducted to test the framework using participants from the United Arab Emirates and Thailand. The survey questionnaire was developed and tested before applying to the empirical study. The findings indicate variation in demands for incubator features in particular related to infrastructure and networking services. In line with the expectations, no differences have been found for the business support services. We also found that a more general strategy and goals seem to be preferred over a more narrow industry focus. The framework and our empirical findings suggest that university business incubators should take into consideration institutional differences between the countries in order to increase acceptance of the incubator concept, especially in developing countries. The study addresses a research gap, identifying cross-country differences in the demand of potential entrepreneurs for value adding features provided in University Business Incubators (UBI).

Keywords: University Business Incubator; institution; developing countries; demand side; value adding features

JEL codes: M0, O31

INTRODUCTION

The concept of University Business Incubators (UBI) keeps attracting attention from various scholars in wider entrepreneurship literature (Bruneel, Ratinho, Clarysse & Groen, 2012; Rothaermel, Agung & Jiang, 2007). Popular key areas are technology diffusion processes, the survival rates of business ventures or various typologies of incubators (Barbero, Casillas, Ramos & Guitart, 2012; Grimaldi & Grandi, 2005; Todorovic & Suntornpitug, 2008).

The importance of incubators for the regional and national economy has been well established over the years in studies that looked for example at Europe (EC, 2002), Taiwan (Tsai, Hsieh, Fang & Lin, 2009) or US (Mian, 1996). However, the success factors for university and other business incubator models are somewhat more controversial (Barbero *et al.*, 2012; Lee & Osteryoung, 2004). For example, it has been suggested that variation in success could be caused by the differing reasons for establishing incubators (Chan & Lau, 2005). University incubators, for instance, have been mostly assessed from a technology diffusion and transfer perspective, where empirical evidence is largely based on incubators located in North America, Europe and to some extent East Asia (Rothaermel *et al.*, 2007). Others investigated the evolution of established incubators over time, arguing that broader economic changes on the regional and national plane alter the requirements for successful incubator models (Bruneel *et al.*, 2012). Another stream of research argues for particular practises, such as tenant screening, which might help to determine success of incubator models in various contexts (Aerts, Matthyssens & Vandenbempt, 2007). Others indicate that incubators which have been established in recent years around the world seem to follow the North American blue print, with very little consideration towards local needs (Akcomak, 2009; Chan & Lau, 2005). However, there seems to be very little research on the services or value added features provided by incubators that refer to local requirements. In particular, value adding features that an entrepreneur might find important within an incubator environment is a neglected issue. The demand side of incubators needs attention (Bruneel *et al.*, 2012). That is, the link between university business incubator provisions and the demand from potential entrepreneurs in different countries is under researched.

The current article addresses this gap. The main objective is to identify differences in the demand for value adding features provided in University Business Incubators (UBI) to potential entrepreneurs in different countries. Value adding features mean the provision of tangible (e.g. office space, conference rooms) and intangible services (e.g. networking, business support services) in and by the incubator (Mian, 1996). This research follows Bruneel's *et al.* (2012) call that incubators must meet tenants' demands in order to become more successful and to fulfil their full potential. The reason for our expectation of differing demands is the growing evidence provided in the adjacent international entrepreneurship literature which suggests that differing institutional settings have a considerable impact on the behaviour of entrepreneurs (Bowen & De Clercq, 2008; De Clercq, Lim & Oh, 2011; Estrin, Korosteleva & Mickiewicz, 2013). Differing institutional settings have been rarely accounted for in demand side literature concerning business incubators. Some notable exceptions in the literature that took local demands by entrepreneurs in incubator context into deliberation are for example a conceptual paper by Zablocki (2007). The author suggests that the local environment needs to be taken into considera-

tion and suggests a market analysis to be done in order to understand tenants demands before the incubator is established, but offers little beyond that. Lee and Osteryoung (2004) compare managers' perceptions of critical success factors of UBI's in Korea and US, but only found differences for goals and operational strategies between the participants. Vanderstraeten and Matthyssens (2012) investigate internal and external alignment of incubator strategies, but focus on a European context only. Chan and Lau (2005) provide an overview of tenant's use of incubator services, yet focus on case studies in Hong Kong science parks only, whereas an extensive study conducted by Mian (1996) focuses exclusively on the US.

This study sets out to shed some light on the demands of value adding features provided by UBI's for would be entrepreneurs in different countries. In order to guide the development of our hypothesis, this study will rely on insights from the institutional perspective on entrepreneurship (Baumol, 1990; North, 1990). It thereby attempts to overcome some of the limitations of previous studies in suggesting a coherent framework for the adaptation of the UBI concept to different institutional settings. This study also provides some indicative empirical evidence based on a survey of potential entrepreneurs in the United Arab Emirates (UAE) and Thailand.

This article is structured as follows: the next section provides relevant literature review and general hypothesis are developed. The following section outlines the research design. Next, the analysis and discussion of the results are presented. The last section sums up the conclusions of the article.

LITERATURE REVIEW

University Business Incubators and Institutions

Adjacent entrepreneurship literature has emphasised the institutional perspective as one fruitful way to explain various entrepreneurship related phenomena (Bowen & De Clercq, 2008; De Clercq *et al.*, 2011; Estrin *et al.*, 2013). Baumol (1990) was among the first to point out that the institutional setting in a country determines the entrepreneurial activity and the kind of endeavours undertaken by entrepreneurs. Institutional settings are, for the purpose of this study, defined as consisting of formal (e.g. rules and legislation) and informal (e.g. habits, norms and values) which constrain human behaviour and therefore provide the rules of the game (North, 1990). The institutional setting in a country determines the cost of transaction for social exchanges and hence influences the resource allocation that is paramount for entrepreneurial efforts to develop and sustain (Baumol, 1990; Bowen & De Clercq, 2008). North (1990) argued that formal and informal institutions are path dependent and change only very slowly through an extended reform process or abruptly through revolution for example. Path dependence can lead to an institutional misfit. That is organisational or institutional forms that work well in one institutional setting, might not work in another institutional setting because it is not aligned to the formal and informal institutional setting in another country. For example, laws for intellectual property rights protection are only useful if enforced and accepted by the social values in a society. We believe that business incubators are one of such organisational forms that might provide valuable economic gains in one setting, but not in others. In particular, the institutional constraints on entrepreneurs will determine their

set of opportunities available to them (North, 1990). This in turn, is for this study, expected to have an impact on the perceived importance for the demand of value adding features provided by business incubators.

A UBI is one type of business incubator. Various typologies have been proposed in the literature (EC, 2002; Rothaermel *et al.*, 2007). Commonly used categories are public incubators, private incubators, and university incubators (Barbero *et al.*, 2012). The present research focuses on the differing demands for the establishment of UBI's. It is thereby following a general definition of UBI's as suggested in Barbero *et al.* (2012) and Grimaldi and Grandi (2005). Accordingly a UBI is defined as a university based institution that provides support for young business start-ups through tangible and intangible services in order to support growth and survival of its tenants. Literature indicates that UBI's rely on a mixture of funding from public and private sources. It is thereby emphasised that UBI's do not necessarily have to have a technology focus (Mian, 1996). This is important, because it allows non-technology focussed higher education institutions such as stand-alone business schools, to become active in the incubator market with a particular focus on non-tangible services in addition to technology transfer activities.

UBI's have been chosen for three main reasons. First, it is argued that especially in countries in which incubators are still in their infancy, university based incubators can help start-up businesses to add legitimacy i.e. lower the cost of transaction through trust, based on the location of the tenants under the university tutelage through its location and reputation (Mian, 1996; Chan & Lau, 2005). This can lower market entry costs for start-ups that generally lack reputation and hence increase the likelihood for survival (Mian, 1996). Second, a reoccurring issue in the entrepreneurship literature across countries is the lack of business and management knowledge in young business start-ups (GEM, 2012). It is argued in this paper that universities, in particular while collaborating with their business schools, are well suited due to their *raison d'être* in supporting young businesses in that aspect. Thirdly, universities have access to a constantly renewing talent pool, which increases the likelihood of accessing and recruiting new tenants (Barbero *et al.*, 2012; Todorovic & Suntorpnithug, 2008). This might be of particular relevance in developing countries in which the concept of business incubators is still largely unknown (Akcomak, 2009).

Current Context

Most research on business incubators has been focussed on North America, Europe and developed countries in East Asia (Akcomak, 2009; Rothaermel *et al.*, 2007; Vanderstraeten & Matthyssens, 2012). Relatively little has been done in the context of emerging regions such as the Middle East or Southeast Asia. This research attempts to narrow this gap by providing indicative empirical evidence collected from potential entrepreneurs in two universities located in the UAE and Thailand.

The UAE is an oil rich nation located on the Arabian Peninsula. Over the last decades, the central and local governments put in increased efforts to shift the economy away from its dependence on crude oil and gas. Various initiatives have been taken to diversify the economy. A particular emphasis has been placed on the development of small and medium sized companies in the country. As part of this policy shift a number of funds have been set up to ease the access to capital for entrepreneurs, various supporting organisations have been created such as SME-forums. Among those, a number of public and private business incubators have been set up around the country. Alt-

though the concept is still rather alien to the population, increased efforts have been made to provide help and support for entrepreneurs. The country also showed a relatively high perceived competency concerning entrepreneurial activities, but a low level of actual business start-ups (GEM, 2011).

Thailand is a middle income country located in Southeast Asia. The concept of business incubators is still relatively unknown in the country. Different incubator projects have been set up but failed due to various factors such as lack of understanding of the concept, poor funding, or lack of local expertise (Friedrich, Harley & Langbein, 2012). However, Thailand has a comparatively high rate of entrepreneurial activity among its population compared to other countries in the region (GEM Thailand, 2012). This indicates that the concept of business incubators might be rather useful, if carried out correctly, in both cases.

A study by Scaramuzzi (2002) indicated that there are discrepancies among incubators from different developing countries however the certain characters are required as part of incubation process including facilities, professional services, networking opportunities, access to capital and partnership mechanism.

Building upon a recent study by Bruneel *et al.* (2012), who suggested a dynamic typology for the incubator industry, this study proposes testable hypothesis along four value adding features of business incubators: goals and strategy, infrastructure, business support services, and networks.

Goal and Strategy of Incubators

Previous research has indicated that the goals and strategy of incubators are important factors to attract business start-ups (Bruneel *et al.*, 2012). Lalkaka (2003) observed that there are several distinctive characteristics of successful business incubator from different developing countries. Lee and Osteryoung (2004), for example, showed in one of the very few existing comparative studies that goals and strategy were less important for Korean directors of incubators than for US directors. They further argued that this might be caused by the relatively recent introduction of incubators across Korea. Vanderstraeten and Matthyssens (2012) found in their study that the scope of incubators will depend on their choice of providing generalised or specialised services to their tenants. Their findings indicate a dichotomy between interviewed tenants in Belgium. While specialised companies with relatively few market competitors preferred a more general incubator strategy, business start-ups facing broader scope of competition preferred specialised incubators. Explanations for their findings beyond industry have not been provided by the authors. This raises issues concerning generalisability to differing institutional contexts in other countries. Different countries might well nurture differing requirements based on different institutional settings in which UBI's are located. For example, it could be argued that for countries with a long tradition of incubators that a more specialised focus could be preferred in order to take advantage of scale economies. Scale economies derive from further specialised services and a certain incubator image that comes with being located as a tenant in a specialised incubator (Bruneel *et al.*, 2012). Another study by Guerrero, Urbano and Salamzadeh (2015) found that university business incubators in Iran have been transformed under the influence of changing institutional setting in order to better serve local demand.

On the other hand, in countries that are relatively new to the business incubator concept, a more general strategy might be preferred in order to exchange ideas or identify reoccurring issues which affect a number of tenants across a range of industries (Akcomak, 2009). In developing countries, the institutional setting often provides limited support for entrepreneurs (Estrin *et al.*, 2013). Most notably, the protection of intellectual property rights has been emphasised on the formal institutional level (Bowen & De Clercq, 2008). On the informal institutional level, prevailing uncertainty avoidance has been shown to inhibit entrepreneurial risk taking. In such cases, potential entrepreneurs might prefer a more general incubator strategy in order to learn from a wide range of businesses and role models (De Clercq *et al.*, 2011). Hence, the following hypothesis will be tested.

H1: The importance of general or specialised incubator goals and strategy for potential entrepreneurs varies across countries.

Infrastructure

As indicated by Bruneel *et al.* (2012), one of the key features of first generation incubators is the provision of tangible services, i.e. infrastructure. Subsidised office space and other tangible resources such as receptionist services, parking space, or meeting rooms, free incubator tenants from related search and management costs. Shared infrastructure has also been suggested to lead to an increased sharing of information between incubator tenants (Chan & Lau, 2005). However; the use of shared incubator communication facilities has found only mixed evidence in the literature, dependent on context specific informal institutional variables such as trust or attitude (Chan & Lau, 2005; Schwartz & Hornych, 2008; Vanderstraeten & Matthyssens, 2012). This hints towards differing needs among potential entrepreneurs depending on the formal and informal institutional setting in which they are located.

However, basic infrastructure is provided by the vast majority of physical (as compared to virtual) incubators and has been found to be one of the most important value added features by incubators (Chan & Lau, 2005). As indicated above this provision reduces the overhead costs such as rents, copy facilities and other office utilities for new businesses. This can be assumed to hold true for new businesses located in expensive metropolitan areas, as well as in more sparsely populated areas due to a potential lack of supply of appropriate facilities. Hence, the following hypothesis will test for differing demands for tangible services.

H2: Infrastructure demand by entrepreneurs will not vary across countries.

Business Support Services

Business support services include primarily professional services in order to help businesses in their start-up phase such as accounting, in-house bookkeeping, finance, management or marketing (Bruneel *et al.*, 2012; Vanderstraeten & Matthyssens, 2012). The main reason for providing those services is a general lack of management expertise in young business start-ups (GEM, 2012). Business support services can take the form of subsidised courses offered, or tailored mentoring and coaching services (Lee & Ostryoung, 2004). More specialised services can be provided on a general level by incubators such as help in recruiting new staff. It has been argued for example in Vander-

straeten and Matthyssens (2012) that many start-ups face the problem of recruiting new staff for their companies. Incubators can provide support in selecting new staff and hence reduce adverse selection risk for new firms. Additionally, in the study above, the authors also found that tenant firms often lack knowledge concerning the development of crucial marketing campaigns or how to engage with the public in general. Business support services on marketing can reduce the costs for developing targeted marketing campaigns and helping to provide guidance concerning public relations of the firms.

Business support services can also help to close the gap between the required knowledge to run a business and the training provided by the educational system prevailing in the country (Bowen & De Clercq, 2008). We believe that given the lack of human capital in business start-ups, especially in less developed countries (GEM, 2012; Estrin *et al.*, 2013) that there will be no variation in demand for business support services between countries. Hence, the following hypothesis will be tested:

- H3:** Business support services demand by entrepreneurs will not vary across countries.

Networking Services

Business start-ups often suffer from a lack of legitimacy in the market place (Chan & Lau, 2005; Mian, 1996). It has been suggested in the literature that business incubators can provide access to market networks that would otherwise be out of reach for such companies (Scilitoe & Chakrabarti, 2010). Networks help start-ups to gain new business contacts such as customers and suppliers, as well as access to new financial sources. For example, locating a start-up in an incubator can lead to increased credibility for the firm, which in turn reduces search costs for the firm and hence reduces the overall costs of transaction (Bruneel *et al.*, 2012). This could be of particular relevance when firms are located in institutional settings in which business contacts still require the personal introduction in order to establish a certain amount of trust between the business parties (North, 1990). Personal business contacts are also important in countries in which law enforcement is seen as slow and costly (Bowen & De Clercq, 2008; De Clercq *et al.*, 2011; Estrin *et al.*, 2013; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1998). Vanderstraeten and Matthyssens (2012) found evidence that an extensive business network is a differentiating feature among the incubators in their study, opening the possibility for incubators to differentiate themselves from competition in the incubator market. Contrary to that, Chan and Lau (2005) found no indication for the use of networks provided by the science park for business start-ups in Hong Kong. The authors argue that the western-model of clustering might not be as successful in an eastern context.

For young start-ups, it is seen as difficult to establish a business network regardless of their location (GEM, 2012). However, the extent to which external network support is being accepted by tenants is expected to lead to variations between countries (Estrin *et al.*, 2013). In particular related to finance, suppliers and buyers, as well as specialist know-how. Hence, the following hypothesis will be tested.

- H4:** Network services demands for entrepreneurs will vary across countries.

The hypothesis proposed for testing defines the UBI environment in terms of four major factors derived from the current literature – goals/strategy, infrastructure, business support services, and networks. These are common factors across incubators

around the world (Akcomak, 2009). This makes them fundamental in providing insights into UBI models across countries. The current article therefore suggests that testing of those can provide a measure for the extent to which the demand for UBI features vary between countries based on their differing institutional settings.

MATERIAL AND METHODS

Given the number of studies that have been conducted on universities incubators using qualitative research designs (Barbero *et al.*, 2012; Bruneel *et al.*, 2012; Chan & Lau, 2005) it is argued here that a carefully crafted quantitative design is the most appropriate approach to provide indicative support for our study. This research employs a questionnaire survey in order to fulfil its research objective i.e. identifying demands from potential entrepreneurs for UBI features. This study is looking at two rather under researched countries that is the UAE and Thailand. The proposed quantitative survey method can provide expansive understanding of the focused topic however this method may lack in-depth understanding as commonly found in the interview method. This article incorporates both undergraduate and graduate students in the survey in order to analyse the demand for university business incubator from two different backgrounds, with and without work-experience.

This study utilises survey data collected from undergraduate and postgraduate students in the UAE and Thailand. The students at each university had chosen an entrepreneurship or business planning module either at the undergraduate or MBA level. Due to their modules and/or experience they were already aware of the concept of UBI's, although none of the universities in the sample had a formal university business incubator established at that point.

The use of student surveys is not without criticism in the entrepreneurship literature (Robinson, Huefner & Hunt, 1991). However, the approach has been proven valuable in several related studies in recent entrepreneurship literature (e.g. Fitzsimmons & Douglas, 2011; Shepherd & De Tienne, 2005). For this study it is also seen as a suitable approach for the following reasons. Firstly, the majority of cross-country studies uses institutional managers in their samples (Lee & Osteryoung, 2004), which provide valuable insights, but do not directly address demand related issues. Secondly, in countries in which UBI's are still in their infancy or not existing at all, potential entrepreneurs are seen as providing valuable insights. Thirdly, university students are generally perceived as the major source for tenants at UBI's (Todorovic & Suntornpithug, 2008). That implies that entrepreneurship students would be most likely the first group to be aware of such incubators and most likely the first tenants in newly founded UBI's. Lastly, mature and students that are far progressed in their studies stand at a point of career choice, of which becoming an entrepreneur is one feasible option (Shepherd & De Tienne, 2005).

The measures for this survey have been adapted from the literature in order to increase reliability and validity of the scales. Special care has been taken in order to establish cross country data equivalence (Hult *et al.*, 2008). Data collection equivalence has been accounted for in a way that all questionnaires were given out in the classroom and hence provide a similar setting for all participants. Construct equivalence has been established through pre-tests in each country. Measurement equivalence has been ensured through the use of consistent 7-point Likert scales, which have been identified as most appropriate

for cross-country research (Harzing *et al.*, 2009). Scale validity has been ensured through using scales based on previous studies and a pilot test with students and academics as well as discussion with a panel of experienced researchers. Scale reliability for each has been tested through Cronbach alphas tests that were all above the 0.7 threshold.

The questionnaire has been split into two main sections. Section A, following Fitzsimmons and Douglas (2011), asks for general information such as age, education, gender, and working experience.

Section B contained four subsections. The measures have been adapted from the relevant literature. Participants have been asked to rate the importance of 4 categories on a scale from 1 (not important) to 7 (very important) on goal and strategy i.e. 'What are the most important factors for you concerning the goals and strategy of the university business incubator?' (Lee & Osteryoung, 2004; Vanderstraeten & Matthyssens, 2012). For incubator infrastructure the respondents have been asked to rate 10 categories: 'What are the most important factors for you concerning the Infrastructure provided by the university business incubator?' (Bruneel *et al.*, 2012; Ratinho, Harms & Groen, 2013; Zablocki, 2007). Nine categories have been included for networks i.e. 'What are the most important factors for you concerning the networking services provided by the university business incubator?' (Bruneel *et al.*, 2012; Chan & Lau, 2005; Ratinho *et al.*, 2013). For business support services the respondents have been asked to rate eight categories: 'How likely are you to use the following business support services provided by the university business incubator?' The categories can be found in table 2 in the next chapter. And the sample characteristics can be found in table 1 below.

Table 1. Sample characteristics

Line item	UAE	Thailand
Sample size	114	100
Gender	51.8% male	60.2% female
Age	25.3 years	24.4 years
Program enrolled	78.1% Undergraduate	53% Undergraduate
Entrepreneurial experience	74.6% no	82% no
Working experience	71.1% yes	53% no

Source: own calculation based on the research survey.

RESULTS AND DISCUSSION

The results of the analysis are provided in table 2 below. It provides the descriptive statistics (i.e. mean and standard deviation) for the total sample, the UAE and Thailand. In the first column of Table 2 we show the total mean. That is the result of all the respondents combined, i.e. Thailand and UAE. This column is provided in order to give an overview of the perception of all respondents concerning the issues that were being investigated. In order to test for the hypothesised differences, One-way ANOVA has been conducted. The significant F-Values are presented in the last column. The analysis follows previous studies such as Lee and Osteryoung (2004) for example. Concerning the discussion on ordinal versus interval scale, this article follows Labovitz (1970). Labovitz (1970)

Table 2. Descriptive statistics and ANOVA results

Category	Total (n = 214)		UAE (n = 114)		Thailand (n = 100)		ANOVA
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	F value
Goals and Strategy							
Broad business focus	4.76	1.37	4.77	1.43	4.75	1.29	
Broad industry focus	4.76	1.29	4.74	1.36	4.79	1.21	
Narrow industry focus	4.69	1.31	4.70	1.42	4.67	1.19	
Narrow business focus	3.82	1.49	3.67	1.39	4.00	1.59	2.69†
Infrastructure							
INF print and copy	5.38	1.42	5.16	1.54	5.63	1.23	6.04*
INF parking	5.13	1.54	5.13	1.44	5.13	1.66	
INF meeting rooms	5.11	1.35	4.82	1.32	5.43	1.33	11.16**
INF conference rooms	4.99	1.31	4.73	1.34	5.29	1.23	10.16**
INF reception services	4.87	1.48	5.17	1.44	4.54	1.46	9.97*
INF production facilities	4.78	1.46	4.88	1.45	4.67	1.48	
INF laboratories	4.75	1.42	4.76	1.44	4.74	1.40	
INF individual office space	4.64	1.46	4.67	1.48	4.60	1.44	
INF postal service	4.64	1.55	4.96	1.45	4.28	1.60	10.56**
INF shared office space	4.37	1.32	4.04	1.29	4.74	1.26	15.82***
Business Support Services							
BSSbusplan	5.09	1.38	5.05	1.36	5.14	1.41	
BSSfaculty	4.83	1.39	4.78	1.28	4.89	1.52	
BSSlaw	4.83	1.50	4.82	1.51	4.84	1.48	
BSShr	4.81	1.40	4.87	1.49	4.75	1.30	
BSSworkshops	4.79	1.42	4.78	1.41	4.80	1.44	
BSSmentor	4.79	1.30	4.76	1.31	4.83	1.29	
BSS International Business focus	4.74	1.45	4.69	1.46	4.80	1.44	
BSScoaching	4.72	1.41	4.76	1.36	4.68	1.48	
Networking Services							
Financial institutions	5.41	1.20	5.25	1.34	5.60	0.99	4.74*
Suppliers	5.25	1.36	4.98	1.51	5.56	1.10	10.00*
Other tenants	5.24	1.28	4.96	1.33	5.56	1.14	12.17**
External consultants	5.22	1.26	5.09	1.30	5.38	1.20	2.88†
Business angels and VC	5.21	1.31	5.10	1.36	5.34	1.23	
Other entrepreneurs	5.20	1.34	4.96	1.41	5.47	1.20	7.81*
Accountants, legal experts, etc.	5.15	1.27	5.18	1.33	5.12	1.21	
Business plan competitions	5.10	1.28	4.96	1.32	5.27	1.22	3.23†
Governmental institutions	5.10	1.36	5.12	1.47	5.07	1.23	

***p<0.001, **p<0.01, *p<0.05, †p<0.1

Source: own elaboration.

conducts a Monte Carlo simulation in order to investigate potential measurement differences through assigning ordinal data to interval scales. The findings show that the differences are negligible, and do not outweigh the advantages gained from treating ordinal scales as interval. This notion is also shared by Nunnally and Bernstein (1994). Therefore, this study treats the scales as interval in the subsequent analysis.

In hypothesis 1 we expected a significant difference in the means between the two groups concerning the strategy and goals of the UBI. The results, however, show little difference between the respondents from Thailand and the UAE. Only one out of four items reaches statistical significance. The item indicates a slight preference among the Thai respondents for a more narrow business focus than the UAE sample. The total means of the construct hint towards a preference for a broader scope of businesses and industry sectors to be located in the UBI. This is nevertheless in line with our expectations, given that the incubator model is still a rather novel establishment in both countries. Potential entrepreneurs might therefore feel that a broader strategy adds more value for them than a too narrow focus. This finding links in the current debate on incubator strategy and goals. This study adds to this debate by providing some evidence for a distinct developing country perspective. It seems that reasons for a narrow strategic scope of the incubator as found by Vanderstraeten and Matthyssens (2012) might be less pronounced in the context of the UAE and Thailand. The authors suggest that specialised reputation of the incubator is an important factor for tenants to gain legitimacy in the market place. In the context of the current study, however, other factors might be more important. For example, having access to a wide range of knowledge sources might be perceived as more important than having a more industrial homogenous set of start-ups in the incubator. Furthermore, complex technology might make the need to have specialised firms more prominent, this seems to be the general message from the incubator and technology transfer literature (Rothaermel *et al.*, 2007). However, for the UAE as well as Thailand is the development of complex technologies still in their infancy. Therefore is the need for technological specialisation of the incubator less evident.

Hypothesis 2 suggested that the basic infrastructure, or tangible services, provided by the UBI are of equal importance across countries, in line with findings in recent literature (Bruneel *et al.*, 2012). However, significant differences in means between potential entrepreneurs in the UAE and Thailand have been found in six out of ten items. Respondents in Thailand valued print and copy facilities, meeting rooms, conference rooms, and shared office space higher than their UAE counterparts. On the other hand, reception services and postal services were higher valued by UAE based potential entrepreneurs. This might indicate the UBI's in the UAE might have to provide their tenants with more supporting service staff than UBI's in Thailand. This finding, the higher preference for shared service in UAE may reflect on a huge difference in labour cost between UAE and Thailand. The average minimal wage in Thailand is approximately USD 300 per month, five times smaller than USD 1,500 per month in UAE. Looking at the total descriptive statistics for the Infrastructure construct, it can be observed that shared office space has been valued the lowest by all respondents in the sample. This might indicate that there is little will by the respondents to follow western style design of incubators in which the sharing of ideas is one of the core principles (Chan & Lau, 2005; Estrin *et al.*, 2013).

In our third hypothesis we expected no significant differences in the demand for business support services between countries. The respondents from Thailand and the UAE confirmed this expectation, none of the F-values has been found significant. This is in line with the broader entrepreneurship literature in a way that it confirms a relatively homogenous demand across entrepreneurs in different countries for training and other human capital related activities (Bowen & De Clercq, 2008; De Clercq *et al.*, 2011; Estrin

et al., 2013). Most notably in this case, the support for business plan development seems to have been most pronounced throughout the sample. The possibility to have access to specialist faculty within the university and business law consulting also scored high. Pointing towards a likely use of internal services provided by the incubator, which might be contrary to the findings of Ratinho *et al.* (2013) who found that tenants are less likely to use internal services as compared to external ones. However, their sample was based on incubators across Western Europe. In less developed institutional settings; however, the trust in external actors might be more limited (Bowen & De Clercq, 2008; De Clercq *et al.*, 2011; Estrin *et al.*, 2013).

The last hypothesis suggested a significant difference between countries when it comes to the provision of networking services in UBI's. This was based on stark differences between the networking concepts in the west and non-western cultures (Estrin *et al.*, 2013). This has been largely confirmed in this article. Six out of nine items showed significant F values. This finding is in line with the qualitative observations made by Chan and Lau (2005) who indicated that the business incubator networking concept is only applicable to an East Asian context in a limited way. The findings of the present study seem to support their observation. In our sample, the Thai respondents seemed to be more inclined towards networking activities than the UAE ones. The most important items were networking activities with financial institutions, followed by suppliers. On third rank from the total scores we find contacts with other tenants. This might indicate that pragmatic networking activities are given priority over the more innovation focussed networking activities with fellow tenants or other entrepreneurs. For this particular sample, the respondents from Thailand had higher scores in all but two items compared to the UAE respondents. Accountants and legal experts as well as networking activities linking to governmental institutions were more important for UAE potential entrepreneurs; however, the difference was not statistically significant. Contact with suppliers, other tenants, and other entrepreneurs were significantly more important for the respondents in Thailand.

CONCLUSIONS

This research set out with the objective to shed further light on the demand side of UBI service provision. UBI's can create important platforms for the nurturing of new business ventures in their early stages, especially in less technology driven developing countries (Lalkaka, 2002). It aimed at highlighting differences between potential entrepreneurs and their demands on services provided by UBI's that follow the North American 'blueprint'. For this purpose, an institutions-based framework has been suggested. The subsequent indicative survey has been conducted with potential entrepreneurs in the UAE and Thailand.

The results indicate that there are significant differences between the two countries and their service provision requirements for UBI's. Overall, a broader scope for incubators goals and strategies seems to be preferred. This might be because of the lagging technological complexity of industries in both countries. Broader business sector orientation might be more successful for the attraction of tenants in developing countries.

Differences have also been identified regarding the importance of infrastructure provision by incubators. More service based demands have been made by the UAE respondents, whereas the tangible side e.g. copy facilities or meeting rooms have been

found more important in the Thailand sample. Overall, shared office space seemed to have a rather low standing in both countries, which also hints towards limitations of the networking and idea exchange concepts originating from the western literature and developed under different perceptions of trust (Baumol, 1990; North, 1990).

There were no differences between the two countries concerning the provision of business support services. Support in business plan development has been ranked highest by all respondents. This was in line with recent entrepreneurship literature, which emphasise the importance of human capital development in business start-ups. (Bowen & De Clercq, 2008; De Clercq *et al.*, 2011; Estrin *et al.*, 2013).

Significant differences have been found for networking service items. A more pragmatic tendency seems to drive the importance of the items. Contacts with other entrepreneurs outside the incubator, as well as other tenants inside the incubator have been given less importance than contacts with suppliers and financial institutions.

This research has two main managerial implications. Firstly, given the focus of this study on two developing economies, the demand indicators showed that a preference is given to broader strategic outlook of UBI's. That is because the incubator concept might not be as common in those countries as it is in the US or UK for example. Universities might therefore be advised to provide their reputational effects to a broader spectrum of tenants from various industries. Secondly, in order to establish a successful incubator, it might be preferable to follow local demands, rather than the North American blueprint. Important is also to take the local requirements into account when it comes to the provision of infrastructure as well as networking services. This plays also a role for policy makers.

The policy implications of this research are certainly to pay attention that universities follow local demands rather than establishing state of the art incubators that will end up being underutilised and hence abandoned. In particular, non-technology based incubators could be a successful concept for developing countries to nurture business start-ups in their early phase, provided those are aligned to the formal and informal institutional setting of the country.

There are several limitations of this study that should be overcome in future studies. The sample was based on university students from two different universities. Further studies could expand the sample size in order to increase representativeness. Continuing research is required outside the mainstream regions in order to develop a more complete picture of UBI's success and failure in developing countries. For instance, future studies can be conducted on UBI in African and South American countries. In addition, more comparative studies should be carried out within such a context in order to establish stronger patterns of localisation of incubator concepts and hence establish benchmarks if not globally, but at least on a regional level.

REFERENCES

- Akçomak, I.S. (2009). *Incubators as tools for Entrepreneurship Promotion in Developing countries* (No. 2009.52). Research paper/UNU-WIDER.
- Aerts, K., Matthyssens, P., & Vandenbempt, K. (2007). Critical role and screening practices of European business incubators. *Technovation*, 27(5), 254-267.
- Barbero, J.L., Casillas, J.C., Ramos, A., & Guitar, S. (2012). Revisiting incubation performance: How incubator typology affects results. *Technological Forecasting and Social Change*, 79(5), 888-902.

- Baumol, W.J. (1990). Entrepreneurship: Productive, unproductive and destructive. *Journal of Political Economy*, 98(5), 893–921.
- Bowen, H.P., & De Clercq, D. (2008). Institutional context and the allocation of entrepreneurial effort. *Journal of International Business Studies*, 39(4), 747-767.
- Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations. *Technovation*, 32(2), 110-121.
- Chan, K.F., & Lau, T., (2005). Assessing technology incubator programs in the science park: the good, the bad and the ugly. *Technovation*, 25(10), 1215–1228.
- De Clercq, D., Lim, D.S., & Oh, C.H. (2011). Individual-Level Resources and New Business Activity: The Contingent Role of Institutional Context. *Entrepreneurship Theory and Practice*, 37(2), 303-330.
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations?. *Journal of business venturing*, 28(4), 564-580.
- EC (2002). *Benchmarking of business incubators*. Brussels: European Commission.
- Fitzsimmons, J.R., & Douglas E.J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26(4), 431-440.
- Friedrich, F., Harley, B., & Langbein, J. (2010). *Development guidelines for technology business incubators*. Bonn: InWEnt – Internationale Weiterbildung und Entwicklung gGmbH.
- GEM (2012). *The global entrepreneurship monitor*. Retrieved on 10 April, 2016 from www.gemconsortium.org/docs/download,2409
- GEM (2011). *Entrepreneurship in the United Arab Emirates*. Retrieved on 10 April, 2016 from www.gemconsortium.org/docs/download,2409
- GEM Thailand (2012). *Thailand Report*. Retrieved on 10 April, 2016 from www.gemconsortium.org/docs/download,2409
- Grimaldi, R., & Grandi, A. (2005). Business incubators and new venture creation: an assessment of incubating models. *Technovation*, 25(2), 111-121.
- Guerrero, M., Urbano, D., & Salamzadeh, A. (2015). Entrepreneurial transformation in the Middle East: experiences from Tehran Universities. *Technics Technologies Education Management*, 10(4), 533-537.
- Harzing, A.W., Baldueza, J., Barner-Rasmussen, W., Barzantny, C., Canabal, A., Davila, A. et al. (2009). Rating versus ranking: What is the best way to reduce response and language bias in cross-national research? *International Business Review*, 18(4), 417-432.
- Hult, G.T., Ketchen, D.J., Griffith, D.A., Finnegan, C.A., Gonzalez-Padron, T., Harmancioglu, N., Huang, Y., Talay, M.B., & Cavusgil, S.T. (2008). Data equivalence in cross-cultural international business research: assessment and guidelines. *Journal of International Business Studies*, 39(6), 1027-1044.
- Labovitz, S. (1970). The Assignment of Numbers to Rank Order Categories. *American Sociological Review*, 35(3), 515-524.
- Lalkaka, R. (2002). Technology business incubators to help build an innovation-based economy. *Journal of Change Management*, 3(2), 167-176.
- Lalkaka, R. (2003). Business incubators in developing countries: characteristics and performance. *International Journal of Entrepreneurship and Innovation Management*, 3(1-2), 31-55.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113-1155.

- Lee, S.S., & Osteryoung, J.S. (2004). A comparison of critical success factors for effective operations of university business incubators in the United States and Korea. *Journal of Small Business Management*, 42(4), 418-426.
- Mian, S.A. (1996). Assessing value added contributions of university technology business incubators to tenant firms. *Research Policy*, 25(3), 325-335.
- North, D.C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory*. London: McGraw-Hill.
- Ratinho, T., Harms, R., & Groen, A. (2013). Business Incubators: (How) Do They Help Their Tenants? *New Technology-Based Firms in the New Millennium*, 10, 161-182.
- Robinson, P.B., Huefner, J.C., & Hunt, K.H. (1991). Entrepreneurial research on student subjects does not generalize to real world entrepreneurs. *Journal of Small Business Management*, 29(2), 42-50.
- Rothaermel, F.T., Agung, S.D., & Jiang, L. (2007). University entrepreneurship: a taxonomy of the literature. *Industrial and corporate change*, 16(4), 691-791.
- Scaramuzzi, E. (2002). Incubators in developing countries: Status and development perspectives. *Washington DC: The World Bank*.
- Schwartz, M., & Hornych, C. (2010). Cooperation patterns of incubator firms and the impact of incubator specialization: Empirical evidence from Germany. *Technovation*, 30(9), 485-495.
- Scillitoe, J.L., & Chakrabarti, A.K. (2010). The role of incubator interactions in assisting new ventures. *Technovation*, 30(3), 155-167.
- Shepherd, D., & DeTienne, D. (2005). Prior Knowledge, Potential Financial Reward, and Opportunity Identification. *Entrepreneurship Theory and Practise*, 29(1), 91-112.
- Todorovic, Z.W., & Suntornpithug, N. (2008). The multi-dimensional nature of university incubators: capability/resource emphasis phases. *Journal of Enterprising Culture*, 16(4), 385-410.
- Tsai, F.S., Hsieh, L.H., Fang, S.C., & Lin, J.L. (2009). The co-evolution of business incubation and national innovation systems in Taiwan. *Technological Forecasting and Social Change*, 76(5), 629-643.
- Vanderstraeten, J., & Matthyssens, P. (2012). Service-based differentiation strategies for business incubators: Exploring external and internal alignment. *Technovation*, 32(12), 656-670.
- Zablocki, E.M. (2007). Formation of a Business Incubator. In A. Krattiger, R.T. Mahoney, L. Nelsen, J.A. Thomson, A.B. Bennett, & S.P. Kowalski (Eds.), *Intellectual Property Management in Health and Agricultural Innovation: A Handbook of Best Practices* (pp. 1305-1314). Oxford, UK: MIHR and Davis, USA: PIPRA.

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Spas: Opportunity in Developing Nations

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Abstract

The objective of this paper is to understand the level of knowledge of consumers about spas, their services, products and their benefits. Spas are slowly regaining their prominence in society and are expected to grow well despite turbulence in the economies. As they provide a huge entrepreneurship opportunity especially in the developing nations, it was thought appropriate to investigate how much consumers were aware of spas. For this purpose, awareness of the existence of spas, their types, services offered by them and the benefits derived from them were selected as the indicators. Applying exploratory-diagnostic research design, the data was collected on a sample size of 200 people, residing in the USA and India. Then, a percentage analysis was conducted to understand the people's awareness level. The study proves that the spa cognizance level in the consumers is very high and people are aware of not just the different types of spas and their services but also of the physical and psychological benefits accrued from them. This paper aims to attract entrepreneurs towards developing their own units or in alliance with existing hotels, as spas provide a solution to one of the most prominent health issues of modern times, namely stress. Moreover, as it is not a capital intensive venture, it provides a lot of opportunities for startups in developing economies like India.

Keywords: Awareness, Cognizance level, Entrepreneurs, India, Spa industry, USA

JEL codes: L83

INTRODUCTION

As the true worth of an entrepreneur is seen through the value his idea adds to the current market, this research paper is aimed at acting as a catalyst to their innovative approaches by awakening the stakeholders of the interrelated hospitality, tourism, medical and beauty industries to the charms of the old spa industry. It is assumed that a product

occupying a higher cognition in the consumers' minds has more chances of acceptance in the market, especially if it claims to benefit the mind, body and soul. Hence, to allure the entrepreneurs of these industries towards spas, an attempt was made to explore the level of cognizance of the consumers about spas, their services and products. For this purpose, using the non-probability purposive spa sampling technique, a survey of 200 spa consumers in India and USA was conducted. The chosen indicators included awareness about types of spas, spa service and of psychological and physical benefits from them. It was found that the awareness level of consumers about spas and their various classifications is significant enough for the stakeholders to take notice of them (94%) and an equally high degree of cognition about the physical and psychological benefits from their services (84 and 90% each) warrants dynamism in the market and an open invitation to businesses to cash in on this knowledge. It is expected that the findings would entice entrepreneurs to explore this area especially in the developing nations. It is also anticipated that the study would act as a basis for further research in the area of consumers' perceptions and the prevalent situation of the spa industry.

The market is showing an insatiable appetite for quality products with an immense scope of profitable business for a well-researched product. The key to success is the right prospect turned into a quality product or service at the right time. This paper is an attempt to allure entrepreneurs with the spa industry which is showing huge promises in terms of growth and opportunities. Today, spas are reclaiming their historic position in the economy. Their physical and psychological uses have been well documented now. It is already a well-established industry in the western world with robust associations of its own and support from the government. While in the developing nations, despite being the pioneer of some of the most popular services, it is still in its nascent stage. Yet, the industry worldwide offers good chances of growth since it claims to provide a remedy for stress, one of the most prevalent problems of the modern world. In today's modern world, stress affects everyone irrespective of age, gender or profession. Spas are promoting themselves as a heaven for relaxation and rejuvenation. Apart from bestowing beneficial results on the physical and the psychological health of a person, they have a very positive effect on the economy and the tourism of a destination. Just like olden times, they are currently increasing their status in today's society. This industry has gained a lot of prominence in the West and is counted among the developed ones. In the developing nations, it is still in its infancy stage, though it shows lots of promise of growth in the future. Keeping these facts in mind, this research was conducted to understand the present status of the spa industry in the USA and India. For this purpose, the awareness levels, the people's perception of spas and their services and their benefits were chosen as the main indicators. The study reveals that the consumers' awareness level of the spas, spa industry is quite significant and that these indicators have divulged the present position of the industry by giving a clear picture of the cognizance level of the spas in the consumers' mind and the degree of cognizance of the services and their paybacks. The comparison has provided us with a platform for finding the scope of their improvement. The findings of the study prove that not much of a difference exists in the awareness level of consumers across the continents.

LITERATURE REVIEW

According to Schumpeter, an entrepreneur is willing and able to convert a new idea or invention into a successful innovation. Entrepreneurship employs what Schumpeter called "the gale of creative destruction to replace in whole or in part inferior offerings across markets and industries, simultaneously creating new products and new business models. Thus, creative destruction is largely responsible for long-term economic growth. The spa industry is looking for this creative destruction in order to witness the bright revival especially in developing economies. According to Shane and Venkataraman, entrepreneurship comprises both "enterprising individuals" and "entrepreneurial opportunities," and this research aims at bringing the two closer. As per the study conducted by Farris et al., "Awareness, attitudes, and usage (AAU) metrics relate closely to what has been called the Hierarchy of Effects, an assumption that customers progress through sequential stages from lack of awareness, through initial purchase of a product, to brand loyalty." It is hoped that with an adequate consumer awareness level about spas and their services, entrepreneurs can devote their energies to the creation of purchases and developing customer loyalties. David A. Aaker has outlined the following dimensions of a market analysis: Market size (current and future), Market trends, Market growth rate, Market profitability, Industry cost structure and Distribution channels. The spa industry promises a bright future and has ample scope for growth. American spas made \$9.7 billion in revenue last year, according to the International Spa Association. Not just this, according to research by IBISWorld, The Health and Wellness Spas industry has low barriers to entry. The industry is in the mature stage of its industry life cycle, and companies are slowly entering the industry to satisfy the slowly rising demand. Competition within the industry is high and increasing, however, which does present a slight barrier for potential entrants. Startup costs are low, as new entrants need only to rent a space and purchase relatively cheap equipment. All this speaks for a lot of scope for entrepreneurs to jump in the profitable business opportunities.

Similarly, specifically for developing economies like India, in the words of Mr. Rakesh Sharma, President of the Spa Association of India, "The future of Spa industry is very promising and India is looking for opportunities to supply spa therapists all over the world. In the coming years, spas would take over the wellness industry." He also stressed that it is no longer a luxury for people. All the existing studies refer to a profitable robust future of the spa industry but fail to talk about the awareness level of consumers about the spa industry and its products. This paper aims to fill in this gap and expects to benefit the stakeholders of spa and allied industries.

MATERIAL AND METHODS

This paper is an attempt to understand the level of cognizance in the minds of consumers with respect to spa types, services, products and their benefits. For this purpose, exploratory-diagnostic research design is employed in this research. The scope of the study is confined to the spas in India and the USA. However, within the countries, the scope is limited to the people residing in and around New Delhi in India and Los Angeles in USA. The survey sample consists of 200 respondents, 100 from each country. The two

countries were chosen because of their different level of development of the spa industry, in order to get a comprehensive view of the cognition level of people globally. On the recommendations of experts, the number of respondents was kept equal for the two countries. The samples were selected by applying non-probability purposive sampling.

For the primary data, a single set of questionnaires was prepared for the people residing in the two countries and the responses were measured on a five point scale of satisfaction. The purpose of the survey was to understand the look into the prevalent situation of the industry in the two countries. Questions were asked about the awareness of the respondents regarding types of spas and their services. All the statements pertaining to various parts were structured and the responses of the respondents have been measured on a Likert type five point scale. The collected data was thus analyzed through standard descriptive percentage analysis in order to provide a simplified picture of the level of knowledge about spas and their services in the consumers' mind.

This study is based on the hypothesis that the awareness level of people about spas and their services is quite high. The research is limited by the lack of time and money to conduct a more comprehensive survey. Also, the responses might not be the actual reflection of the mindsets of the respondents.

RESULTS AND DISCUSSION

To understand the cognition level of people about spas and their services, a percentage analysis of some of the indicators like awareness level was conducted, and it was found that various aspects of spas, like awareness level, are significantly high. This information, combined with the fact that relaxation and stress busters are the most demanded commodities in today's stressful times, can be used to attract stakeholders in related industries and hawks looking for profitable opportunities in the market to invest in these markets.

Table 1 presents an item-wise analysis of the awareness level of spa users about the spa services available, their benefits and types of the spas available.

The data collected indicates that the awareness level of spas and their services is quite high and people across the cultures not only recognize but also appreciate the physical and psychological benefits accrued from the spa services. Additionally, people are aware of different types of spas especially the Day, Resort and Medical spas. This is an important finding since it proves that the industry has got a strong grip over the customers' minds and knowledge of the benefits provides a good base for the business to bring in stressed minds and souls. The data analysis reveals that there is a significant level of awareness of spa services such as massages (97%), facials (96%), manicures (96%), pedicures (96%), body wraps (94%), fitness training (93%), cosmetic procedures (92%), body detoxification programs (95%) and nutritional counseling (93%). The overall awareness of spa services is very high as indicated by a strong % score of ninety four. People are also strongly aware of the physical benefits accruing from spa services. They accept that the spa services and products help in relieving chronic pain (91%), easing joint movement (91%), regulating blood pressure (88%), improving sleep patterns (94%), reducing aging effects (89%), managing weight (89%), enhancing beauty (93%), detoxification (92%) and improving stamina (88%). A high ninety one % score indicates a strong level of awareness of the physical benefits of spas.

Table 1. Present status of the awareness level of people – a percentage analysis with respect to spa types, services available and their benefits (own preparation)

S. No	Description of the indicators and items of each indicator:	Obtained Score	Percentage Score N=1000
1	Awareness of the services provided by the spas:		
a	Various Massages	977	98
b	Various Facials	957	96
c	Manicures	957	96
d	Pedicures	956	96
e	Body Wraps	941	94
f	Fitness Training	925	93
g	Cosmetic Procedures	920	92
h	Body detoxification programs	954	95
i	Nutritional Counseling	932	93
	N = 9000	8519	94
2	Awareness of the following PHYSICAL benefits from the spas:		
a	Relief from chronic pain	914	91
b	Ease in joint movement	914	91
c	Blood pressure regulation	880	88
d	Sleep improvement	943	94
e	Reduced aging effects	894	90
f	Weight management	888	89
g	Beauty enhancement	933	93
h	Detoxification	921	92
i	Stamina improvement	880	88
	N = 9000	7518	84
3	Awareness of the following PSYCHOLOGICAL benefits from spa services:		
a	Anxiety reduction	936	94
b	Intellectual improvement	862	86
c	Focusing of mind	888	89
d	Improvement in stress related disorders like migraine	923	92
e	Increased spiritual awareness	882	88
f	Decreased unrest	915	92
g	Improved self-esteem	870	87
h	Relief in muscle tensions	939	94
Total	N = 8000	7215	90
4	Awareness of the following types of spas:		
a	Day spas	977	98
b	Resort / hotel spas	973	97
c	Destination spas	953	95
d	Cruise Ship spas	887	89
e	Medical spas	911	91
f	Green spas	872	87
Total	N = 6000	5573	93

Source: own compilation.

With respect to the psychological benefits, ninety % score again divulges a strong cognition level. It is accepted that they help in reducing anxiety (93%), improve intellect (82%) and stress related disorders (92 %), increase mind focus (89%), spiritual awareness (88%), self-esteem (87%) and decrease unrest (91%) and muscle tension (94%). People are well aware of various kinds of spas with day and resort spas leading the score (98 and 97%), followed by destination spas (95%), medical spas (91%), cruise ship spas (89%) and ecofriendly green spas (87%). The high level of awareness helps in bringing the acceptance level to a point where going to various types of spas is taken up as a routine and people recognize and appreciate the benefits that the various services are accruing to their physical and psychological health.

The following Table 2 gives a summarized statement of awareness indicators:

Table 2. Present awareness level about spas and their services – item-wise percentage analysis (own preparation)

S. No	Awareness Indicators	Maximum Score	Obtained Score	Percentage
1	Awareness of spa services available	9000	8519	94
2	Awareness of Physical benefits from spa services	9000	7518	84
3	Awareness of Psychological benefits from spa services	8000	7215	90
4	Awareness of types of spas	6000	5573	93
Total	N = 32000	29440	27188	92

Source: own compilation.

The above table illuminates the fact that today people are well aware of services available in the spas, the types of spas available and the physical and psychological benefits from spas.

After understanding that the spa cognition quotient in consumers' minds is quite high, the next step to understand the present status of the industry, was to understand the reasons why people go to spas.

The study explains well that spas are perceived as a place for relaxation (97%), leisure and pampering (95%), alternate healing practices (87%), social interaction (85%), and utilizing medical remedies (81%).

The fact that interest in wellness has become ubiquitous and even during travel, people are asking for luxurious spa experiences, means that this area warrants matching attention from allied industries such as hospitality, beauty and cosmetics as well as the medical industry. Since the spas promise to be a retreat away from the madness of stressful lives, an accelerated push towards bringing up products and services accordingly may prove to be rewarding. Studies have predicted growth of the spa industry and the global spa economy is expected to be worth \$255 billion; it is a golden opportunity that is waiting to be explored.

In a nutshell, the findings of the present study are in tandem with the previously conducted ones that offer a bright future estimation for the spa industry, as is shown by a significantly high cognizance level of the services and products. It is strongly predicted that the present global spa industry has a big cognition factor in the consumers' minds and hence can offer a lot to budding entrepreneurs in terms of revenue inflow.

CONCLUSIONS

Today, spa therapies and products have been witnessing a major revival of interest. Just like ancient times, when the spa was the central meeting place in the society and a status symbol of various empires, it is regaining its place of prominence. With stress being one of the most prevalent causes of health troubles, anything that promises to bring relief is welcome on the market. The findings have illuminated the fact that people are aware of the existence of various spa types, their services and the physical and psychological benefits that accrue from them. A significantly high cognition level may be turned into a rewarding opportunity through a quality product. It is anticipated that the findings would prompt entrepreneurs to take notice and bring out satisfactory services and products catering to the demands of the consumers. This study would immensely benefit all the stakeholders as it imparts a deeper understanding into the present status of the spa industry, its services and products in the minds of consumers. It is also projected to help the allied industries such as tourism, medical and beauty products as it showcases the positive outlook for the spa industry through high awareness levels. The findings are a good parameter for entrepreneurs who are always looking for an opportunity and a rewarding business. Though this research was bound by the limitation of resources and the probability of not so accurate responses from the respondents, it can act as a first step towards further research into the relationship between the success rate of a product and the awareness level of the product in consumers' minds. It is further hoped that the relationship between the ease of product launching on the market and the high cognition of a product and its benefits would be explored by future researchers.

REFERENCES

- A big challenge in the Indian Spa industry is lack of skilled workers. (n.d.). Retrieved October 9, 2015, from <http://www.indiahospitalityreview.com/interviews/big-challenge-indian-spa-industry-skilled-workers>
- Aaker, D. A., McLoughlin, D. (2010). *Strategic Market Management – Global Perspectives*. West Sussex: John Wiley & Sons Ltd.
- Farris, Paul W.; Neil T. Bendle; Phillip E. Pfeifer; David J. Reibstein (2010). *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance*. Upper Saddle River, New Jersey: Pearson Education, Inc. ISBN 0137058292.
- Health & Wellness Spas in the US: Market Research Report. (n.d.). Retrieved November 18, 2015, from <http://www.ibisworld.com/industry/health-wellness-spas.html>
- Schumpeter, Joseph Alois (1976). *Capitalism, Socialism and Democracy*. Routledge. ISBN 978-0-415-10762-4
- Shane, S. (2000). "The promise of entrepreneurship as a field of research", *Academy of Management Review* 25(1): 217-226. doi:10.5465/AMR.2000.2791611

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Formal Institutions: the Source of Unproductive Entrepreneurship in Poland

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Abstract

The purpose of this article is to determine the entrepreneurs' perception of formal institutions in Poland as a source of non-productive behaviours. The research methodology was developed based on many years of the teams' research experience. It involved three stages of research: 1) panel of experts and 2) telephone surveys of 1,612 entrepreneurs in Poland, which were the basis for 3) development of detailed research to be conducted among 300 entrepreneurs. The Polish entrepreneurs are mostly forced to unproductivity and they rather do not use the institutions to fight off the competition (offensive, voluntary unproductivity). The entrepreneurs themselves do not seem to provide much evidence for the unproductivity caused by the formal institutions. The study revealed a number of shortcomings in the research methodology itself. Conducting the research on a larger group of respondents necessitated the development of a standard questionnaire which does not capture all the shades of unproductivity. Perhaps individual interviews with entrepreneurs would allow for describing the activities treated as voluntary unproductivity. The original contribution of the authors is the division of unproductive entrepreneurship into voluntary and forced. So far no studies of this type have been conducted in Poland.

Keywords: unproductive entrepreneurship; formal institutions; institutional economics

JEL codes: P48, M21, L25

INTRODUCTION

The available analyses of entrepreneurship are mostly dominated by the approach exposing its positive nature and positive impact on economic development, treating it as an

important factor of growth and socio-economic development. The vast majority of reports, expert opinions and analyses concerns the conditions for the development of entrepreneurship, the possibility of using these conditions etc. Naude (2012) rightly draws attention to the fact that such belief in the positive impact of entrepreneurship on the economy is supported by the experiences of many countries over the past 30-40 years. Indeed, there is little doubt that entrepreneurship has earned a positive image, widely accepted by policymakers and shared by the academic economists in their published scientific works (though not always in a visible way). There are probably no countries without entrepreneurship support programmes (even if only on paper). Entrepreneurship is also very frequently called the "driving force" of economy or the "locomotive" of development.

At a time when such positive image of entrepreneurship began to take concrete shape, William Baumol (1990) published an article in which he also pointed to other faces of entrepreneurship¹. In it, he differentiated three types of entrepreneurship, dividing it into *productive*, *unproductive* and *destructive*. He also initiated a discussion and attracted a large group of scientists, inspiring a number of studies going beyond the previously analysed aspects related to entrepreneurship. Still, the vast majority of research projects was focused on entrepreneurship treated as a factor of development, i.e. the productive entrepreneurship. The "darker" faces of entrepreneurship are considered marginal, while economists and politicians still react with surprise to such terms as *unproductive* and *destructive* entrepreneurship. On the other hand, it is probably no coincidence that the most recent (December 2015) collection of articles by Acs (one of the most outstanding contemporary researchers of entrepreneurship) opens with his article "A Model of Destructive Entrepreneurship", co-written with Desai and Weitzel (2010).

The major aim of this paper is to draw attention to unproductive aspects of entrepreneurship in the Polish economy. We do not know any research devoted to this problem in Poland. Hence we try to fulfil this gap. The core of our analyses and research is the hypothesis formulated by Baumol (1990), implying that it is the set of rules and not the supply of entrepreneurs or their objective goals that determines the outcome of the whole economy and causes its changes over time by allocating resources and entrepreneurial talents. As a consequence, we also equate entrepreneurial activities to the figure of entrepreneur (as Baumol, and then i.a. Murhy, Shleifer, Vishny, Sanders and Weitzel)².

Due to practical difficulties we do not distinct between unproductive and destructive entrepreneurship. But we have introduced a distinction between forced and voluntary unproductive/destructive entrepreneurship. It is important if we want to understand not only motives of entrepreneurial behaviours but final macroeconomic results too. Studies of such sensitive problem like unproductive entrepreneurship are not easy because of shortage, sometimes even lack of available data. Usually researchers are forced to collect data through research questionnaires. Being in such situation we conduct our research in three phases. The first one was devoted to the experts, whose opinion helped in creating the other two phases. In the second the 1,612 entrepreneurs were

¹ For the sake of historical accuracy it should be noted that the negative aspects of the entrepreneurship were mentioned decades earlier by Th. Veblen (1889, 1904), W. Mitchell (1923) and C. Ayres (1962), without using terms proposed by Baumol.

² It is not a universal approach. E.g. Douhan and Henrekson (2008) indicated that the types of entrepreneurship relate to functions and not to figures/persons.

questioned with CATI method. The last one included the research, based on the questionnaire, conducted among three groups of entrepreneurs: potential, operating and those who shut the business. This paper is based on phase two data, and only answers from the operating entrepreneurs from phase three.

THEORETICAL FRAMEWORK

The theoretical framework of this paper is institutional economics. In our opinion, it allows for the best analysis of the complex phenomenon of entrepreneurship and its role in the economy.

We know less about these "inferior"³ types of entrepreneurship than about the productive ones not only because they are less frequently studied but rather because they are difficult to define clearly or reflect within a single theoretical framework. There are also a "sensitive" topic in empirical research.

The authors share the opinion of Douhan and Henrekson (2008) concerning the issue of vagueness of differentiating between unproductive and destructive entrepreneurship. Baumol adopted the impact on the macroeconomic effects of the economy as a criterion for division of entrepreneurship into the above-mentioned three types. The productive entrepreneurship contributes to their improvement, while the unproductive one has no impact on them and the destructive one worsens them. In practice, the determination of these effects (particularly the latter two types of entrepreneurship) is very difficult and they certainly cannot be measured precisely.

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Baumol himself did not develop the concept of destructive entrepreneurship in his work and operated mainly by confronting productive and unproductive entrepreneurship. This is due i.a. to the fact that the same entrepreneurial activities can have a neutral or negative impact on the macro-economic effect, which cannot be determined by examining them at the micro level. Therefore, for the purposes of our research we combine both types in a way by using mainly the term "unproductive". Such approach was applied i.a. by Sobel (2008)⁴.

³ The negative types of entrepreneurship are often described in the literature with terms different from these proposed by Baumol. Sautet (2005) divided entrepreneurship into productive, evasive and socially destructive. Henrekson (2007) and Holcombe (2011) talk about *predatory* instead of unproductive/destructive entrepreneurship. The productive entrepreneurship is also differentiated from *institutional*, *political* or even *legal* one (Sobel 2008).

⁴ Some researchers have focused solely on the destructive actions (e.g. Sanders, Weitzel (2009); Douhan, Henrekson (2008a); Foss, Foss (2000); Desai, Acs (2008), Sauka (2008), Sauka, Welter (2010), Tonoyan, Strohmeyer, Habib, Perlitz (2010) or Desai, Acs, Weitzel (2010)). In Poland, the only studies on destructive entrepreneurship known to authors are those conducted by M. Bielenia within the framework of the NCN project (2015).

We followed Baumol's hypothesis, We assumed, therefore, that it is the available institutions (formal and informal ones) that have decisive influence on the productive, unproductive or destructive nature of the entrepreneurs' actions. Thus, institutions are a kind of filter which directs the entrepreneurs' actions (Figure 1).

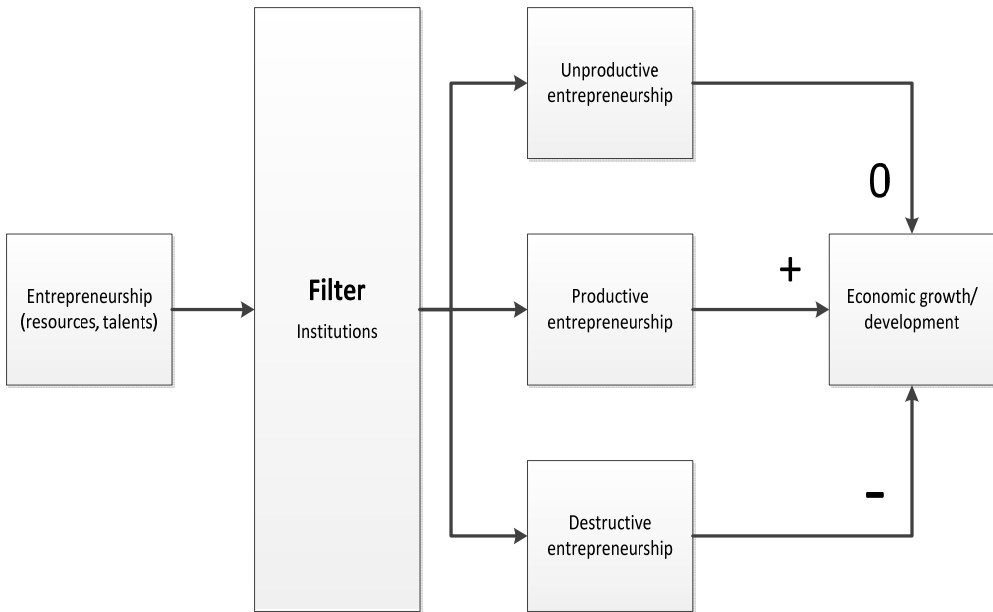


Figure 1. Institutions as the filter of entrepreneurship

Source: Dominiak, Wasilczuk, Starnawska (2016)

The use of Baumol's approach in empirical studies, however, faces a number of problems. Firstly, there is a long "path" between the entrepreneur's decision to take action and its macroeconomic effect. The "length" of this path is determined by the process of preparing and making decisions itself and the time passing between the decisions and the onset of their effects. The evaluation of the effects can only be conducted *ex post* and only then the actual nature of entrepreneurship can be determined. The *ex ante* evaluation can only be approximate and made on the basis of previous experience. Secondly, the adoption of the macroeconomic perspective means that the entrepreneur taking action may not know (or be aware of) their macro effect. Thirdly, even if the cumulative macroeconomic result of entrepreneurs' actions is known, assigning (disaggregating) them to specific activities or specific businesses is problematic. Lastly, the action which is unproductive or destructive in the macro scale can be (and usually is) productive from the point of view of the micro (entrepreneurs, enterprises) or (probably less frequently) meso level (region, sector).

Entrepreneurs are guided by their own interests, simply seeking to attain net profit without thinking about the macroeconomic effects. Of course, there are exceptions, but it would be difficult to assume that the entrepreneurs as a collective group make decisions by preferring the interest of the whole economy at the expense of their self-

interest or the interest of their own company. They utilize available opportunities, while trying to gain a competitive advantage. They play a game whose rules derive from existing formal and informal institutions. They may try to disrespect these rules, avoid them, bend etc., but will not do it in the interest of the entire economy – on the contrary, their behaviour will result from their individual interest⁵. Obviously, entrepreneurs are different. The heterogeneity of this group is noticed by Desai, Acs and Weitzel (2010). In their study, they assume i.a. that entrepreneurs are divided into less and more patient. The former are more likely to engage activities falling within the scope of unproductive and destructive entrepreneurship.

The authors point out that when considering the choice of the type of entrepreneurial activities, the alternative to productive activities are the unproductive/destructive ones. The entrepreneur decides either to conduct productive activities that lead to positive macroeconomic effect, or to take actions that are neutral or detrimental in the macro perspective. A completely different way is omitted in this approach, however⁶. An entrepreneur who finds themselves in the situation when they cannot act productively, simply ceases their activities. The macro effect is negative but such decision has nothing to do with entrepreneurship, e.g. when the entrepreneur did not take into consideration (at all – for ethical reasons or for fear of legal and financial consequences) the alternative: I pay all taxes and act legally or evade payment and hide my business. If the latter option is out, it does not mean that all entrepreneurs will remain at the first one, since there is also a third possibility.

Some entrepreneurs will close their businesses when they come to the conclusion that the amount of taxes prevents them from achieving positive economic results. In such case, choosing the second option can be better than choosing the third one (figure 2). Better in terms of the micro (entrepreneur's) perspective but also in the macro view, as e.g. the actual unemployment will be lower and the supply will be higher. As a result, the living standard will not decrease as much as in the case of the third option. Douhan and Henrekson (2008) cite examples of business activity of mafia, as well as corruption, as the "second best" type of solutions.

An important new element of the authors' research was distinguishing between two types of unproductive entrepreneurship: voluntary and forced (Figure 3). It should be remembered that there is a significant difference between taking unproductive action voluntarily, without any external pressure, and the actions forced by the environment. The first are offensive (sometimes predatory). They include i.a. rent seeking in the form of e.g. lobbying, corruption, litigation or monopolistic practices. The forced entrepreneurship is defensive in nature and includes actions enforced by bureaucratic restrictions (*red tape*), related e.g. to the payment of taxes and other fiscal or quasi-fiscal levies, statistical reporting, reporting associated with the efforts to obtain various permits, mandatory certifications etc. Some of these actions are routine in nature but they consume resources (time, money) that could be used productively. Some of the activities are related to creative actions, searching for loopholes, "creative" accounting (e.g. depressing profits or inflating costs), circumvention of (particularly absurd) regulations, illegal

⁵ In addition to Baumol (1990), the topic was discussed by Murphy, Shleifer and Vishny (1991), as well as Desai, Acs and Weitzel (2010).

⁶ The exceptions are Douhan and Henrekson (2008).

employment or paying "under the table" etc. It can be debated whether such measures can be treated as "forced", as the entrepreneurs might not take them. However, two kinds of motives they are guided by have to be distinguished. If creativity in this area is defensive in nature, that is if its purpose is to protect the company against liquidation (of jobs or manufacturing activity), then such actions are the second best solution. If, however, such actions are initiated voluntarily to achieve rent (at the expense of other entities), then certainly they have to be classified in the second group and treated as socially unproductive or even harmful. The forced activities bring losses (in relation to the first best option) both at the micro (company) and at the macro level. They are not the predatory version of the destructive entrepreneurship, however. Even corruption may be defensive in nature, when business cannot be conducted without paying bribes to officials who make decisions related to the functioning of the company.

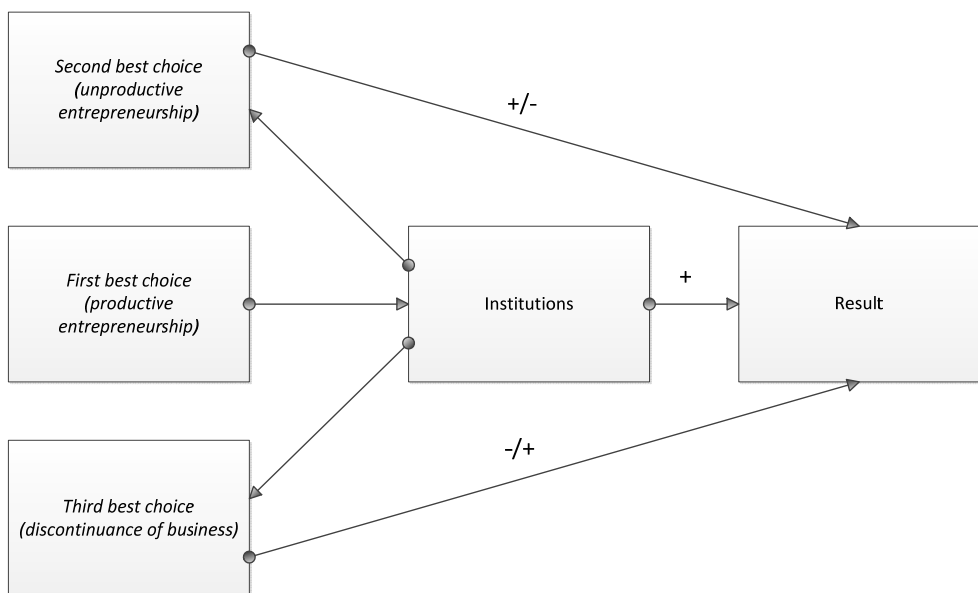


Figure 2. Institutions and available options

Source: Dominiak, Wasilczuk, Starnawska (2016)

In authors' approach, the forced unproductive entrepreneurship does not include the defence against competition or the actions resulting from the entrepreneur's earlier errors. It applies to defensive reactions to the institutional environment. The potential scale of such activities depends on the quality of formal institutions. On the other hand, the actual scope of such activities is determined by informal institutions and results mainly from the broadly understood culture⁷.

⁷ The impact of formal and informal institutions on corrupt behaviours of entrepreneurs and their determinants (from the perspective of bribe-takers and bribe-payers) in the economies of the post-socialist countries was discussed by Tonoyan, Strohmeyer, Habib and Perlitz (2010).

Moreover, the tendency to take such actions may be higher if the economic situation of the entrepreneur/company is more difficult.

Voluntary actions of an unproductive/destructive nature are taken in order to achieve benefits not being the result of a productive activity.

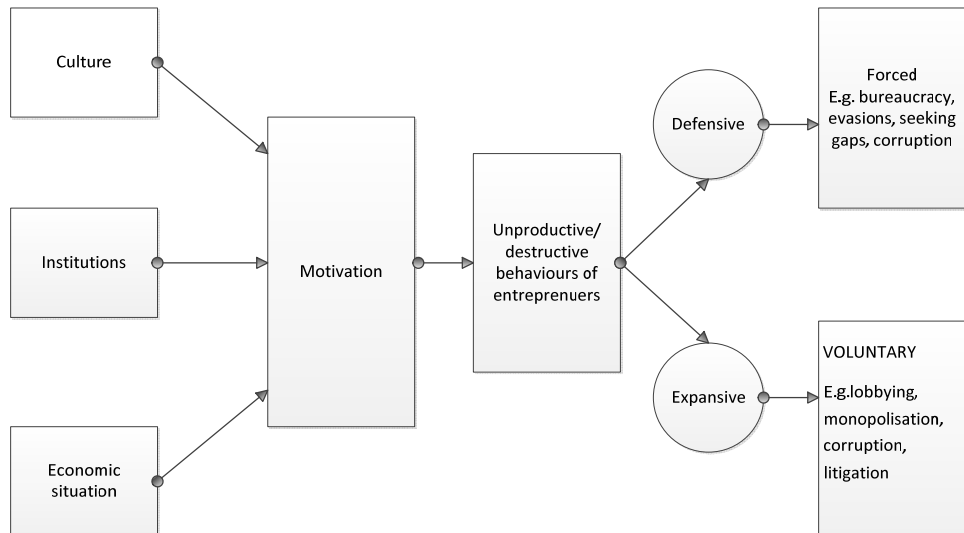


Figure 3. Voluntary and forced unproductive/destructive entrepreneurship

Source: Dominiak, Wasilczuk, Starnawska (2016)

In research practice, the distinction between voluntary and forced productive activities is not easy. In fact, the motives of entrepreneurs and the contexts in which they make decisions should be analysed and their formal and informal environment should be carefully examined. Studies of this type would require access to plenty of detailed data. Often such data simply do not exist⁸.

As a result, the researchers are forced to avail of information obtained through research questionnaires, interviews etc. of invariably limited scope and questionable credibility. As a result, while being aware of the many limitations, the authors decided to implement Poland's first research program related to unproductive entrepreneurship.

METHODS

The empirical studies comprised three phases:

Stage 1 – a panel of experts, the aim which was to verify whether the concept of unproductivity is comprehensible for the entrepreneurs and people from the widely understood economic environment;

Stage 2 – carried out on a sample of 1612 entrepreneurs registered in Poland, acting in the micro (51%) and small (39%) scale, with some conducting their activity in the me-

⁸ Thus, there is very little research on the unproductive/destructive activities, using quantitative data obtained from different types of records. The few available studies include Sobel and Garrett (2000) and Sobel (2008).

dium (8%) and large (2%) scale. The selected companies operated in the construction, manufacturing, retail and professional services sectors, in roughly equal proportions (respectively: 24%, 26%, 24% and 26%). The research was conducted towards the end of 2012 using a survey questionnaire among companies from all regions of Poland, based on the CATI method. Its aim was i.a. the analysis of the entrepreneurs' opinions on the formal institutions in Poland, as well as determining the cost of their ineffectiveness.

Stage 3 – a survey of 300 active entrepreneurs (based on the CATI method), 51 who shut down their businesses (CATI) and 254 who belong to the group of potential entrepreneurs (based on PAPI method). The purpose of this stage was to clarify the information collected during stage 2. The results of stages 2 and 3 are discussed below – only the answers given by the active entrepreneurs were taken into account.

Prior to designing the research questionnaire, a list of behaviours that can be attributed to a particular type of unproductivity was drawn up (table 1).

Table 1. Voluntary and forced unproductive actions of entrepreneurs

Voluntary unproductive actions	Forced unproductive actions
Collusions in tenders	Reporting (bureaucracy)
Corruption	Studying regulations
Legal loopholes in relations with employees, suppliers and institutions	Efforts to obtain licenses
Tax evasion (e.g. depressing profits)	Errands in government offices
Entrepreneurs' private relationships with politicians or government administration officials	Seeking unofficial and private relations with decision-makers
Using legal loopholes	Corruption (due to the chronic administrative proceedings which threaten business)
Lobbying	
Lawsuits	
Exaggerated promotion	

Source: own elaboration.

Some non-productive behaviours are difficult to be precisely classified into one of two types unproductivity, as they may arise due to different motives. An example of such behaviour is corruption: bribery to expedite settlement of a matter in an office ceases to be a way to fight off competitors when the case drags on long enough to jeopardize the functioning of the company.

The research on unproductive behaviours, presented in the table, in many cases relates to activities which are illegal, unethical or on the edge of law. The research team looked for the best way for formulating questions in a way that would enable drawing valid conclusions from the answers, without fear that the respondents answered insincerely because of fear of possible legal consequences (guaranteeing the use of research results only for statistical purposes, without analysing the individual responses, does not seem to be a sufficient warranty for the entrepreneurs). The questions have been so designed, in a way that would make them refer to the entrepreneurs' knowledge about the conduct of their industry or the environment, and not to their personal behaviours. Efforts were made to avoid suggestions that it is the studied entrepreneur who is behaving in an unacceptable way (resorting to bribery, conspiracy, tax evasion etc.).

Questions relating to hypothetical situations in the respondents' companies were also introduced. Their aim was to find out to what extent the entrepreneurs are willing to take advantage of inefficient institutions when the business of their companies is at stake. It was assumed that this would allow for obtaining a picture of the entrepreneurs' tendency to engage in unproductive behaviours.

RESULTS AND DISCUSSION

The respondents participating in the first stage of the research had no doubt that formal institutions are the source of unproductive activities of entrepreneurs in Poland (50% pointed to the weakness of the law, whereas 38% to weaknesses of government offices) (figure 4). The informal institutions, such as standards and customs common in Poland, were indicated by 37% of respondents. Only 22% stated that in their opinion it is the market mechanisms that are responsible for unproductivity. The last result refers to the unproductivity as understood by Baumol, who argued that the unproductivity is a result of entrepreneurs' rent-seeking and using inefficient institutions to fight off competition.

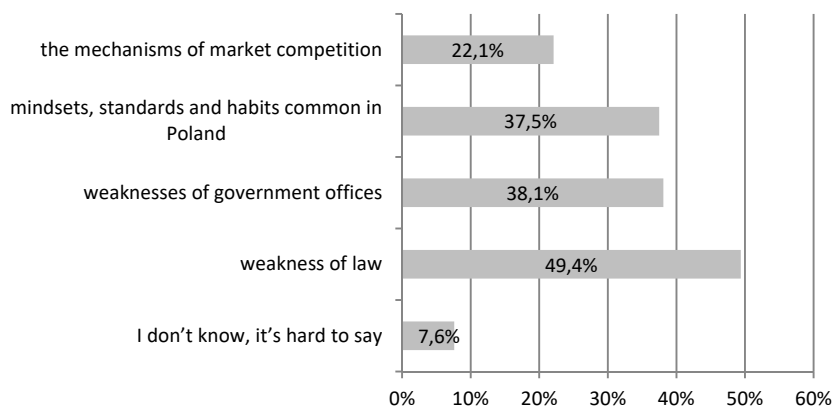


Figure 4. Sources of unproductive behaviours. Source: Own work based on research results (n = 1612)

Source: own elaboration based on research results

The above-described sources of unproductive behaviour indicated by entrepreneurs are related to a large extent to bureaucratic burden being the subject of the next question. According to respondents, the most burdensome spheres related to bureaucracy are taxes (46%), reporting to the Social Insurance Institution (ZUS – 37%), as well as reporting to the Central Statistical Office (GUS – 32%). Less than one third of the entrepreneurs pointed to the accounting and building permits (26%) (figure 5).

The mentioned nuisances are due to the ambiguity of the rules, leading to different interpretations (taxes), as well as due to reporting related to self-employment and the employment of workers (ZUS), which is often equal to duplication of information being already in the possession of ZUS. The source of an additional reporting requirement for entrepreneurs is the Central Statistical Office (GUS), which demands not only the annual activity reports but also statements that involve randomly selected entrepreneurs in

connection with the implementation of the statistical research program of public statistics established every year on the basis of a special Ordinance of Council of Ministers⁹.

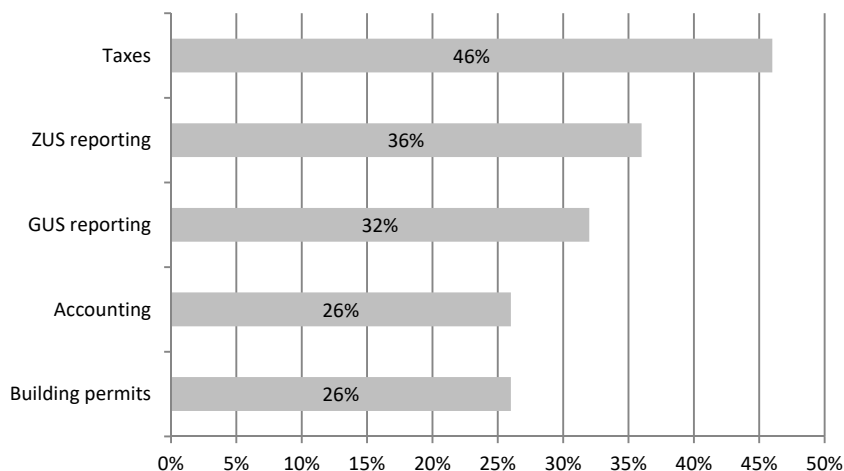


Figure 5. The most burdensome spheres associated with bureaucracy. Source: own work based on research results. (The entrepreneurs could indicate any number of answers) (n = 1612).

Source: own elaboration based on research results

From the point of view of entrepreneurs, all reporting/bureaucratic obligations are considered to be nuisances that distract them from productive activity. Moreover, they recognize them to be a result of ineffectiveness of the institutions imposing such duties. Thus, when asked about the benefits of reducing bureaucracy, they pointed to the possibility of transferring employees to more productive activities (67%) or even reducing employment (14%) (Table 2). It is thought-provoking, however, that in 23% of cases, the entrepreneurs do not see a possible reduction in bureaucracy as a possibility to improve the efficiency of their company. This may mean that the bureaucracy is not as burdensome as the entrepreneurs think.

The continuation of this question was an open-ended question (one of the few in the questionnaire) regarding the usage of time saved due to reducing bureaucracy. The answers also show that not all the entrepreneurs feel the inconveniences to be that discomforting – 16% (260 entrepreneurs) did not give any answer. It must therefore be assumed that at least some of them spend so little time on actions identified as bureaucratic that they do not even wonder what else they might be doing during the time spend on them. As an alternative to fulfilling bureaucratic procedures, the other entrepreneurs frequently mentioned the opportunity to engage in the development of their company or development of their own competences or the competences of their

⁹ On the other hand, it should be noted that in Poland we have, in comparison to many other countries, a relatively narrow range of information on the functioning of enterprises. As a result, conducting scientific research, monitoring of the condition of the economy or preparing reliable reports, which should provide a basis for making decisions on economic policy, becomes difficult. Even general overview of the Eurostat company databases shows many gaps related to this group of entities in Poland.

employees (27% of responses). 14% would be searching for new markets and customers, 3% would spend this time on the development of production, while 5% would treat it as leisure time spent on resting or being with family. As mentioned earlier, a significant part of the publications related to the impact of institutions on unproductive entrepreneurship refers to the transforming economies. It is recognized that rapid changes of formal institutions, typical for transformation, create, on the one hand, some temptation, while on the other (due to the haste, faults and gaps – inevitable in these processes) impose difficult choices related to nature of entrepreneurial activity (acting productively/unproductively or discontinuing operations). As a result, space for unproductive activities is created – both voluntary and forced.

Table 2. The expected effects of reducing bureaucracy for the company's operations (n = 1612)

The benefits of reducing bureaucracy	Number	% of cases
reduction of employment in the company	227	14.1
transferring employees to activities more productive for the company	1072	66.5
no effect on efficiency	379	23.5
"I don't know"	65	4.0
Total	1743	x

Source: own elaboration based on research results

Thus, in the third stage of the presented study, an attempt was made to evaluate the nuisances related to the functioning of the formal institutions in Poland. The entrepreneurs were presented with a list of potential nuisances arising from inefficient formal institutions and asked to indicate the intensity level of nuisance in the scale of 1 to 5. The changes in regulations were cited as most burdensome by 41% respondents (figure 6), while 39% of them mentioned bureaucracy, and another 37% the lack of law clarity. This confirms the frequently encountered opinion that the volatility of formal institutions, characteristic for transformation, is the most serious problem for business.

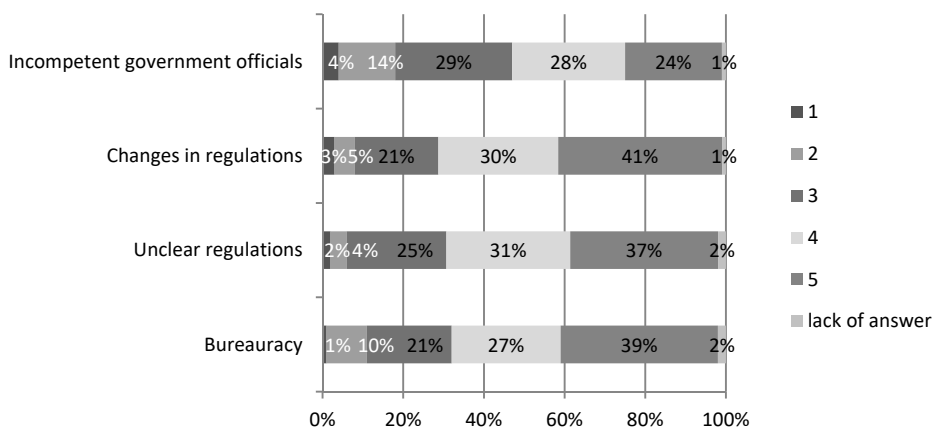


Figure 6. The scale of nuisance of actions resulting from various causes. (n = 300)

Source: own elaboration based on research results

The entrepreneurs were most lenient for the government officials, whose incompetence was rated as the most burdensome by only 24% of respondents. It is interesting to refer here to the results of research carried out within the Pomeranian Economic Observatory IV project, implemented in 2012 in the Polish Pomeranian province (Dominiak, Wasilczuk, Zięba, Daszkiewicz, 2013). Over 600 entrepreneurs from the SME sector were asked then about their relationships with the personnel of government offices and institutions they contact regularly. Only the relationships with three types of institutions: the county office, the State Inspection of Commerce and the Employment Office were not been evaluated as positive. In the case of the other institutions (the municipal office / tax office, Social Security Institution and State Inspectorate of Labour) at least half of the respondents identified those relations as good and very good.

Examining the costs of entrepreneurs' unproductivity proved to be impossible. It was due to the fact that it is difficult to determine the value of business expenditures on meeting the requirements of government officials and offices that are superfluous from the point of view of business activity, while being necessary from the point of view of normal functioning of the state itself and the government offices in particular. Thus, the costs of inefficiency of formal institutions, resulting from the forced inefficiency, can only be estimated on the basis of assessments of the entrepreneurs themselves.

Their level can be indirectly estimated on the basis of the fact that about 80% of the surveyed entrepreneurs (table 3) indicate that they spend up to 25% of their time on reporting, up to 25% of their time on studying the regulations and also up to 25% on errands in government offices. Such activities can be considered, to a large extent, to be unproductive. The same percentage of respondents indicated that they spend also up to 25% of their time on strategic activities. This division of time is not the most favourable in terms of business development but we must remember that the study was conducted in SMEs, in which the entrepreneurs do not have specialized departments (dealing e.g. with legal matters).

Table 3. The time spent on various activities related to the operation and functioning of the company ($n = 300$)

The share of time spent on various activities	Current activity	Strategic actions	Reporting	Studying regulations	Errands in government offices
0%	0%	3%	15%	14%	9%
up to 25%	24%	80%	79%	82%	86%
26-50%	40%	16%	5%	4%	5%
51-75%	26%	1%	1%		
76-99%	10%				

Source: own elaboration based on research results.

The entrepreneurs were asked what actions they would be willing to take in an emergency situation to save their companies. The most frequent idea was using acquaintances – 30% of respondents said they definitely would be ready for it, while 35% declared that would do it only in an emergency situation (figure 7). The second idea was related to unreliable promotion. 14% of respondents confirmed their readiness for such actions in general, while 31% only in an emergency for the company. The readiness to give bribes was significantly lower (respectively 8% and 19%) – slightly lower than the readiness to exploit legal loopholes. It is characteristic that apart from using acquaint-

ances, in other cases the tendency to use non-productive activities was significantly higher in an emergency for the company (in some cases more than twice as high).

It can therefore be presumed that in phases of economic downturn the scale of unproductive entrepreneurship is growing. It must also be assumed that it will be so also during the phases of tightening the restrictive formal procedures and increasing the bureaucratic and/or fiscal burden. Moreover, in transforming economies the scale of unproductivity will be intensified along with the ambiguity of legal solutions or the level of negative perception of formal institutions (as weak or unreliable).

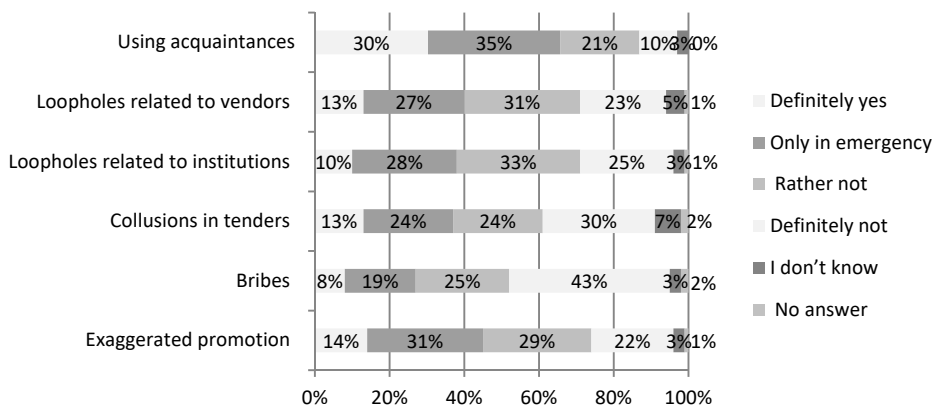


Figure 7. The readiness to take unproductive action depending on the situation of the company
 Source: own elaboration based on research results.

The entrepreneurs' declared tendency to take unproductive actions corresponds with their views on the unfair practices they observe. The surveyed entrepreneurs frequently observed the bribery of government officials (Figure 8) (27% of respondents). However, they met with competitors' availing of legal loopholes or entering into collusion even more often (respectively 47% and 40% of respondents).

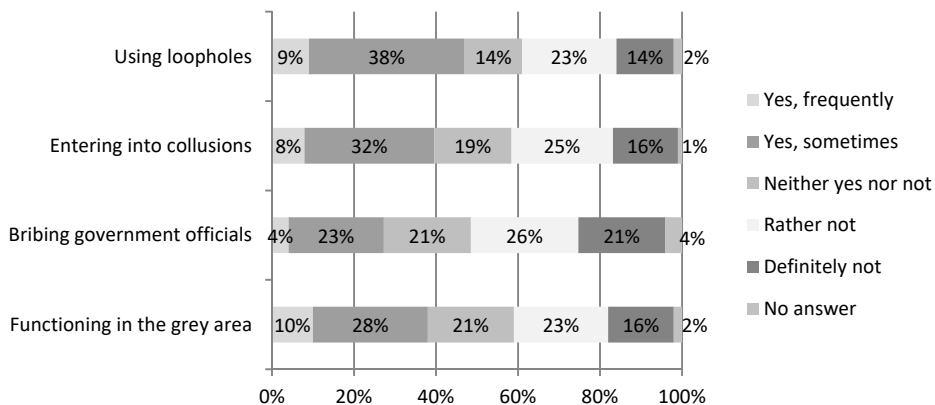


Figure 8. The observed unethical behaviours of active entrepreneurs
 Source: own elaboration based on research results

CONCLUSIONS

The review of the scientific literature on entrepreneurship shows that despite the fact that research is still dominated by analysing the positive impact of entrepreneurship on the economy, more and more authors pay attention to the darker side of enterprise. There is general consensus as to the view that the directions of entrepreneurial activities are determined by available institutions. It is the formal and informal rules of game that induce the entrepreneurs to take productive action or resort to unproductive or destructive activities. Differentiating the latter two types of actions is difficult and in this respect there are differences of opinion among scholars. For the purposes of the presented research, the authors accepted the division of entrepreneurship in only two types: productive and non-productive.

The studies conducted are of pioneering nature in Poland and rare in international scale. The nature of the problems related to unproductive entrepreneurship makes obtaining objective knowledge in this area very difficult. The range of available statistical data in this area is limited and often relates only to the superficial aspects of the analysed phenomena (e.g. the details of the disclosed corruption cases, the number of lawsuits, the number of required reports etc.). In questionnaire studies, the researchers often encounter the reluctance of respondents related to the disclosure of phenomena that they think can be considered to be cause of condemnation of not only themselves, but also their industry, region etc. Conscious of this, the authors conducted the research gradually, using the knowledge acquired during earlier stages of research in subsequent phases of the study.

Dividing the study into three phases allowed for a better understanding of the research problem, i.e. the unproductivity of entrepreneurs, but also for identifying the sources and costs of such unproductivity. In conditions typical for Poland, the sources of unproductivity are primarily formal institutions represented by the applicable law and the government offices. The Polish entrepreneurs are mostly forced to unproductivity and they rather do not use the institutions to fight off the competition (offensive, voluntary unproductivity) – at least those originating from the SME sector. Perhaps the complicated legal regulations and the weakness of institutions whose existence dates back to the beginning of the transformation at most do not leave much time for seeking legal loopholes and private relationships with public officials, aimed at harming competitors. On the other hand, the entrepreneurs themselves do not seem to provide much evidence for the unproductivity caused by the formal institutions: they do perceive the bureaucratic burdens and complain about them but not everyone of them can indicate what they would do with the saved time. There is therefore no certainty that those burdens actually reduce the scale of productive activity.

The study also revealed a number of shortcomings in the research methodology itself. Conducting the research on a larger group of respondents necessitated the development of a standard questionnaire which does not capture all the shades of unproductivity and does not allow for understanding all the nuances of acting on the edge of law. Perhaps individual interviews with entrepreneurs would allow for describing the activities treated as voluntary unproductivity. After all, many of these individual cases are described in news reports (e.g. the acquiring of residential units by heir proxies or hostile

takeovers of companies on the stock exchanges). However, in the questionnaire used for mass research there is no place for a longer explanation of what the classical, Baumol unproductivity is (described by the authors as voluntary).

REFERENCES

- Acs, Z. (2015). *Global Entrepreneurship, Institutions and Incentives*, Edward Elgar
- Ayres, E. (1961). *Toward a reasonable society*. University of Texas Press
- Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Political Economy*, vol. 98, No. 5, Part 1, October
- Bielenia M. (2015). *Przedsiębiorczość destrukcyjna w podmiotach gospodarczych w Polsce*. Praca doktorska. Wydział Zarządzania i Ekonomii Politechnika Gdańska
- Desai, S., Acs, Z., & Weitzel, U. (2010). *A model of destructive entrepreneurship* (No. 2010, 34). Working paper//World Institute for Development Economics Research.
- Deasi S., & Acs Z. J. (2009). *A theory of destructive entrepreneurship*. Max Planck Institute of Economics. Working paper
- Dominiak P., Wasilczuk J., Zięba K., Daszkiewicz N., & Sobiechowska – Ziegert A., (2013). *Sektor MSP na Pomorzu w warunkach spowolnienia tempa wzrostu gospodarczego*. Gdańsk, Agencja Rozwoju Pomorza
- Dominiak, P., Wasilczuk, J. E. & Starnawska, M. (2016). *Przedsiębiorczość nieprodukcyjna w świetle ekonomii instytucjonalnej*. Warszawa, PWN
- Douhan, R., & Henrekson, M. (2010). Entrepreneurship and second-best institutions: going beyond Baumol's typology. *Journal of Evolutionary Economics*, 20(4), 629-643.
- Douhan R., & Henrekson M. (2008). Productive and destructive entrepreneurship in a political economy framework. Research Institute of Industrial Economics, IFN Working paper No. 761, Stockholm,
- Foss K., & Foss N. (2000). *Economic Organization and the Tradeoffs between Productive and Destructive Entrepreneurship*. Institut for Industriøkonomi og Virksomhedsstrategi, Handelshøjskolen i København
- Henrekson M. (2007). Entrepreneurship and institutions. Available at SSRN 996807
- Holcombe R. (2011). Cultivating creativity: market creation of agglomeration economies. *Handbook of Creative Cities*
- Mitchell W. (1950). *Making goods and making money*. The Backward Art of Spending Money and Other Essays, 137-148.
- Murphy K., Shleifer A., & Vishny R. (1991). The Allocation of Talent: Implication for Growth. *Quarterly Journal of Economics*, 106 (2), 503-530.
- Naudé W. (2013). Entrepreneurship and economic development: Theory, evidence and policy. *Evidence and Policy*. IZA Discussion Paper No 7507.
- Sanders, M. & Weitzel, U. (2009). Institutions and the allocation of entrepreneurial talent between productive and destructive activities. *Discussion Paper Series/Tjalling C. Koopmans Institute*, 9(36).
- Sauka, A. (2008). *Productive, unproductive and destructive entrepreneurship: A theoretical and empirical exploration* (Vol. 3). Peter Lang.
- Sauka, Arnis. Welter Friedrieke. *Productive and Unproductive Entrepreneurship in Latvia*. The teliasonera Institute at the Stockholm School of Economics in Riga, Discussion Paper No. 6, June 2010

- Sauka, A., & Welter, F. (2007). Productive, unproductive and destructive entrepreneurship in an advanced transition setting: the example of Latvian small enterprises. *Empirical entrepreneurship in Europe, Cheltenham: Edward Elgar*, 87-111.
- Sautet, F. (2005). The role of institutions in entrepreneurship: implications for development policy. *Mercatus Policy Primer*, (1).
- Sobel, R. S., & Garrett, T. A. (2002). On the measurement of rent seeking and its social opportunity cost. *Public Choice*, 112(1-2), 115-136.
- Sobel, R. S. (2008). Testing Baumol: Institutional quality and the productivity of entrepreneurship. *Journal of Business Venturing*, 23(6), 641-655.
- Tonoyan, V., Strohmeyer, R., Habib, M., & Perlitz, M. (2010). Corruption and entrepreneurship: How formal and informal institutions shape small firm behavior in transition and mature market economies. *Entrepreneurship Theory and Practice*, 34(5), 803-831.
- Veblen T. (1904). *The Theory of business enterprise*. New York: Charles Scribner's Sons.

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Structural Similarities of Economies for Innovation and Competitiveness: A Decision Tree Based Approach

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Abstract

The purpose of this article is to classify countries according to their stage of competitive advantage (factor-driven, efficiency-driven, innovation-driven) by using an expert survey on entrepreneurship and innovation. For this purpose, machine learning tools were used. The algorithm used to create a decision tree is the exhaustive CHAID algorithm. This classification not only identifies how countries of similar competitive advantages are structurally similar, but also shows the experts survey in a reduced-dimensional space for further analyses. Even though there is heterogeneity amongst countries belonging to the same category, the structural similarities are associated with infrastructure, legislature and financing and support possibilities for entrepreneurs. This analysis provides additional information to data on the ease of doing business relevant for FDI decisions as well as for macroeconomic policymaking. This paper is unique in combining a powerful method to derive decision rules, with a new perspective on competitive advantages and innovativeness of economies. The results help to understand the competitive advantages of economies.

Keywords: Entrepreneurship; Competition; Innovation; Decision Tree Analysis

JEL codes: O38, O10, C44

INTRODUCTION

Country classifications according to the competitiveness of economies are very common in the literature. Since Porter's [1990a, 1990b] theoretical contribution, the World Economic Forum issues the Global Competitiveness Report, which is a sound indicator of the competitive stage of a country. Furthermore other analyses and data sources build up upon this report to observe different aspects of economic activities of nations in comparison.

A classification scheme can be useful for developing economic policies based on the economic strengths of a particular country, as well as for decisions regarding FDI. Considering economic activities of different countries it could be asked how a certain classification observes structural similarities of countries within the same classification category. What aspects of their economic activities, impediments, possibilities and so on make different countries belong to the same classification category?

By making use of machine learning tools, the National Experts Survey (NES) of the Global Entrepreneurship Monitor (GEM) will be analyzed for the structural similarities of economies belonging to the classification categories of competitive advantages. GEM NES is a subjective opinion survey conducted by an international consortium on a yearly basis which focuses on the early phases of entrepreneurship, where experts from different countries describe the possibilities and frontiers for entrepreneurial activities in their own country.

Uncertainty plays a key role in economies, their presence is associated with individual market actors adjusting and re-adjusting their plans according to the information they receive from the markets [Hayek, 1968, p. 13]. In an uncertain economic environment it is still not possible to say that everything related to the economy is unknown. We still can make pattern predictions [Hayek, 1968, p. 12] and observe empirical regularities, which, according to Hayek, do not always need to be true.

Lehmann Waffenschmidt [2008] states that a system transformation process is a “self-organised economic evolution, which is at least partially open-loop and consequently cannot be predicted and designed perfectly” [Lehmann-Waffenschmidt, 2008, p. 105]. The stages of competitiveness, as described by Porter [1990a, 1990b], build the strengths of a country’s economy based on its competitive advantages. These competitive advantages, based on a 12-pillar model, vary across the countries [Eriksson, 2013, p. 2].

The transformation of the economy from one stage of competitiveness to the other can be interpreted within the context of a self-organised economic evolution. Even within the uncertainty, which justifies the existence of the markets, economies can share similarities [Lehmann-Waffenschmidt, 2008, p. 108], even though they may not be identical in case of innovation and competitiveness.

The research hypothesis of this paper is that the selected properties of economies based on GEM NES data can give an idea as to how similar economies are in terms of their structures which build their competitive advantages and their strengths in innovativeness. Understanding these structural similarities can be relevant for both investment decisions and policy recommendations to provide ground for well-functioning markets driven by innovation and technological progress.

Using the machine learning tools a dimension reduction with fewer variables giving a meaningful explanation to the classification of countries according to their competitiveness and innovativeness may be used for further analysis purposes as well. In a complementary paper written by the author it will be shown that GEM NES as a subjective data and the Index of Economic Freedom by the Heritage Foundation as an objective data show the same tendencies regarding economic freedom and entrepreneurship (Erkut, 2016).

The rest of the paper is structured as follows: After a literature review of GEM the decision tree algorithm will be presented, which will be used for the analysis. The results will be presented and discussed. A conclusion follows with implications for future research.

LITERATURE REVIEW

Literature on Global Entrepreneurship Monitor consists of three main categories [Bosma, 2012, p. 17]: Publications based on country-level information, publications of a special issue of the Small Business Management journal with different thematic focuses and publications focusing on policy effects and economic development.

An interesting aspect is Anokhin and Schulze's research using data from GEM, where the focus is on innovation and corruption. According to the authors domestic innovative activity is associated with the relation of corruption and foreign direct investments [Anokhin, Schulze, 2009, p. 5]. Corruption can be controlled if innovation and entrepreneurship can grow, where the uncertainty and outcomes of corruption are working as discouraging factors on potential entrepreneurs to take initiatives [Anokhin, Schulze, 2009, p. 2].

Koellinger [2008] asks why some entrepreneurs are more innovative than others in his empirical research with GEM data and finds out that innovativeness of entrepreneurs cannot be explained by individual factors alone. Furthermore the creation of new knowledge should be done by the members of society other than the entrepreneur himself [Koellinger, 2008, p. 35]; the innovative and imitative entrepreneur types are seen as complementary figures and their importance for the economy is stressed.

Bjørnskov and Foss [2007] analyze how economic policies and institutions can be linked to entrepreneurial activities and economic freedom on a cross-country based empirical research. Their findings suggest that government size, monetary policy and financial environment are the key factors for the entrepreneurial activity [Bjørnskov, Foss, 2007, p. 324]. The authors differentiate between necessity entrepreneurship (which is, in their findings, positively influenced by government spending) and opportunity entrepreneurship (based on their findings is negatively affected by government transfers) [Bjørnskov, Foss, 2007, p. 324-325].

Using data from GEM, Wennekers and co-authors [Wennekers et al., 2005] test the hypothesis of a U-shaped relationship between entrepreneurial tendencies and economic development. They find that incentives for start-ups and the effective use of intellectual property legislation shall be the relevant policy implications to boost innovativeness [Wennekers et al., 2005, p. 21].

Lundström and Stevenson [2007] focus on entrepreneurial policies and identify that education, reducing entry and exit barriers as well as start-up support are important policy measures to promote entrepreneurship.

Coduras and Autio [2013] implement an empirical methodology using discriminant and regression analyses; their focus is on the comparison of the Global Entrepreneurship Monitor with the Global Competitiveness Index (GCI). The authors find that the GEM data can be seen as a complementary data source to the GCI [Coduras, Autio, 2013, p. 71].

The literature review on GEM data shows that the research on GEM data is mainly empirical in nature; however, according to the author, machine learning tools were not used as a method to discover structural similarities of economies from the point of view of the experts interviewed. The identified findings on entrepreneurship and innovation are based on policy implications to improve entrepreneurial activities, decrease corruption and boost economic growth through these measures.

METHODS

Machine learning as a discipline of artificial intelligence has different purposes such as the modelling of human processes, theories of adaptive algorithms and solving decision making and classification problems.

In this paper the following definition of a decision tree will be used: "A decision tree is a flowchart-like tree structure, where each internal node (non-leaf node) denotes a test of an attribute, each branch represents an outcome of the test and each leaf node (or terminal node) holds a class label." [Han, Kamber, 2001, p. 330-331]

Generating a decision tree usually consists of two phases; tree construction and tree pruning; the latter can take place either by means of pre-pruning or post-pruning. Pre-pruning cuts the tree prior to the classification whereas post-pruning allows the classification of the data and prunes the tree afterwards. The general algorithm can be stated as follows:

Tree construction is based on a top-down recursive partitioning approach, i.e. the starting point is the top of the tree, which will grow by "splitting attributes one by one" [Rudin, 2012, p. 1]; the splitting attribute will be determined based on the maximization of the homogeneity in groups. Leaf nodes will be assigned; the graphical representation of the tree will consist of a root node and terminal nodes. The top-down approach leads to an end, where the tree will be pruned in order to avoid overfitting [Rudin, 2012, p. 1]. Generating a decision tree is based on the decisions of selecting a splitting criterion, selecting a stopping criterion and finding the best tree [Castillo, 2012, p. 128].

In this paper the exhaustive chi-squared automatic interaction detection (CHAID) algorithm will be used [Biggs et al., 1991]. It is based on a chi-squared test for splitting. The predictor with the smallest adjusted p-value will be selected and compared to an α_{split} which needs to be specified at the beginning of the analysis: $p\text{-value} \leq \alpha_{split}$ would imply that the node will be split using that specific predictor; otherwise the node cannot be split and remains as a terminal node [Clementine 2006, p. 51].

The target variable was described as the GCI categorization of each economy based on the competitive advantages, for which the values 1 ("factor driven economy"), 2 ("efficiency driven economy") and 3 ("innovation driven economy") are assigned by the author. The exhaustive CHAID algorithm was used to predict the competitive advantages of countries according to the opinions of experts. All the 88 ordinal scaled variables of the GEM national experts' survey were used as independent variables. The decision tree is a result of iteratively building compound categories for each predictor variable.

This algorithm was chosen for the following reasons:

1. The exhaustive CHAID algorithm allows for ordinal categorical independent variables [Castillo, 2012, p. 139]. This applies to the case here since all of the predictor variables are measured on Likert scales which are widely accepted as ordinal. The country classification can be accepted as a nominal categorical dependent since the categorization according to factor-driven, efficiency-driven and innovation-driven economies reflect the different strengths of countries and the aim is to find the variables that describe the corresponding stage of development, since "the impact of each pillar on competitiveness varies across countries, in the function of their stages of economic development" [Eriksson, 2013, p. 2].

2. The exhaustive CHAID algorithm makes use of multiple splits and is better for an analysis of the three-categories dependent variable than, for example, the classification and regression trees algorithm which has binary splits.
3. Furthermore it searches for the split point which has the smallest adjusted p-value, which is an important feature with respect to the statistical significance of the results [Nisbet et al. 2009, p. 247]. The exhaustive CHAID is an improvement upon the CHAID algorithm. It is an exhaustive search mechanism which tries to merge similar pairs until one single pair remains.

The maximum tree depth is set equal to 3 – this is a precaution to make sure that the tree does not go very deep. The significance level for the splitting nodes, (α_{split}) is given as 0,05; the maximum number of iterations is 100 with the minimum change in expected cell frequencies being equal to 0,001. The Bonferroni method will be used for the adjustment and the likelihood ratio test will be chosen as the chi-square statistic, which gives more robust results in comparison to the Pearson test [IBM SPSS Decision trees, 2011, p. 10].

RESULTS AND DISCUSSION

Results

53 nations participated in the GEM NES 2010 survey, which are also present in IEF simultaneously. Since the analysis will provide grounds for a complementary paper focusing on IEF, only these 53 nations will be considered. The target is to find out those variables which can classify the 53 economies correctly according to the Global Competitiveness Index classification. Table 1 gives the names of these nations and their classification according to the GCI.

The distribution of 1972 interviewees across nations is usually made according to the principle of having 4 experts for nine different categories [Bosma et al., 2012, p. 40-41]; however there are some exceptions. Some countries have less than 36 experts in the dataset, whereas others have more than 36 experts interviewed. 26,6% of 1946 experts were female, 73,4% were male. The interviews are usually conducted online, especially due to problems noticed during face-to-face interviews.

The professions of the experts are summarized in five categories. These categories are listed as entrepreneur (570), business and support service provider (479), educator-researcher-teacher (345), policy maker (275) and investor-financier-banker (194). Not only are the national teams required to hand in a list of experts to the GEM data team before the start of survey, around 35% of the sample should consist of entrepreneurs as well [Bosma, 2012, p. 15].

Considering the missing values it becomes obvious that the vast majority of missing values are either of the “do not know” or the “does not apply” type. All data are examined regularly by GEM data monitoring teams if the number of missing values is acceptable for each case. Sometimes the data team even requests more interviews to balance the sample.

The exhaustive CHAID algorithm makes use of missing values. It treats all missing values as a single category, which may or may not get merged with other categories of each predictor variable [IBM SPSS 20 Decision Trees, 2011, p. 104]. The resulting decision tree is presented in Figure 1.

The result is a classification tree with 34 nodes (of which 21 are terminal). The degree of IPR legislation being efficiently enforced is the strongest independent variable on the categorization of a nation according to Porter's classification. The exhaustive CHAID analysis recorded the participation of the interviewees on this question by means of four nodes reflecting four homogenous groups.

Table 1. Countries of the dataset and their corresponding GCI classifications

Factor-driven	Efficiency-driven	Innovation-driven
Angola	South Africa	Israel
Ghana	Tunisia	Slovenia
Uganda	Argentina	Japan
Zambia	Brazil	South Korea
Egypt	Chile	Finland
Iran	Columbia	France
Pakistan	Costa Rica	Germany
Saudi Arabia	Ecuador	Greece
Jamaica	Mexico	Iceland
Guatemala	Peru	Ireland
Bolivia	Trinidad and Tobago	Italy
Vanuatu	Uruguay	Norway
	Bosnia and Herzegovina	Portugal
	Croatia	Spain
	Hungary	Sweden
	Latvia	Switzerland
	Macedonia	United Kingdom
	Montenegro	United States of America
	Russia	
	Turkey	
	China	
	Malaysia	
	Taiwan	

Source: Modified from [Kelley et al., 2011, p. 8]

According to the exhaustive CHAID analysis entrepreneurship being a desirable career choice is more common for efficiency driven economies. Quick access to utilities (such as water, gas, sewer or electricity) is more common for innovation driven economies and less common for efficiency driven economies and factor driven economies, whereas sufficient debt funding for new and growing firms is more common for factor driven economies and efficiency driven economies.

From the analysis it is clear that there is a gap between opportunities and effective entrepreneurial support with respect to the factor driven economies: Science parks and business incubators are not present or they do not provide effective support for new and growing firms; however, there are more good opportunities to create new firms than there are people able to perceive and make use of these opportunities. For the latter the evidence was mixed for efficiency-driven economies; experts from innovation-driven economies rejected the latter argument.

The existence of many good opportunities to create truly high growth firms led to two groups; in the “accepting” group, there were mainly experts from the factor driven and efficiency driven economies, whereas in the “rejecting” group, the tendency was more towards innovation driven economies. According to the experts of efficiency driven economies, good opportunities for new firms have increased in the past five years; at the same time the perceived gender equality is clearer in efficiency driven economies than in the other two groups.

Whether subcontractors, suppliers and consultants were used during the business creation process led to mixed evidence with an almost equal number of efficiency-driven and factor driven economies in the groups completely rejecting it and being either neutral or accepting it to be true respectively. There were many innovation-driven economies in the rejecting group.

One of the twelve pillars of competitiveness in GCI is the effectiveness of institutions, which is a key factor for factor-driven economies, the opinion of experts show the ineffectiveness of governmental assistance in this group. Whether government assistance for new and growing firms can be obtained through a single institution led to three groups, where the experts of factor driven economies mainly answered this question with “completely false”. Amongst those experts who answered this question with “completely false”, the question about the effectiveness of government programmes to support new and growing firms also led to a subdivision of experts from factor-driven economies completely rejecting this statement, whereas the experts from efficiency-driven economies could not completely reject it. With respect to the role of university education for start ups and growing new firms it could be observed that experts from innovation-driven countries mainly rejected this statement.

There is an estimate of 0.440 and a standard error of 0.011. If the countries were to classify using this exhaustive CHAID analysis, an overall correct classification rate of 56% would be reached which is widely acceptable. Based on the results described above, it can be seen that even though there are structural similarities there is also heterogeneity amongst members of the same classification category.

Discussion

The question in the survey which can give the most important explanation to the distinction of countries according to their competitiveness and development stage is on the efficient enforcement of the intellectual property rights legislation. This can be seen as a notion in line with Adam Smith's point of view whose argument was that a well-functioning mechanism of law and institutions can guarantee a good environment to be economically active as an individual, through which the prosperity of a nation will increase.

According to McCreadie's [2009] interpretation of Smith a business is highly profitable either because of the lack of competition or because there is a trade secret which gives the entrepreneur an advantage [McCreadie, 2009, p. 27]. It can be seen that factor-driven economies have competitive advantages in the production of simple products and the competition is based on price. Entrepreneurs use either cheap raw materials or cheap labour for their advantage [Porter, 1990b, p. 79] where technology does not play a key role.

Technology's role changes when the country's competitive advantage is based on investments or efficiency – in that case, countries not only accumulate and imitate foreign technologies from more developed and innovative economies but they also try to improve upon these technologies. An innovation-driven economy has technology as one

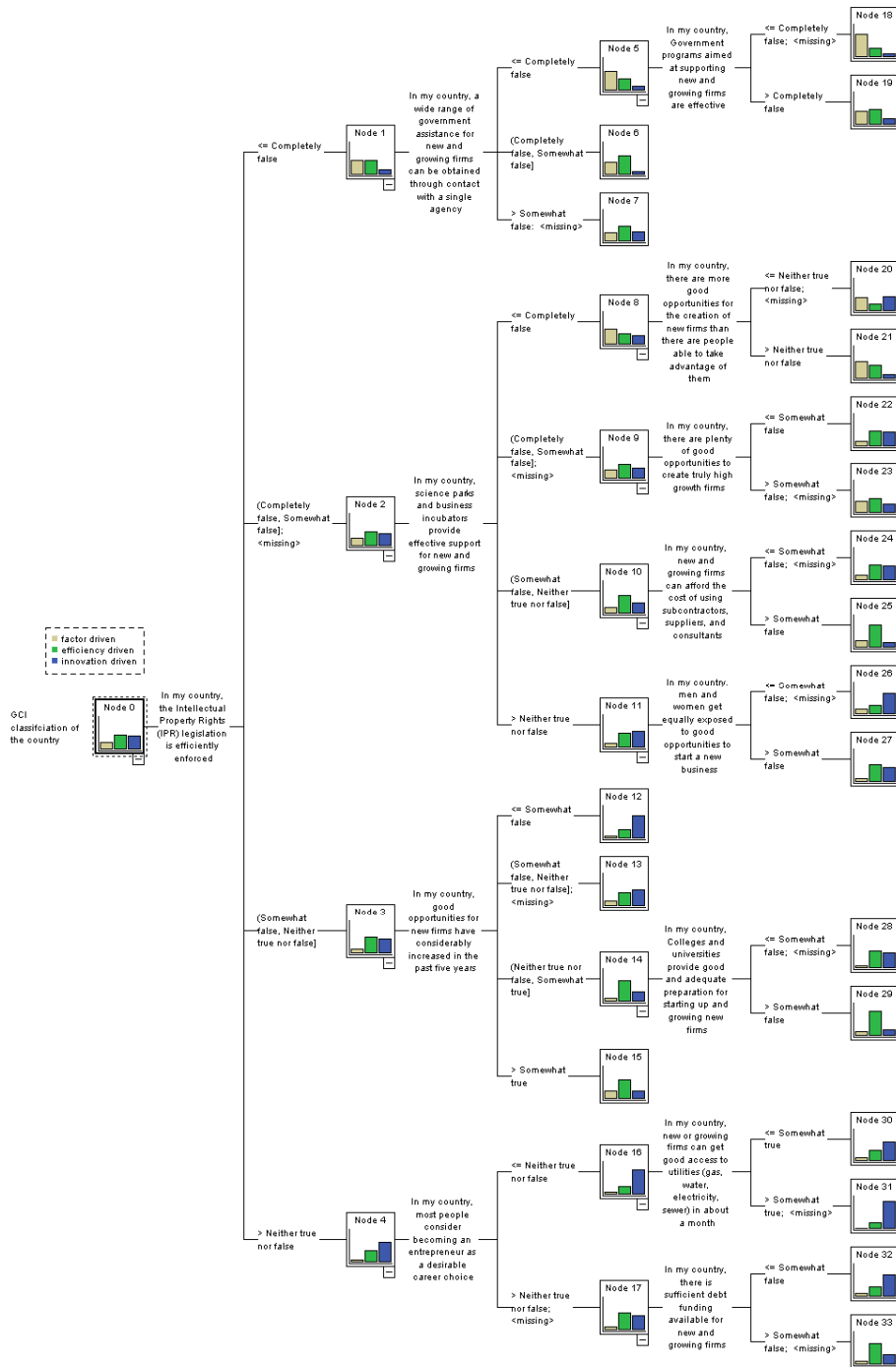


Figure 1. Results of the exhaustive CHAID analysis

Source: own study.

of its most important elements; new and differentiated products are invented, which increases competition. In order to secure the profitability of a differentiated product the entrepreneur needs a guarantee of the protection of his intellectual property.

The experts who believe that the intellectual property rights legislation is not effectively enforced in their countries also say that the availability of government assistance for new and growing firms through contact with a single agency is not possible. Furthermore the experts who believe that both factors are completely false for their country also reject the idea that government programmes targeting new and growing firms are effective.

Clearly this situation is the case of most factor-driven economies and some efficiency driven economies. The situation can be linked to the key factor "institutions" as one of the twelve pillars of competition and which is a basic requirement for factor-driven economies. An institutional framework is one of the important things the governmental structure has to establish and preserve in order for the economy to be successful. Of course being in the stage of a factor-driven economy may be "too early" for an effective enforcement of intellectual property rights legislation, even if there is one, since the technological structure of the economy in this early stage is either based on importing the technologies from more innovative countries or by imitating them. However even if there are some inventions both corruption and bureaucracy can be factors which may endanger the enforcement process. Anokhin and Schulze [2009] demonstrate the result that through more innovation corruption can be taken under control.

In the literature there is an ongoing debate as to whether intellectual property rights have a positive effect on economic growth in developing countries; the empirical evidence is mixed [Adams, 2004 p. 4-6]. This can also be seen for the cases of both government assistance through a single agency and government programmes targeting new and growing firms. The first case is more focused on the bureaucratic costs.

In some cases innovation-driven European economies have more bureaucratic processes than less innovative economies. For example, Djankov, La Porta, Lopez-de-Silanes and Shleifer [2002] focused on the regulation of entry for start up firms in an empirical research on 85 countries. They compare the time and costs of beginning to operate a firm legally in New Zealand and in France; whereas in New Zealand this process takes place in three days, in France it takes 53 days [Djankov et al., 2002, p. 12]. Furthermore their findings suggest that "heavier regulation of entry is generally associated with greater corruption and a larger unofficial economy, but not with a better quality of private or public goods." [Djankov et al., 2002, p. 37].

In the second case the relevant question is not about the existence of the programmes but rather on their effectiveness. Both corruption and bureaucracy can be possible impediments where the distinction between factor-driven and efficiency-driven economies can be a distinguishing feature of a well-functioning institutional framework. Another possible impediment may be the ineffectiveness of the government programmes to reach new and growing firms, or to address their needs.

For the experts who say that the effective enforcement of the intellectual property rights legislation in their countries is somewhat false, the effective support of science parks and business incubators for new and growing firms was considered important. The experts who believe that both factors are either completely false or somewhat false for their country believe that the opportunities exist for creating high growth firms and there are more

opportunities for new firms than people who can perceive these opportunities. Obviously the situation described is typical for factor-driven economies. Also for factor-driven economies the existence of opportunities to create high growth firms is “somewhat true”.

For efficiency-driven economies, the case of science parks and business incubators is “somewhat false”, hence, emphasizing the issue of the transformation from being importers of new technologies to being both importers and developers of these. Although science parks, places where universities, industry and governments contribute to develop projects, are more common for innovation-driven economies, business incubators may be more typical for efficiency-driven economies. This can be explained with the two pillars “higher education and training” and “technological readiness” as two key factors for the efficiency-driven economies – at this stage, business incubators dedicated to the creation of new firms can have a coordination and support role.

Innovation-driven economies, on the other hand, are characterized by the fact that the opportunities are not more than the number of people who can perceive and take advantage of them; this may be interpreted as a reference to the key factors “business sophistication” and “innovation” of the innovation-driven economies. For innovation-driven economies the emphasis is more on business sophistication than on the creation of high growth firms; this stage is characterized by firms developing global strategies and replacing hierarchical structures through dividing the power amongst their sub-units.

For the experts describing the effective enforcement of the intellectual property rights legislation in their countries as “somewhat false” and being neutral on the effective support of science parks and business incubators, costs for new and growing firms to use subcontractors, suppliers and consultants was determined as an important question. The experts who believe that the first factor is somewhat false and the second factor is indecisive for their country also believe that new and growing firms cannot afford the costs of using subcontractors, suppliers and consultants.

The question was clearly rejected by the vast majority of experts from innovation-driven economies. The reason may be the blocked entry to the market by new firms caused by larger firms with global strategies. Competition is bigger, structures to support firms are more established than other stages of economic growth and due to the key factor of business sophistication, the competition is based on differentiated products – in order to enter a market, a new or a growing firm first has to “invent” a good which really differs in its properties from the other goods of the same market. An example is the increasing number of smart phone apps which discover and exploit market gaps, such as Uber from the USA.

Of course this notion is more dependent on research and development costs than in the case of a new firm in a factor-driven economy, which focuses on the production of a “simple” good with “known” technology and competes with the others on the basis of the price; intellectual property rights do not play a role and firms imitate each other's technologies (or the technologies of more innovative economies).

The situation may be “neutral” in the case of efficiency-driven and factor-driven economies due to a number of reasons. First of all, based on the survey, it is not clear whether business incubators or science parks exist in such economies. Second, even if they exist, new and growing firms cannot afford them, not because of the established structures as in the case of innovation-driven economies, but (most probably) due to lack of capital to invest. Hence efficiency-driven economies are characterized by foreign direct investments.

In the initial Porter model this stage of development was described as investment-driven; therefore the establishment and success of firms depend on foreign capital inflows. Third, it may be unclear to the experts whether the support of these structures are effective due to other reasons, since in the factor-driven and efficiency-driven stages of economic development, key factors other than the effects of science parks may determine the success of a firm, e.g. macroeconomic instability or lack of qualified labour.

The experts who believe that the effective enforcement of the intellectual property rights legislation in their country is somewhat false and the support of science parks and business incubators is effective for new and growing firms. The issue of gender equality was determined as an important question. The experts who believe that the first factor is somewhat false and the second factor is somewhat true or true for their country believe that men and women get equal opportunities to start a new business. This was more typical of efficiency-driven economies. This can be related to "higher education and training" as a key factor to the efficiency-driven economies. It may be the case that potential women entrepreneurs get vocational education and support programmes through non-governmental organizations or public institutions in order to equalize their chances. Another example would be to give microcredit to women in order to encourage them to be entrepreneurs. Although this may be perceived as women having better chances than men to start a new business in an innovation driven economy it may be seen as the equalization of chances in an efficiency-driven economy, if the women usually do not work.

For the experts describing the effective enforcement of the intellectual property rights legislation in their countries as "neither true nor false", good opportunities for new firms in the past five years was considered as an important variable. For the experts from innovation-driven economies, the existence of these opportunities could not be observed. In innovation-driven economies the focus is more on diversified, sophisticated products which need more effort and more knowledge than big competitors which act globally with the absence of hierarchical structures. For the experts from efficiency driven and some factor driven economies this statement was accepted. Those experts who evaluated the first statement as "neither true nor false" and the second statement as "somewhat true", good and adequate preparation for starting and growing firms by universities and colleges was considered as an important variable; the tendency to be neutral was more common for efficiency driven and some factor driven economies also in this case.

Finally there are some experts, especially from innovation-driven economies, who accept the statement on the effectiveness of the legislation of intellectual property rights. Some experts from efficiency driven and factor driven economies seem to agree with this statement. This also reflects the subjective character of the survey and by extension, possibly, different perceptions of the issue of intellectual property rights.

For the case of the agreement on the statement, the question of entrepreneurship as a desirable career choice was considered important. The experts who agreed on the effectiveness of the intellectual property rights legislation and people's consideration of entrepreneurship as a desirable career choice were mainly from efficiency-driven economies. Similar to the interpretations above the consideration can be based on the chances for new firms as well as for the "market openness", which is a key factor to the efficiency-driven economies also for this case.

Market openness considers, amongst other things, also the readiness of consumers to buy new products, or to buy “usual” products from new firms. Clearly economists from efficiency-driven countries see bigger opportunities for potential entrepreneurs in these economies than in other stages of economic growth. It may be more common for innovation-driven economies to have entrepreneurs who are scientists or engineers, or entrepreneurs who can commercialize the ideas of scientists and engineers with their firms. For the experts from innovation-driven economies it may be more common to reject the statement that many people consider being an entrepreneur as a desirable career choice because of different entrepreneurial structures; it may even be the case that many people consider being a scientist and engineer working for industry as a desirable career choice. This consideration is not reflected in the survey.

The experts who agreed on both statements also agreed on the fact that there is sufficient debt funding available for new and growing firms. Clearly the agreement on all three statements simultaneously reflects the situation on factor-driven and efficiency-driven economies. Debt funding generally involves a firm getting a loan from a bank or a financial institution without giving a part of the company to that institution [NFIB, 2009, p. 1]. This can be associated to the pillar of “financial market development” which is a key factor of efficiency-driven economies.

For the experts who agreed on the statement of the effectiveness of intellectual property rights legislation but rejected the statement that many people consider being an entrepreneur as a desirable career choice, the variable “In my country, new or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month” was considered. The experts who considered this statement as “completely true” were mainly from innovation-driven economies. Clearly the conditions of economic activity are different across nations. This may have different explanations; it may be because of bureaucratic processes, because of states/cities not having enough money to provide these services quickly, or because of corruption, or a combination of some of these factors. Of course throughout these interpretations one aspect has to be clear: These are the subjective opinions of the experts. Although almost all nations fulfil the criterion on having at least four experts from nine different categories. These experts are only specified on small aspects which together constitute the bigger picture.

CONCLUSIONS

According to the decision tree analysis the most important structural similarity amongst innovation-driven economies is the role of intellectual property legislation, a very sound infrastructure and a well-functioning bureaucracy – however, at the same time, the non-affordability of science parks and business incubators for newly founded firms is also important.

The most heterogeneous group of economies amongst the three categories appears to be the efficiency-driven economies; however structural similarities are entrepreneurship as a desirable career choice, perceived gender equality in business life, the ineffectiveness of intellectual property legislation and government assistance to newly established firms.

In factor-driven economies, it is expected that there are more opportunities to create a new business than people who perceive them. Sufficient debt funding for new and growing firms is available. However governmental support lacks in factor-driven economies.

Based on the theoretical model it can be said that the stage of competitiveness can be associated with the effectiveness of governmental institutions, intellectual property legislation, gender equality, quick access to utilities and the discovery of opportunities by young entrepreneurs to establish new firms.

These structural similarities need to be analyzed in detail, especially according to the objective economic data, since the GEM NES survey has a subjective character. For future research the association of economic freedom and the stage of economic development need to be analyzed in detail. To fulfil this a complementary paper by the author focuses on the question as to whether the objective data from IEF and the subjective data from the GEM NES survey give the same tendencies in questions of entrepreneurship and economic freedom.

Through the given variables and the given decision tree, 56% of the cases could be classified correctly. The exhaustive CHAID analysis goes beyond Porter's model to classify countries according to their sources of competitiveness and innovativeness but also identifies their structural problems and opportunities for entrepreneurship.

REFERENCES

- Adams, S. (2004). Intellectual Property Rights, Innovation and Economic Growth in Sub-Saharan Africa. *ECPR Standing Group on Regulatory Governance, Third Biennial Conference*. <http://regulation.upf.edu/dublin-10-papers/2G3.pdf> last accessed on December 15, 2015.
- Anokhin, S., & Schulze, W. S. (2009). Entrepreneurship, innovation and corruption. *Journal of business venturing*, 24 (5), 465-476.
- Biggs, D., B. De Ville, and E. Suen (1991). A method of choosing multi-way partitions for classification and decision trees. *Journal of Applied Statistics* 18 (1), 49-62.
- Bjørnskov, C., & Foss, N. J. (2007). Economic freedom and entrepreneurial activity: Some cross-country evidence. *Journal of Public Choice* 2008, 134, 307-328.
- Bosma, N. (2012). The Global entrepreneurship monitor (GEM) and its impact on entrepreneurship research. *Global Entrepreneurship Monitor working paper series*, 12 (1).
- Bosma, N., Coduras, A., Litovsky, Y., Seaman, J. (2012). *GEM Manual: A report on the design, data and quality control of the Global Entrepreneurship Monitor*. Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak.
- Castillo, M. d. L. G. (2012). *Modelling Patient Length of Stay in Public Hospitals in Mexico*. University of Southampton.
- Clementine (2006). *SPSS Clementine Algorithms Guide*. Integral Solutions Limited.
- Coduras, A. & Autio, E. (2013). Comparing subjective and objective indicators to describe the national entrepreneurial context: the Global Entrepreneurship Monitor and the Global Competitiveness Index contributions. *Investigaciones Regionales*, 26, 47-74.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A. (2002). The Regulation of Entry. *The Quarterly Journal of Economics*, CXVII (1), 1-37.
- Eriksson, J. (2013). Global Competitiveness and Innovation. <http://blog.bearing-consulting.com/2013/10/13/global-competitiveness-and-innovation/> last accessed on December 15, 2015.
- Erkut, B. (2016). Entrepreneurship and Economic Freedom: Do Objective and Subjective Data Reflect the Same Tendencies? *Entrepreneurial Business and Economics Review*, 4(3), 11-26, DOI: 10.15678/EBER.2016.040302

- Global Entrepreneurship Research Association (2010). National Experts Survey Global National Level Data. <http://www.gemconsortium.org/docs/3134/gem-2010-nes-global-national-level-data> last accessed on December 10, 2015.
- Global Entrepreneurship Research Association (2010). National Experts Survey Global Individual Level Data. <http://www.gemconsortium.org/docs/3135/gem-2010-nes-global-individual-level-data> last accessed on December 10, 2015.
- Han, J., Kamber, M. (2001): *Data Mining: Concepts and Techniques*. Elsevier Ltd., Oxford.
- Hayek, F. A. (1968): Competition as a Discovery Procedure. English translation by Marcellus S. Snow. *Quarterly Journal of Austrian Economics*, 5(3), Falls 2002, 9-23.
- IBM (2011): *IBM SPSS Decision Trees 20*
- Kelley, D.J., Bosma, N.; Amorós, J.E.(2011): *Global Entrepreneurship Monitor. 2010 Executive Report*. Babson College, Universidad del Desarrollo.
- Koellinger, P. (2008). Why are some entrepreneurs more innovative than others? *Small Business Economics*, 31 (1), 21-37.
- Lehmann-Waffenschmidt, M. (2008). Strukturähnlichkeiten und –ungleichheiten evolvierender Ökonomien. *Wissenschaftliche Zeitschrift der Technischen Universität Dresden*, 57 (3-4), 105-109.
- McCreadie, K. (2009). *Adam Smith's The Wealth of Nations: A Modern Day Interpretation of an Economic Classic*. Infinite Ideas Limited.
- National Federation of Independent Business (2009). Debt vs. Equity Financing: Which is the best way for your business to access capital? <http://www.nfib.com/article/ital-50036/> last accessed on December 6, 2015.
- Nisbet, R., Elder IV, J., Miner, G. (2009). *Handbook of Statistical Analysis and Data Mining Applications*. Academic Press.
- Porter, M. E. (1990a). *The competitive advantage of nations*. Free Press, New York.
- Porter, M. E. (1990b). The competitive advantage of nations. *Harvard Business Review*, 68 (2), 73-93.
- Rudin, C. (2012). Decision Trees MIT 15.097 Course Notes. http://ocw.mit.edu/courses/sloan-school-of-management/15-097-prediction-machine-learning-and-statistics-spring-2012/lecture-notes/MIT15_097S12_lec08.pdf last accessed on January 29, 2016.
- Wennekers, S., van Stel, A., Thurik, R., Reynolds, P. (2005). Nascent Entrepreneurship and the Level of Economic Development, *Small Business Economics*, vol. 24(3) 293-309.

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Entrepreneurship and Economic Freedom: Do Objective and Subjective Data Reflect the Same Tendencies?

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Abstract

The paper addresses the question whether the same tendencies on entrepreneurship, innovation and economic freedom can be captured by subjective (Global Entrepreneurship Monitor) and objective (Index of Economic Freedom) data – and to which extent one can classify countries by different data sources in a theoretical framework based on the national competitiveness of each country. Main method used was the direct discriminant analysis. Since this approach has shortcomings, selected variables from an exhaustive CHAID analysis (Erkut, 2016a) were used to predict the degree of economic freedom of the country based on the answers of experts. To determine the degree of economic freedom in a country, the effective enforcement of intellectual property rights legislation and quick access to utilities are the two variables with the most informational content. 86.8% of the original grouped cases was classified correctly – this is above the widely accepted threshold of 75%. A new trend in entrepreneurial research is to build compound indices based on different data sources. It is important to understand whether parts of a compound index reflect the same tendencies.

Keywords: entrepreneurship; economic freedom; innovation; discriminant analysis

JEL codes: C53, L26, O38

INTRODUCTION

Although the concept of economic freedom is a subjective matter, surveys and composite indices were constructed in the past to measure the degree of economic freedom, as well as entrepreneurship activity and how innovative individual countries are.

Research on entrepreneurial activity has increased in the recent years. According to Coduras and Autio (2013, p. 49), more effort has to be put to determine the usefulness of the data resources on entrepreneurship, since the tendency is to offer integrated information instead of observing partial aspects in an isolated fashion – in other words, integrated indices on entrepreneurship need a careful selection of indicators. According to Coduras and Autio (2013), the most advanced integrated index is the Global Entrepreneurship and Development Index (GEDI), proposed by Zoltan Acs and Laszlo Szerb in 2008. This integrated index uses objective and subjective data to bridge the gap between entrepreneurship, individuals and institutions.

The focus of this paper is on the Global Entrepreneurship Monitor (GEM) and the Index of Economic Freedom (IEF). GEM is a subjective survey bridging the gap between innovativeness and entrepreneurship, thus differing from other indexes and focusing both on the opinions of experts as well as citizens, trying to categorize the participating countries by means of their economic activities and innovative openness. IEF is an index based on hard facts of the participating countries, which tries to categorize countries by their degree of economic freedom – emphasizing how easy or hard it is for the individuals to “work, produce, consume and invest” (Heritage Foundation, 2016) without any significant impediments. Both data sources are used in the GEDI.

The research question is whether the same tendencies on entrepreneurship, innovation and economic freedom can be captured by subjective (GEM) and objective (IEF) data – and to which extent one can classify countries by different data sources in a theoretical framework based on national competitiveness of each country.

This research question will be answered by using linear discriminant analysis based on previously selected variables by a decision tree algorithm (Erkut, 2016a) as an attempt to reduce the dimension of the data. The selected variables will be used to understand whether one can have the same classification for the degree of economic freedom with the subjective data on entrepreneurship. The rest of the paper is as follows: After a literature review, the theoretical models of GEM and IEF will be introduced. The methods will be clarified; the results will be presented and discussed. A conclusion follows, where the limitations on research will be discussed.

LITERATURE REVIEW

Since the research trend is tending to build composite entrepreneurship indicators based on subjective and objective data, the importance of data sources to be used in such indicators must be analysed deeply, and it is necessary to put more effort for the assessment of the relevance of information sources to the entrepreneurial research context. Entrepreneurial measurements should offer integrated information to the users (Coduras & Autio, 2013, pp. 48-49). These measurements necessarily need to combine both the perceptions regarding entrepreneurship and hard facts from objective data.

The context of the research is framed within the background of market processes, where entrepreneurs are the driving forces behind these processes. To be more precise, entrepreneurs are seen as forces that are “keeping the economy in continual motion, urged on to incessant progress” (Gustafson, 1992, p. 5). For the emergence of long-term growth, both technological progress and the associated introduction of novelties (innovative services and goods) to the economy are the most important causal factors (Lehmann-Waffenschmidt, 2008, p. 108).

Indeed, to avoid the pretence of knowledge (Hayek, 1989), not central planners but individuals can be entrepreneurially active and offer solutions to problems they perceive in the society, with their uniquely possessed knowledge, since “the knowledge of circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess.” (Hayek, 1945, p. 519). Entrepreneurial discovery drives market processes (Kirzner, 1997, p. 62). According to Wong, Ho and Autio (2005, p. 345), high potential total early stage entrepreneurial activity is the only factor which has a significant effect on growth rates. This hypothesis was confirmed in a cross-country, Cobb-Douglas production function type context in the authors’ research.

Individuals’ entrepreneurial activity alone is necessary, but not sufficient for the long-term sustainable economic performance of a country – the idea behind fiscal freedom goes back to low tax burdens for entrepreneurial activity. Ockey (2011) uses the data from IEF to test the hypothesis of a positive correlation between economic freedom and fiscal performance. The results of this paper confirm this hypothesis; furthermore, the results also suggest that trade freedom and property rights also contribute to the economic performance of a country, the latter having a positive relationship with fiscal performance (Ockey, 2011, p. 15).

Employing the idea of disaggregating the determinants of economic freedom, Heckelman and Stroup (2000) focus on the isolated effects of the non-aggregated determinants of economic freedom on economic growth, by using a procedure based on the relevance of each factor determined by a multivariate regression procedure. According to their findings, “differences in economic freedoms between nations can explain almost half of the variation in growth” (Heckelman & Stroup, 2000, p. 542). The conclusion is in line with Erkut’s (2016a) empirical work regarding the structural similarities of countries for competitiveness and innovation.

In this study, Erkut (2016a) focuses on the GEM national experts survey (NES) dataset for understanding how similar experts from countries belonging to the same stage of economic development observe impediments on competitiveness and innovativeness of their country. By using a decision tree algorithm, the author extracts 12 variables that describe more than half of the variation within the dataset. Effectiveness of governmental institutions, intellectual property legislation, gender equality, quick access to utilities and the discovery of opportunities by young entrepreneurs to establish new firms altogether constitute the most important factors extracted to explain the variation in the dataset.

Especially the role of intellectual property rights as the variable with the highest explanatory power (Erkut, 2016a) suggest the move towards a knowledge-based economy, where freedoms of individuals engaging in economic activities play an important role “to

pursue, explore or implement new ideas” (Audretsch & Thurik, 2000, p. 24). Therefore, policy designs should aim to deliver strategies for the emergence of firms’ success and their sustainability (Audretsch & Thurik, 2000, p. 32) without intervening in the planning decisions of individuals. In this sense, understanding economic freedom and impediments towards reaching economic freedom gain importance.

Snodgrass (2008) compares alternative business enabling environment indices based on those countries, in which USAID works. He finds out that GEM findings on bureaucracy differs from the Doing Business Index of the World Bank by means of the ranking of countries, and based on this fact, he says that “no one index merits exclusive reliance” (Snodgrass, 2008, p. 12).

Hanke and Walters (1997, p. 126) find out that IEF is positively correlated with the Economic Freedom of the World Index of the Fraser Institute. According to the authors, differences between the two indices are in their views of monetary policy and government size, the latter being neutral in case of government size. This is a critical point in answering the question of who will plan the economic activity in a country. Hayek (1945, p. 524) asks this question for clarifying responses to “rapid adaptation to changes in particular circumstances of time and place”, where a central board cannot be efficient on deciding what to plan for the economy. The policy implication is known to be the decentralisation of the economy, where government intervention does not occur; through that way, individuals can plan accordingly, using their specific knowledge to provide solutions to market gaps. In line with Hayek’s (1945) point of view, IEF is chosen to be the index capturing this necessary aspect of knowledge problem in the society.

In an early work, McMullen, Bagby and Palich (2008) focus on opportunity-motivated entrepreneurship and necessity-motivated entrepreneurship and explain them with the ten factors of economic freedom as well as GDP level. The novelty of their paper lies within the two distinctions of entrepreneurial activity and how these two are differently influenced by government’s different restrictions on different factors of economic freedom (McMullen *et al.*, 2008, p. 889).

In an attempt to compare GEM and IEF, Diaz-Casero, Diaz-Aunion, Sanchez-Escobedo, Coduras and Hernandez-Mogollon (2012, p. 1708) make use of three questions building together the total entrepreneurial activity index. According to the findings, government size and fiscal freedom fosters entrepreneurial activity. Furthermore, for the group of countries classified as innovation-driven economies, an overall increase in economic freedom has a positive impact on opportunity based entrepreneurship.

Kuckertz, Berger and Mqepa (2016) employ a fuzzy-set qualitative comparative analysis approach for analysing the link between economic freedom and entrepreneurial activity based on IEF. The focus on configurations of the factors of economic freedom shows that these vary according to the stage of economic development (Kuckertz *et al.*, 2016, p. 1292). The authors conclude that economic freedom is more able to explain necessity driven entrepreneurship than opportunity driven entrepreneurship.

Although there is this distinction in the literature, it is true that both necessity driven and opportunity driven types of entrepreneurship go back to the introduction of a novel product to the economy, where perceptions of economic actors play an important role in perceiving information and transferring it to knowledge in their minds. Since knowledge is dispersed in the society, every economic actor possesses a piece of the dispersed

knowledge, which is their competitive advantage if they utilize this knowledge in form of a product and the corresponding business conception (Erkut, 2016b). Therefore, the role of perceptions in new product development becomes equivalently important for both the opportunity driven and the necessity driven types of entrepreneurship. This is what Erkut (2016b) calls the nano-dimension of the evolutionary economic analysis, which becomes the necessary step prior to the generation of knowledge.

Coduras and Autio (2013) implement an empirical methodology using discriminant and regression analyses; their focus is on the comparison of the Global Entrepreneurship Monitor with the Global Competitiveness Index (GCI). The authors find out that the GEM data can be seen as a complementary data source to the GCI (Coduras & Autio, 2013, p. 71). For further research, they suggest a research program based on the comparison of GEM with other relevant, subjective (IEF) and objective (Ease of Doing Business Index) data sources which are used to build up the composite GEDI, which is the point of departure for the research question to be answered in this analysis.

In this sense, this analysis can be seen as a continuation of the Coduras-Autio research program on comparison of different data sources composing GEDI for the tendency of concordance. This analysis is needed for understanding the importance of complementary objective and subjective data sources. It can also be the source of ideas towards shaping the economic landscape for enabling entrepreneurial activity in a free market economy without impediments or bureaucracy that keep individuals away from shaping the market process.

MATERIAL AND METHODS

Theoretical GEM Model

GEM was launched with the target of creating a possibility for the comparison of entrepreneurship on an international level in 1997 (Kelley, Bosma & Amoros, 2011, p. 61). Bosma, Coduras, Litovsky and Seaman (2012, p. 4) state that until the launch of GEM, an international comparison of entrepreneurial data was not possible due to differences in government databases and missing entrepreneurial data in some countries.

GEM defines entrepreneurship as “any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business” (Bosma *et al.*, 2012, p. 20).

GEM’s objectives are based on a number of premises, which implicitly imply the economic freedom of individuals in a broad sense (Bosma *et al.*, 2012, pp. 7-8): (1) Economic growth depends on the dynamics of the entrepreneurial activities, (2) Economies requires individuals who are able and motivated to be entrepreneurs, and a society accepting and supporting entrepreneurs, (3) Entrepreneurs need to be ambitious.

Since the first GEM global study in 1999, both quality of the research methodology and the quality of surveys tend to increase. GEM comprises a wide range of developing and developed economies of over 50 nations and is conducted by a consortium of universities. It differs from other surveys on the same field by means of two guiding purposes (Kelly *et al.*, 2011, pp. 13-15): First of all, GEM aims to focus on venture creation, whereas other studies on entrepreneurship focus on firm-level data. Second, GEM aims to promote

entrepreneurship as an ongoing, dynamic process. Implicitly, this second guiding purpose implicitly describes entrepreneurship as a living organism with the phases beginning “from intending to start, to just starting, to running new or established enterprises and even discontinuing these” entrepreneurial activities (Kelley *et al.*, 2011, p. 13). It categorizes countries by means of their entrepreneurial activities according to the theoretical framework of national competitiveness by Porter (1990a, 1990b).

GEM is based on two parts: an adult population survey (APS) and a national experts survey, which both are subdivided into global-individual level datasets and national summaries. APS is aimed to identify aspirations, entrepreneurial attitudes and activities of individuals, whereas NES is targeted at (at least 36) national experts of each country, which focuses on the nine key Entrepreneurial Framework Conditions (EFC) which are listed as finance, government policies, government programs, entrepreneurial education and training, R&D transfer, commercial and professional infrastructure, internal market openness, physical infrastructure and services, cultural and social norms (see e.g. the website of GEM consortium) and further topics listed as degree of skills and abilities to start up in the population, opportunities to start up, high growth businesses support, women’s entrepreneurship support, and encouragement in addition. These EFC are associated with the theoretical model of Porter (Ahlstrom & Bruton, 2010, p. 437). The current, revised GEM model relies on the typology of Porter (1990a, 1990b) to categorize the economies as “factor-driven”, “efficiency-driven” and “innovation-driven” within an entrepreneurial framework. The target of the revision was set to be the description and the measurement of the conditions, which can lead to economic growth based on entrepreneurship and innovation.

Theoretical IEF Model

IEF was launched jointly by The Wall Street Journal and The Heritage Foundation (an American conservative think tank) in 1995 with the aim of developing “a systematic, empirical measurement of economic freedom in countries throughout the world” (Holmes, Feulner & O’Grady, 2008, p. 1).

IEF defines economic freedom as a notion which encompasses “all liberties and rights of production, distribution, or consumption of goods and services” (Miller & Kim, 2010, p. 58). With the existence of the rule of law and the protection and respect of the individual freedoms by the state, people should be able to consume, produce, invest and work freely. Based on this definition, economic freedom is measured by using ten different components, which are relevant to economic development and national welfare as well as the welfare of each individual. The ten economic freedoms are (1) business freedom (“the individual’s freedom for founding and running a firm without state intervention”), (2) trade freedom (“how open is the economy to international trade”), (3) fiscal freedom (“to what extent does the government permit persons to use their income and wealth for themselves”), (4) government spending (“is there excessive government spending which may lead to a crowding out of the private consumption?”), (5) monetary freedom (“is the currency stable?”, “are the prices determined by markets?”), (6) investment freedom (“is there an open investment environment?”), (7) financial freedom (“how transparent is the financial system?”), (8) property rights (“are people able to accumulate private property and wealth?”), (9) freedom from corruption (“do the individuals gain personally at the expense of the whole by being dishonest?”) and

(10) labour freedom (“are the individuals able to work as much as they want and wherever they want?”). Each component is scored on a 0 to 100 scale individually. The simple average of these scores builds the overall economic freedom of a nation (Miller & Kim, 2010, p. 60), where each component is treated equally. For each component, there are different data sources to calculate the score (for the calculation methods see the Miller & Holmes, 2010, pp. 457-468).

Discriminant Analysis

The purpose of the analysis is to compare the results of GEM expert survey with the IEF results as different sources of information regarding entrepreneurship and to understand if one can classify countries for the degree of economic freedom according to IEF with the results of GEM expert survey.

Therefore, the research hypothesis is that the GEM NES results can classify the 53 nations participating in GEM for the corresponding IEF stages of economic freedom. Since GEM NES results are subjective results based on the opinions of experts, whereas IEF results are objective results based on statistics and economic hard facts, the aim is to analyse if one can find a link between objective and subjective data on entrepreneurship and economic freedom.

Discriminant analysis consists of two sources of data: The results of the 2010 GEM NES survey and the economic freedom scores of 2010 IEF. A methodological issue arises from the categorization of countries according to their respective economic freedom scores. In the 2010 IEF, there are 4 countries categorized as “repressed”, 11 countries which are categorized as “mostly unfree”, 27 countries which are categorized as “moderately free”, 9 countries which are categorized as “mostly free” and only 2 countries which are categorized as “free”. Of course, this classification does not reflect the whole IEF but only the proportion of 53 countries which are considered in both GEM and IEF. Because of this uneven distribution, these five groups will be combined into three groups; “repressed/mostly unfree” with 15 countries, “moderately free” with 27 countries and “mostly free/free” with 11 countries. The aim of this reduction is to have enough observations for all categories to proceed with the analysis.

Independent variables are those that are selected by a decision tree algorithm to describe the data set in a reduced dimension, explaining 56% of the variance in the data set (Erkut, 2016a). These are Likert scaled variables, which can be treated as interval scales for data analysis (Brown, 2011). The method for the discriminant analysis is the direct method, which takes in all the independent variables simultaneously in the analysis. For three categories, two discriminant functions will be estimated. The starting point is a univariate ANOVA analysis, which shows how each independent variable can classify the three groups individually. For the classification, the a-priori probabilities will be chosen to be computed from the group sizes. Also, separate covariance matrices will be used. The strength of this method is drawing boundaries between groups of data with the target, having similar data points (in terms of their closeness) in the same group and having different data points in different groups. However, it is fair to mention that this method does not work if there is not a minimum number of cases in each group.

RESULTS AND DISCUSSION

Results

From the univariate ANOVA analysis (Table 1), it can be seen that five out of twelve variables can classify the three groups significantly with a given 0.05 significance level.

Table 1. Univariate ANOVA Analysis

Variables	Wilks' Lambda	F	df1	df2	Sig.
Intellectual Property Rights (IPR) legislation is efficiently enforced	0.510	24.067	2	50	0.000
New or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month	0.600	16.666	2	50	0.000
Sufficient debt funding available for new and growing firms	0.986	.348	2	50	0.708
Good opportunities for new firms have considerably increased in the past five years	0.986	.361	2	50	0.699
Colleges and universities provide good and adequate preparation for starting up and growing new firms	0.930	1.875	2	50	0.164
Men and women get equally exposed to good opportunities to start a new business	0.959	1.064	2	50	.353
Plenty of good opportunities for the creation of new firms	0.958	1.105	2	50	0.339
More good opportunities for the creation of new firms than there are people able to take advantage of them	0.980	0.499	2	50	0.610
Government programs aimed at supporting new and growing firms are effective	0.829	5.139	2	50	0.009
A wide range of government assistance for new and growing firms can be obtained through contact with a single agency	0.865	3.895	2	50	0.027
Science parks and business incubators provide effective support for new and growing firms	0.713	10.048	2	50	0.000
Most people consider becoming an entrepreneur as a desirable career choice	0.944	1.471	2	50	0.240

Source: Author's own calculations using SPSS.

In table 2 the functions at group centroids can be seen. It is important to see that function 1 separates the mostly free or free countries from those which are moderately free and repressed or mostly unfree; centroids are average discriminant scores for each discriminant function.

At this stage, the goodness of fit of the discriminant functions has to be understood. For this purpose, the eigenvalues and Wilks' Lambda for the two discriminant functions can be observed in tables 3 and 4 respectively.

From the eigenvalues, one can see that with 16.1% of the explained variance, the second discriminant function has a lower explanatory power than the first one, which explains 83.9% of the variance. Canonical correlations are 0.786 and 0.488 respectively.

The relative importance of each variable can be seen from the structure matrix in table 5, where correlations of the variables with the discriminant functions are given.

The given correlations are Pearson correlation coefficients and show that the variables “In my country, the Intellectual Property Rights (IPR) legislation is efficiently enforced”, “In my country, new or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month”, “In my country, science parks and business incubators provide effective support for new and growing firms”, “In my country, Government programs aimed at supporting new and growing firms are effective”, and “In my country, a wide range of government assistance for new and growing firms can be obtained through contact with a single agency” have a higher correlation with the first discriminant function.

Table 2. Functions at group centroids

Country group at IEF Report 2010, 3 Categories	1	2
Repressed / Mostly Unfree	-1.444	-0.586
Moderately Free	-0.063	0.532
Mostly Free / Free	2.123	-0.505

Source: Author's own calculations using SPSS.

Table 3. Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.619 ^a	83.9	83.9	0.786
2	0.312 ^a	16.1	100.0	0.488

a. First 2 canonical discriminant functions were used in the analysis.

Source: Author's own calculations using SPSS.

Table 4. Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 2	0.291	54.919	24	0.000
2	0.762	12.077	11	0.358

Source: Author's own calculations using SPSS.

The variables “In my country, most people consider becoming an entrepreneur as a desirable career choice”, “In my country, Colleges and universities provide good and adequate preparation for starting up and growing new firms”, “In my country, there are plenty of good opportunities for the creation of new firms”, “In my country, there are more good opportunities for the creation of new firms than there are people able to take advantage of them”, “In my country, there is sufficient debt funding available for new and growing firms” and “In my country, men and women get equally exposed to good opportunities to start a new business” have a higher correlation with the second discriminant function.

The classification results on table 6 give an idea on how well the group memberships were predicted. Here, it can be seen that 86.8% of the original grouped cases was classified correctly. Since a widely accepted threshold in the literature is 75% and above, the discriminant analysis is acceptable.

Figure 1 is the all-groups scatter plot, which is based on the centroids of the three categories and the two estimated discriminant functions. The vertical axis has the values of the second function, whereas the horizontal axis has the values of the first function. The group (class) memberships were plotted with different types of points.

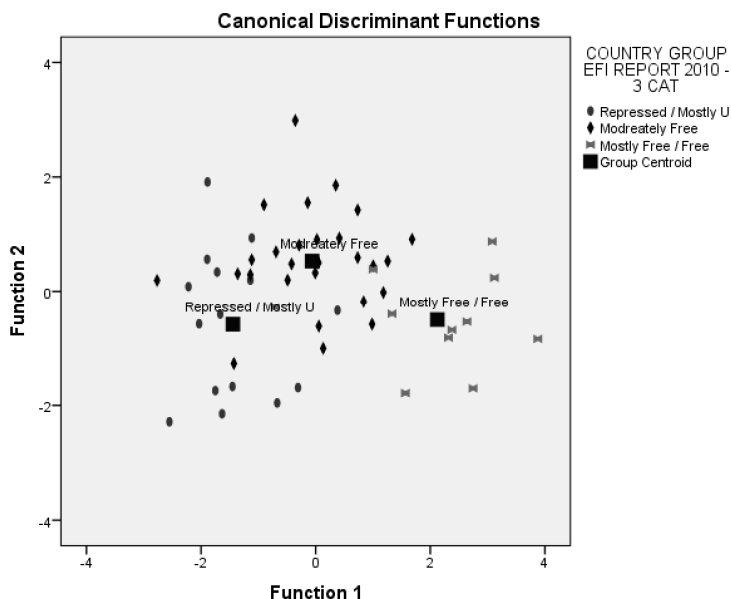


Figure 1. All-groups scatter plot

Source: Author's own illustration using SPSS.

Table 5. Structure Matrix

Variables	1	2
Intellectual Property Rights (IPR) legislation is efficiently enforced	0.768*	-0.149
New or growing firms can get good access to utilities (gas, water, electricity, sewer) in about a month	0.631*	0.262
Science parks and business incubators provide effective support for new and growing firms	0.492*	-0.174
Government programs aimed at supporting new and growing firms are effective	0.349*	-0.168
A wide range of government assistance for new and growing firms can be obtained through contact with a single agency	0.303*	0.155
Good opportunities for new firms have considerably increased in the past five years	-0.093*	0.035
Most people consider becoming an entrepreneur as a desirable career choice	-0.104	0.364*
Colleges and universities provide good and adequate preparation for starting up and growing new firms	0.154	0.343*
Plenty of good opportunities for the creation of new firms	0.087	-0.320*
More good opportunities for the creation of new firms than there are people able to take advantage of them	-0.056	-0.219*
Sufficient debt funding available for new and growing firms	0.019	0.207*
Men and women get equally exposed to good opportunities to start a new business	0.144	-0.169*

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions. Variables ordered by absolute size of correlation within function.

* Largest absolute correlation between each variable and any discriminant function

Source: Author's own calculations using SPSS.

Grey butterfly-like points representing mostly free and free countries are found at top right in the diagram, with high values of the first discriminant function and low values of the second discriminant function. Moderately free countries are found at the centre of the diagram with relatively higher values of the second discriminant function and relatively lower values of the first discriminant function; they are represented with rhombus black dots. Mostly unfree and repressed countries are found in the bottom left of the diagram with negative values of both discriminant functions; they are represented with round black dots.

Table 6. Classification Results

Country group at IEF Report 2010	Predicted Group Membership			Total
	Repressed / Mostly Unfree	Moderately Free	Mostly Free / Free	
Repressed / Mostly Unfree	12	3	0	15
Moderately Free	2	25	0	27
Mostly Free / Free	0	2	9	11
Repressed / Mostly Unfree	80.0	20.0	0	100
Moderately Free	7.4	92.6	0	100
Mostly Free / Free	0	18.2	81.8	100

Source: Author's own calculations using SPSS.

Although there are some outliers for the latter two cases, the conclusion is that a country with a high value of the first discriminant function and a low value of the second discriminant function can be assigned to the group of mostly free and free countries, whereas a country with low values of both functions can be assigned to the group of repressed and mostly unfree countries. A country with a high value of the second discriminant function and a low value of the first discriminant function can be assigned to the group of moderately free countries. Of course, due to the situation with the outliers, there might be difficulties with the classification, but it is not expected to classify 100% correctly due to different natures of objective and subjective data.

Discussion

Discriminant analysis is the main finding of this empirical research and gives answer to the question whether it is possible to classify the GEM NES participating nations in the corresponding stage of economic freedom according to IEF.

The result of the discriminant analysis was given as two discriminant functions. With the discriminant analysis, the correct classification of nations for the degree of economic freedom based on the subjective information given from GEM NES was 86.8%, which is a high correct classification rate.

It can be said that the classification was especially successful for moderately free countries (92.6% of the cases were classified correctly) and less successful for repressed/mostly unfree countries (80% of the cases were classified correctly) and mostly free/free countries (81.8% of the cases were classified correctly), where "less successful" is seen only by relative means – since the threshold of 75% was exceeded in all three groups, meaning that the analysis holds good explanatory power.

The misclassifications can be due to the fact that from the original five groups of IEF, three groups were created. This was necessary for the analysis to proceed, but the critical assumption can also be related to the GCI classification of countries. In the original setup, there are also two transition phases in addition to the three stages of economic growth due to Porter, which are “merged” in order to have a categorization based on three groups. Therefore, the overall classification was not endangered.

It is important to notice that all innovation-driven economies except USA were categorized correctly for the corresponding degree of their economic freedom. The analysis based on three groups was resulted with two discriminant functions. The first discriminant function showed a higher correlation with variables which can be considered as the institutional framework which can support new and growing firms. Intellectual property rights, quick access to utilities (gas, water, electricity, sewage), support of science parks, business incubators and government, reduced bureaucracy by offering a wide range of government services through a single agency and the environment of increased opportunities are key topics which can be associated with the first discriminant function. All variables except the last one were positively correlated with the first discriminant function.

The second discriminant function showed a higher correlation with variables which can be considered as the perceptual components for becoming an entrepreneur. Perceptions as a fuzzy front-end to generation of new knowledge was the point of view of Erkut (2016b). Entrepreneurship as a career choice, training programs, opportunities to create new firms, financial possibilities and equal opportunities based on gender equality are the key topics which can be associated with the second discriminant function, at first forming the perception of what entrepreneurship means by describing it in terms of the perception of the availability of opportunities. Whereas the opportunities were negatively correlated with the second discriminant function, financial possibilities and training programs as well as entrepreneurship as a career choice were positively correlated.

In the original five categories categorization of IEF in 2010, Chile was categorized as a “mostly free” country. Due to lack of observations for “free” countries, the two categories were merged to have the category of “mostly free/free” countries. Chile was misclassified as a “moderately free” country. Since Chile's overall freedom score, 77.2, is very close to the lower boundary of 80 points for being a free country, it is interesting to see why Chile was misclassified. From the detailed evaluation of the ten economic freedoms, it can be seen that Chile has an especially high score for property rights (Miller & Holmes, 2010, p. 148).

According to the GEM NES global-national level data, the average value for Chile corresponding to the effective enforcement of intellectual property rights is 3.0 – which means “neither true nor false” in the Likert scale. Also the statement on the effective support of science parks and business incubators was rejected by the experts from Chile in average (2.72). Therefore, not only the property rights were differently assessed (since IEF focuses on the property rights in a more general sense), but also business freedom was seen as more restrictive than it appears to be. Without some sort of support for start-ups, it is harder to enter into markets. Indeed, one can also say that based on the subjective opinion of experts, a more pessimistic evaluation of the country's economic freedom is realized as a result of the analysis. Corruption and high income taxes are the weaknesses

listed by the IEF for Chile (Miller & Holmes, 2010, p. 147); they have to be taken into account for explaining the pessimistic evaluation.

Also for Ecuador, the classification was not precise. In the original categorization, Ecuador was categorized as a “repressed” country; in the analysis, it was belonging to the group of “repressed/mostly unfree” countries, whereas it was classified by the analysis as a moderately free country. Interestingly, the result driven from the experts’ survey gives a more optimistic view of the degree of economic freedom.

An important point for Ecuador is the increasing government spending after the 2007 constituent assembly referendum (Miller & Holmes, 2010, p. 180). Since government spending is generally associated with short-term positive economic effects, this may also influence the opinion of the experts. From the global-national level GEM NES dataset, it can be seen that the statement “In my country, new or growing firms can get good access to utilities (gas, water, electricity, sewage) in about a month” has for Ecuador the national average 3.85 – which is closer to 4, “somewhat true” in Likert scales. According to the 2010 report of IEF, the regulatory environment has a negative effect on the start-ups (Miller & Holmes, 2010, p. 180). In this case, the opinion of the experts is different.

In the 2010 IEF, Uganda’s categorization corresponds to the category of a “moderately free” country. The result of the analysis suggests that Uganda is a “repressed / mostly unfree” country. Also in this case, experts’ opinion on the issue of intellectual property rights can play a role. The national average for Ugandan experts on the effective legislation of intellectual property rights corresponds to 1.48 – in Likert scales, 1 is “completely disagree” and 2 is “somewhat disagree”. Interesting for the Ugandan case is the different evaluation of IEF and GEM NES global-national level average value for the role of government programs supporting new and growing firms.

The Ugandan national level average value corresponding to the effectiveness is 2.03 – the experts disagree on the effectiveness of government programs in average, whereas the 2010 report of IEF says that “reforms have enhanced the entrepreneurial environment and fostered growth” (Miller & Holmes, 2010, p. 423). Uganda is below the world average for the time needed to start a business (25 days for Uganda, 35 days as world average) (Miller & Holmes, 2010, p. 424); therefore, there must be other factors that cause this divergence of interpretation, which is again subject to a more specific evaluation and analysis.

The last misclassified case is USA. The overall economic freedom score of the USA was 78.0 for 2010 – two points behind the threshold for being an economically free country, categorized as “mostly free”. As the categories merged, USA was in the group of “mostly free/free” countries. According to the results, USA was misclassified as a “moderately free” country. Both datasets are from the period of global economic and financial crises. Since USA was at the centre of these crises, it can be said that the experts’ evaluation was more pessimistic than the evaluation of IEF – the “crisis” effect. This can also be understood from the sharp drop of seven economic freedoms out of ten for the US (Miller & Holmes, 2010, p. 432), whereas in the previous evaluations USA was categorized as a free country.

CONCLUSIONS

Based on the empirical findings of the study, it can be said that subjective (GEM NES) and objective (IEF) data reflect the same tendencies concerning entrepreneurship and economic freedom. Intellectual property rights, quick access to utilities, a well-functioning bureaucracy and a government supporting entrepreneurs are important factors to understand the interactions between these central concepts. The findings are in line with Ockey's (2011) contribution showing the close relation between economic freedom and intellectual property rights as well as with McMullen *et al.* (2008) work explaining entrepreneurship with economic freedom. Furthermore, the findings can also be associated with the findings of Kuckertz *et al.* (2016) showing the variation of influence factors according to the stage of economic freedom.

The contribution of this paper to the literature is based on four points: First, it was shown that a balanced collection of objective and subjective data is necessary for entrepreneurship research, which was also the point of view of Coduras and Autio (2013). Second, a combination of both perceptions and infrastructure support in a wide sense were identified as explanatory clusters of variables for the classification of countries according to their stage of economic freedom. Third, in particular, it was empirically tested that with GEM NES data, IEF can be forecasted to a large extent, although some misclassified cases were observed; both are important for the construction of GEDI.

The fourth contribution of this paper is based on the perspective of an entrepreneurially driven market process (Kirzner, 1997). The role of perceiving opportunities as well as the role model of entrepreneurship and support opportunities build an important cluster of variables in the analysis. This cluster is a reflection of the role of perceiving conditions during the generation of new knowledge and the introduction of novelties to the economy.

Still, some research limitations need to be highlighted. The research was done with data from 53 countries which are covered in both sources; however, due to methodological difficulties, the original five-category IEF was reduced to a three-category IEF in order to have enough observations in every group. Also the original GCI classification was reduced to three categories instead of having two additional transition phases. These were necessary steps for proceeding with the analysis, but they resulted in some misclassifications. Furthermore, Likert scaled variables from GEM NES were treated as interval scaled in line with Brown (2011) and Coduras and Autio (2013) although some researchers classify Likert scaled variables as ordinal scaled. This is known to the author of the paper; the methodological issues were kept in line with the research program defined by Coduras and Autio (2013).

Overall, it is necessary to collect both objective and subjective data with respect to entrepreneurship, since only the combination of hard facts and subjective perceptions can give an overview of how free a country is in terms of its inhabitants' entrepreneurial activity, which is the driving force behind markets (Kirzner, 1997).

REFERENCES

- Ahlstrom, D., & Burton, G. (2010). *International management: Strategy and culture in the emerging world*. Mason, OH: South-Western Cengage Learning.
- Audretsch, D.B., & Thurik, A.R. (2000). Capitalism and democracy in the 21st Century: from the managed to the entrepreneurial economy. *Journal of Evolutionary Economics*, 10, 17-34.
- Bosma, N., Coduras, A., Litovsky, Y., & Seaman, J. (2012). *GEM Manual: A report on the design, data and quality control of the Global Entrepreneurship Monitor*. London: Global Entrepreneurship Research Association (GERA).
- Brown, J.D. (2011). Likert items and scales of measurement? *Shiken: JALT Testing & Evaluation SIG Newsletter*, 15 (1), 10-14.
- Coduras, A., & Autio, E. (2013). Comparing subjective and objective indicators to describe the national entrepreneurial context: The Global Entrepreneurship Monitor and the Global Competitiveness Index contributions. *Investigaciones Regionales*, 26, 47-74.
- Diaz-Casero, J.C., Diaz-Aunion, D.A.M., Sanchez-Escobedo, M.C., Coduras, A., & Hernandez-Mogollon, R. (2012). Economic Freedom and Entrepreneurial Activity. *Management Decision*, 50 (9), 1686-1711.
- Erkut, B. (2016a). Structural Similarities of Economies for Innovation and Competitiveness - A Decision Tree Based Approach. *Studia Oeconomica Posnaniensia*, 4(5), 85-104, DOI:10.18559/SOEP.2016.5.6
- Erkut, B. (2016b). From perceptions to new product development: product innovation & market shaping. *2016 NeuroPsychoEconomics Conference Proceedings*, 34.
- Gustafson, J.W. (1992). Entrepreneurship, Ideology and Economic Theory: An Appraisal. *The Journal of Economics*, 18, 1-7.
- Hanke, S.H., & Walters, S.J.K. (1997). Economic freedom, prosperity and equality: A survey. *Cato Journal*, 17(2), 117-146.
- Hayek, F.A. (1945). The use of knowledge in the society. *The American Economic Review*, 35(4), 519-530.
- Hayek, F.A. (1989). The pretence of knowledge. *The American Economic Review*, 79(6), 3-7.
- Heckelman, J.C., & Stroup, M.D. (2000). Which economic freedoms contribute to growth? *Kyklos*, 53(4), 527-544.
- Heritage Foundation (2016). 2016 *Index of Economic Freedom*. Retrieved on June 30, 2016 from <http://www.heritage.org/index/about>
- Holmes, K.R., Feulner, E.J., & O'Grady, M.O. (2008). *2008 Index of Economic Freedom*. Washington, DC: The Heritage Foundation.
- Kelley, D.J., Bosma, N., & Amoros, J.E. (2011). *Global Entrepreneurship Monitor 2010 Global Report*. London: Global Entrepreneurship Research Association (GERA).
- Kirzner, I. (1997). Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. *Journal of Economic Literature*, 35(1), 60-85.
- Kuckertz, A., Berger, E.S.C., & Mpeqa, E. (2016). The more the merrier? Economic freedom and entrepreneurial activity. *Journal of Business Research*, 69, 1288-1293.
- Lehmann-Waffenschmidt, M. (2008). Strukturähnlichkeiten und –ungleichheiten evolvierender Ökonomien. *Wissenschaftliche Zeitschrift der Technischen Universität Dresden*, 57, 105-109.
- McMullen, J.S., Bagby, D.R., & Palich, L.E. (2008). Economic freedom and the motivation to engage in entrepreneurial action. *Entrepreneurship Theory and Practice*, 32(5), 875-895.

- Miller, T., & Holmes, K. (2010). *2010 Index of economic freedom*. Washington, DC: The Heritage Foundation.
- Miller, T., & Kim, A.B. (2010). Defining economic freedom. In T. Miller & K. Holmes (Eds.), *2010 Index of economic freedom* (pp. 58-62). Washington, DC: The Heritage Foundation.
- Ockey, J.R. (2011). Economic freedom and fiscal performance: A regression analysis of indices of economic freedom on per capita GDP. *Undergraduate economic review*, 8(1), Article 9.
- Porter, M.E. (1990a). *The competitive advantage of nations*. New York: Free Press.
- Porter, M.E. (1990b). The competitive advantage of nations. *Harvard Business Review*, 68(2), 73-93.
- Snodgrass, D. (2008). *Alternative business enabling environment rankings – a review*. Washington: United States Agency for International Development.
- Wong, P.K., Ho, Y.P., & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small business economics*, 24, 335-350.

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Women's Road to Business Success in the Era of Equal Opportunities Policy

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Abstract

In the era of equal opportunities policy, the road to business success is still more time-consuming and labour-intensive for women than it is for men. Numerous studies indicate that women are faced with specific requirements concerning the enhancement of their role in management. However, despite the existing procedural and legal solutions, women's access to leadership positions is still difficult. Analysing the situation in Poland, a change in the situation of women in the labour market after the accession to the European Union is practically imperceptible or insignificant, despite such strongly emphasised equal opportunities policy, especially in projects co-financed by the Structural Funds. The paper aims to answer the following questions: (1) what factors hinder women's entrepreneurial activity?, and (2) does the phenomenon of discrimination against women in the labour market still exist despite the strongly emphasised, especially after 2004, principle of equal opportunities? The provision of answers to thus formulated questions was preceded by an analysis of secondary sources and a CAWI study conducted on a sample of 353 randomly selected companies from Lodz representing various sectors. The respondents in the study were women-entrepreneurs or women occupying managerial/executive positions.

Keywords: entrepreneurial activity of women; equal opportunities policy; structural funds

JEL codes: L25, L26

INTRODUCTION

In the era of equal opportunities policy, the road to business success is still more time-consuming and labour-intensive for women than it is for men. As shown by numerous studies, women are faced with specific requirements concerning the enhancement of

their role in management. However, despite the existing procedural and legal solutions, women's access to leadership positions is still difficult.

Research hypotheses assumed in this article are as follows:

- H1:** Women's entrepreneurial activity is limited primarily by external factors.
- H2:** In the era of the principle of equal opportunities, there is still a phenomenon of discrimination against women-entrepreneurs.
- H3:** The implementation of the principle of equal opportunities in projects co-financed by the ESF and the ERDF in 2004-2013 contributed little to the improvement of the situation of women in business.

The main objective of the study was to examine the situation of women – managers and entrepreneurs – and to identify the factors of their professional success. The study was divided into two phases. In the first phase, an analysis of secondary sources – studies on the situation of women in business – was carried out, clearly indicating that women's entrepreneurial potential is not fully exploited due primarily to: (1) the existing external barriers hindering women's managerial careers; (2) a low impact of the equal opportunities policy on the improvement of the situation of women in management/business and; (3) virtually no change in the situation of women (a lack of improvement in the situation of women in management/business) as a result of the implementation in Poland since 2004 projects co-financed by the ESF and the ERDF in which the principle of equal opportunities is crucial. In the second phase, the CAWI was carried out on a sample of 353 randomly selected enterprises from Lodz representing various sectors.

In order to conduct the study, a questionnaire containing 37 questions divided into 6 thematic blocks and a personal profile form containing 11 questions encompassing socio-demographic data characterising the respondents were prepared. In addition, a scenario of individual in-depth interview containing 6 questions was developed. 21 women participated in the in-depth interviews. The material obtained from the interviews was used to develop recommendations for the activation of women aimed at starting entrepreneurial activity and to provide the description of "good practices". The paper contains the analysis related to 6 questions within the following thematic blocks: 2 – determinants of professional success; 4: barriers to managerial advancement and possible solutions, and 6: self-employment. Statements on stimulating entrepreneurial activity among young women made by the respondents during the individual interviews were used.

The respondents in the study were women-entrepreneurs or women in managerial/executive positions. The aim of the survey was to: (1) indicate stimulants and barriers to conducting business activities and management of the enterprise/organisational unit by women; (2) identify the path to professional success of women; and (3) determine the impact of the principle of equal opportunities on the situation of women in business. The study results confirmed the findings of the analysis of existing sources indicating the inhibition of women's entrepreneurial activity by the environment and its prevailing stereotypes. Attempts to improve the situation of women in business, by means of educational programmes, informational and promotional campaigns, as well as legislative solutions, etc., should therefore be continued.

FACTORS LIMITING WOMEN'S ENTREPRENEURIAL ACTIVITY IN THE LIGHT OF INTERNATIONAL AND DOMESTIC RESEARCH

In the light of international studies, factors determining women's decision to start their own business can be divided into two groups (Jennings & Brush, 2013):

1. pull factors (independence, self-realisation, an increase in income);
2. push factors (dissatisfaction with work, flexibility and family reasons, insufficient earnings).

Regrettably, in the case of women, push factors are more likely to influence the decision about starting their own company rather than the perception of market opportunities and opportunities for personal growth (Fransson, 2011).

In many countries, women face particular difficulties in obtaining capital to operate their business activity, e.g.: by additional requirements for securing loans (Avolio Alecchi & Radović-Marković, 2012). At the same time, funding problems are more often a reason for termination of business activity than in the case of men. Moreover, women are more likely than men to feel the fear of failure in terms of founding a company. It is common in all regions of the world. In addition, women assess their skills and capabilities in business more negatively than men do. In many countries, it is harder for women to start a business due to their lack of education – the level of illiteracy is greater among women. In the group of people running their own companies, women are more likely than men to have difficulty with the development of their businesses (Kelley, Brush, Greene & Litovsky, 2012).

The situation of women in developing countries with low GDP per capita should be also noted. The following factors constitute the main barriers for women from these countries in making the decision to start their own business (Wube, 2010):

1. Difficulties in establishing and running businesses by women due to culture, religion and traditions.
2. Difficulties experienced by women in obtaining funds to run their own businesses in the form of bank loans and informal loans. Financial institutions require women to provide a higher collateral or the affiliation of loan agreements also by a man. As a result, when setting up a company, women are more likely to use savings than loans (which excludes from the market the women that do not have savings). In addition, investors are less interested in supporting companies run by women.
3. Women have less business experience than men. This is mainly due to the limited access of women to training in this field.
4. Women have fewer business contacts, they do not know how to deal with government bureaucracy and have less bargaining power, which limits their development (the problem with access to new markets due to the lack of contacts and knowledge). Thus, they work on a smaller scale and rarely enter into network relations (which are mostly dominated by men and difficult to access by women).
5. A lack of or limited access to technology due to a lack of funds. Public places with the Internet access are not friendly to women because of the hours of work and an environment not favourable to women. Hence they do not feel at ease using modern technologies.

6. Legal and institutional barriers. Women have little access to decision-makers (experiencing problems with communication with public administration and not receiving reliable information). Legal conditions reduce the possibility of having resources or obtaining an inheritance by women.
7. Difficulties in reconciling business commitments and family obligations as well as lower mobility of women.

Moreover, in developing countries, women's entrepreneurial activity is very often a result of necessity (no other options to support their households).

The following factors prompt Polish women to run their own businesses (Balcerzak-Paradowska et al., 2011; Kupczyk, 2009):

1. striving for independence and self-reliance (to decide their own fate);
2. striving to achieve higher income and financial independence;
3. opportunity for professional development;
4. negative experiences from paid employment;
5. favourable market conditions;
6. the threat of unemployment.

Other factors – stimulants of entrepreneurial activity of Polish women – include:

1. economic factors associated with an increase in the level of wealth of the society, contributing to the development of services which constitute space for women's entrepreneurship;
2. cultural factors associated with the perception of women as entrepreneurs;
3. institutional and demographic factors, such as a fertility rate.

The barriers – de-stimulating entrepreneurial activity of Polish women – include:

1. barriers in access to financing;
2. a lack of entrepreneurial skills;
3. cultural barriers: lower self-esteem, less faith in success, a greater fear of failure, a lack of self-confidence and faith in the effectiveness of the objectives of the organisation;
4. educational barriers (a lack of information and knowledge on how to start, run and successfully develop one's own company);
5. traditional socialisation (strengthening the traditional division of social roles by gender), the difficulty of reconciling work and the role of the wife/mother;
6. institutional barriers, such as poor access to childcare.

Thus, comparing the results of analyses of national and international research on stimulants and destimulants of women's entrepreneurial activity, one can conclude that depending on the level of economic development, their decisions are guided either by pull or push factors. Hence, in developing countries with lower GDP per capita, push factors dominate and additionally there is a lack of other alternatives for women to provide the minimum subsistence level for themselves and their families. In developing countries with higher GDP per capita, one can talk about the combination of these two groups with a predominance of pull factors. In developed countries pull factors dominate.

According to a study carried out in 2015 on a group of 353 respondents from Lodz¹, the main determinants of setting up one's own business included: striving for independence – independence in decision-making (23% of the respondents) as well as the desire to achieve higher income/financial independence (18% of the respondents). Unfortunately, the factor associated with the ease of obtaining financing for new and growing businesses was identified by respondents as marginal (2% of the respondents) (Figure 1). Such a distribution of responses may be due to either ignorance of the available programmes for new and growing businesses (a lack of interest on the part of the respondents or a wrong method of information provision and promotion used by institutions that provide this kind of support) or complicated procedures for obtaining support for new or developing businesses run/managed by women.

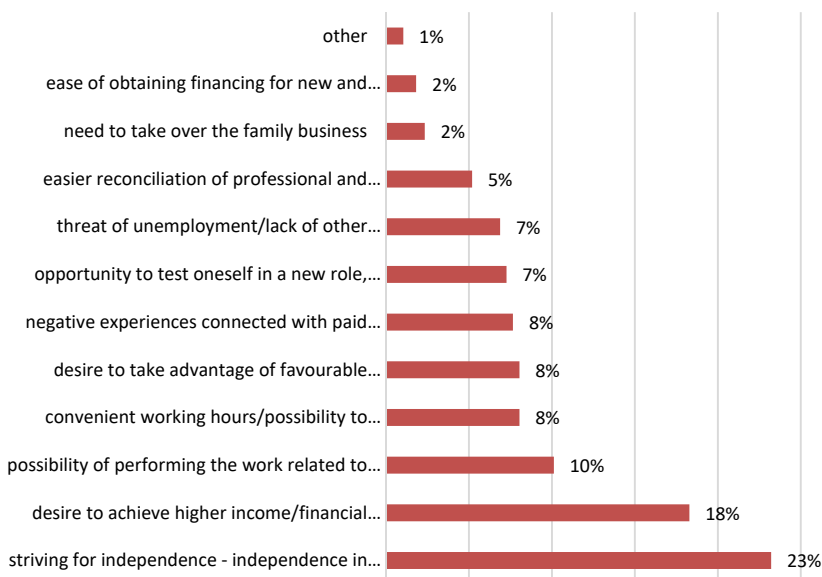


Figure 1. Factors encouraging women to become entrepreneurs

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

The barrier to making the decision about taking up entrepreneurial activity most frequently mentioned by the respondents was the lack of self-confidence/the fear of failure (24.07% of the respondents) and the lack of their own financial resources (18.17% of the respondents). Other destimulants of women's entrepreneurship included, among others: the tax system, strong competition in the market and difficulties in finding customers. Importantly, sporadically the respondents indicated a lack of support from family as a factor that constituted a barrier to making the decision to start their own business (Figure 2).

¹ The study was conducted in 2015 in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" ("A woman In business. Women's success in the Łódź labour market") coordinated by the Regional Labour Office in Lodz in cooperation with the Centre of Excellence for Teacher Training and Vocational Education as well as Agency for Economic and Statistical Analysis "Anstat".

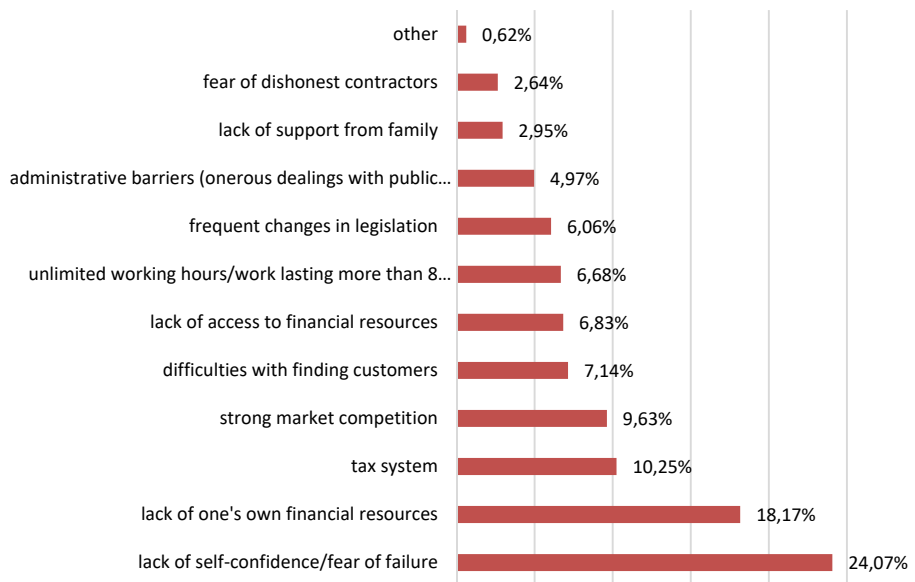


Figure 2. Factors inhibiting women's decision to undertake economic activity

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

In terms of barriers that the respondents had to overcome on the way to their present professional positions, the following held the first three positions in the ranking: difficulties in reconciling work and family life (30% of the respondents), the lack of self-confidence/the fear of taking risks (18% of the respondents) and the stereotype indicating that men are better managers (13% of the respondents). In the minority were the respondents who pointed to a reluctant attitude to motherhood on the part of their superiors (only 3% of the respondents), or the lack of support from family and the blocking of opportunities for promotion by men/women occupying senior positions (4% of the respondents) as barriers to their professional development (Figure 3).

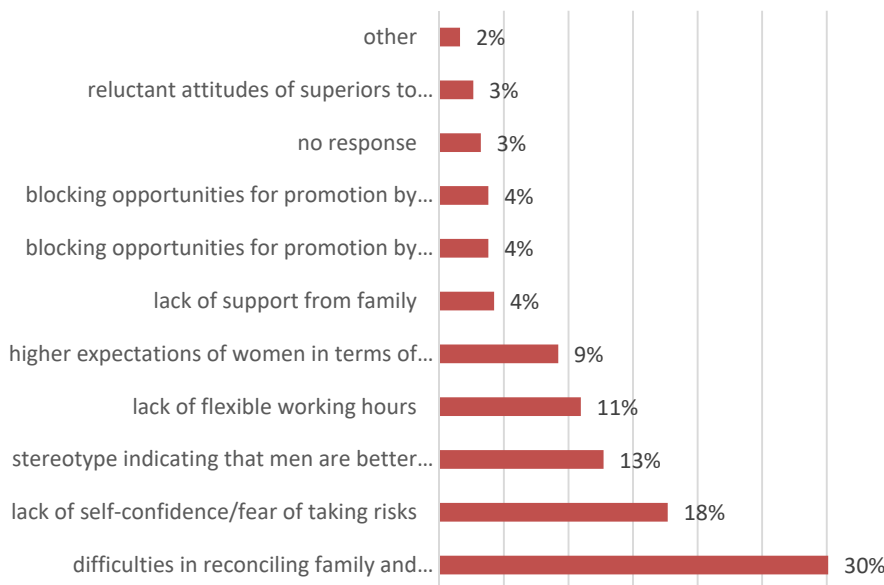


Figure 3. Barriers to women's professional career

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

THE POLICY ON THE EQUALISATION OF OPPORTUNITIES FOR PROFESSIONAL DEVELOPMENT IN THE CONTEXT OF GENDER IN THE LIGHT OF INTERNATIONAL AND NATIONAL RESEARCH

In the framework of the policy on the equalisation of opportunities for professional development in the context of gender, there are two basic types of action taken:

1. Financial – providing funds dedicated to women.
2. Non-financial – providing various forms of support for women in the form of training, consulting, mentoring and access to international cooperation networks.

In developing countries with lower GDP per capita, reforms of financial policies and regulatory frameworks are still necessary to increase women's access to external capital and enable them to run their own economic activities.

At the European Union level, the framework strategy on gender equality is one of good practices in the policy of equalisation of opportunities for professional development in the context of gender (Kupczyk, 2009). It is a programme to promote equality between men and women by coordinating and funding of horizontal initiatives in the field of: (1) providing support for national organisations dealing with equalisation of opportunities, (2) providing equal access to training, vocational education etc., (3) increasing women's participation in the labour market through the use of resources under the ESF for the expansion of services offering childcare and care for dependent adults.

Other good practices in the framework of the policy of equalisation of opportunities for professional development in the context of gender in the European Union can be divided into three types of initiatives (Beltran & Ursa, 2006; Kupczyk, 2009):

1. Legislative – regulations on the equalisation of opportunities for women in the labour market (quotas).
2. Institutional – centres/committees supporting professional activity of women and supervising the observance of the principle of equal opportunities in the labour market.
3. Information and training – integrated educational and information systems addressed to women and supporting their entrepreneurship.

The good practices indicated in the framework of the policy for the equalisation of opportunities for professional development in the context of gender are at the same time the demands listed by the surveyed Polish women who indicated the following solutions which might help in the development of entrepreneurship among women (Balcerzak-Paradowska et al., 2011):

1. Lower taxes and contributions (labour costs).
2. Increased access to capital (an effective system of obtaining assistance for the development of enterprises, expanding a network of consultation centres).
3. The development of care for young children and better access to technical infrastructure (increased employers' interest in the development of the network of care providers as well as providers of educational, recreational and sports services for children and adolescents).
4. Simplified procedures (easier and shorter).
5. A better social image of women-entrepreneurs (actions taken to change stereotypes about perceiving the roles of men and women and the development of partnership relations in the family, promoting the partnership-based model of the family).
6. The promotion of research and development.
7. Customised support for women-entrepreneurs (coaching, mentoring) and individualised school education for women (developing characteristics and forming appropriate attitudes favourable to women's entrepreneurship).

According to the study conducted, the opinions of the respondents on the manifestations of unequal treatment of women in the workplace were divided. Thus, 34% of the respondents answered that they had not heard of such cases, while 32% indicated that they had personally not experienced it but had heard of such cases from their friends. However, the analysis of the total value of the responses regarding the lack of this phenomenon or its occurrence, whether directly experienced or encountered in the environment, indicates that the majority, i.e. 60% of the respondents, have encountered personally or not manifestations of unequal treatment of women in the workplace. This was primarily manifested in lower wages of women compared with men (20% of the respondents), voicing the views of referring to gender stereotypes (14% of the respondents) and passing women over for promotions (11% of the respondents) (Figure 4).

The surveyed women also voiced their opinions on the methods of the equalisation of opportunities for professional development in the context of gender that companies and the government could introduce.

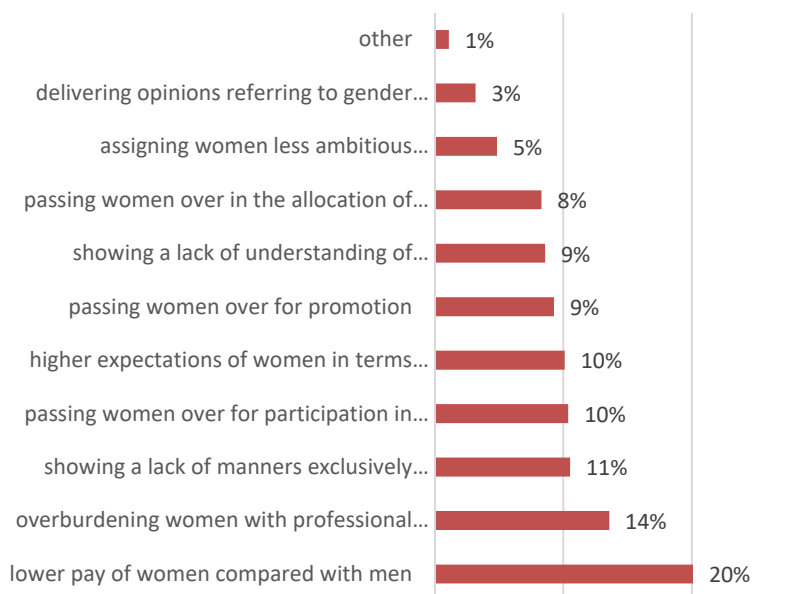


Figure 4. Unequal treatment of women in the workplace manifested

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

Among the demands concerning the actions that companies should take in terms of the equalisation of opportunities for professional development in the context of gender, the most frequently mentioned by the respondents was the demand regarding the establishment of nurseries and kindergartens attached to their workplace (19% of the respondents). The women surveyed deemed important also the activities related to the organisation of trainings improving vocational qualifications of women (16% of the respondents) and the introduction of flexible working hours, including managerial positions (16% of the respondents) (Figure 5).

In terms of means to support the policy of equal opportunities for professional development in Poland in the context of gender, the respondents' demands were consistent with the actions that should be taken by companies. For the surveyed women, the improvement in the access to nurseries and kindergartens (22% of the respondents) ranked first. The next positions in the ranking were occupied ex aequo by: organising free-of-charge trainings raising professional qualifications of women; launching assistance programmes for mothers returning to the labour market; promoting positive examples of women's professional activity and profiles of successful women – the so-called good practices (17% of the respondents in each case) (Figure 6).

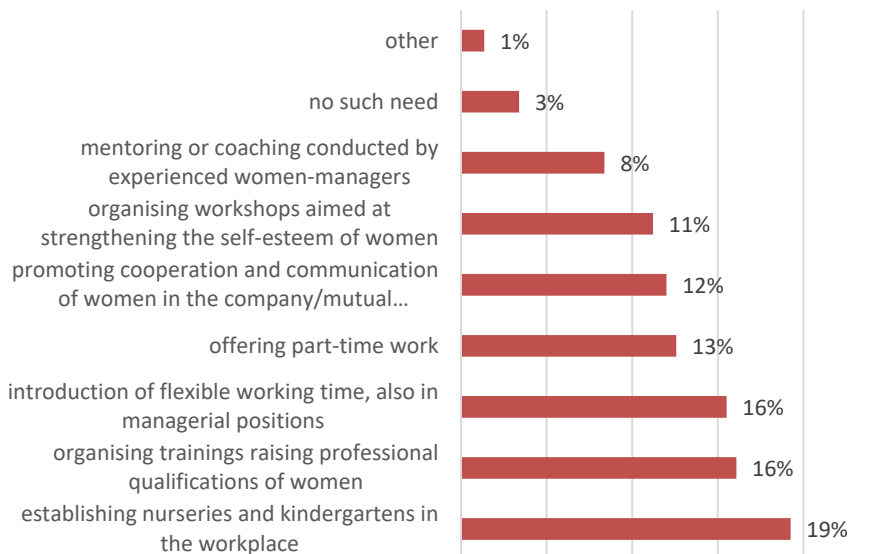


Figure 5. Means of the equalisation of opportunities for professional development in the context of gender recommended for companies

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

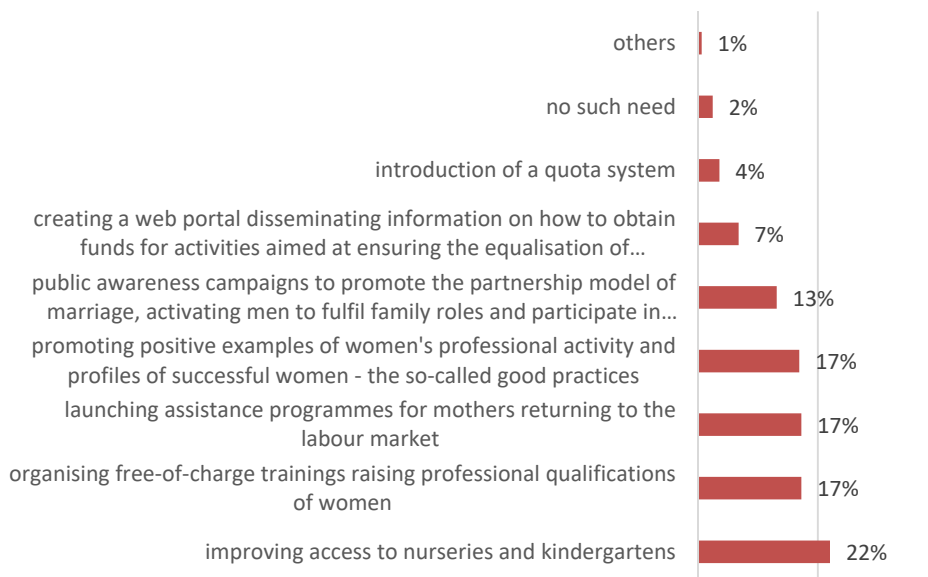


Figure 6. Recommended solutions for the support of the equal opportunities policy for professional development in Poland in the context of gender

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

SUPPORT IN THE FRAMEWORK OF THE EU FUNDS AND THE SITUATION OF WOMEN IN THE LABOUR MARKET

According to studies carried out at the EU level, still fewer women than men benefit from support under the Structural Funds, especially in terms of support for establishing and developing economic activities (Beltran & Ursa, 2006).

National studies indicate that women's opinions (n = 400) concerning the improvement of the situation in the context of the use of EU funds are divided. Thus, 26% of the respondents noticed a significant improvement in the situation of women in management, and another 22% said that the situation had improved only slightly. On the other hand, 25% of the respondents felt that "women continue to be discriminated against, and their access to positions is more difficult, they earn less and are promoted more slowly. Women at the medium levels of management feel most strongly discriminated against. The largest group of women who perceive some improvement in the situation are company owners/co-owners" (Kupczyk 2009, pp. 81-82).

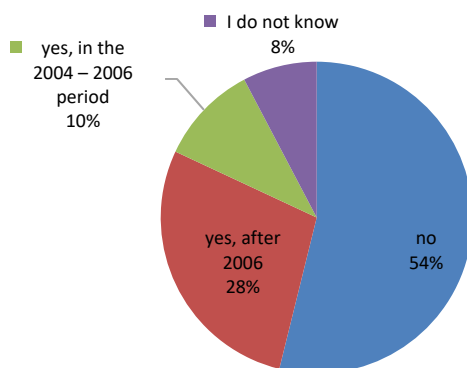


Figure 7. The percentage of businesses run by women benefiting from the support of the European Union funds

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

What is disturbing in the research conducted is the fact that most of the women surveyed have not benefited from the support of the European Union funds (54% of the respondents) (Figure 7). However, compared to the first period of assistance (2004-2006, after Poland's accession to the European Union), the share of the use of the EU funds in the next programming periods (after 2006) increased (10% of the respondents declared their participation in the 2004-2006 programmes and 28% indicated the use of that assistance after 2006). Therefore, it can be concluded that awareness of the opportunities associated with the support provided by the EU funds is increasing (this may be partly due to the appropriate promotional and informational campaign), and the ability of the respondents to use this kind of support is growing (which can be a result of appropriate training and consulting programmes).

Due to the nature of the support from which the respondents benefited, both in 2004-2006 and in 2007-2013, most of the responses were related to the assistance for

the purchase of tangible assets (35.94% of the respondents and 36.26% of the respondents respectively). The women surveyed indicated training next in the ranking. In this case, the share of the respondents benefiting from this form of assistance in 2007-2013 fell compared to the first programming period 2004-2006 (from 34.38% to 28.57% of the responses). However, the share in the use of the support for the implementation of innovations increased (from 10.94% to 13.19% of the responses) (Figure 8). That result may be due to a change of emphasis in terms of the areas covered by the assistance, i.e. the transition from the support focused on basic company operations to the support for innovativeness of companies.

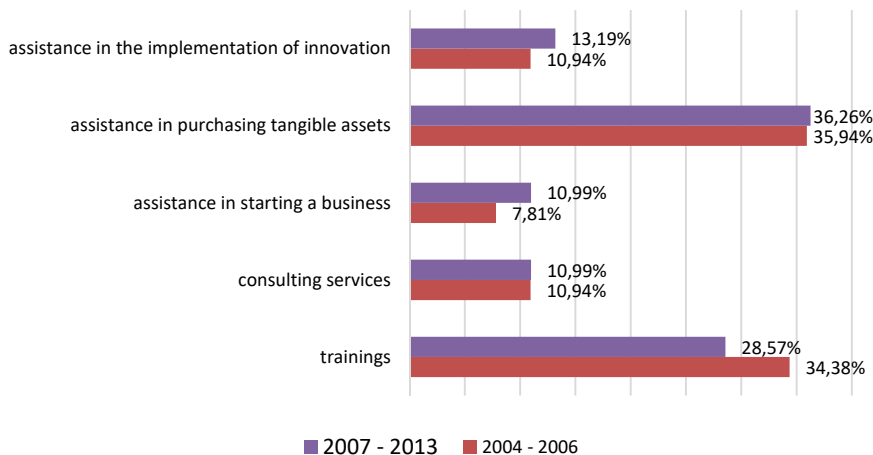


Figure 8. The forms of the EU support used by companies managed by women since 2004
 Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

A large number of the surveyed women did not see the connection between the situation of women in the labour market and the use of the EU funds (45% of the respondents). Only 17% of the respondents indicated that there had been a significant improvement, and 19% that there had been a slight improvement in the situation of women in the labour market associated with the use of the EU funds (Figure 9). Such a distribution of the responses provided by the women surveyed can be caused, among others, by: a lack of awareness of the impact that projects implemented may have on the situation of women, low awareness of the main objectives of the principle of equal opportunities in the context of gender and opportunities for conducting activities in accordance with the equality principle among project designers and institutions responsible for the implementation of these programmes.

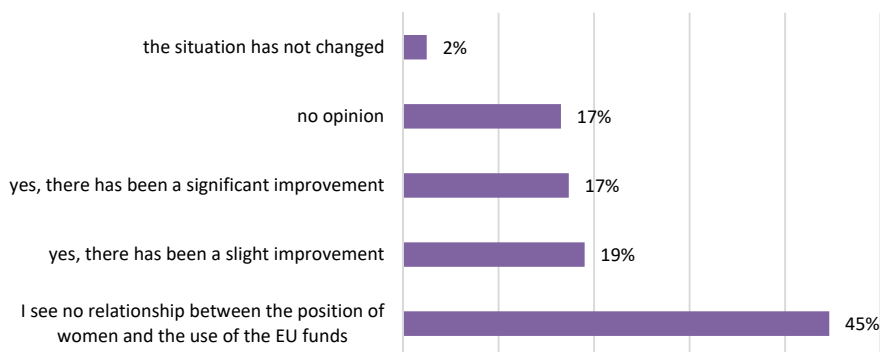


Figure 9. Changes in the situation of women in the labour market, including management, through the use of the European Union funds available since 2004

Source: own compilation based on the study carried out in the framework of the project entitled "Kobieta w biznesie. Sukces kobiet na łódzkim rynku pracy" (n=353).

CONCLUSIONS

Analysing the results of research and reviewing national and international literature, it can be concluded that in countries/regions where the GDP per capita rises, differences regarding issues related to stimulants and destimulants of the "feminine" and "masculine" entrepreneurship become slowly blurred. Owners of MSMEs have similar hopes, expectations and concerns, face similar institutional barriers and economic fluctuations. Cultural norms that do not see women as company owners become a thing of the past and women-entrepreneurs do not signal any major concerns in terms of the challenges they face. The next generation of women is characterised by great openness to changes and willingness to take risks. Similarly to men, they perceive the personal qualities that facilitate entrepreneurship: industriousness, patience, creativity and innovativeness. Women's knowledge about entrepreneurship is equal to men's. There are also gradual changes in the family model towards the partnership-based model.

Still, however, due to the fact that the situation of equality between men and women engaged in business/managing companies/teams has not reached its "optimum" yet, it is necessary to take action to achieve it in the form of:

1. Ensuring better functioning of the existing laws – taking measures to inform and raise awareness how to implement legislation in the field of equal opportunities policy in practice (e.g.: by promoting the exchange of good practices in the indicated area, organising appropriate training programmes and information campaigns to strengthen the role of women in management/running their own business). In order to encourage and motivate women (graduates of various types of schools) to start business activity, schools should introduce workshops/trainings (at the stage of early childhood education) which would help women overcome their own weaknesses and believe that they are able to run their own businesses in the future. Workshops and seminars on building women's confidence about their own self-worth, not lower than men's, in relation to taking on managerial roles should be organised.

2. Developing by the state in collaboration with business companies the care and educational system, as well as recreational and sports services for children and adolescents. In addition, school classes providing demonstrations (e.g.: in a form of workshops) in the area of partnership-based family planning or the division of responsibilities in order to reconcile family and professional life should be introduced.
3. Creating possibilities for shortened/flexible working time or remote work for women. Among flexible forms of work organisation, teleworking can play a significant role in professional activation of women. This is mainly due to the possibility of performing this work in the recently rapidly developing occupations related to the IT, financial, commercial, legal and human resources areas. Studies show that women are increasingly better educated and often work in the indicated areas.

In addition, due to the fact that the current 2014-2020 programming perspective (especially the Regional Operational Programmes) provides an opportunity to implement solutions that were requested by the women participating in the study (e.g.: increased access to childcare and educational infrastructure; capital for business start-ups, training and consulting services dedicated to women), all possible dissemination, training and consulting actions should be taken to fully exploit the existing opportunities (to increase the proportion of female applicants successfully applying for the assistance from the new perspective programme 2014-2020).

REFERENCES

- Avolio Alecchi, B.E., & Radović-Marković, M. (2012). *Women and Entrepreneurship: Female Durability, Persistence and Intuition at Work*. London: Routledge.
- Balcerzak-Paradowska, B., Bednarski, M., Głogosz D. et al. (2011). *Przedsiębiorczość kobiet w Polsce*. Warszawa: PARP.
- Beltran, M.E., & Ursa, Y. (2006). *Benchmarking Analysis on Women Entrepreneurs and Workers in ICT Industry*. WISE- Benchmarking Analysis Report. WISE project, co-financed by the Leonardo da Vinci-Programme of the European Commission.
- Fransson, B. (2011). *Women's Entrepreneurship and Innovation. Country Report, Sweden*. Stockholm: Power Lake AB.
- Jennings, J.E., & Brush, C.G. (2013). Research on Women Entrepreneurs: Challenges to (and from) the Broader Entrepreneurship Literature?, *The Academy of Management Annals*, 7(1), 661–713.
- Kelley, D.J., Brush, C.G., Greene, P.G., & Litovsky, Y. (2012). *Global Entrepreneurship Monitor 2012 Women's Report*. London: Global Entrepreneurship Research Association.
- Kupczyk, T. (2009). *Kobiety w zarządzaniu i czynniki ich sukcesów*. Wrocław: Wyższa Szkoła Handlowa.
- Wube, M.C. (2010). *Factors Affecting the Performance of Women in Micro and Small Enterprises (the case of Dessie Town)*. Bahir Dar: Bahir Dar University.

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Use of a Circular Economy in Entrepreneurial Business

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Abstract

The objective of this paper is to evaluate the impact of a circular economy on entrepreneurial business models and improving resource productivity in industrial business. A literature review and data analysis covers the issues concerning how circular analysis affects business effectiveness and state economy. Moreover, the article analyzes how to measure the effects of circular economy implementation on business and the economy. This article discovers the benefits of circular economy implementation for business and the economy and how it affects waste management. It is necessary to analyze a circular economy as a new economic model to improve waste recycling, becoming less dependent on primary energy and materials inputs, and ultimately being able to regenerate our natural capital. The article studies possible models of some practical aspects of circular economy implementation in entrepreneurial business models. The originality of this work lies in studying waste recycling and as a resource for manufacturing possibilities.

Keywords: circular economy; waste recycling; waste management; entrepreneurship

JEL codes: Q53, Q55, Q57

INTRODUCTION

The relationship between industry and environment is crucial for industrial business. Recent decades environmental impacts have incrementally increased pressure on manufacturing processes, the lack of the resources is one of the biggest challenges that confronts today and tomorrow industrial business.

The industrial revolution, mass production of goods was enabled by new manufacturing methods resulting in products with high quality and low costs. Due to new manufacturing technologies and consumer societies emissions to the environment, solid waste

generation, and growing landfills have become increasingly severe. Growing world population and especially strong middle-class growth the demand for resources and the consumptions is rising rapidly. It has become important after the population migration to the cities the amount of wastes generated by citizens grown dramatically and become the source of infection, diseases and vermins.

According to the World Bank World Bank's Urban Development and Local Government Unit there has been a movement from were 2.9 billion urban residents who generated about 0.64 kg of municipal solid waste (MSW) per person per day (0.68 billion tonnes per year) to today, there the amounts have increased to about 3 billion residents generating 1.2 kg per person per day (1.3 billion tonnes per year). It is expected to increase to approximately 2.2 billion tonnes per year by 2025 (World Bank, 2012, p. 8).

MSW generation rates are influenced by the economic development, the degree of industrialization, public habits, and local climate. The higher economic development and urbanization, the greater the amount of solid waste produced.

The natural resources have reached their limits and the requirements of exponential economic and population growth cannot be met (Meadows et al. 1972, p. 5). The industrial business confronts the pressure of environmental regulations, natural resources limitations and increasing competition for access to scarce or critical resources. The underlying limitations of a linear economy, i.e. take-make-use-dispose, the concept of circular economy is considered as a solution for economic growth (Hayler, 2014).

The idea of "Circular economy" is rapidly becoming one of the main ideas of waste and resources management and mainstream concept at least in the rhetoric level. Recent year global publications draw our attention to the waste recycling and resource recovery from waste problem. The circular economy concept can be implemented in any kind of business type to reduce manufacturing costs and resources amounts. In recent global ecological reports a proper waste management is considered as a global problem.

Recent years European Union (EU) has sought to encourage a more sustainable approach to the management of resources. European Commission adopted an ambitious circular economy package to stimulate Europe's transition towards a circular economy which will boost global competitiveness, foster sustainable economic growth and generate new jobs (European Commission, 2015a, p. 2).

The object of the paper is to evaluate the impact of the circular economy to entrepreneurship business models and improve resource productivity. The main approaches were employed in the project is the meta-analysis. The meta-analysis utilised both academic and grey literature (non -academic, but reputable sources) and data analysis to examine circular economy will affect the business effectiveness and state economy.

LITERATURE REVIEW

Defining a "Circular Economy"

The concept of "circular economy" was developed by environmental academics in the 1970s. It became more popular in the latest decades. In today's economy, natural resources are mined and extracted, turned into products and discarded by using linear economy principle. Waste collection and recycling can reduce the need for extraction of raw materials. In a circular economy, the resource loop would be closed and large vol-

umes of resources are captured and reused (Preston, 2012, p. 3). Still, waste recycling policy is not effective and about 50 per cent of waste still goes to landfills.

Circular economy includes production and consumption sectors in order to reduce amounts of waste generated, increasing the amount of collected and recycled wastes at the same time. The idea of “circular economy” rapidly becoming a mainstream concept of the rhetorical level (Navickas et al., 2015, p. 66). Many other prevailing or emerging ideas relate to the circular economy: resource recovery, resource efficiency, resource effectiveness, sustainable consumption and production, the system of provision, industrial symbiosis, urban metabolism, zero waste, eco-design, materials criticality, design for recycling, cascade models, remanufacturing, waste prevention and minimisation and sustainability. However, the circular economy can be defined as the returning of used resources that would otherwise become waste back into the economy (Velis, 2015, p. 390).

In 2014 European Commission published its communication “Towards a Circular Economy: A Zero Waste Programme for Europe“, scientists started to analyze circular economy implementation possibilities. States aim to establish „producer responsibility“ to stimulate the design of goods that can be more easily repaired, reused, disassembled or recycled (Hobson, 2015, p. 6).

The European Union seeks a circular economy will boost global competitiveness, foster sustainable economic growth and generate new jobs. It is necessary to reform the economy in order to encourage more efficient use of natural resources and reduce environmental pollution. European Commission developed and proposed a circular economy model (Figure 1), which helps to keep product added value as long as possible, avoiding waste formation.

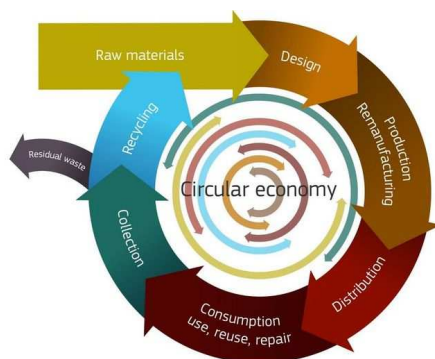


Figure 1. Model of circular economy

Source: Holemans, 2015 (<http://www.katoikos.eu/opinion/doing-less-bad-is-not-good-enough.html>)

The concept of circular economy implies the highly efficient use of resources and recycling, reduction, re-use, low consumption, low emission, high-efficient features, in line with the concept of sustainable development of economic growth. Finally, it helps to achieve optimal production, optimal consumption, and minimum waste indicators (Zhao et al., 2012, p. 439).

The circular economy requires changes in all industrial business from the design to using. Also leads to the new business model, where waste is considered as a resource.

Circular Economy Implementation in Entrepreneurship Business Models

The neo-classical theory has identified the economic growth driving factors: physical capital, technological knowledge and labour (Solow 2007, p. 5). Social factors are also important in generating economic growth. Social factors are focusing on social capital, which consists of connection among individuals – entrepreneurship (Urbano & Aparicio 2015, p. 35). Understanding the role of entrepreneurship requires the decomposition of the concepts. The entrepreneurship definition is too complex to be explained through a single set of factors. The term “entrepreneur” was introduced by R. Cantillon, where the central component of this definition is entrepreneur gravitates around risk assuming (Toma et al., 2014, p. 438).

Other authors (Schumpeter 1911; Gilder 1980) entrepreneur sees as an innovator or coordinator of production. Entrepreneurship occurs under five conditions of newness: new goods, new production methods, new markets, new sources of materials and new organizations.

Today’s business confronts new challenges that have a significant impact on their environment, shape their behaviour and encourage implementing new work and business models. The entrepreneurship firms have to continuously innovate to remain competitive (Dhliwayo, 2014, p. 116). The definition of entrepreneurship is a multidimensional concept, involving aspects of uncertainty-bearing, innovation, opportunity-seeking, management and enterprising individuals (Iversen, et al. 2008, p. 14). The circular economy is the main competitiveness factor for the future business organizations. The importance of waste consumption and recycling leads to the new technologies and innovations in all industrial sectors and business operations. Entrepreneurs are orientated to innovations and new products design where the circular economy can be successfully implemented.

The circular economy concept based on innovation implementation in the industrial business. It is benefit for all business, especially small and medium enterprises (SMEs). Wastes can be used six ways and improve incentives: regenerate (repair), share (re-use), optimise (to find efficiency gains), loop (recycle), virtualise (use software on generic machines more rather than manufacturing specialised machines) and exchange (replace traditional materials with recoverable, renewable or bio-based ones). The circular economy is already profitable for companies what decide to use it (European Commission, 2015b).

Although using of wastes as a renewable resource for energy production is taking the first steps, but technological development and innovations are rapidly implementing. Business transformation to entrepreneurship model is discovering cheap waste disposal techniques to ensure environmental principles implementation in daily business activities. The private sector involvement in the circular economy implementation is the key success factors of competition, transparency and accountability are present. The private sector improves efficiency and lowers costs by introducing commercial principles, financial and managerial autonomy, a hard budget constraint and clear accountability to both customers and providers of capital. The private sector can provide needed investment funds, new ideas, technologies, and skills (The World Bank, 2015).

Circular economy covers all industrial sectors and business types. It is based on a few industrial system principles (Figure 2).

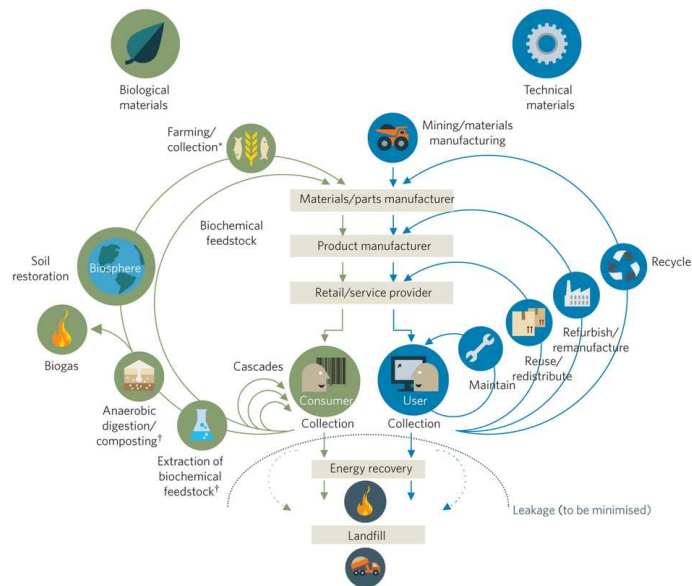


Figure 2. Model of circular economy and industrial system
 Source: MacArthur 2014.

First, circular economy aims to design out waste. In this model, waste does not exist: products are designed and optimised for a cycle of disassembly and reuse. Second, circularity introduces a strict differentiation between consumable and durable components of products. Third, the energy required to fuel this cycle should be renewable by nature. It helps to decrease resource dependence and increase systems resilience (MacArthur, 2014, p. 15).

Circular economy implementation in the business cycles requires entrepreneurship thinking. Entrepreneurship is important in the circular economy mechanism through which inefficiencies in economies are identified and mitigated. The entrepreneur has two major roles for economic growth and development: “new entry” and “newness” in general. Firstly, the entrepreneur is the founder of a new business. Secondly, the entrepreneur is an innovator. He transforms inventions and ideas into economically viable entities (Wennekers & Thurik, 1999, p. 33). Thus, newness through circular economy and innovations are one of the most relevant factors linking entrepreneurship to economic growth in today’s reality.

MATERIAL AND METHODS

The circular economy is a global economic model aims to decouple economic growth and development from the consumption of finite resources. International organizations analyze circular economy possibilities and its payback. A circular economy model not only allows to capture additional value from products and materials but also to mitigate risks from material price volatility and material supply.

Waste consumption and recycling statistical data analysis help gives the general view about the waste management problems and their opportunities.

International organizations: World Bank, European Union, Ellen MacArthur Foundation analyze circular economy implementation possibilities and the economic beneficial for the business and world economy in general.

Elen MacArthur Foundation developed a circular economy methodology and the implementation model (MacArthur, 2015b, p. 7). The model of circular economy differentiates between two types of cycles:

1. **Biological cycles** where non-toxic materials are restored into the biosphere while rebuilding natural capital, after being cascaded into different applications.
2. **Technical cycles** where products, components and materials are restored into the market at the highest possible quality through repair and maintenance, reuse, refurbishment, remanufacture and recycling.

These strategies are illustrated in the circular economy system diagram in our discussed Figure 2.

The development of the company Material Circularity Indicator (MCI) is based on the hypothesis that the material circularity of a company can be build up from the material circularity of the company's products. The assessment may cover any time period. It can be one year or even longer. MCI assessment can be taken for every single product placed on the market. The Material Circularity Indicator MCI_c for the company is:

$$MCI_c = \frac{1}{N_c} \sum_{\alpha} (N_{D(\alpha)} \times MCI_{D(\alpha)}) \quad (1)$$

$$N_c = \sum_{\alpha} N_{D(\alpha)} \quad (2)$$

where:

MCI_c - Material Circularity Indicator of a company;

N_D - Total normalising factor.

This methodology takes a reference product approach where each reference product presents a range of similar products. This is helpful for companies deciding is it effective to use recycled products in the manufacturing process.

RESULTS AND DISCUSSION

Fossil fuels can currently provide about 80 percent of the world primary energy demand, but it will be exhausted in the near future. So more and more attention must be paid to the renewable sources of energy. It is very important to know: what is the potential of these sources to supply energy on a large scale (Michaelides, 2012, p. 31).

The research is divided into two parts: circular economy effect to waste collection, recycling, and business. Finally, to analyze the circular economy implementation evaluation model.

Wastes are considered as the renewable energy source but their possibilities are not fulfilled. Waste management lets integrate five basic stages: generation, reduction, collection, recycling, and disposal. One of the objectives of waste management is to optimise these five stages to provide the most efficient and economic practices commensurate with the socio-technological and environmental constraints imposed (Sushil, 1990, p. 3).

In 2012 EU generates over 2 514 million tonnes of wastes and this number is still growing (Table 1). The higher economies the higher rate of wastes are generated (e.g. Germany generates over 368 million tonnes of wastes, France – 344 million tonnes of wastes, United kingdom – 241 million tonnes of wastes). Most of the generated wastes

are mixed ordinary wastes. Only a few percent of the wastes are recyclable. Because of the rapid economic growth, modernization and technologies improvement more and more wastes are old and unuseful equipment. Electronic and all goods life are decreased. For this reason, most of the people choose to buy new ones instead of fixing them.

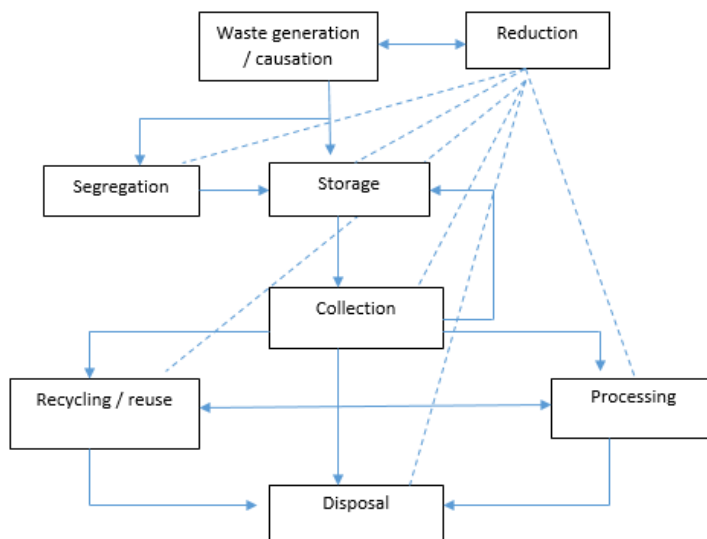


Figure 3. Functional elements of Waste Management

Source: Sushil 1990.

The World Bank estimated that in the past 2,9 billion population generated about 0,64 kilograms of household waste per person per day (0,68 billion tonnes per year). Today 3 billion population generates 1,2 kilograms of household waste per person per day (1,3 billion tonnes per year). In 2025 4,3 billion population will generate 1,42 kilograms of household waste per person per day (2,2 billion tonnes of waste) (Ladhe et al., 2014, p. 324).

In 2012, the average European used 16 tonnes of materials. 60 percent of discarded materials were either landfills or incinerated and only 40 percent were recycled or reused as materials. In value terms, Europe lost 95 percent of the material and energy value. Even recycling of steel, PET and paper lose 30-75 percent of the material value in the first use cycle. On average, Europe uses materials only once (MacArthur, 2015 a, p. 12).

Linear consumption is reaching its limits. A circular economy is a trillion-dollar opportunity with huge potential for innovation, job creation and economic growth. Today's Companies harvest and extract materials for manufacturing. About 65 billion tonnes of raw materials entered the economic system in 2010 and this figure is expected to grow to around 82 billion tonnes in 2020. Linear economy increases resource prices and supply distributions (World Economic Forum, 2014, p. 13).

The use of the circular economy principles can three times decrease the primary materials demand in widget market (Figure 4).

The circular economy can reduce the demand of primary materials about 17-24 percent and at EU level it will save US\$ 520 – 360 billion (World Economic Forum, 2014, p. 18).

Table 1. Waste generation by economic activities and households, 2012, thousand tonnes

GEO/WASTE	Total Waste	Recyclable wastes	Equipment	Mixed ordinary wastes	Common sludges	Mineral and solidified wastes
European Union (28 countries)	2.514.220	242.390	16.000	282.010	21.510	1.784.370
Belgium	67.630	12.836	387.293	7.597	2.829	35.181
Bulgaria	161.252	1.925	120.976	3.599	62.562	154.212
Czech Republic	23.171	4.808	69.518	3.800	797	12.408
Denmark	16.332	3.261	163.118	4.282.022	171.928	7.270
Estonia	21.992	1.492	30	518	25	18.234
Ireland	13.421	1.360	264	3.968	408	4.538
Greece	72.328	2.000	193	5.547	109	63.811
Spain	118.561	13.352	1.094	29.110	1.427	62.097
France	344.731	33.735	2.228	38.097	1.470	252.705
Croatia	3.378	781	62	1.483	17	855
Italy	162.764	25.740	2.717	37.437	6.226	64.877
Cyprus	2.086	309	19	246	15	1.254
Latvia	2.309	311	20	1.044	77	676
Lithuania	5.678	903	70	1.286	52	2.731
Luxembourg	8.397	434	14	274	10	7.539
Hungary	16.310	2.936	98	3.504	277	8.142
Malta	1.452	63	15	266	10	1.067
Netherlands	123.612	8.489	505	9.501	636	87.398
Austria	34.047	5.581	155	4.374	471	20.965
Poland	163.377	12.630	220	18.056	586	123.443
Portugal	14.184	4.475	233	5.405	686	2.484
Romania	266.975	5.500	133	6.325	277	235.503
Slovenia	4.546	952	29	775	84	2.177
Slovakia	8.425	1.644	32	1.589	285	3.388
Finland	91.824	13.456	224	2.880	391	72.980
Sweden	156.306	5.587	581	5.078	602	141.173
United Kingdom	241.100	40.530	3.819	41.613	2.154	137.439

Source: Eurostat, env_wasgen

European sector analyses showed that use cycles are short. The average manufactured asset lasts only nine years. In total, today the production and resources cost Europe 7.2 trillion euros every year for the three analysed sectors: mobility, food and built environment. Resource costs are about 1.8 trillion euros. In general, this

means that circular economy implementation can increase annual benefits up to 25 percent (1.8 trillion euros) in Europe by 2030 (Figure 5).

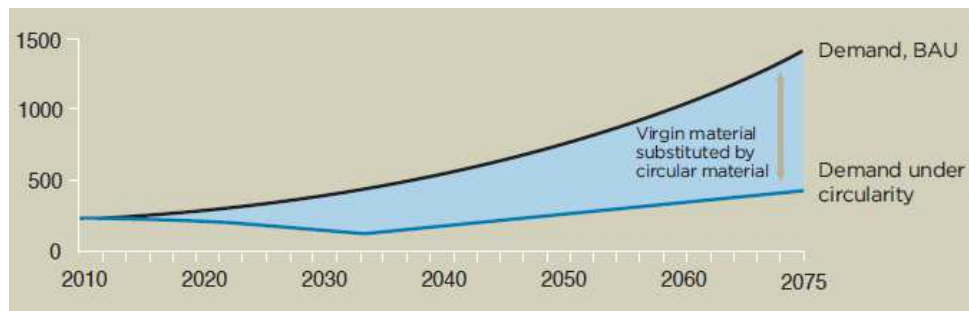


Figure 4. Effect of circular economy on primary material demand in widget market

Source: World Economic Forum, 2014.

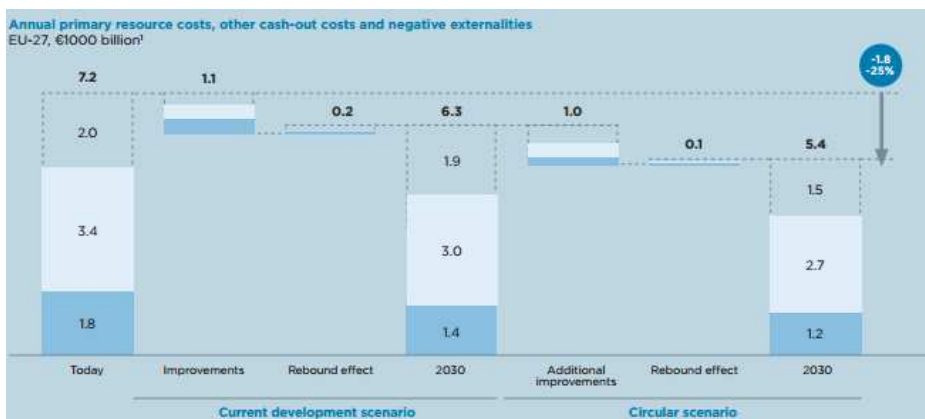


Figure 5. The circular economy opportunity – 2030 scenarios

Source: MacArthur 2015a.

To understand how to measure the circular economy in business Ellen MacArthur Foundation had created Material Circularity Indicator (MCI). For example, a company produce 2 products ranges: Product 1 and Product 2. Product 1 is with the high recycled content. Product 2 is not recycled (Table 2).

Table 2. Summary of input data for products supplier

No.	Name of product range	Total product mass of product range	Revenue, euro	MCI of ref. product
1	Product 1	9 600	60	0,68
2	Product 2	3 560	42	0,22

Source: own study.

Using the Aggregator Tool, it is results that, using as a normalising factor, the MCI of the company would be 0,56. Using revenue the MCI would be 0,49.

In this example, it is clear that because of its higher density the MCI for Product 1 dominates the combined result when mass is used as the normalising factor (Figure 6). On the other hand, using revenue gives a more balanced view of the company and should be chosen as the preferred option in this case (Figure 7). If MCI would be close to the Product 1, it would mean that company should produce more of Product1 and have to refuse Product 2.

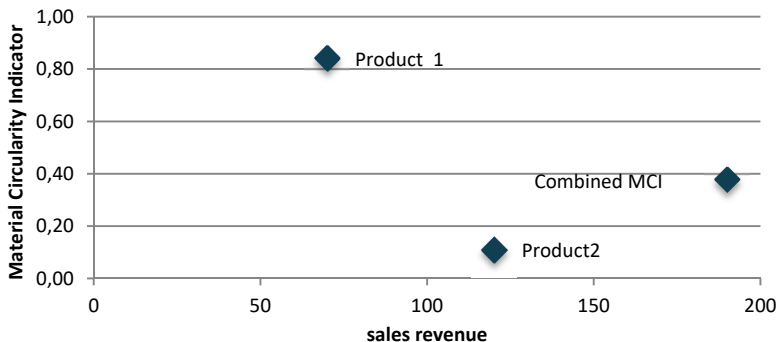


Figure 6. Combining the MCIs using mass as the normalising factor

Source: own study.

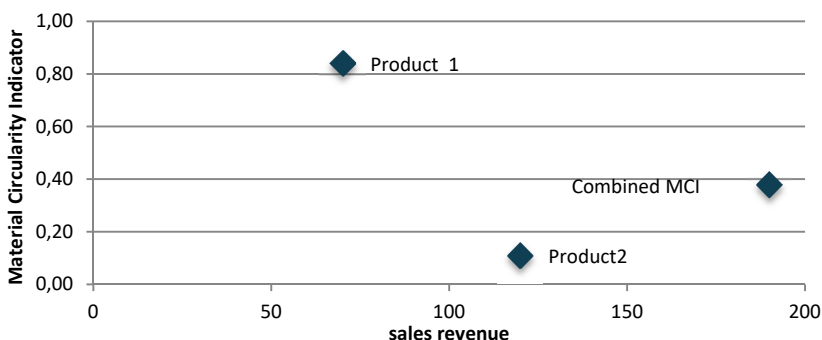


Figure 7. Combining the MCIs using sales revenue as the normalising factor

Source: own study

This method is useful for the evaluation of the circular economy principles implementation in the company. It helps to measure the effectiveness and financial payback of production from recycled wastes.

CONCLUSIONS

Circular economy helps to improve industrial business productivity and ensure continual economic growing. Because of the waste crisis, low productivity and rapid exploitation of natural resources it is important to implement integrated waste management policy in the circular economy context. Circular economy includes manufacturing and consumer sectors, systematically reduces emission of waste, and encourages waste recycling to raw materials, as well as energy production.

Entrepreneurship business sees as innovators of new goods, new production methods, new markets, new sources of materials etc. From this point of view, entrepreneurs are primary who can see the beneficial and possibilities of the circular economy. The importance of the waste consumption and recycling leads to the new technologies, innovations in all industrial sectors and new business models.

Waste use as a raw material in manufacturing and energy production can resolve environmental issues and reduce the increasing amount of waste in the world. The growing amount of waste in the world and Europe is a ticking bomb which requires a rapid solution and effective implementation. While linear consumption is reaching its limits, a circular economy can be seen as a solution. Today use cycles are short. To satisfy demand business has to produce more and more product. This leads to rapidly waste increasing. The circular economy can reduce the demand of primary resource about 17-24 percent and this will save more than 1.8 trillion euros in Europe market.

Ellen MacArthur Foundation created Material Circularity Indicator (MCI) can measure how well product performs in the context of a circular economy and to estimate how advanced they are in the circular economy implementation context.

REFERENCES

- Dhliwayo S., Entrepreneurship and Competitive Strategy: An Integrative Approach. *The Journal of Entrepreneurship*, 23(1)2014, 115-135.
- European Commission, Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the Committee of the regions. Closing the loop – An EU action plan for the Circular Economy. Available at: http://ec.europa.eu/priorities/jobs-growth-investment/circular-economy/docs/communication-action-plan-for-circular-economy_en.pdf
- European Commission, Circular economy and the role of eco-innovation. Available at: http://ec.europa.eu/environment/ecoap/about-eco-innovation/policies-atters/eu/circular-economy-ecoinnovation_en
- Eurostat, Waste generation. Env_wasgen. Available at: <http://appsso.eurostat.ec.europa.eu/nui/show.do>
- Navickas V. et al., The concept of circular economy as a competitiveness factor: macro-economic aspect. *Journal of Management*, 27(2)2015, 65-72.
- Gilder G., *L'esprit d'entreprise*, Fayard, Paris 1980.
- Hayler J., Circular economy is turning the old waste sector into resource industry, 2014, available at: <http://www.theguardian.com/sustainable-business/circular-economy-old-waste-sector-resource-management>
- Hobson K., Closing the loop or squaring the circle? Locating generative spaces for the circular economy. *Progress in Human Geography*, 1-17, 2015.
- Holemans S., The circular economy: Doing less bad is not good enough, 2015, <http://www.katoikos.eu/opinion/doing-less-bad-is-not-good-enough.html>
- Iversen J. et al., *Defining and Measuring Entrepreneurship*, Delft, Boston 2008.
- Ladhe T.; Magnusson J.; Nilsson A., From Trash to Cash: A Case of Waste Management Business Model Formation. *New Perspectives in Information Systems and Technologies*, 1/2014, 323-335.
- MacArthur E., Towards the Circular Economy. Accelerating the scale-up. Across global supply chain, 2014, available at: <http://www.ellenmacarthurfoundation.org/publications/towards-the->

- circular-economy-vol-3-accelerating-the-scale-up-across-global-supply-chains
- MacArthur E. et al., Growth within: a circular economy vision for a competitive Europe. 2015 available at: https://www.mckinsey.de/sites/mck_files/files/growth_within_report_circular_economy_in_europe.pdf
- MacArthur E., Circularity indicators: An Approach to Measuring Circularity. Methodology, 2015, available at: http://www.ellenmacarthurfoundation.org/assets/downloads/insight/Circularity-Indicators_Methodology_May2015.pdf
- Meadows D. H. et al., The Limits to Growth, 1972, available at: <http://web.ics.purdue.edu/~wggray/Teaching/His300/Illustrations/Limits-to-Growth.pdf>
- Michaelides E. E., Alternative energy sources, Springer, Texas 2012.
- Preston F., A Global Redesign? Shaping the Circular Economy. Energy, Environment and Resource Governance, 2012/02, 1-20.
- Shumpeter J., The theory of economic development, Harvard University Press, Cambridge 1911.
- Solow R. M., The last 50 years in growth theory and the next 10, Oxford Review of Economic Policy, 23(1)2007, 3-14.
- Sushil D., Waste Management: A System Perspective, Industrial Management & Data Systems, 90(5)1990, 1-67.
- The World Bank, Private sector involvement, 2015, available at: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTURBANDEVELOPMENT/EXTUSWM/0,,contentMDK:20239710~menuPK:497754~pagePK:148956~piPK:216618~theSitePK:463841,00.html>
- Toma S. G. et al., Economic development and entrepreneurship, Procedia Economics and Finance, 8(2014), 436-443.
- Urbano D., Aparicio S., Entrepreneurship capital types and economic growth: International evidence, Technological Forecasting & Social Change, 102 (2016), 34-44.
- Velis C. A., Circular economy and global secondary material supply chains, Waste Management & Research, 33(5)2015, 389-391.
- Wennekers S.; Thurik R., Linking Entrepreneurship and Economic Growth, Small Business Economics, 13/1999, 27-55.
- World Bank, What a waste. A Global Review of Solid Waste Management, 2012. http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/336387-1334852610766/What_a_Waste2012_Final.pdf
- World Economic Forum, Towards the Circular Economy: Accelerating the scale-up across global supply chains, 2014, available at: http://www3.weforum.org/docs/WEF_ENV_TowardsCircularEconomy_Report_2014.pdf
- Zhao Y. et al., Discussion on the Model of Mining Circular Economy, Energy Procedia, 16/2012, 438-443.

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Specialised SME in Hotel Industry and Market

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Abstract

The aim of this paper is to research the positioning of small and medium-sized (SME) hotel companies as entrepreneurship in the tourism business competitive environment, as well as to consider further development potentials. The aim is to explore and point out importance of specialised SME that recognise both the tourist demand and hotel industry as tourist supply. Potentials for future activities and possibilities of valorisation of SME companies in the international tourism market will be presented by means of their consideration and the obtained knowledge. By using scientific quantitative and qualitative methods, the positions of the Croatian hotel industry have been considered followed by the research of opinion of Italian hotel managers as Italian tourism and hotel industry are recognised as leaders in SME hotel entrepreneurship and present best practice that developing markets could learn from. The opinions of the hoteliers (SME) have been researched by using the interview method and processed by method of analysis, synthesis, creative thinking, description and meta analysis on the potentials of market valorisation of their special particularities and the implemented promotional mix, as well as the survey research of tourists, processed using the statistical methodology. This methodology included Likert scale processed by statistical and mathematical methodology and presented by figures and tables. The research results point to the importance of specialisation of SME hotels through the concept of sustainable development, with implementation of an adequate marketing mix. This includes all the components that valorise a hotel product adapted to the modern trends of tourist demand.

Keywords: hotel industry; small and medium-sized hotels; market positioning; competitiveness; specialisation

JEL codes: L83, L1, L2

INTRODUCTION

Development of small and medium-sized entrepreneurs in Croatia in the sphere of tourism occupies a significant position as a strategic goal of development of the national economy. A potential has been recognised for sustainable increase in the role and number of small and medium-sized hotels in tourism destinations, which could affect the formation of offers of complex hotel services, increase in guest satisfaction, advancement in international recognisability and the increase in average expenditure per day of their stay. A high level of effect has been noted on the increase in employment and entrepreneurial self-employment, as well as on the decrease in seasonality. By innovative, specialised and versatile offer of a series of high quality service facilities it is possible to affect the increase in the competitiveness of the Croatian tourism product. Development of distinction and evocation of an "experience plus" (special experience) is a global trend of modern tourism and, by means of internationalisation, small and medium-sized entrepreneurs are finding niches for successful placement in the world market.

By consideration of the competitive aspects of specialised SME hotels at the international level, as well as considering the level of their attractiveness, assessed by tourists, attention will be drawn to realistic positions of the Croatian SME hotel business, which will also be theoretically elaborated and synergic contributions will be made to the conclusions directed to the potentials of future development. Choice of three Italian hoteliers as leaders and best practices in SME hospitality industry and research of opinion of hotel managers about potentials of market positioning with regards of hotel specialisation is presented aiming to explore implementation of new promotional strategies and use of new technologies in creation of new and creative hotel product. This issues that define and impact qualitative market placement form the main hypothesis of the paper "Specialisation of SME hotels impact their better market positioning" which is directly related with objective of the research. The theoretical part of research include review of many international authors research of the SME in hotel industry topic, then the paper explore the potentials of specialisation. Analysis of SME in Croatian hotel industry is presented and set in relation with Italian best practices that should be followed and implemented in entrepreneurship. Research part of paper is focused on two aspects of tourism stakeholders, hotels and services providers, and, on the other side the consumers that present their preferences and booking habits. Researches synergicly lead to conclusions and recommendations that form new knowledge and present a platform for new researches and considerations. Applied methodology included both qualitative (interview and creative thinking methods) and quantitative research methods (statistical and mathematical methods) including Likert scale and methods of analysis, synthesis, description and generalisation.

LITERATURE REVIEW

Small and medium sized companies play a valuable economic role. The hotel accommodation sector in Europe is dominated by small businesses which provide about 90% of the total number of rooms, while only 10% are owned by leading hotel operators (HES-UNWTO, 2011:4). The changing dynamics of the industry and the reforms initiated by the government have opened up a plethora of opportunities for Small to Medium Enterpris-

es (SMEs). Numerous authors consider the aspects of entrepreneurship in SME hotel companies and analyse the possibilities of their market positioning and placement. Jones and Haven (2005) researched Tourism SMEs, Service Quality, and Destination Competitiveness and Lee-Ross and Lashley (2009) explored family businesses, hospitality and commercial homes within entrepreneurship concepts.

Understanding the needs of the highly demanding customers and continuous innovation is what is going to help the SMEs to establish themselves in this competitive industry. However, small and medium-sized entrepreneurs, as opposed to large hotel companies, find themselves more often in economically problematic positions, given that numerous SMEs have grown from trade and independent activities and, in the circumstances of organised international market economy, they come across difficulties conditioned by a lack of education, experience and limited resources, discuss Soriano and Castrogiovanni (2013). Bell et al (2005) also studied aspects of business efficiency, small firm internationalisation and business strategy, explaining the close relationships between product policies and market focus, with product or process innovation often providing an important stimulus to international expansion. Identification of specific developmental strategies of internationalisation, as an essential step in the development of small and medium-sized companies, is related to four key dimensions of internationalisation: operations, market, product and time. Depending on resources, each individual hotel company finds a corresponding dimension, discuss Ruzzier and Konecnik (2006, 17-35). Westhead et al (2002, 51) suggests that SME companies may need to target customised export programmes to specific situational demands of established micro and small firms.

Further to this, Jekanyika and Matnadam (2012, 509) discuss that the internationalisation process was mostly driven by firm-based factors, such as managerial orientation, maintaining business reputation, enhancing market share and revenue, technological advancement and flexibility of operations.

Proebstl and Mueller (2013) examined the importance of specialisation and certification of the hotel industry for the development of competitive SMEs, as well as Ifko (2010) and Henderson (2011, 2013), Koncul (2012), who explore selective forms of tourism and specialised hotels in tourist destinations. Specialised and themed hotels offer specialised services focused on one niche related to culture, health, sport, etc.

Small businesses generally do not engage in strategic planning because of “planning barriers” such as a lack of time, lack of specialised expertise, reluctance to share strategic plans with other employees, inadequate knowledge of the planning process, communication was inadequate and overall goals of strategy not well understood, discuss Morrisons and Thomas, (1999, 148). The same aspects are also analysed by Jaifar et al (2011, 827), who explore the issues and problems that SME confront in relation to their survivability in the industry. Koryak et al (2015, 89) also discuss the competencies of entrepreneurial leadership, capabilities and their influence on the growth of small and medium-sized enterprises (SMEs), as well as El Gohary et al. (2013, 113), who pointed to the fact that SME owners and marketing and sales managers have a limited knowledge in relation to the different available export entry modes in the sense of affirmation of the placement channels.

Lee-Ross and Johns (1997) and Philps et al (2005) research business efficiency and yield management of SME entrepreneurship in the hotel industry. The formation of small and medium-sized entrepreneurship companies in the tourism and hotel industry is not

always conditioned by profit maximisation. Bosworth (2005) discusses the same issues, suggesting that "...small firms could be expected to be profit seeking". In contrast, Carter and Jones-Evans (2000:102) have pointed out that "...not all owners see growth as an important business objective". The latter ones also include inclination towards preservation of the historical heritage, cultural identity and other aspects of non-material cultural heritage. As an important tourism resource, the culture of life and work (Kušen, 2002:103) affirms the historical, civilisation and tourist identity and small and medium-sized companies, privately owned by local investors, recognise the potential of their valorisation through specific qualities, theming and specialisations of a hotel product.

The owner motivation to enter into small business could be "pushed" or "pulled". "Pull" factors include; owner's desire to create own wealth and change lifestyle (Sheedy et al, 2010). In addition, it was noticed that "pull" factors include current lack of opportunities or job frustrations and the owner wishes to escape from being continually supervised or threatened with unemployment. "Push factors" created an environment where owners feel compelled to create business and "pull" factors suggest benefits to potential owners of small businesses. In the event that ownership motivations are related to pursuing non-financial objectives like improvements in lifestyle or traditional sentiment, the owner would be less likely to engage in strategic planning and profit maximisation (Lashley and Lee Ross, 2009).

While considering innovations and specialised services which are implemented in the marketing mix of small and medium-sized hotels, Beaver (2002:99) has concluded that "...small firms also need, as an aid to innovation in business processes, to encourage the use of new technology and training to raise their performance and productivity...". This includes the implementation of Internet, different social networks, as well as applications for smart phones, which, price-wise, represent an accessible and flexible tool for the creation of an efficient optimal promotional mix (Marshal and Todd, 2009). Equally, new technologies transform up-to-date channel structures and relationships among the mediators in the distribution chain, reason Jantan et al (2003:427). In their research on the distribution channels in small and medium-sized entrepreneurship in the hotel industry, Shegg et al (2013, 554-565) observe a re-grouping in the positions of tour operator businesses and a direct placement in the sense of a continuous strengthening of e-Placement through B2B and B2C sales¹. Furthermore, Gratzler and Winiwarter (2003) explore the major threats and opportunities for hotels by evaluating the framework for competitive advantage in eBusiness.

Small and medium-sized hotel marketing appearance and promotional mix often encounter problems with the financing of the quoted activities. The solutions are proposed in the form of linking up with other hotels, DMOs and other tourism stakeholders into cluster consortia, marketing branding and common market appearance and positioning. Also, the importance of selection of an adequate promotional mix is stressed, by which modern technologies and Internet marketing, apart from traditional media and channels, take over the leading role in market positioning (Kriechbaumer and Christodoulidou, 2014).

¹ B2B – business to business, B2C – business to consumer, includes business activity between entrepreneurs and end consumers, another entrepreneur or end consumer.

Conclusively, Mura and Buleca (2013, 905) point out that internationalisation of business creates new market opportunities, the possibility of organic growth and strengthening of the market position.

Modern tourism is differentiated and segmented, flexible and adaptable and rests on the 6-E concept, which includes "experience, excitement, escape, education, entertainment and ecology". Modern society consumers are experienced and well educated, they are looking for something new, different, authentic and realistic, as well as for a higher quality and standard of services. They are ecologically aware and go on holiday more frequently, staying for shorter periods of time on their journeys. They require that the destination of their stay provides them with a unique experience, which includes the 5C characteristics: "calm – tranquillity and safety, character – authenticity, meaningfulness, charm – atmosphere and communication, courtesy – above average kindness & cuisine – gastronomic choice"².

The data on segmentation is obtained by research and it has to provide a basis for definition of the product policy, i.e. all its relevant characteristics, including also the price; they determine the basic promotion ideas, i.e. advertising messages which can influence the behaviour of tourists and which affect the choice of the media with which tourists are targeted. They also form a basis for the positioning of hotel products of small and medium-sized entrepreneurship, i.e. for determination of the place they will occupy in the selected market. The place of the product is determined according to how the target segment experiences and receives it, i.e. target segments and the level of services and the price have a significant influence on the position and image of a hotel facility in the market (Berc Radišić, 1999, 96).

SMALL AND MEDIUM-SIZED ENTREPRENEURSHIP IN THE CROATIAN HOTEL INDUSTRY

In consideration of the small and medium-sized entrepreneurship in the hotel industry of Croatia, as a post transition country, questions are evident which potential investors and entrepreneurs should also consider in project planning. Tourism, as an internationalised activity, bases its development on a unique platform for a compliant interaction of three main factors: advanced environment, adequate incentive system and raising of the level of knowledge and skills³. This is implemented in the National development programme for small and medium-sized entrepreneurship in tourism, which, as a strategic document, has been adopted by the Croatian government and which will, with the support of European Union funds, be conducted in the period between the years 2014 and 2020.⁴ According to the Strategy, programmes are planned which directly bear on small and medium-sized hotels (COSME – the programme for Competitiveness of Enterprises and Small and Medium-sized Enterprises) and other programmes which, with their activity, enter into the sphere of tourism and hotel business (HORIZON 2020, Connecting Europe Facility, LIFE+, etc.).

² Galičić V.(2010) "Upoznajmo svoje goste", *Ugostiteljstvo i turizam – stručna revija za turizam*, br. 9, p. 95-102,

³ Ivandić, N., Kunst, I.,(2014). *Nacionalni program razvoja malog i srednjeg poduzetništva u turizmu*, Institut za turizam Zagreb,

⁴ Ministarstvo Turizma (2013), *Nacionalni program razvoja malog i srednjeg poduzetništva u turizmu- 2014.-2020.*, Zagreb, Croatia.

Among small and medium-sized entrepreneurs, the Croatian legal and institutional framework includes registered companies which, according to the criteria of number of employees, turnover in euros and the size of the balance, are categorised as follows:

- micro: up to 10 employees, turnover of up to 2 million euros or a balance of up to 2 million euros;
- small: up to 50 employees, turnover of up to 10 million euros or a balance of up to 10 million euros;
- medium: up to 250 employees, turnover of up to 50 million euros or a balance of up to 43 million euros.

Through the Ministry of Tourism, Ministry of Business and Trade, Ministry of Economy and Ministry of Finances, but also through the Croatian Chamber of Commerce (HGK), i.e. Croatian Chamber of Trades and Crafts (HOK) the Republic of Croatia government has developed the National development programme for small and medium-sized entrepreneurs in tourism, defining the operative guidelines for compliant activities of the main stakeholders responsible for the stimulation of small and medium-sized entrepreneurs. The programme encompasses a wide range of activities: accommodation facilities, food and beverage facilities, service trades, shops, entertainment, recreation, nautical charter, "floating hotels", tasting facilities, theme parks, ethno offer, organisation of excursions and guided tours, as well as other tourism related activities.

With the developmental potentials, questions are also recognised of current positions, which include the low levels of initiation (Global Entrepreneurship Monitor), i.e. a small number of newly-established SMEs in tourism and the hotel industry, which can be explained by a short season and poor destination value chains of formed tourism products, built on the attraction basis. With their valorisation, prerequisites are created for the formation of specialised small and medium-sized hotels.

By the National programme (Ministry of Tourism, 2013), three key programmes for the stimulation of small and medium-sized entrepreneurs in the tourism and hotel industries have been identified.

1. Programme "All year round" relates to the decrease in seasonality of the destination value chain, with its activities affecting:
 - Stimulation of production clusters at regional/thematic level;
 - Creation/commercialisation of complex tourism products;
 - Active online sales system for individual/package SME services;
 - Public and Stakeholder Awareness Programmes.
2. Programme "Something special" relates to expansion of the destination experience system, with its activities affecting:
 - Development of activity-based tourism experiences;
 - Development of selective forms of tourism (rural tourism products, theme parks, eno and gastro tourism and eco- tourism);
 - Provision of information to users and mutual promotional activities (foreign bloggers, journalists' study trips and similar);
3. Programme "Quality all around us" relates to the integrated quality system in the destination, with its activities affecting:

- Theming and specialisation through certification;
 - Criteria of excellence and quality of the SME offer in tourism and stimulation of innovative contents;
 - Vocational categorisations adapted to the market requirements, as well as quality labels/special standards;
 - Annual system of grading and awarding of SMEs in tourism, Destination Public and Stakeholder Awareness Programmes;
4. Programme "We are still learning/We can do better" relates to the advancement in entrepreneurial skills and service quality and is directed to education
 5. Programme "We too are changing" relates to the strengthening of the institutional capacity.

In consideration of small and medium-sized hotels in Croatia, the following data is presented:

Table 1. Small and medium-sized hotels in the Republic of Croatia

Hotels by categories	Number of SME hotels	Share (%) In SFH ⁵	Share (%) in total number of hotels	Number of beds	Number of arrivals	Number of overnights	Average days of stay
Total	184	100	30.7	6,037	218,694	467,587	2.1
5*	2	1.1	8.0	75	3,180	9,067	2.9
4*	31	16.8	19.4	988	39,930	86,127	2.2
3*	123	66.8	39.2	4,101	152,170	326,529	2.1
2*	28	15.2	27.7	873	23,414	45,874	2.0

Source: Processed by the author according to: Bartoluci, M. (2012), Poduzetništvo u turizmu bbz.hr/images/uploads/683/poduzetništvo_u_turizmu_-_bjelovar.ppt, accessed on 28.12.2015.

As at 2013 in Croatia 605 hotels⁶ were operational; the share of 30.4% of small and medium-sized hotels is indicative in the total number of accommodation facilities. The category of 3* is also indicative, which points to the trend of organisation and quality of offer of the small and medium-sized hotels in Croatia. According to the analytics of the average stay (2.1 days), it is evident that guests stay longer in small and medium-sized hotels of a higher category; the 5-star category generates 2.9 days of stay, while the 2-star category generates 2 days. Parallel, with stays in large hotels, where, at the level of Croatia, average stay is recorded at 5.3 overnights⁷, as well as with the analysis of indicators of overnights per bed (77 overnights), room for qualitative and quantitative shift for extension of stay is evident, by which a better rate of capacity occupancy and better financial results would be realised.

Organised development and stimulation of small and medium-sized entrepreneurship in the hotel industry in Croatia started in 2004 with the project "Incentives for Success" of investment in small family hotels and which included the support of business

⁵ SFH-Small Family Hotels.

⁶ Pavia N., Gržinić J., Floričić T., (2014) Specialisation as a trend in modern hotel industry, Trends in Tourism and Hospitality Management, Opatija, Croatia: Faculty of Tourism and Hospitality Management, Opatija, p.p. 256-272.

⁷ Floričić T.: "Master Plan and destination positioning: Tourism clusters in Istria", CIT2013 – Papers and Proceedings, a special monograph on-line issue of *Papers de Turisme*, No.54, July-December 2013, p.4.

banks⁸. The project "Under Ancient Roofs" followed, which valorised historical, original architecture and, within it, around 100 small and medium-sized hotels have been established in Croatia up to date. In Croatia, for stimulation of small and medium-sized entrepreneurship in the hotel business, 450 different loans in the amount of 275 million euros have been approved up to now, by means of which in 184 small and medium-sized family hotels, 14,000 beds were created and 3,700 persons employed. Coordinated activities of small and medium-sized entrepreneurs in Croatia are supervised by the National association of small and family-run hotels, which has 138 members.

Taking into consideration the competitive environment of the geographically close receptive countries of Austria and Italy, data has been recorded that, in Austria, there are 10,000 facilities of winter and continental tourism, out of which 70% of accommodation capacities is organised as small family hotels. In Italy, 23,000 facilities make up 50% of accommodation capacities. In Croatia, however, small family hotels make up around 7% of accommodation capacities, i.e. around 31% of the total number of hotels, which points to the potential for qualitative growth.

MATERIAL AND METHODS

According to the National development programme for small and medium-sized entrepreneurs in Croatia, the key challenges for the internationalisation of small and medium-sized hotels are responding to consumers' expectations, an increased specialisation, new technology, marketing mergers, as well as the pricing policy. This research was conducted for the purposes of recognition of the importance and consideration of aspects and positions of internationalisation and positioning of small and medium-sized entrepreneurs in the hotel industry, with the aim of their intensification. The aim is also to point out and research market potentials for the placement of specialised small and medium-sized hotels, as well as to assess the promotional mix instruments in the sense of consideration of the power of Internet as opposed to traditional promotional media.

The potentials and aspects of market positioning of specialised SME hotel companies were researched from two aspects. In the first place, using the qualitative research methodology, i.e. interview, attitudes of the managements of small and medium-sized hotels were researched in cultural tourism destinations, which are specialised and themed according to the destination resource basis. The second part of the research is the quantitative research, carried out using the Likert scale and processed using the statistical methodology. Other scientific and research methodologies were also used, such as analysis, synthesis, description and Meta-analysis, for the purposes of as comprehensive as possible consideration of the topic area and testing of the hypothesis: By specialisation, small and medium-sized hotels achieve better competitiveness in the international market and develop as tourist attractions in tourism destinations.

RESULTS AND DISCUSSION

By multiplicative function, the international trend of development of small and medium entrepreneurship stimulates the growth of the scope of accompanying service activities

⁸ Kreditiranje uz kamatnu stopu od 2% na rok otplate 20 godina (HBOR – Hrvatska banka za obnovu i razvoj).

in tourism, as well as their quality and diversity. Monitoring long-term demand trends which include increasingly pronounced segmentation in the sense of development of selective forms of tourism, coupled with incentives and programmes supported by the European Union, enables the creation of preconditions for realisation of market competitiveness and international placements. The research results, as well as the conclusions which contribute to new knowledge follow further down.

Small and Medium-Sized Hotels as Tourist Attractions

For the purposes of better recognisability and market placement, small and medium-sized hotels are grouped and promoted using the cluster strategic promotion, realised in cooperation with DMOs and tourist boards. By means of the synergy marketing, destination tourist products are formed, which are directed towards the valorisation and affirmation of small and medium-sized stakeholders, service providers and mediators, as well as the local entrepreneurs. The research was conducted in March 2015, at the International Travel Trade Fair ITB in Berlin, which represents the world's largest gathering of supply, demand and associated stakeholders and which sets the future trends and potentials of international tourism development.

The example of the Italian hotel industry, in regard to the development of small and medium-sized entrepreneurship, is presented, as well as the coordinated marketing with destination companies. Three hotels were chosen among 39 SME hotels that author researched by meta search and interview with hotel management and representatives. Hotels are unique with their specialised services and operate as SME hospitality entrepreneur with developed marketing strategy, destination identity and high occupancy ratio. The brief overview of hotels and hotel managers interview results are following:

- Etruscan Chocohotel – the first hotel dedicated to chocolate is situated in Perugia, the Italian capital of chocolate. The hotel disposes with 94 accommodation units, themed according to different types of chocolate and chocolate delicacies, a restaurant, tasting rooms and a shop and within the hotel there are also conference and wellness centres.
- Byblos Art Hotel – Villa Amista is situated in Verona, located in a 16th century villa and disposes with 60 unique, different designer rooms, a restaurant, a bar, a wine cellar, a wellness centre and a remarkable permanent contemporary artefact exhibition.
- Nebrodi Ospitalita Diffusa – a diffused hotel in Sicily which offers accommodation in traditional Sicilian houses, transformed into a diffused hotel which, as an hotelier concept, link up several small entrepreneurs and, for the purposes of tourism, use cultural and historical heritage in the form of accommodation structures.

Modern tourism is responsible, it sustainably valorises the resources and, market-wise, it is oriented towards the guests it individually identifies. The business concept is based on experiences and emotions; guests themselves take part in them, thus becoming loyal consumers and promoters. Small and medium-sized hotels in culture and tourism destinations valorise the resource basis and form a themed, specialised hotel product which they then place in the tourism market, achieving a new competitiveness with their specific characteristics and, with their strategic marketing and modern technologies, intensifying the promotion mix channels and improving the recognisability among the masses of undifferentiated

hotel offers. The possibility has been recognised of a stronger promotional presentation and cooperation with the local DMOs for the purposes of placement intensification.

Table 2. Attitudes of managers of specialised SMEs in the hotel industry

Etruscan Chocohotel	Byblos Art Hotel	Nebrodi Ospalita Diffusa
1. What was the original purpose of the building where your hotel operates now?		
The hotel is a modern building, designed for hotelier purposes	The hotel is an old villa with a contemporary image of the Valpolicella region	The diffused hotel is formed on autochthonous Sicilian houses, appointed with historical details
2. How does your hotel promote cultural tourism and does it have historic details?		
The hotel is specialised in gastronomic tourism; it is a modern building and has no historical details	Through marketing channels by means of promotion and modern technologies. We have no historical details in the hotel, but a contemporary art exhibition	Through all types of promotion, we emphasise the importance and historical heritage: Roman, Byzantine and Greek
3. How does the market respond to your hotel's specialised features?		
Guests are impressed by the theme of chocolate, present in all segments of the offer. We are applying for the TripAdvisor certificate of excellence and have a lot of positive reviews	Our guests are fans of designer hotels and contemporary art	Guests' positive impressions; they wish to be in authentic touch with the traditions of life and work in Sicily
4. As a SME hotel, do you promote yourself through a DMO marketing mix and how?		
No, we promote our hotel independently, using brochures, fairs and Internet	We do recognise the importance, but we are not using it yet; we have our own independent promotional activities, catalogues, Internet and fairs	Yes, we are cooperating well through different media, campaigns and activities
5. Are your specialised services, as a SME entrepreneur, achieving competitive advantage?		
Yes, we offer local products, chocolates, souvenirs made of chocolate and souvenirs made on that theme	Yes, our contemporary art exhibition and our designer rooms attract guests	Yes, the houses are authentic, attractive, and they offer history, culture and traditional heritage
6. Are you implementing specialised gastronomic offer and are you linking up with the local entrepreneurs?		
Yes, we cooperate with agencies through our restaurant and shop	Yes, we offer authentic regional cuisine, as well as modern and international dishes	Yes, we offer local food and organise excursions to the local producers for tasting and purchase
7. Does your business affect the development of small and middle-sized entrepreneurship in the destination?		
Yes, we cooperate and promote the local producers' products	Yes, we cooperate with the local food producers and we offer excursions	Yes, in cooperation with the local businesses and as a part of a project under the EU ⁹ auspices

Source: Author's research

Specialised SME hotels through the hospitality offer could promote cultural tangible and intangible values that could be developed into a tourist attraction. These include the historic buildings, localities and urban area, but also cultural traditional performances, handicraft workshops and gastronomy that could be organised and served in SME hotel.

⁹ The project financed by the EU, the Republic of Italy and the Sicily Region, dal P.O. F.E.S.R.2007-13 l.i. 3.1.4.3 *Dipartimento dei Beni Culturali e dell'Identità Siciliana*

As the hotel industry is an economy with multiplicative impact on local community, the development of specialised SME hotel that promote local services, ingredients and other product could support the strength of local economy and increase the competitiveness of intangible export through tourism.

Specialised SME Hotels and Tourist Perception

The second part of the research relates to the perceptions of the guests of specialised offer small and medium-sized hotels, thus supplementing the first research on analysed positioning potentials. The best practice from foreign country present a potential roll model how Croatian and Istrian SME hotels should organise their marketing mix. Aiming to circle the topic in whole, the attitudes of consumers are explored and general overview of their preferences is given targeting to present the level of agreeing with statements related with first research.

The research on attitudes of the tourists who stayed in the Croatian, Istrian cluster of Southern Istria during the festivity season points to the existence of potentials for the development of specialised hotel businesses through small and medium-sized entrepreneurs (SME). Using the survey methodology, the questionnaire was completed by 103 respondents¹⁰. The sample was randomly chosen, but the targeted group was representative in mean that the approached respondents are typical clients (by demographic structure, emissive market, motivation) of Istrian hotels so their representativeness is accepted as a appropriate for generalisation.

The research was processed using the Likert scale, from 1 to 5, where the highest level of agreement with the statement was expressed by the grade 5 and the lowest by the grade 1 and the average grade of importance of a specific hypothesis in the tourists' perception was calculated. Using the statistical methodology, a sample from the aspect of the origin – tourist emissive market was included, their gender and age were analysed, as well as their motivation for coming to the tourism destination and valorisation of SME hotel business.

The results of the research, which contribute to the formation of the conclusions and recommendations, follow below.

Table 3. Respondents' nationality survey

	Nationality						Total
	Italian	Slovenian	German	Austrian	Croatian	Other	
No.	43	21	17	10	10	2	103
%	42	20	17	10	10	2	100

Source: Author's research

The research on the tourist emissive markets points to the importance of the vicinity of the tourism destination. Out of the total number of conducted surveys, 42% were from the Italian market, 20% from the Slovenian, 17% of surveyed guests were from Germany, 10% from Austria, 10% from Croatia and 2% from other emissive countries (Bosnia and Herzegovina, Spain).

¹⁰ Out of 300 survey questionnaires which were prepared for the survey, 103 were completed, representing a response rate of 34.3%. A minimal number of survey questionnaires was invalid, i.e. 1.9%.

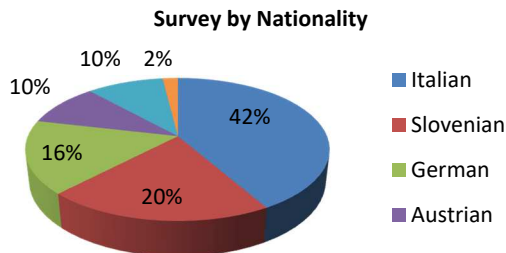


Figure 1. Respondants nationality survey

Source: Author's Research.

Table 4. Respondants gender survey

Gender	No.	%
Male	46	45
Female	57	55
Total	103	100

Source: Author's research

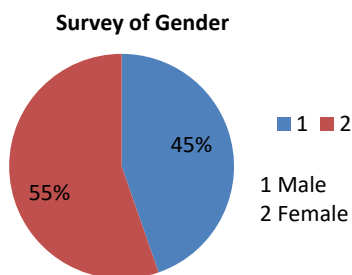


Figure 2. Respondents gender survey

Source: Author's Research.

The research on the respondents' gender points to a quite equal participation of both genders, with a rather more frequent response by the female respondents (55%).

Table 5. Respondents' age survey

	Age							Total
	20-29	30-39	40-49	50-59	60-69	70-79	80-89	
No.	4	10	19	22	32	16	0	103
%	4	10	18	21	31	16	0	100

Source: Author's research

Considering the respondents' age structure, the research indicates that the dominant share of the sample, 68%, is of an older age, between 50 and 79 years of age. This also implies the destination market positioning, as well as the orientation of services and facilities of the Southern Istria cluster towards a middle-aged to older demographic structure.

The quoted segment is a consumer of the destination cultural product when it comes to the excursions and gastronomy offers, 44%, which is evident from the following table.

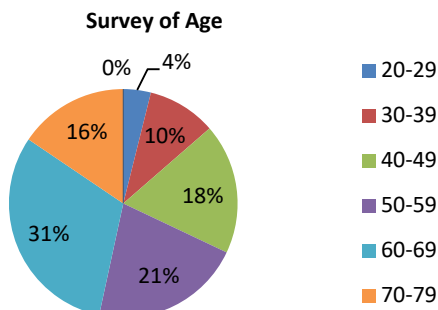


Figure 3. Respondents' age survey

Source: Author's Research.

Table 6. Respondents' motivation survey

	Motivation			Price	Total
	Vacation-Relaxation	Excursion-Gastronomy	Loyalty to tour operator		
No.	33	45	22	3	103
%	32	44	21	2	100

Source: Author's research

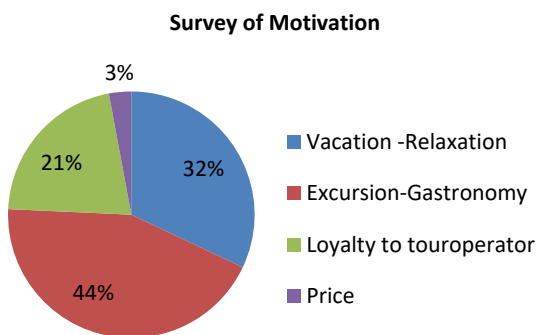


Figure 4. Respondents' age survey

Source: Author's Research.

The tourist motivation of vacation and relaxation, 32%, is also indicative, while loyalty to tour operator points to tourists' confidence in the sense of letting the tour operator, who cooperates with the local businesses, packet services and choose the destination on their behalf.

The illustration in table 7. of the results of respondents' research on specialised SME hotels, with a review of average grades, realised per specific statement, follows below.

Further to this, the discussion examines the significance and relevance of the research results.

Table 7. Tourists' perception of specialised SME hotel aspects

Tourists' perception survey – statements	Average grade
1. I often stay in small and medium-sized specialised themed hotels.	3.6
2. I prefer specialised hotels as opposed to the standardised offer of large hotels.	3.6
3. Tourist attractiveness and a hotel specificity affects my choice of destination.	3.9
4. Internet is an important source of information about small specialised hotels.	3.8
5. I choose specialised tour operators as SME mediators for booking of specialised hotels.	3.9
6. I read specialised magazines and watch TV programmes related to selective forms of tourism and small specialised hotels.	3.3
7. Brochures, magazines and newspaper articles are important for the development of small and medium-sized hotel business marketing.	3.6
8. By staying in small and medium-sized hotels, I support local entrepreneurship.	3.6

Source: Author's research

The questionnaire was prepared on the basis of 8 indicative questions which research the impact of small and medium-sized specialised and themed hotels on the tourist demand, i.e. on the tourists' perception of their specific features which affect their tourist attractiveness and market positioning. The frequency of respondents' stays in small and medium-sized specialised hotels was researched, as well as the level of their preference in choosing those hotels as opposed to large standardised hotels. The average grade of 3.6 points to a positive trend and preference of tourists in the perception of small and medium-sized hotels as a favourable form of accommodation. The third question was directed to consideration of the importance of small and medium-sized hotels when selecting a tourism destination. A high level of attractiveness of specialised small and medium-sized hotels in the destination achieved a high average grade of 3.9, pointing to a potential comparative advantage of the destination which is developing small and medium-sized entrepreneurship in tourism and in the hotel industry.

The following three questions in the research deal with the sources of information about small and medium-sized specialised hotels in the tourist destination. As large hotels in the hotel company systems and international brands (regardless of whether they are organised by contracts of management, franchises or ownership) have large budgets for marketing, they use different marketing tools and promotional mixes for the purposes of as aggressive as possible market presence. Small and medium-sized companies in tourism and in the hotel industry are fighting for marketing recognisability with limited financial resources, which is conditioned by their size and their power itself of being able to invest in marketing. Small and medium-sized hotels, therefore, specialise their specific features, theme their offer and present their product in the market through a differentiated and specialised marketing mix. This marketing mix also includes their promotion in world tourism markets, where small and medium-sized hotels often merge into themed clusters and present themselves through themed cultural routes. The examples for this are the Strada dell Radicchio in Italy, the Porcelain route in Germany, wine routes and olive oil routes and the Glagolitic Alley in Istria, Croatia. Small and medium-sized hotels in the quoted

cultural and gastronomic routes offer specialised and themed services in original autochthonous environments or in constructed replicas and stimulate sustainable cultural development, comprehension and education, which is also encompassed by the first part of the research on the attitudes of the management towards the market positioning of small and medium-sized hotels in the European destinations of culture and tourism.

As a tool of modern technologies, Internet has contributed to an easier and faster spread of information, which become accessible to a wide population in all parts of the world and which, with the limitations of the traditional printed and audio-visual media, was not possible. In the sense of specialised editions of magazines, travelogues, books or TV programmes (average grades 3.3/3.6), traditional media, however, contribute to the development of the needs for the selective forms of tourism based on natural resources, as well as cultural tourism in special hotel accommodation structures. Educating tourists and raising awareness of their needs for a special "experience plus" opens new potentials for development of small and medium-sized specialised entrepreneurship in the hotel industry.

Specialised offers are being formed, historical edifices transformed into hotels, thus becoming tourist attractions and small and medium-sized entrepreneurs encouraged at all tourism industry levels. The respondents equally awarded a high grade of 3.9 for the development of specialised tourist agencies, as a market mediator in realisation of market competitiveness of specialised hotels.

Finally, with the last question, the tourists' opinions were researched on the impacts of small and medium-sized entrepreneurship in the hotel business and the realised tourism flow on the local economy development. The average grade of 3.6 points to the respondents' positive reply and to the perception of the importance of the contribution to the local community by means of stimulation of the SME through tourism and hospitality business.

CONCLUSIONS

Conclusions and recommendations follow further to the discussion in order to intensify entrepreneurship in the hotel industry, as well as the linking up of entrepreneurs from all the branches of business related to tourism. Namely, tourism as a set of business branches, apart from hospitality business and trade, also includes transport services, banking and excursion services, which represents a potential flywheel of the tourism destination economic development. Selective, specialised forms of tourism, as well as demand requirements, open new possibilities for the creation of innovative products and services by small and medium-sized entrepreneurs and they affect the gross domestic product of some regions and clusters.

As this paper researched the marketing aspects of small and medium-sized specialised hotel market positioning in the international context, room for the development of new forms of accommodation offer has been noted, especially as, after UNWTO, the differentiation and specialisation had been set as modern trend of development of international tourism.

The destination material and non-material cultural product represents the basis for the development of specialised entrepreneurship, ennobles the offer and provides a special "experience plus", affecting the increase in competitiveness. For a new consumer, the created experience and added value should be mature, spontaneous, complex, distinctive and complementary.

Further to the afore-quoted, the following recommendations are suggested:

1. The room for the linking up of specialised small and medium-sized hotels with the destination offer into a destination integral product: accommodation, restaurants, excursions, workshops and transport services are business projects by which it is possible to affirm the activities in the local community.
2. Considering stays in the destination, the importance of the autochthonous and themed gastronomic offer in the hotel is evident, which opens windows of opportunity to new entrepreneurial initiatives. Such specialised hotels in tourism destinations are becoming tourist attractions in themselves and a motivation for visits. This can also be supported by the development of public and stakeholder awareness programmes.
3. The support given to small and medium-sized entrepreneurship from the institutional level is important, as well as from the European Union funds, which affirm entrepreneurship projects in tourism and the hotel industry. Support is also possible through deregulation of legislation for the purposes of alleviating initiation of businesses and transfer of property of small and medium-sized companies in the hotel industry, as well as the reduction of para-fiscal charges and better provision of information.
4. The importance of expansion and increase of the quality of offer is recognised, plus introduction of the international standards and norms.
5. It is possible to intensify strategic marketing through modern technologies, by adequate optimisation of Internet pages to express the presence in the international tourism market and by opening new e-distribution placement channels.
6. The importance of linking up with the local DMOs and DMCs has been recognised. Using promotional synergy activities, as well as mutual investment in marketing, the financial burden is reduced for small entrepreneurs and a more efficient promotion is achieved.
7. Also, the potential of horizontal and vertical integration of small and medium-sized entrepreneurs in tourism through created marketing brands, mutual appearance or organisation of cultural tourism routes.

Further research into these problem areas should also include analysis of the factors which contribute to a good performance of marketing positioning of specialised small and medium-sized entrepreneurs in the hotel business and which can be observed through the processes, environmental protection, aesthetics (client's sensual experience), information accessibility, cooperation among stakeholders, education of staff, etc. and all that for the purposes of the client identification, attraction and retention. The research results are corresponsive with results of several international authors (Koryak et al 2015 and El Gohary et al 2013) that recognise the importance of awareness of new technologies, better information sharing among SME managers and usage of modern management skills.

In paper there are several premise set as constitutional part of one hypothesis "Specialisation of SME hotels impact their better positioning". Researched and analysed from the two different and opposite points of view, supply and demand, the unanimously results could point to the importance of specialisation and SME hotels development.

In the course of the research, the author also came across certain limitations in the sense that the response to the survey was somewhat poorer than expected, which was explained by a pretext of being too busy with excursions and activities. This does not necessarily present a negative aspect, as the fact that guests on excursions consume

local products, delivered to destinations by local entrepreneurs, already in itself represents a potential for future research and a basis for new scientific knowledge.

REFERENCES

- Beaver, G. (2002). *Small business, entrepreneurship and enterprise development*. Pearson Education.
- Bell, J., Crick, D., Young, S., (2004). *Small Firm Internationalization and Business Strategy*, *International Small Business Journal* 22(1), SAGE Publications, p. 23-56.
- Bosworth, D. L. (2005). *Determinants of enterprise performance*. Manchester University Press.
- Carter, S., Jones-Evans, D. (eds.) (2000). *Enterprise and Small Business – Principles, Practice and Policy*. Ashford Colour Press Ltd., Gosport.
- El-Gohary, H. , Edwards, D., Eid, R., Huang, J., (2013). Choice of export entry mode by developing economies SMEs : An empirical investigation of Egyptian SMEs, *Journal of Economic and Administrative Sciences*, Vol. 29 Iss: 2, p.113-133.
- Floričić T. (2013). Master Plan and destination positioning: Tourism clusters in Istria. CIT2013 – Papers and Proceedings, a special monograph on-line issue of Papers de Turisme, No.54, July-December 2013, p. 50-69.
- Gratzler, M., Winiwarter, W. (2003). The Role of the Internet in the SME Hotel Sector in Austria, *Web and Communication Technologies and Internet-Related Social Issues — HSI 2003*, Volume 2713 of the series *Lecture Notes in Computer Science*, p. 85-95.
- Henderson, J.C.,(2013). Hip heritage: The boutique hotel business in Singapore, *Tourism and Hospitality Research*, 11(3), 2011,p.217-223.
- Henderson, J.C., (2013). Selling the past: heritage hotels, *Tourism*, Vol.61/ No.4, p. 451-454.
- Ilfko, S., (2010). Trendovi razvoja industrijskog turizma u Europi, The 2nd Scientific conference Management, Education, Tourism, Portorož, October, 21-22, p.706-714
- Ivandić, N., Kunst, I.,(2014). Nacionalni program razvoja malog i srednjeg poduzetništva u turizmu, Institut za turizam Zagreb.
- Jaafar, M., Abdul-Aziz, A. R., Maideen, S. A., & Mohd, S. Z. (2011). Entrepreneurship in the tourism industry: Issues in developing countries. *International Journal of Hospitality Management*, 30(4), p.827-835.
- Jantan, M., Ndubisi, O.N., Yean, O.B. (2003). Viability of e-commerce as an alternative distribution channel, *Logistics Information Management*, Vol. 16, No.6, p. 427.
- Jekanyika Matandam M. (2012). Internationalization of established small manufacturers in a developing economy: A case study of Kenyan SMEs, *Thunderbird International Business Review*, Special Issue:, *Re nascent Africa*, Volume 54, Issue 4, p. 509-519.
- Jones, E., Haven, C., (2005). *Tourism SMEs, Service Quality, and Destination Competitiveness*, CABI Publishing.
- Koncul, N. (2012). Wellness, a new mode of tourism, *Ekonomika istraživanja*, Vol. 25, No. 2, p. 525-534.
- Koryak, O., Mole, K., Lockett, A, Hayton, J., Ucbasaran, D. and Hodgkinson, G. (2015). Entrepreneurial Leadership, Capabilities and Firm Growth. *International Small Business Journal* 33, p. 89-105.
- Kriechbaumer ,K., Christodoulidou N., (2014). SME website implementation factors in the hospitality industry: Groundwork for a digital marketing roadmap, *Worldwide Hospitality and Tourism Themes*, Vol. 6 Iss: 4, p.328-351.
- Kušen, E., (2002). *Turistička atrakcijska osnova*, Institut za turizam, Zagreb.

- Lee-Ross, D., & Johns, N. (1997). Yield management in hospitality SMEs. *International Journal of Contemporary Hospitality Management*, 9(2), p.66-69.
- Lee-Ross, D., Lashley, C., (2009). *Entrepreneurship and Small Business Management in the Hospitality Industry*, Butterworth Heinemann / Elsevier Publishing.
- Marshall, P., Todd, B. (2009). Kako doprijeti do milijuna klijenata u 20 sekundi, Masmedia, Zagreb.
- Ministarstvo Turizma (2013). *Nacionalni program razvitka, 2014.-2020.*, Zagreb, Croatia.
- Morrison, A., Thomas, R., (1999). The future of small firms in the hospitality industry, *International Journal of Contemporary Hospitality Management*, Vol. 11 Iss: 4, p.148-154.
- Mura, L. Buleca, J. (2013). Trends in International Business of the Slovak Small and Medium Food Enterprises, The 2-dn International Scientific conference „Contemporary Issues in Business, Management and Education 2013“, *Procedia – Social and Behavioral Sciences*, Volume 110, 24 January 2014, p. 905-912.
- Pavia N., Gržinić J., Floričić T., (2014). Specialisation as a trend in modern hotel industry, *Trends in Tourism and Hospitality Management*, Opatija, Croatia: Faculty of Tourism and Hospitality Management, Opatija, p. 256-272.
- Personal communication with hotel managers: Nebrodi Albergho Difusso, Byblos Art Hotel, Etruscan Chocohotel, 04.03.2015.
- Phillips, P., & Louvieris, P. (2005). Performance measurement systems in tourism, hospitality, and leisure small medium-sized enterprises: a balanced scorecard perspective. *Journal of Travel Research*, 44(2), p.201-211.
- Proebstl, U., Mueller, F., (2013). Hotel certification and its relevance for sustainable development: examples from the European Alps, *WiT press, Sustainable Tourism V*, Eds.: F. D. Pineda, C. A. Brebbia.
- Ruzzier, M., Konečnik, M., (2006). The internationalization strategies of SMEs – the case of Slovenian hotel industry, *Management*, Vol. 11, 2006, 1, p. 17-35.
- Schegg, R., Stangl, B., Fux, M., & Inversini, A. (2013). *Distribution channels and management in the Swiss hotel sector*, Springer Berlin Heidelberg, p. 554-565.
- Soriano, D. R., & Castrogiovanni, G. J. (2012). The impact of education, experience and inner circle advisors on SME performance: insights from a study of public development centres. *Small Business Economics*, 38(3), p.333-349.
- UNWTO (2011). *Hotel Energy Solution Project, HES*, http://www.unwto.org/conferences/ec/en/pdf/089_04a.pdf, accessible on 27.12.2015.
- Westhead, P., Wright, M., Ucbasaran, D., (2002). International market selection strategies by ‘micro’ and ‘small’ firms. *The International Journal of Management Science* 30, p. 51-68.

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High-Tech SMEs in the Concept of Intelligent Organizations: The Reconstruction of the Approach in the Light of Empirical Research

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Abstract

The objective of this paper is to present the concept of intelligent organizations, which is nowadays believed to be the highest developed form of a company and to check if high-tech small and medium enterprises (SMEs) from Greater Poland region are run according to the concept of intellectual entrepreneurship. Verification whether the high-tech SMEs meet the criteria of intelligent organizations was tested on a sample 44 SMEs using a survey CATI tool. Data analysis consisted of comparing the values of three statistical measures (dominant, median, arithmetic average) of seventeen items. The survey results confirm that these enterprises base their actions on intellectual capital, which becomes the most important element of business management in the strategic perspective. Thus, their actions are consistent with the concept of intellectual entrepreneurship. The originality of this work lies in studying the concept of intellectual entrepreneurship taking into account companies from high-tech industry. Up till now companies from Greater Poland region were analysed just for their level of innovations, not intellectual capital. It is important to encourage more companies to be run according to the intellectual entrepreneurship concept due to unstable circumstances worldwide.

Keywords: globalization; intellectual entrepreneurship; intelligent organization; human capital; social capital

JEL codes: O31, O32

INTRODUCTION

It is difficult to find an example of a wealthy country with a closed economy. Open borders and free movement of the means of production, final goods and services until recently guaranteed both economic development and technological progress around the world (Geenhuizen & Ratti, 2001). Ideal examples of this are the economies of such countries as South Korea, Singapore, Hong Kong, Taiwan, and China. And although the literature points to numerous indisputable advantages of the internationalisation of markets, institutions and outcomes, and their aggregated form of globalization, its disadvantages must also be pointed out. It can undoubtedly be attributed with the following negative traits: the lack of global coordination, the impairment of authoritarian state in the economy, the accumulation of negative externalities, the dominance of microeconomic interest and the relaxation of rigor in terms of risk-taking by managers (Harrison, 2007). These aspects "contributed to a violation of the fundamental economic balance between the need for growth and profitability and the pursuit of security. The other side of the disturbed balance between profitability and security is economic instability" (Szymański, 2011, p. 15). Obvious examples of such instability can, in turn, be found in such countries as Greece and Cyprus, where the disregard for economic security has shaken not only their economies, but – given the high degree of dependence – also the entire European Community.

Economic reality is now characterized by the scarcity of confidence, trust and stability. Modern enterprises do business in an environment of generalized insecurity that hinders strategic planning in the long term, but promotes opportunistic behaviour (Cook & Kramer, 2004; Roubin & Mihim, 2011). As a consequence, verification, or adjustment activities have become increasingly difficult in observed high complexity of modern world, and it forces a new look at entrepreneurship and competitiveness. In literature one may find new concepts for understanding entrepreneurship in terms of new ideas, knowledge management, intellectual capital, innovation diffusion, as well as the ways of organizing the company (Ismail, Poolton & Sharifi, 2011; Teece, 2007).

The main purpose of this article is to point out the concept of an intelligent organization, which conducts its activity based on intellectual capital, and the synergy of human, social and organizational capitals. Bendkowski (2012, p. 21) states that the idea behind an intelligent organization "is to use its resources of knowledge with their simultaneous restoration and renovation. Thus, allowing for high flexibility and smooth adaptation to the environment and the anticipation of external conditions". The theoretical background of the problem has been further enhanced by the prospect of research on the high-tech SMEs sector in Greater Poland. The participation in the study (using CATI technique) was confirmed by 44 entities of which 32 were small, and 12 medium-sized companies. By using statistical measures (like dominant, median and arithmetic average) the sample companies were analysed and results have been presented.

THE CONCEPT OF AN INTELLIGENT ORGANIZATION

More than thirty years ago Peter Drucker proclaimed that global societies had entered the era of discontinuity and uncertainty (Drucker, 2015). For this reason, as described by

Szymański (2011), a critical reflection on classical and neo-classical approach to the analysis of reality made sense not just 50, 30 and 20 years ago, but also makes sense at present. It is even more apparent knowing that these schools recognize any fluctuations as normal economic phenomena, which should not cause unrest, because they are temporary. At the same time, the well-functioning market mechanism will ultimately lead to balance. The author adds, however, that today "qualitative transformations require substantial revision of the guidelines" (Szymański, 2011, p. 37). Also Joseph Stiglitz notes that "science quite often so strongly believes in assumptions or they are so firmly entrenched in our thinking that no one realizes the fact that these are only assumptions. (...) Economists assume that information is excellent, although they understand that it is not the case. Theorists hope that the world of imperfect information works very similar to the world of perfect information" (Stiglitz, 2010, p. 297).

The range of current changes resulting from the opening of economies and their internationalisation, complex phenomena of offshoring, industrial and even economic relocation, force one to reject the classical concept of full rationality, and thus the idealized model of homo oeconomicus. According to Janasz, "progressive globalisation will increasingly affect development prospects for individuals, organizations, cities, regions, countries and even continents" (Janasz, 2012, p. 61). Moreover, some authors claim that a new kind of society is now forming, namely "homo globalis" (Strenger, 2011).

In such a dynamic environment where the extrapolation of past experiences and the anticipation of foreseeable trends are impossible, and where the culture of insecurity and mistrust is constantly growing, the unmistakability of resources is gaining importance (Jashapara, 2006). In particular such resources that allow constant adaptation to a changing reality. According to Ratajczak-Mrozek (2010, p. 45) "under hypercompetition permanent competitive advantage is replaced by a series of instantaneous states of comparative advantage. This means that companies, instead of trying as long as possible to keep their well-established competitive advantage, should constantly search for new ways to maintain their dominant positions, which means to constantly question and demolish their current advantage and the advantage of their competitors". Thus, contemporary management paradigms need to be gradually redefined and broadened with such strategic, and at the same time, intangible elements as: knowledge, skills, experience and leadership, human capital, as well as trust, loyalty and credibility – collectively referred to as social capital (Libertowska, 2014, p. 96). Moreover, the importance of creativity and innovativeness has been growing along with high flexibility and seamless adaptation to the environment (Brilman, 2012; Easterby-Smith, Lyles & Petraf, 2009; Eisenhardt, 1989; Kogut & Zandar, 1992).

The concept of intellectual entrepreneurship with intellectual capital at its foundations is an answer to these new, difficult conditions. As observed by Baron and Armstrong (2007, p. 9) "the concept of intellectual capital composed of three elements points out that while individuals (human capital) create, maintain and use the knowledge, which is multiplied by the interactions between them (social capital) and consequently it generates institutionalized knowledge which is owned by the organization (organizational capital)". According to Love, Fong and Irani (2005, p. 1), this specific type of entrepreneurship involves "establishing a basis of material wealth of intangible knowledge". Janasz (2012, p. 31) adds that natural features of this type of enterprise are

creativity and innovativeness. Intelligent organizations are thus identified as the highest stage of enterprise improvement. The table below presents the main differences between a traditional organization, and an intelligent one.

Table 1. The features of traditional and intelligent organizations

Traditional Organization	Intelligent Organization
Work fully utilizes only the knowledge of a small part of employees	Work is based on the knowledge of all participants
Hierarchical structure	Network structure
Functional management system	The dominance of intellectual capital management
The dominance of routine work, repeatability and procedures	The dominance of activities involving innovative solutions
Individual or group work	Teamwork
Work involves the performance of duties	Design work
The use of individual skills	Synergy in teamwork
Strong position of managers	No typical managerial positions, and if they exist, a manager acts as a coach and an inspirer
Orientation inside the company to maintain internal balance	Orientation on the outside and creating a global value
Top-down coordination	Coordination by team participants

Source: (Mikula & Ziębicki, 2000) quoted in (Bendkowski, 2012).

In the context of intellectual entrepreneurship particular significance is attributed to human capital, including knowledge as a strategic element, which allows the creation of competitive advantage (called knowledge-based view) (Kogut & Zander, 1992, p. 391). There is no doubt that knowledge is rare and it depends on context. Each enterprise produces appropriate knowledge, which means that it is difficult to forge (Bendkowski, 2012, p. 21). Thus, the willingness of companies for creative and innovative solutions to new problems and undertaking an entrepreneurial approach with a simultaneous risk appearing in connection with new, uncertain and revolutionary changes "remains associated with the intelligent use of knowledge aimed at creating new knowledge and new skills, which lead to the realization of unique projects. All this allows one to unlearn routine, traditional and customary behaviours" (Janasz, 2012, p. 30).

Moreover, it is worth noting that the literature emphasizes particular importance of tacit knowledge, which arises within organizations and becomes subject to rapid transfer between the employees of a company and between the company and its environment (Nonaka, 1995). This knowledge can become an important source of innovations, and thus can contribute to gaining competitive advantage in the future. It allows giving up the strategies of imitation. It means moving away from technological approach to knowledge popular in the 80s and 90s and taking up a social approach in which knowledge is created as a result of mutual interaction and group learning (Janasz, 2012). According to Czop (2001, p. 98), "[...] it is thanks to the many interactions occurring between the participants of organizations, the processes of transferring information and knowledge and the learning processes, that an organization is able to survive on the market. A modern organization inspires and supports the learning of all its members,

constantly transforms itself, expanding its creative possibilities for the efficient creation of the future".

Thus, the second element of intellectual capital – social capital grows in importance. "Focusing on people creates an atmosphere of harmony within a company and facilitates the use of wealth and originality of employee personality traits, filling a wider social and cultural role. This makes the people and the relationships between them the greatest good of a company" (Grzanka, 2009, p. 10). This suggests that in an intelligent organization the appropriate selection of employees in terms of skills and qualifications should go hand in hand with social skills. The concept of intellectual entrepreneurship emphasizes the role of cultural factors and the system of fundamental values in the process of decision-making.

THE CHARACTERISTICS OF THE STUDY AND THE ANALYSED SAMPLE

Within the framework of the project undertaken in the period between May 2013 and November 2014, titled "The role of intangible assets in shaping competitive advantage of high-tech companies in Greater Poland," a survey of small and medium-sized enterprises from the high-tech sector¹ was conducted. All the participants were located in the Greater Poland region. The basic research problem was to identify the extent to which these entities use soft factors of production in acquiring their superior position over their competitors. The questions in the survey also made it possible to assess the extent to which these companies are aware of new trends in the management of modern enterprises and whether they are guided by the concept of intellectual entrepreneurship. The essence of the study stemmed from the fact that "companies predominantly attach importance to current efficiency and represent the traditional approach" (Janasz, 2012, p. 35), while too little number of business entities chooses a strategy based on change, innovation and flexibility (Brilman, 2012; Easterby-Smith, Lyles & Petraf, 2009; Liu & Liang, 2014).

For this reason, the undertaken study focused on the high-tech enterprises (industry approach), which are generally the units focused on pro-innovation activities. According to the governmental report titled "Competitiveness of high-tech companies", "industry of high technology, due to high intensity of the processes of research and development, is a specific sector, the analysis of which provides not only information on the impact of R&D, but also on competitiveness and the ability of the economy to absorb the results of the work in the fields of science and technology" (Ministry of Economy, 2009, p. 3). These companies are characterized by specific features, which allow them to achieve competitive advantages over their large counterparts. It is possible to distinguish, amongst others, the following (Glinka & Gudkova, 2011):

1. More flexible management structure than in the case of large companies.
2. Less bureaucracy, which provides greater freedom of action for businesses and the possibility of an easier assignment of innovative activities as priorities in the development strategy.

¹ The classification of advanced technology industries was adopted in accordance with Polish Classification of Activities (PKD 2007) and included the following: (C 21), (C 26), (C 30.3), (J 59), (J 60), (J 61), (J 62), (J 63), (M 72).

3. The possibility of freezing a much smaller share in earlier generations of technology than in the case of large companies.

The choice of the territorial scope was due to the fact that the region of Greater Poland during the period 2008-2012 significantly differed in comparison to other provinces in the country in terms of the size of investment in innovative activities and R&D activities of small and medium-sized industrial and service enterprises, as well as in terms of the largest number of significant concentration of the people employed in high-tech industries (PARP, 2006).

The analysis of data obtained from the statistical office indicated that 215 entities had met the criteria for selection defined in the project. The study was complete for the given population. Finally, the participation in the study (using CATI technique, i.e. Computer-Assisted Telephone Interview) was confirmed by 44 entities (maneuverability at 20%), of which 32 were small (10-49 employment level), and 12 medium-sized (50 to 249 employees) companies.

The main research tool was a survey consisting of 27 questions divided thematically into two parts. The first part concerned the degree of innovation and competitiveness, the other – social capital in the organization.

INTELLECTUAL ENTREPRENEURSHIP IN LIGHT OF EMPIRICAL RESEARCH

The basic premise of the study was the statement that "the challenges faced by today's organizations highlight the need to take into account not only quantitative factors but also qualitative indicators of competitiveness while creating competitive advantage" (Machaczka, 2014). Enterprises predestined to build such an advantage, especially by means of intangible assets, are companies belonging to the high-tech sector. Therefore, the questionnaire consisted of 17 questions about the resources and skills, which in the opinion of managers of these companies, allow one to gain competitive advantage. The distribution of replies is presented in the table below.

From the above set of resources (skills) constituting competitive advantage of companies respondents on a scale of 1 (lowest rating) to 5 (highest rating) most appreciated the following:

- human capital ($m_e=5$, $d=5$, $\bar{x}=4,63$);
- tendency of a company to learn ($m_e=4,5$, $d=5$, $\bar{x}=4,18$);
- social capital of employees ($m_e=4$, $d=5$, $\bar{x}=4,13$).

These factors can therefore be considered as a set of determinants, which allow the creation of competitive advantage for small and medium-sized enterprises in the high-tech sector of Greater Poland region. In addition, these results indicate that the analysed entities primarily value intangible resources so difficult to imitate and emulate and so crucial for the concept of intellectual entrepreneurship. The first tangible factor in the form of company's finances has been positioned sixth.

Table 2. The importance of resources and skills to shape competitive advantage

Assets	Median	Mode	Arithmetic mean
1. Human capital	5	5	4.63
2. Company's eagerness to learn	4.5	5	4.18
3. Social capital of employees	4	5	4.13
4. Social capital in relation to business partners	4	5	3.95
5. Flexibility of organizational structures and activities	4	5	3.63
6. Know-how and corporate image	4	4	3.95
7. Research and development activity	3	3	2.86
8. Shortening the period of the commercialization of results	3	3	3.13
9. The processes of organizational learning	3	3	3.30
10. Patents and licenses	3	1	2.63
11. The state of company's finance	4	4	3.95
12. Implemented innovations	4	4	3.95
13. Quality management system	3	3	3.50
14. Company's location	3	4	3.04
15. Machines, production equipment	3	3	3.18
16. Logistics	3	3	3.00
17. Others	3.5	4	3.16

Source: own study.

The highest importance attributed to human capital – the aggregate of knowledge, skills and experience, clearly shows that these elements are treated by the analysed companies as a strategic resource in which it is necessary to invest. This approach is consistent with the concept of a knowledge-based economy which, from a microeconomic perspective, assumes that knowledge remains an undisputed source of competitive advantage for most businesses, including those of small and medium size (Koźminski, 1996). Moreover, according to Edvinsson and Malone (1997, p. 34), human capital embodies the dynamics of an intelligent organization through its creativity and innovativeness. It is worth noting that among the 44 surveyed units there are 32 innovative entities, i.e. those which have introduced innovations in the past three years.

In the opinion of the respondents the second most important factor (also in this case an intangible production factor) is a company's eagerness to learn. This resource becomes crucial in the context of the acquisition of competitive advantage in a situation where "sustainability has been devalued, while transience is rapidly gaining value" (Bauman, 2001, p. 161). Therefore, a specific challenge faced by enterprises today is the relentless "creative destruction" in thought and action, as addressed by J.A. Schumpeter (2014, p. 192), who identified it with the impact of the implementation of innovations, when "better behaviour forced the destruction of the old". Thus, Schumpeter played a significant role in the rejection of the neoclassical approach to equilibrium and stability. As Szymański (2012, p. 169) aptly adds, "the market is changing in an erratic and turbulent way. On the other hand, the company itself faces difficulties in adapting to changes, and it regards especially its leadership, which does not demonstrate an adequate capaci-

ty to change and remains in with its behaviours in the old era of continuity. [...] As a consequence, it causes an imbalance between the market reactions and the reactions of enterprises". Therefore, the importance of organizational learning also increases. It is a process in which the acquired knowledge increases the ability to both solve current problems, as well as undertake more effective actions (Wang & Ahmed, 2007; Zott, 2003). Thus, this process facilitates a high flexibility of action (Brett, 2002). Similar conclusions have been reached by Senge (2006), who stated that organizations that are able to build competitive advantage in the future are those which can take a fresh look at the place and importance of social capital of a given organization, and those, which will learn to use the involvement of employees and their ability to learn in a right way (Chen, 2008; Wang, Cheng & Lin, 2013).

The third important factor that managers of the analysed companies recognize is the importance of their employees' social capital – their mutual relationships based on, inter alia, trust, loyalty, or even credibility in the process of gaining competitive advantage. Entrepreneurs should, therefore, take measures to strengthen trust (which constitutes a fundamental resource of social capital) between employees and their superiors as well as among employees themselves. This fact is especially important in the light of a very low trust of employees towards their superiors observed in Poland. As becomes clear from the research of the Institute Great Place to Work Poland, less than 50% of workers share the opinion that business is conducted in an honest and ethical way, and that they feel appreciated in their work environment (Forum Odpowiedzialnego Biznesu, 2015). For this reason, the fact that social capital is valorised in the analysed companies is encouraging. The more so with the fact that a number of studies confirm its positive impact on economic activity (Adler & Kwon, 2002; Coleman, 1990; Fukuyama, 1996; Granovetter, 1973; Lin, 2000, Nahapiet & Ghoshal, 1989). It is now seen as a pro-development factor affecting the success of an organization and the achievements of individuals, because it reduces opportunistic behaviours, incites greater accountability in economic interactions, and provides access to resources, including tacit knowledge and its faster diffusion between employees (Gajowiak, 2010). As noted by Grzanka (2009, p. 126), social capital allowing access to important information and other strategic resources has a significant impact on the ability of companies to adapt to both challenges and opportunities that emerge in the environment. The more possibilities for interaction between employees, the more social capital is created, "which results from the fact that new knowledge accumulated by a company creates new opportunities in the environment". Thus, it seems true that knowledge and values shared by people slowly replace three elementary principles of competitiveness, namely cost advantage, higher quality of goods and services and the speed of response to customer needs (Grzanka, 2009). Moreover, as stressed by F. Fukuyama, social capital is the driving force for innovative behaviour, and its absence may act as a drag for such a behaviour (Fukuyama, 1996). Entrepreneurship, including the intellectual one, is based on the phenomenon of social interaction and the methods of operation of business entities are the result of "a game of interinfluence and negotiation" (Gajowiak, 2013, p. 62).

It should also be added that in the context of intellectual entrepreneurship it is worth pointing to organizational capital. And so, according to the study, the representatives of high-tech SMEs from Greater Poland (over 80% of them) attach importance to

the development of organizational capital by introducing, inter alia, the latest quality systems and software for data storage and processing.

CONCLUSIONS

Over the last few years a model focused on continuity and evolutionariness has been created among entrepreneurs. This model, however, is becoming inadequate in a situation of discontinuity of the modern world. As rightly pointed out by Szymanski (2011, p. 164) "the unsuitability of enterprises for non-linear change is an expression of insufficient capacity for creative destruction in thinking and action". Therefore, it becomes necessary to use the resources (particularly the intangible ones) intelligently, and aim at increasing pro-innovation behaviour. The role of intangible values continues to rise, as the existence of modern organizations is conditioned by innovations mentioned herein as well as by gaining the trust of customers, by creating brand and by effectively responding to changing reality. Baron and Armstrong (2007, p. 11) conclude that "the success in these areas depends precisely on the people". Thus, organizations aspiring to be "intelligent" must base their activities on intellectual capital representing the following three basic elements: human capital, social capital and organizational capital. It remains undisputed that in addition to extensive knowledge and highly skilled employees, crucial to further development of a company are social skills, which determine the acceptance common values and common culture, and sharing them (Hayes & Upton, 1998; Teece, Pisano & Shuen, 1997). Thus, social capital becomes a resource enabling the transfer of knowledge between employees, as well as between a company's closer and farther surroundings. Taking it into account contributes to the reduction of transaction costs and increases the innovativeness of business entities. Therefore, it can be equated with the common good worth investing in (Lauzikas & Dailydaite, 2015). As aptly noted by Będzik (2010, p. 15), "in the face of the depletion of cheap resources and easy ability to achieve economic growth, the socio-economic development regarding all aspects of life in highly developed societies would not be possible without strengthening ties and trust among the members of society. Whatever the next step in evolution will be called, civil and information society, knowledge-based economy, each form requires cooperation, ties, the flow of information and trust".

The survey conducted among high-tech SMEs from Greater Poland confirms that these enterprises base their actions on intellectual capital, which becomes the most important element of business management in the strategic perspective. Thus, their actions are consistent with the concept of intellectual entrepreneurship. The managers of these companies are aware that human capital, the willingness of a company to learn, and social capital created among employees are the most important factors influencing company's position on the market. These three elements are crucial in the context of the creation of their innovative attitudes and behaviour.

The main limitation of the study is its sample size. 44 entities from the total group of 215 companies, which met the criteria of the project, took part in a survey. As a fact, the results may not be generalized in regard to the level and kind of competitiveness of high-tech sector. Secondly, as discovered while conducting the study, not all companies were not "high-tech", as they have not created so far any innovations and the level of expendi-

tures spent on R&D is less than 5%. That problem is commonly and strictly connected with “industry approach” to high-tech sector, which was assumed in the study.

It should be also emphasize here, that it would be interesting to conduct in the future comparative study taking into account small and medium high-tech companies with the biggest ones and getting to know which of them base their functioning more on intellectual capital and in how the managers approach the developing this crucial resource.

REFERENCES

- Adler, P., & Kwon, S. (2002). Social capital: the good, the bad and the ugly. In E.L. Lesser (Ed.), *Knowledge and social capital: foundations and applications*. Butterworth-Heinemann: Boston.
- Baron, A., & Armstrong, M. (2007). *Human Capital Management. Achieving Added Value Through People*. London & Philadelphia: Kogan Page.
- Będzik, B. (2010). Deficyt kapitału społecznego zwiastunem nadchodzących kłopotów, *ACTA Scientarium Polonorum, Oeconomica*, 9(1), 15-21.
- Bendkowski, J. (2012). *Interaktywno-sieciowy model kształtowania wspólnot działań w kreowaniu i dyfuzji wiedzy w organizacjach*. Gliwice: Wydawnictwo Politechniki Śląskiej.
- Brett, R. (2002). Creating Intelligent Organization. *The Journal for Quality & Participation*, 12.
- Brilman, J. (2012). *Réconcilier démocratie et gestion*. Paris: L'Harmattan.
- Chen, C.C. (2008). An Objective-oriented and Product-line-based Manufacturing Performance Measurement. *International Journal of Production Economics*, 112(1), 380-390.
- Coleman, J.S. (1990). *Foundation of Social Theory*. Cambridge: Harvard University Press.
- Cook, K.S., & Kramer, R.M. (2004). *Trust and distrust in organizations: dilemmas and approaches*. New York: Russell Sage Foundation.
- Czop, K. (2001). Wiedza, zmiana i uczenie się jako determinanty kultury nowoczesnej organizacji. *Zarządzanie Wiedzą*, No 1, 98-105.
- Drucker, P.F. (2015). *Innovation and Entrepreneurship*. New York: Routledge.
- Easterby-Smith, M., Lyles, M.A., & Petraf, M.A. (2009). Dynamic Capabilities: Current Debates and Future Directions. *British Journal of Management*, 20(s1), S1-S8.
- Edvinsson, L., & Malone, M.S. (1997). *Intellectual Capital: realizing your company's trust value by finding it's hidden brainpower*. New York: Harper Business.
- Eisenhardt, K.M. (1989). Building Theories from Case Study research. *Academy of Management Review*, 14(4), 532-550.
- Forum Odpowiedzialnego Biznesu (2015). *Menedżerowie CSR. Wyniki badania*. Warszawa.
- Fukuyama, F. (1996). *Trust. The Social Virtues and The Creation of Prosperity*. New York: Simon & Schuster.
- Gajowiak, M. (2010). *Sources of social capital creation*. Poznan: Publishing House of Poznan University of Technology.
- Gajowiak, M. (2013). The Role of Social Capital in the Activities of Internationalized Food Processing SMEs. Confrontation of Theoretical Findings with Empirical Ones. *Oeconomia Copernicana*, No 4, 59-76.
- Geenhuizen, M.S., & Ratti, R. (2001). *Gaining Advantage from Open Borders: An Active Space Approach to Regional Development*. Hampshire: Ashgate.
- Glinka, B., Gudkova, S. (2011). *Przedsiębiorczość*. Warszawa: Oficyna Wolters Kluwer business.

- Granovetter, M.S.(1973). The Strength of Weak Ties. *American Journal of Sociology*, 6, 1360-1380.
- Grzanka, I. (2009). *Kapitał społeczny w relacjach z klientami. CRM a społeczny potencjał przedsiębiorstwa*. Warszawa: Wydawnictwo CeDeWu.PL..
- Harrison, A. (2007). *Globalization and poverty*. Chicago: University of Chicago Press.
- Hayes, R.H., & Upton, D.M. (1998). *Operation-based Strategy*. California Management Review, Berkley, California..
- Ismail, H. S., Poolton, J., & Sharifi, H. (2011). The Role of Agile Strategic Capabilities in Achieving Resilience in Manufacturing-based Small Companies. *International Journal of Production Research*, 49(18), 5469-5487.
- Janasz, W. (2012). Przedsiębiorczość i przedsiębiorcy jako kategorie współczesnych organizacji. In J. Wiśniewska, K. Janasz (Eds.), *Innowacyjność organizacji w strategii inteligentnego i zrównoważonego rozwoju*. Warszawa: Difin.
- Jashapara, A. (2006). *Knowledge Management: An Integrated Approach*. Harlow: Pearson Education Limited.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities and the replication of technology, *Organization Science*, 3(3), 383-397.
- Koźmiński, A. (1996). *Zarządzanie. Teoria i praktyka*. Warszawa: PWN.
- Lauzikas, M., & Dailydaite, S. (2015). Impacts of social capital on transformation from efficiency to innovation-driven business. *Journal of Business Economics and Management*, 16(1), 37-51.
- Libertowska, A. (2014). The importance of social capital as a factor determining the increase in corporate value. In F. Bylok, E.I. Ubreziova, L. Cichobłaziński (Eds.), *Management and Managers Facing Challenges of the 21st Century*. Godollo: Szenst Istvan Egyetemi Kiado Nonprofit Kft.
- Lin, N. (2000). Inequality in social capital. *Contemporary Sociology*, 29(6), 785-795.
- Liu, Y., & Liang, K. (2014). Evaluating and developing resource-based operations strategy for competitive advantage: an exploratory study of Finnish high-tech manufacturing industries. *International Journal of Production Research*, 53(4), 1019-1037.
- Love, P., Fong, P.S.W., & Irani, Z. (2005). *Management of knowledge in project environments*. Elsevier: Butterworth Heinemann.
- Machaczka, J. (2014). Wstęp. In J. Machaczka (ed.), *Determinanty konkurencyjności współczesnych organizacji*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.
- Mikuła, B., & Ziębicki, B. (2000). Organizacja inteligentna a organizacja ucząca się. *Przegląd Organizacji*, 5(1), 32-37.
- Ministry of Economy. (2009). *Report Competitiveness of high-tech companies*. Warsaw.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242-266.
- Nonaka, J. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 18-21.
- PARP. (2006). *Perspektywy rozwoju małych i średnich przedsiębiorstw wysokich technologii w Polsce do 2020 roku*. Warszawa.
- Ratajczak-Mrozek, M. (2010). *Sieci biznesowe a przewaga konkurencyjna przedsiębiorstw zaawansowanych technologii na rynkach zagranicznych*. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- Roubin, N., & Mihm, S. (2011). *Crisis Economics: A Crash Course in the Future of Finance*. London: Penguin Book.
- Schumpeter, J.A. (2014). *Capitalism, Socialism and Democracy*. New York: Martino Fine Books.

- Senge, P. M. (2006). *The Fifth Discipline: The Art. And Practice of the Learning Organization*. Bantam Doubleday: Dell Publishing Group INC.
- Stiglitz, J.E. (2010). *Freeall: Free markets & the Sinking of the Global Economy*. London: Penguin Books.
- Strenger, C. (2011). *Fear of insignificance: searching for meaning in the twenty-first century*. Basingstoke : Palgrave Macmillan.
- Szymański, W. (2011). *Niepewność i niestabilność gospodarcza*, Warszawa: Wydawnictwo Difin.
- Teece, D. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, 28(13), 1319-1350.
- Teece, D.J., Pisano G., & Shuen A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 509-533.
- Wang, C. L., & Ahmed P. K. (2007). Dynamic Capabilities: A Review and Research Agenda. *International Journal of Management Reviews*, 9(1), 31-51.
- Wang, C.L., Cheng, C. Y., & Lin, S.K. (2013). Distributed Feedback Control Algorithm in an Auction-based Manufacturing Planning and Control System. *International Journal of Production Research*, 51(9), 2667-2679.
- Zott, C. (2003). Dynamic Capabilities and the Emergence of Intraindustry Differential Firm Performance: Insight from a Simulation Study. *Strategic Management Journal*, 24(2), 97-125.

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International Environment and its Influence on the Entrepreneurial Internationalisation of the Firm: The Case of Polish Businesses¹

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Abstract

The article focusses on international environment, which is one of the main variables of firms' internationalisation process. The main goal of this study is the identification of the key factors for internationalisation of the firms inherent in the international environment and the exploration of the impact of these factors on the process of internationalisation of Polish firms. The paper presents the partial results of survey based on a sample of 355 firms operating in Poland. The questionnaire was completed in 2015 within OPUS 4 project carried out at the Cracow University of Economics. The results presented in the article are just a starting point for further analyses including not only the simple 7 dimensional approach of PLESCET, but also the process of organisational learning and accumulation of knowledge coming from the environment and taking advantage of environment opportunities.

Keywords: Internationalisation; international business; external environment; business environment; international entrepreneurship

JEL codes: F23, L26

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INTRODUCTION

Since over three decades, the deepening process of globalisation and widening regionalisation have been a driving force for development of various entities of the contemporary economy. Changes made by those processes influence also the functioning of businesses, which increasingly decide to go international. Entering the international markets creates developmental opportunities for businesses, allowing on one hand to benefit from many advantages, but on the other hand bringing a lot more severe dangers than those occurring in local markets. The environment has strong influence on those businesses, and is more complex, competitive, susceptible to changes and unpredictable than those at the local level. International conditions for internationalisation of the firm, that is, external conditions inherent in the international environment (Wach 2016: 9-10), are one of the three main variables explaining the process of internationalisation of firms from the perspective of international entrepreneurship (as well as the entrepreneur and the entrepreneurial process of recognising entrepreneurial opportunities).

The main cognitive goal of the article is the identification of the key factors for the internationalisation of firms inherent in the international environment and the exploration of the impact of these factors on the process of internationalisation of Polish firms.

The first part of this study defines the essence of the international environment, its classification and the most important properties. The second part of the article discusses the literature on the environment and its impact on firms in the internationalisation process. The third part of the paper presents the results of empirical research conducted on the sample of 355 Polish firms operating in the international environment.

THEORETICAL BACKGROUND OF THE ENVIRONMENT

The concept of environment is strongly tied to business competitiveness, because business environment is an external source of capability for organisation to compete and gain competitive advantage (Porter 1985: 1-26). Business environment is also an essential element of studies devoted to business internationalisation on the global market, especially the emphasis of some of its characteristics, such as turbulence, complexity, multidimensionality and multi-faceted nature.

In the literature, the concept of influence the environment on business performance has been common to organisation and management science since the first half of the 20th century, yet the specific changes in the approach to this subject were noted even in the 1960s and 1970s, being added that the concept is still being researched. The changes that allowed for inclusion of business internationalisation to studies on business environment resulted primarily from the introduction of the open nature of organisation, allowing for identification of relations that businesses have with the external world (Wach 2008a: 28). In the theory of organisation, one of the first attempts to completely grasp the concept of business environment, forming a set of endo- and exogenous factors of various natures, was undertaken in the beginning of the 1970s by Duncan (1972: 314-315)³, who classified the following, among others, into the group of endogenous factors: human factor, internal company divisions,

³ Division into internal and external factors of business environment was not present in the former published works about the problems with business environment.

roles and tasks of those divisions, business organisational structure, so basically all the constituents of contemporary business. In the 1980s, feedback between business and its environment received more attention. The relativity of business individuality was also highlighted, by pointing out relations between the two (Wach 2008a: 27). Hatch and Cunliffe (2013: 57-58) considered business environment as all the existence beyond company's boundaries. A similar approach was presented later in the attempts to explain the concept of business environment, indicating that it consists of the whole set of factors and elements being unrelated to the company, while having potential to influence it. The organisation itself is also conjugated with those elements and can influence them back. (Wach 2008b: 23). Another approach to classify that factor, based on modernist organisation theory, is being represented by the scientists from the marketing field. They consider the concept of business environment as all the factors, which may influence company's abilities to establish contacts with commercial partners and to effectively finalise transactions with clients (Wiktor, Oczkowska & Żbikowska, 2008: 40). In the marketing literature there is a term, which is also in use: "marketing environment of a company", and it highlights the significance of external factors that influence marketing decision-making. Elements of environment, their interrelations and trends are treated as independent variables (Duliniec, 2009: 47).

In comparison to management science, marketing approach to business environment focuses more on isolation and characteristics of its elements, as well as characteristics of various market strengths, opportunities and dangers (Kotler 2002: 136-154). One of the quite frequently presented elements of marketing environment internationally is the cultural environment (Duliniec 2009: 66-79), which can be a source of obstacles on the international market mainly for micro-, small- and medium-sized enterprises, which so far have been operating at the local market (Ubrežiová, Wach & Horváthová, 2008).

In the literature, lots of classifications of the elements of business environment can be found. Business environments include subjects (concerning phenomena and processes as a whole), as well as entities (including various institutions and stakeholders). It consists also of factors and conditions, which can influence organisations as well as future functioning of all its dependent and related elements (Wach 2008b: 23-24). Another criteria is the classification of elements of business environment in terms of susceptibility to influence. The first group, the direct one, has all the characteristics, conditions, phenomena and processes which, because of their correlations at the functional, system and network levels with, and their close proximity to an organisation, are therefore conjugated by active interaction and mutual influence. Another segment is the indirect zone. The organisation does not have the ability to influence that group of elements and entities the same way as it does the elements from the direct environment, but can follow changes and adapt.

The way business environment influences firms constitutes another criteria of classification for that category. In relation to it, one type was classified as the general environment (also called indirect environment, or macroenvironment), while another, as the competitive environment (also called direct environment, task environment and purpose environment, as well as microenvironment). Having regard to the significance of particular aspects of business environment in the process of business internationalisation, the first presented environment will be the task environment. That type of environment is being created by specific organisations or groups, cooperating or competing with each other and having mutual influence, it consists of: clients, partners, suppliers, competitors, control institutions, interest

groups (lobbies), trade unions. In order to highlight the interactions between those entities, Hatch and Cunliffe (2013: 59-60) calls them collectively the inter-organisational network. In the context of business internationalisation, that type of environment may provide useful information on the actual activities of the firm, primarily to companies, which maintain passive relations with foreign countries in form of indirect export; furthermore they follow non-capital entry modes, such as traditional import, contracts for subcontracting (sub-deliveries of parts/components) and the production under license. Those are also important for companies interested in capital cooperation (mergers and acquisitions in foreign markets), as well as the wholly-owned businesses subsidiaries in foreign markets.

A possible indirect aspect relating mainly to mesoenvironment (industrial environment) is proposed by Ansoff (1965: 145) and Porter (1985: 1-4). The former focused on industrial evaluation from the viewpoints of economic criteria (development trends, dynamics of demand, and profitability), competition, and possibility to achieve synergic results (Ansoff 1965: 145-146). Whereas Porter (1985: 4-11) proposed environment analysis on the industry scale, including mainly competitors, suppliers, consumers and products, as well as replacement services. Environment, included in such range is significantly limited compared to segments of general one, and does not include all the specific functional conditions occurring in the foreign markets. International strategic alliances are entry modes, in which that aspect of business environment seems to be especially useful when deciding on business internationalisation in branches characterized primarily by intense changeableness (e.g. when other producers show strong competitiveness, or in response to trends).

Contemporarily, that aspect of environment may also concern the whole country. The general environment is a group of factors and forces among which an organisation is operating, creating a context to its own operations. It can be classified into: political, legal, economic, social, and cultural, ecological (natural), technological factors (Hatch & Cunliffe 2013: 61-67), contemporarily known as the PLESCET. In this aspect of environment, Griffin (2015: 67-73) in addition recognises the international segment, highlighting the essence of business internationalisation as a part of business development strategy, and the influence of international relations on functioning of an organisation (Griffin 2015: 73). The general environment creates framework for business operations in the country, it contains all the factors, which lie beyond company control and covers conditions influencing the behaviour of entities on the market. In the literature, there are even more elements of the general environment, such as infrastructural and communicational factors, which can be especially important in case of company expansion into developing markets. Those constitute a proposition for completing and separating those characteristics from the above presented categories⁴.

The so called megaenvironment (international environment, global environment) is the last recognized aspect of business environment and it contains the elements, which go beyond state borders and usually refer to the whole international community. In relation to the advancing process of globalisation and economic regionalism, the trends on the international market often highlight global issues (e.g. under World Trade Organization, United Nations agendas), as well as regional issues (e.g. covering the European

⁴ It seems that the communication segment should also be taken into account at the sector-limited and organizational levels.

Union). Factors of influence for different elements of macroenvironment and the me-gaenvironment overlap and intersect each other. Business activity on the global market requires tracking, analysis and prediction of various factors of the environment as well as organisational situations and their development. The decision to enter the global market must be preceded by its thorough analysis, and above all, must be based on aspiration to achieve a competitive position (Abhishek 2013: 35).

The analysis of the international (global) environment can be conducted according to the same categories that occur in microenvironment (entity-related) and in macroenvironment (subject-related), yet the global aspects are disproportionately more complex than the ones of the above types (Table 1).

Table 1. Dimensions and layers of the international business environment

Layers and dimensions	Local Community	Country	Region of the World	Globe (worldwide)
Political	Local government and politics	Political system; degree of civil and political freedom	Degree of political cooperation; shared institutions (e.g. EU)	International governmental cooperation (e.g. UN)
Legal	Delegated law-making; planning; health and safety	Rule of law; independent juridical and court system; national legislation	Cross-border research ties; cooperation among universities	International law and the International Court of Justice (ICJ)
Economic	Local businesses; predominant industries	National industries; industrial structure; national income and economic growth	Degree of economic integration; regional trade relations	Global economic integration; WTO and multilateral trade agreements; global companies and industries
Social and cultural	Families; local customs, schools; urban or rural	National culture; language; sense of shared history	Cultural affinity across the region; movement of people between countries	Human rights; world religions; consumer culture
Ecological	Ecosystems; pollution levels; air quality	Areas of environmental stress; environmental protection laws	Regional institutions; cooperation over regional resources (e.g. rivers)	Climate change; international cooperation on emissions reduction
Technological	Schools and colleges; research centres	National school system; universities; government funding for R&D	Cross-border research ties; cooperation among universities	Global spread of breakthrough technology; global R&D networks
Financial	Penetration of banks and financial services	National financial system; regulatory system	Cross-border financial flows; regional regulations (e.g. EBC)	Global financial flows; international institutions (e.g. IMF, World Bank)

Source: adapted from Morrison (2011: 31).

Because of the nature of contemporary environment, attempts to implement other typologies of business environment were also made, for businesses operating mainly on international markets. In the 1980s, one of the proposed classifications of business environment featured uncertainty as one of the characteristics of business environment, and introduced its division into three classes: currency-related uncertainty, political uncertainty and labour market problems. In the 1990s, the OECD (2004: 8-16) proposed an

implementation of division of business environment into: factors relevant to decision-making in terms of internationalisation (pull factors), factors advocating internationalisation (push factors), chance factors and entrepreneurial factors (Wach 2014: 17). A very interesting example (different from the other models) of a general model (meta-framework) of international entrepreneurship focusing on the environment is a dynamic open complex adaptive system proposed by Etemad (2004: 11-37). The model singled out three layers of adaptive interactive (interactive layers) – the entrepreneur, the enterprise and the market (Figure 1), and as a result of self-regulation processes, a firm can operate in the international environment, which is the ultimate layer. The most important feature of the adaptive system is the assumption that the instantaneous change (a minute change) in one part of the system may result in significant changes (effects) in other parts with some time. The model expresses and emphasizes the role of international environment in the international entrepreneurship (in the process of entrepreneurial internationalisation of the firm).

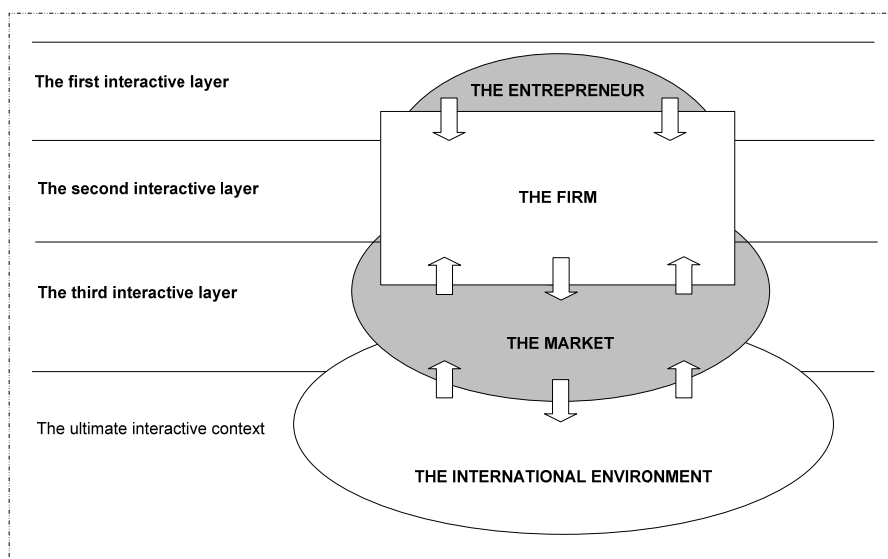


Figure 1. Layers in the entrepreneurial internationalisation of the firm

Source: Etemad (2004: 30).

RESEARCH APPROACHES AND PRIOR RESEARCH

Analysing of the international environment is a complex and multidimensional process. The same can be said about previous works documenting the research conducted in this area. There have been created many studies on the impact of the environment or elements of the environment on businesses (including large multinational enterprises as well as small and medium-sized enterprises) on the various stages of the internationalisation process. Therefore, when reviewing the literature related to this subject, it is desirable to systematize some of the achievements and approaches to the problem. But it should be noted that the proposed taxonomy is not of imperative nature, and presented

approaches may overlap. What is more, it is a selective review of the research, due to the vast amount of studies it is almost not possible to present the existing acquis on environment studies in a comprehensive and holistic way.

First, we can talk about the pragmatic and scientific approaches to the study of the business environment. In the first area, the business environment in some degree is a subject of comparisons, ratings and rankings of international institutions (such as *Global Competitiveness Report* by the World Economic Forum, *Economic Freedom Report* by the Heritage Foundation or *Doing Business Report* by the World Bank). These studies do not aim to study the dependence of the environment and the firm directly, and only provide knowledge on macroenvironment and its components. They are an attempt to describe and measure the basic institutions and markets components using numerical ratings, which allows for international comparisons and the observation of changes over time. The use of rankings for the needs of internationalisation of the firm has some limitations. Firstly, they are definitely more important in the initial phase of the process of internationalisation. Secondly, they are too general and not very personalised to the firm, its size, form or the industry in which it operates. Therefore, they can be used complementarily.

In the scientific approach to the study of the nature of the environment and its impact on the firm in the process of internationalisation there can be distinguished two perspectives dealing with these issues: economics and management. Environment in terms of economics is the domain of international economics. In management science, the environment is widely recognized in theories of organisation and management, and above all, marketing or international marketing. In the classical approach of international marketing to environment analysis, attention is drawn to its division in the system, rooted in strategic management: general environment (macro level) and task environment (micro level). These two areas are mentioned as a components of the domestic market and the components of a foreign market or markets, which should be taken into account in the process of internationalisation (Wiktor, Oczkowska & Żbikowska 2008: 40-42). In the marketing research, the attention is placed on the cultural environment, as well as changes under the influence of progressive globalisation, which create a new framework for action and economic activity (Cojocar 2011: 993 – 999). Changes in the business environment determine the evolution and changes in the area of its management. Hence, it leads to virtualization of structures, processes, creation of new procedures, knowledge and technology, the formation of different kinds of networks. According to Penrose (1995: 56-64) immanent properties of environment, such as the variability and complexity or the turbulence, intensify and escalate risks and uncertainties for the company under the influence of globalisation. The high rate of changes in the environment, both direct and indirect, calls for new methods of its analysis and new strategies.

The analysis of the environment and its impact on businesses in foreign markets is definitely the domain of sciences of management. This subject has been recognised both for theoretical concepts of management, as well as for empirical research. Wach (2008a: 13-26) describes the position of the various management schools and concepts concerning the relationship between the environment and the firm. In these theories the relationship between the environment and the firm are often described by analogy, e.g. of the body (the school of social systems, wildlife (system theory) or brain (evolutionary school). For the first time the environment became the subject of the research of social

systems school, but its analysis was carried out only for the social aspects. It was treated as the environment on which the organisation is dependent in the terms of satisfying different needs (Wach 2008a: 13-26). The essential meaning for defining the role of the environment for the firm was played by a general systems theory. It demonstrated the relationship of environment and the firm on the basis of feedback and emphasised the bilateral nature of this relationship. According to the system theory, the environment is complex and variable, in contrast to the position of social systems school, for which the environment was considered as stable and possible to predict (Wach 2008a: 13-26). One of the newer trends based on the school of social systems and neo-classical school is the contingency approach (the situational concept). It brought a significant contribution to the study of the environment and the firm, supported by empirical analyses. Representatives of this direction proved the influence of the nature of the environment on the firm and the resulting differences in the structure of management of organisational units. They believed that the firm operates in an uncertain and anxious environment, therefore it is desirable to avoid general and universal expressions and application of specific rules in relation to the current situation.

According to the evolutionary school, the relationship between the firm and the environment is based on the exchange of information, which allows the enterprise to observe changes in the environment and make appropriate decisions (Wach 2008a: 13-26). This information is related primarily to the task environment, leavening out the general environment, which is considered to be the major drawback of this approach. A tangible contribution of the evolutionary school to research of the business environment is the project of specific instruments in the form of the portfolio analysis. Test methods used to analyse the environment have also been introduced by another school of management, namely quantitative school. Representatives of this concept used a number of quantitative models for planning and decision-making, which referred also to the environment. On the basis of empirical research of the environment, the school developed a range of methods and models used to analyse the impact of the environment on the firm (Wach 2008a: 13-26).

One of the most important schools studying the impact of the business environment is positional school in the strategic management, rooted in industrial economics. It is connected with Porter (1985: 5), who is the creator of a popularised model of the competitive environment analysis, referred to as "the analysis of Porter's five forces". Competitive forces are potential competitors entering the industry, suppliers and their bargaining power, the buyers and their bargaining power, products and substitutable services and the existing competition. In this approach, the study of the part of the environment is the starting point for creating and implementing the strategy of the firm. However, it should be noted that the representatives of this school in their research neglected the general environment (Dalken 2014: 3-4).

Another approach to study of the correlation between the business environment and the enterprise noticeable in the literature relies on testing the environment for different stages of internationalisation. The literature is quite abundant, that may be referred to defining the role of the environment and its impact on the company in the different phases of the decision-making process. It turns out that the impact of the environment can be crucial in making the following decisions (Hollensen 2004: 137): (i) decision to enter foreign markets, (ii) decision on the selection of specific foreign markets, (iii) decision on foreign market

entry strategies, (iv) decision on creating a marketing program, (v) implementation and monitoring of the program of internationalisation. In such a trend of research on the impact of the environment on the firm it should be emphasised that the studies on the initial phases of the decision-making process are dominating. They are, therefore, research on the environment in the context of the investment climate (macro level) related to decision-making process on the choice of foreign market and selected markets entry modes or even strategies (Goodnow & Hansz 1972: 33-50; Brouthers, Brouthers & Werner 2002: 495-507; Slangen & van Tulder 2009: 276-291; Tseng & Lee 2010: 407-418; Ahsan & Musteen 2011: 376-392; Efrat & Shoham 2013: 536-558). Goodnow and Hansz (1972: 33-50) were one of the first to provide studies confirming the significant impact of the environment on the decision of the firm about the internationalisation and its form. They showed immediate and direct relationship between the external environment and the decision of the operating range and the direct or indirect entry mode. In this context, the environment is categorised as hot, moderate or cold. Hot environment is characterised by a high degree of political and economic stability, economic development, cultural unity, low legal and institutional and physiographic barriers and geo-cultural distance. Cold environment is defined on the contrary, the moderate, as the name suggests is something in between. The involvement of the firm in the foreign market is directly proportional to the "temperature" of the external environment of the target market (Goodnow & Hansz 1972: 33-50). In the literature, this is referred to as a Litvak – Banting hypothesis. These authors can be considered as precursors of environmental analysis in the context of its impact on the kind of commitment of the firm on a foreign market (Litvak & Banting 1968: 460-467). These observations have been confirmed in later studies, however, the progress of research in this area showed that the impact of the environment on the firm is very important and large but varied. To a large extent, it depends on the size of the firm and the scope of its activities in international markets (Sanjeev & Sridhar 1992: 1-27). Shieh and Wu (2011: 508-517) confirmed the hypothesis of dependence of the entry mode into the foreign market on environment investigating multinational corporations and forms of their expansion through a joint venture enterprise (JVE) or wholly-owned subsidiaries (WOS). Carpano, Chrisman and Roth (1994: 639-656) studied the effect of the business environment on the choice of international strategy and its effectiveness. According to the authors, the geographical scope and diversity of the segments are a good basis for picking the basic international strategies. According to the authors, their effectiveness is a function of the environment in which the company operates (Carpano, Chrisman & Roth, 1994: 639-656).

Another very interesting stream of research on environment and its impact on the internationalisation of the firm is the approach set out in this work as subjective and objective. In this context, analysing the environment can mean the analysis of selected elements of the environment according to the needs or interests of the investigator. The object of the analysis can therefore be the analysis of the general environment, or the analysis of the competitive environment or the firm's potential. It is worth to mention that the objective approach can be also related with broadly defined economic policy, which is crucial in designing environmental conditions. The subject approach is understood as the analysis of the environment taking into account the perspective of specific market participants, first of all one can distinguish an analysis of the environment to the needs of multinational corporations, small and medium-sized enterprises, or companies from a specific industry. Vast amount of the

literature is devoted to the analysis of the macroenvironment or its components (Hart 1995: 986-1014; Ayyagari, Demircuc–Kunt & Maksimovic 2008: 483-516; Kew & Stredwick 2008: 57-196; Ortiz 2010: 475-492; Dickson, Weaver & Vozikis 2013: 43- 55; lamratanakul 2015: 625-631; Wach 2016: 7-20). From the perspective of business, especially industrial economics, the competitive environment is focused on (Gorynia & Jankowska 2004: 20-33; Lansiluto 2004: 107-137; Oraman, Azabagaoglu & Inan 2011: 188-197). In the subjective terms, the overwhelming number of studies focused on the international corporations and their direct investments. Environment from the point of view of those actors is analysed in all possible configurations. First of all, the investment climate is examined (Bayraktar 2014: 24-50). A number of the works is devoted to the form of the internationalisation of corporations in the context of the investment type of brownfield, greenfield, or also joint venture (Wei, Liu & Liu 2004: 508-517; Hu, Ma & Zen 2012: 39-47). Other works focus on economic policy involving institutional, political, economic factors, which determine the functioning of the international corporation in each country (Gao 2008: 5-21). Recently, these studies emphasise the very volatile of the environment uncertainty, thereby the increasing need for research on the changing conditions external to the company. As the driving forces of changing market conditions the authors mention: globalisation, advances in information and technology, the functioning of national and supranational institutions and organisations, the emergence of non-governmental organisations and their impact on reality, dynamic growth of emerging economies, focusing on issues of ecology, business ethics, and the risks associated with terrorism (Ferreira, Li, Guisinger & Serra 2009: 281-294).

From the point of view of this study, it is particularly important to study the international business environment from the perspective not only of large multinational enterprises (MNEs) but also of small and medium-sized enterprises (SMEs). The latter being currently a separate research domain recognised in the literature, however, it is given much less attention than research of large corporations. Evaluation of the impact of the environment on the internationalisation of small and medium-sized enterprises is taken, among others, by authors as Klapper, Laeven & Rajan (2004: 1-61); Wach (2008a: 56-168; 2008b: 55-133); Nummela, Loane & Bell (2006: 562-583); Stoian, Rialp, Rialp & Jarvis (2016: 105-121); Garcia–Cabrera, Garcia Garcia–Soto & Duran–Herrera (2016: 1-32). A review of that literature shows that most of the works is relatively new, which indicates that the specifics of SMEs in the earlier work was not taken so often. Undoubtedly, it changes in recent times due to the growing importance of SMEs in the economy. It justifies, therefore, the intensification of research precisely for these entities. Previous works confirm the impact of the international environment on the operations of SMEs. They also point to the high flexibility of these entities in finding and filling market niches and quick reactions to changes in the environment. Some studies point out that for SMEs more important is the domestic environment in the process of internationalisation of than international environment (OECD 2004: 1-20). This is confirmed by Stoian, Rialp, Rialp & Jarvis (2016: 105-121) on the internationalisation of small and medium-sized enterprises from Central and Eastern Europe. The hypothesis presented in the cited study, saying that the radical changes in the institutional environment, as well as political and economic reforms are "push" factors for SMEs, was positively verified. According to these authors, after the political transformation, SMEs are *de facto* beneficiaries of the changes taking place in the international business environment. In the initial phase following the transformation, it

related to the limitations of the domestic market, which somehow forced enterprises to seek alternatives in the foreign markets. Then the development of these companies in foreign markets resulted from the benefits of the accession to the European Union (Stoian, Rialp, Rialp & Jarvis 2016: 105-121). On the other hand Wach (2008b: 55-133) studied changes in the competitive environment of enterprises in the process of European economic integration. In greater part this study was applied to small and medium-sized businesses, and the environment itself was studied in the context of the perception of changes of the characteristic features of the environment, such as dynamism or variability, complexity or heterogeneity, uncertainty (a mix of dynamism and complexity), munificence or beneficence, concentration, liberality, organisation and hostility. The results confirmed that the Polish accession to the EU influenced the perception of Polish entrepreneurs of changes in the competitive environment. This applies to all eight tested characteristics, however, noticed changes in the environment, according to the surveyed businesses did not have a radical character, and their intensity is assessed as moderate (Wach, 2008b: 55-133). In the empirical studies on the SMEs, the attention is also drawn to the environmental factors limiting their growth and/or development in foreign markets. It is associated with the intensifying competitive environment (hostile environment), especially a strong position of global companies and industry leaders, which have higher human resources – and organisational potential. As a kind of a barrier to the development of SMEs there are indicated internal conditions of the firm, in the form of limited intellectual and financial capital. Strengthening these areas would undoubtedly contribute to the effective elimination of threats or the use of the opportunities that are created by an environment, especially from the perspective of international entrepreneurship, where the entrepreneurial process of recognising opportunities in international market is crucial.

The perfect complement to the studies on the impact of the environment on the firm in the internationalisation process are works created in recent years summarising the previous achievements of the literature in this area (Ferreira, Li, Guisinger & Serra, 2009; Mohamed, 2015: 281- 294). They provide knowledge on the number of published work on the international business environment, as well as forms and places of publication. At the same time, they are a kind of evaluation of the existing literature. On this basis there can be indicated limitations of previous work and recommendations for future research. It turns out that most of the publications relate to the cultural environment. Analyses are one or two-dimensional as well, meanwhile, there is a need for a holistic and multidimensional approach. Moreover, these studies are of marginal - incidental importance. It is desirable to achieve more conceptual approach, rather than a schematic one that dominates so far, e.g. the political and cultural environment is treated separately, whereas today we can talk about the so-called political culture and its impact on the behaviour of the organisation. One should also use more sophisticated research techniques, advanced computer software to study the environment, so that the results are more detailed, they allow the modelling (Ferreira, Li, Guisinger & Serra, 2009: 281-294). On this basis, it can be stated that the business external environment is an area of research with great potential, still not exhausted, and its weight and importance is increasing with time.

RESEARCH FRAMEWORK

The article contains the results of empirical research which was introduced as a part of OPUS 4 grant implemented in years 2013 - 2016 at the Faculty of Economics and International Relations of the Cracow University of Economics, and financed by the National Science Centre of Poland.

The aim of the article was finding the answer to a question how foreign environmental factors influence internationalisation of Polish internationalised firms. The research sample was chosen on the basis of businesses registered in Poland in the REGON register, among which 7100 firms were chosen and to those the questionnaire was directed. Out of all these businesses only as few as 355 agreed to take part in the survey (5%). Stratified – random sampling was applied according to the following criteria:

1. The sample contains only internationalised firms (being at least exporters).
2. The sample contains firms of different size, however, reflecting the research requirements, so (i) with a small share of microenterprises as least internationalised, although they constitute the largest group of the surveyed population, (ii) with a relatively small share of large enterprises, although, despite the fact that they constitute the least numerous group in the population, they are the most typical research object in the field of internalisation, in which case it is assumed that each of the above mentioned groups should represent around 10-15% of the sample, (iii) with a relatively large share of both small and medium-sized enterprises, which according to assumptions is expected to make 25-45% of the sample.

For 7100 firms selected from the REGON Register the sampling made for 5%, although in reality the selected part of the population includes 3313 firms, and the final sampling comprised *de facto* 10.7%. In total 355 questionnaires were collected (Table 2). The reasons why the remaining firms were not reached were as follows:

- 28.1 % (1991) of firms were not internalised ones, so did not meet the first criterion,
- 25.3% (1796) of firms contained false telephone numbers or nobody answered the phone, and therefore they were unable to take part in the survey,
- 22.9% (1627) of firms refused to take part in the survey,
- 18.7% (1331) of firms encountered or caused difficulties for a number of reasons, which made it impossible to obtain reliable responses.

Both the literature, especially the prior research results as well as own observation of cause and effect phenomena led to the following hypotheses:

- H1:** Polish businesses operating in international markets, whose the general environment (macro level) has a stimulating impact and are therefore more internationalised than the ones operating on the markets with an inhibiting international environment.
- H2:** Between international entrepreneurial orientation (from low to high) and foreign environment assessment (from inhibiting to stimulating) there is a linear dependence, i.e. the more stimulating the environment, the greater entrepreneurial orientation is noted by the businesses (a favourable climate for business has a positive influence on the business mechanisms).

Table 2. Research sample profile

Size of the firms (%)		Sector of the economy (%)	
Micro	14.1	agriculture	1.7
small	43.1	production	56.4
medium	29,8	construction	1.9
large	13.0	trade	22.4
		services	17.6
Foreign ownership (%)		Age of the firms (years)	
Mean	28	Mean	24
Min	0	Min	1
Q1	0	Q1	14
Median	0	Median	20
Q3	68.5	Q3	25
Max	100	Max	183

Source: own study based on the survey of 2015 (n = 355).

The survey was conducted with the use of CATI (*Computer Assisted Telephone Interviewing*). The survey questionnaire was divided into four thematic parts, namely: (i) characteristics of the enterprise, (ii) forms and scope of the internationalisation, (iii) patterns and strategies of internationalisation, (iv) resources and competences, (v) domestic and foreign environments, (vi) the entrepreneurial orientation, (vii) characteristics of the entrepreneur.

Telephone interviewing was conducted in the first quarter of 2015, and then its results were subject to appropriate statistical calculation using special computer software *Statistica PL v.10.0*. To verify the posed research hypotheses the following measures and statistical methods were used: Pearson linear correlation, chi-square test, Mann-Whitney *U* test, Student's *t* - test, ANOVA factor analysis, median test, Shapiro-Wilk test.

For the aim of the survey and calculation the following variables describing internationalisation were used (dependent variables) which were subject to statistical calculations:

1. The Transnationality index (*TNI*) as a well-grounded measure of internationalisation in the subject literature, as well as its three components, i.e. share of foreign assets, share of foreign sale, and share of foreign employment.
2. The speed of internationalisation (*INT_SPEED*), so a number of years since the beginning of the firm to its first internationalisation.
3. The scope of internationalisation (*INT_SCOPE*), so a number of markets/countries where the business operates.
4. The degree of internationalisation (*INT_DEGREE*), so the share of sale in the foreign markets.

As an independent variable the business environment in a 7-element analysis of PLES-CET was chosen, and to assess individual factors of the environment a seven-point Likert scale was used (Table 3). During calculations a number of control variables was used, these are advanced forms of entry (0/1), being a family-owned business (0/1), international experience (*INT_EXP*), vulnerability to internationalisation, the scale of employment e.i. the size of the firm, foreign ownership (in %), economic sector (0/1), high-tech (0/1), high-

growth (0/1), hyper-growth (0/1), innovators (1/0), innovation index (INNO_INDEX), common foreign boarder (1/0).

Table 3. Applied scale measuring general enterprise environment in international entrepreneurship

c							Factors	Foreign Markets						
inhibiting.....stimulating							General environment factors	inhibiting.....stimulating						
1	2	3	4	5	6	7	Political factors (P): country political stability, political security	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Legal factors (L): regulations concerning business activity, anti-trust and cartel policy, competition and consumer protection, labour regulations	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Economic Factors (E): national wealth, income level of the population, unemployment rate, level of domestic demand, currency exchange rate, availability of loans and investment incentives, tax burden, level of the duties, production costs	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Social factors (S): demography of the society (population growth, society age structure, sex structure, household structure), educational level of the society, mobility of the society, civilization progress, social disproportion level, civil society	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Cultural Factors (C): values, lifestyle, religion, work ethics, the society perception of foreign products and companies, work effectiveness	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Ecological Factors (E): environmental awareness of customers, environment protection laws	1	2	3	4	5	6	7
1	2	3	4	5	6	7	Technological Factors (T): level of expenditure on research and development, competition and innovation index, computerization level, the speed of modern technology transfer, level of functioning technology wear, transport development level, road and communication infrastructure,	1	2	3	4	5	6	7

Source: own study.

FINDINGS AND DISCUSSION

The above mentioned Likert scale was used to assess each of the seven factors of foreign (and domestic) environment. The scale is an order scale, and therefore the descriptive statistics should be interpreted with great caution, although they allow one to get the measure of general tendencies (Table 4). Economic and technological factors were assessed as stimulating, political and legal as inhibiting according to the use of the following coding: inhibiting (values 1,2,3), neutral (4), stimulating (5,6,7). Due to the fact that the assessment of individual factors spread differently, therefore after simplification by a method of weighing it was assessed which factors are more frequently shown as stimulators, and which as inhibitors of the internationalisation process (Figure 2). As it turned out, the technological and ecological factors proved stimulators, while the cultural and social factors proved to be inhibitors. The remaining three groups of factors were considered by respondents as stimulants and inhibitors to the same degree.

Table 4. Descriptive statistics for foreign environment evaluation

Factors	N	Mean	Me	Mo	No. Mo	Min	Max	Q1	Q3	SD
Political	355	3.93	4	4	102	0	7	3	5	1.87
Legal	355	3.97	4	4	113	0	7	3	5	1.59
Social	355	4.21	4	4	146	0	7	4	5	1.41
Economic	355	4.55	5	4	90	0	7	4	6	1.69
Cultural	355	4.15	4	4	149	0	7	4	5	1.45
Ecological	355	4.36	4	4	112	0	7	4	6	1.67
Technological	355	4.74	5	4	92	0	7	4	6	1.53
FOREIGN	355	4.27	4.28	4.86	27	1	7	3.71	4.86	1.02

Source: own study based on the survey of 2015 (n = 355).

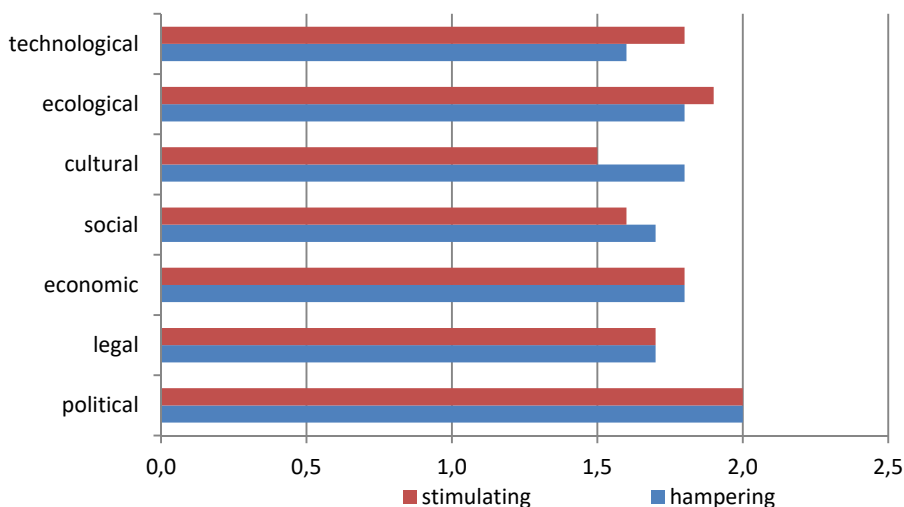


Figure 2. Weighted declarations of both in hampering and stimulating environment

Source: own work based on the questionnaire in 2015 (n = 355).

A categorised normality graph as well as Shapiro-Wilk test were used to assess the normality of the distribution of variables separately for the inhibiting and stimulating foreign environment. On the basis of the test results one may notice that both in the inhibiting situation ($SW-W = 0.884$; $p = 0.00000$), and the stimulating character of the foreign environment ($SW-W = 0.9113$; $p = 0.0000$) it is crucial to refute the null hypothesis postulating the normality of the distribution of TNI variables. Accordingly, nonparametric Mann-Whitney U test was used to assess the diversity of an average TNI level between a stimulating and inhibiting foreign environment (Table 5). Upon the test likelihood p -value assessed by the programme we are entitled to refute the null hypothesis, which means that the TNI level significantly differs statistically depending on the fact whether the foreign environment is inhibiting or stimulating, nevertheless, with acceptable, and not typical materiality level ($p = 0.097 < \alpha = 0.1$). On the ground of the median difference we may assume that the average difference in TNI level is higher of about 5 p.p. in case of stimulating foreign surroundings (25.4 against 21.6 %). The results seem to confirm the first of the research hypotheses stated in the article.

Analogical procedure was used for the inhibiting and stimulating domestic environment. Applying a test based on statistics A and Z , taking into consideration the likelihood value of the test $p = 0.8$ there are no ground to refute the null hypothesis postulating that the average diversification of TNI value is similar in the case of both inhibiting and stimulating domestic environment.

Table 5. Mann – Whitney U test results in regard to variables of the environment

Dependent variable	Rang Sum hampering	Rang Sum stimulating	U	Z	p	Z corrected	P	N_{hamp}	N_{stim}
Grouping variable: International environment									
TNI	17777.5	34548.5	10756.5	-1.655	0.097	-1.656	0.097	118	205
Grouping variable: Domestic environment									
TNI	24605.5	23910.5	11885.5	-0.249	0.802	-0.249	0.802	159	152

Source: own study based on the survey of 2015 ($n = 355$).

In the course of the statistical calculations a decision was made to explore what the relationship between the international entrepreneurial orientation (IEO)⁵ and the assessment of international environment impact is. Presuming the linear dependence, Pearson linear correlation was used for the calculations (Figure 3), its results show a weak linear correlation ($r = 0.25$), however one which is statistically significant ($p = 0.0000008$). It may be partly assumed therefore that a good climate for business, including foreign business, creates a good entrepreneurial orientation for companies.

The collected empirical material as well as statistical calculations allow also to draw other cognitive conclusions which are very interesting:

1. Consumer ecological awareness as well as environment protection laws outside the borders of Poland stimulate companies to a faster and earlier internationalisation (Mann-Whitney U test, $p = 0.018$).

⁵ IEO conceptualization was done on the basis of assumptions represented in Wach (2015: 9-24).

2. Values, lifestyle, religion, work ethics, relation of the society to foreign companies and products, work effectiveness outside the borders of Poland are stimulating for the process of internationalisation of family-run businesses (Mann-Whitney U test, $p = 0.018$).
3. Production companies more often assess foreign environment as stimulating for the process of internationalisation (chi-square test, $p = 0.01$).
4. The firms assessing foreign environment as stimulating for the process of internationalisation more frequently note more than average growth (chi-square test, $p = 0.006$).

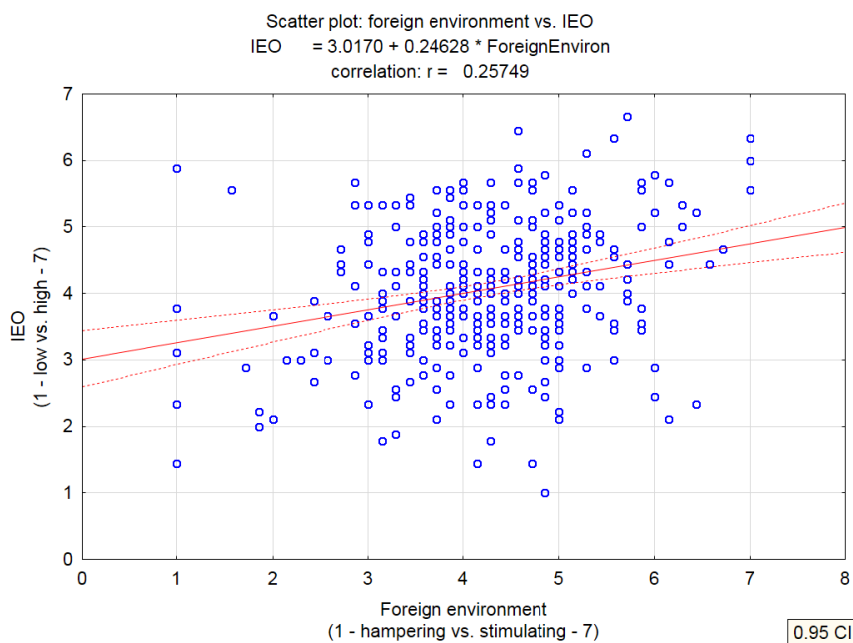


Figure 3. Scatter plot of linear correlation between the variables of the environment and international entrepreneurial orientation

Source: own study based on the questionnaire in 2015 ($n = 355$).

CONCLUSION

The collected empirical material allows for not drawing a number of conclusions. The pull factors have a positive influence on the level of internationalisation of the examined businesses. Stimulating foreign environment and its use (so *de facto* the very internationalisation) may be described as one of the factors of a more than average growth (*high growth*). The beneficiaries of internationalisation are mainly production companies, which more often notice foreign market opportunities. Based on the results, it's worth noticing that Polish born globals take advantage of their adjustment to ecology.

The results of the executed statistic calculations, presented in this article, have led to a verification of the research hypotheses stated at the beginning of the article:

No.	Subject of the hypothesis	Result	Method
H1:	Stimulating international environment ⇒ higher TNI	Confirmed	Mann-Whitney <i>U</i> test, median test
H2:	Good climate for entrepreneurship ⇒ higher entrepreneurial orientation	Further disambiguation is needed	Pearson linear correlation

Just like with any research, especially those empirical in nature, the analysis presented in the article have their own research limitations. These are mainly conditioned by the method of the sample selection, used measurements, or analytical apparatus. Above all, the survey has enforced the use of managerial perception, so measurable corporate data was not dealt with but the perception of analysed phenomena by the managerial staff (which is natural to surveys). For the reason stated it is not possible to absolutize the results. What is still needed is an in-depth research.

The results presented in the article are just a starting point for further detailed analyses. In further analyses it is advised (and even required) to conduct further and fuller research of separate dimensions of international environment (for the need of the present research only the simple 7 dimensional approach of PLESCET was taken into account, where each of the factors was analysed on a very general level). In the further research it is worth introducing elements typical for international entrepreneurship in connection with the environment research, which was not yet included in the research, and these are: (i) the process of organisational learning in connection with environmental factors, (ii) the process of accumulation of knowledge coming from the environment, (iii) the way of discovering (recognising) and taking advantage (exploitation) of the environment opportunities.

REFERENCES

- Abdulghany, M. (2015). International Business Environment: A Proposed Analytical Framework. *International Journal of Business Environment*, 7(2): 168-199.
- Abhishek G. (2013). International Business Environment: Challenges and Changes. *Research Journal of Management Sciences*, 2(11): 34-38.
- Ahsan, M., & Musteen, M. (2011). Multinational Enterprises' Entry Mode Strategies and Uncertainty: A Review and Extension. *International Journal of Management Reviews*, 13 (4): 376-392.
- Aldrich, H.E. (2008). *Organizations and Environments*. Stanford, CA: Stanford University Press.
- Ansoff, H.I. (1965). *Corporate Strategy: An Analytical Approach to Business Policy for Growth and Expansion*. New York: McGraw-Hill.
- Ayyagari, M., Demirguc-Kunt A., & Maksimovic V. (2008). How Important are Financing Constraints? The Role of Finance in the Business Environment. *World Bank Economic Review*, 22(3): 483-516.
- Bayraktar, N. (2014). Importance of Investment Climates for Inflows of Foreign Direct Investment in Developing Countries. *Business and Economic Research*, 5(1): 24-50.
- Brouthers, K., Brouthers, L., & Werner, S. (2002). Industrial Sector Perceived Environmental Uncertainty and Entry Mode Strategy. *Journal of Business Research*, 55(6): 495-507.

- Carpano, C., Chrisman, J.J., & Roth, K. (1994): International Strategy and Environment: An Assessment of the Performance Relationship. *Journal of International Business Studies*, 25(3), 639 – 656.
- Cojocaru, M. (2011). Cultural Globalization in the Context of International Business. *Review of International Comparative Management*, 12(5): 993-999.
- Dalken, F. (2014). Are Porter's Five Competitive Forces still Applicable? A Critical Examination concerning the Relevance for Today's Business, http://essay.utwente.nl/65339/1/D%C3%A4lken_BA_MB.pdf access date: June 2016.
- Dickson, A.H., Weaver, K.M., & Vozikis G.S. (2013). The Impact of the Institutional Environment on SME Internationalization: An Assessment of the Environmental Assumptions of Emerging Integrated Models of Internationalization. *Journal of Applied Business and Economics*, 15(3): 43-55.
- Dill, W.R. (1962). The Impact of environment on organizational development. In: S. Mailick & E.H. van Ness (Ed.), *Concepts and issues in administrative behavior*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Duliniec, E. (2009). *Marketing międzynarodowy*. Warszawa: PWE.
- Duncan, R.B. (1972), Characteristics of Organizational Environments and Perceived Environments and Perceived Environmental Uncertainty. *Administrative Science Quarterly*, 17(3): 314-315.
- Efrat, K., & Shoham, A. (2013). The Interaction between Environment and Strategic Orientation in Born Globals' Choice of Entry Mode. *International Marketing Review*, 30(6): 536-558.
- Etemad, H. (2004). International Entrepreneurship as a Dynamic Adaptive System: Towards a Grounded Theory. *Journal of International Entrepreneurship*, 2(1-2), 5-59.
- Ferreira, M.P., Li, D., & Guisnger, S., & Serra F.A.R. (2009), Is the International Business Environment the Actual Context for International Business Research?. *Revista de Administracao de Empresas*, 49(3): 281-294.
- Gao, Y. (2008). Institutional Environment and MNEs' Strategy in Transitional China. *Managing Global Transitions*, 6(1): 5-21.
- García-Cabrera, A.M., García García-Soto, M., & Duran-Herrera, J.J. (2016). Opportunity Motivation and SME Internationalisation in Emerging Countries: Evidence from Entrepreneurs' perception of Institution. *International Entrepreneurship and Management Journal*: 1-32.
- Goodnow, J.D., & Hansz, J.E. (1972). Environmental Determinants of Overseas Market Entry Strategies. *Journal of International Business Studies*, 3(1): 33 – 50.
- Gorynia, M., & Jankowska, B. (2004). Konkurencja w branży a internacjonalizacja i globalizacja. *Gospodarka Narodowa*, 11/12: 20 – 33.
- Griffin, R.W. (2013). *Management*. 11th edition. Mason, OH: South-Western Cengage Learning.
- Hart, S.L. (1995). A Natural-Resource-Based View of the Firm. *Academy of Management Review*, 20(4): 986–1014.
- Hatch, M.J. (1997). *Organization Theory: Modern, Symbolic, and Postmodern Perspectives*. Oxford: Oxford University Press.
- Hollensen, S. (2004). *Global Marketing. A Decision – Oriented Approach*. Harlow: Person Education Limited.
- Hu, S.H., Ma, H.Y., & Zen, G.T (2012). The Influence of Host-Country's Environments on the FDI Entry Mode Choice of Chinese Companies. *Business and Management Research*, 1(2): 39 – 47.
- Iamratanakul, S. (2015). Modeling the Macro – Environmental Factors of International Distribution. *Conference Proceedings Technology Innovation and Industrial Management*, 27 – 29 May, Bari.
- Kew, J., & Stredwick, J. (2008). *Business Environment: Managing in a Strategic Context*. 2nd ed., London: Chartered Institute of Personnel and Development.
- Klapper, L., Laeven, L., Rajan, R. (2004). Business Environment and Firm Entry: Evidence from International Data. *Working Paper No. 10380*: 1-61.

- Kotler, Ph. (2002). *Marketing Management*. 11th ed. Prentice Hall.
- Lansiluoto, A. (2004). *Economic and Competitive Environment Analysis in the Formulation of Strategy. A Decision – Oriented Study Utilizing Self – Organizing Maps*. Publication of the Turku School of Economics and Business Administration, Turun Yliopisto.
- Litvak, I.A., & Banting, P.M. (1968). A Conceptual Framework for Inter – National Business Arrangements. In: R.I. King (Ed.), *Marketing and the New Science of Planning, American Marketing Association*. 1968 Fall Conference Proceedings: 460 – 467.
- Morrison, J. (2011). *The Global Business Environment: Meeting the Challenges*. 3ed., London: Palgrave Macmillan.
- Nummela, N., Loane, S., & Bell J. (2006). Change in SME Internationalisation: An Irish Perspective. *Journal of Small Business and Enterprise Development*, 13(4): 562-583.
- OECD (2004). *Facilitating SMEs Access to International Markets*. Paris: OECD.
- Oraman, Y., Azabagaoglu, M.O., & Inan, I.H. (2011). The Firms' Survival and Competition through Global Expansion: A Case Study from Food Industry in FMCG Sector. *Procedia – Social and Behavioral Sciences*, 24: 188-197.
- Ortiz, J. (2010). The Global Environment Through the SLEPT Framework. *International Journal of Business and Globalization*, 5(4): 475-492.
- Penrose, E. (1995). *The Theory of the Growth of the Firm*. Oxford: Oxford University Press.
- Pfeffer, J., & Salancik, G.R. (1978). *The external control of organization: A resource dependence perspective*. New York: Harper and Row.
- Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York, NY: The Free Press.
- Rasheed, H.S. (2005). Foreign Entry Mode and Performance: The Moderating Effects of Environment. *Journal of Small Business Management*, 43(1): 41-54.
- Sanjeev, A., & Sridhar, N.R. (1992). Choice of Foreign Market Entry Mode: Impact of Ownership, Location and Internationalization Factors. *Journal of International Business Studies*, 23(1): 1-27.
- Shieh, B.L., & Wu, T.Ch.W. (2011). Equity – Based Entry Modes of the Greater Chinese Economic Area's Foreign Direct Investments in Vietnam. *International Business Review*, 21: 508-517.
- Slangen, A.H.L, & van Tulder, R.J.M. (2009). Cultural Distance, Political Risk, or Governance Quality? Towards More Accurate Conceptualization and Measurement of External Uncertainty in Foreign Entry Mode Research. *International Business Review*, 18(3): 276-291.
- Stoian, M.C., Rialp, A., Rialp, J., & Jarvis, J. (2016). Internationalisation of Central and Eastern European small firms: Institutions, resources and networks. *Journal of Small Business and Enterprise Development*, 23(1): 105-121.
- Tseng, C., & Lee, R.P. (2010). Host Environmental Uncertainty and Equity – Based Entry Mode Dilemma: The Role of Market Linking Capability. *International Business Review*, 19(4): 407-418.
- Ubrežiová, I., Wach, K., & Horváthová, J. (2008). Entrepreneurship in small and medium-sized enterprises: Comparative study between Slovakia and Poland for the years 2001–2007. *Agricultural Economics - Czech*, 54(8): 358-366. Open access - accessible online.
- Wach, K. (2008a). *Regionalne otoczenia małych i średnich przedsiębiorstw*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie. Open access - accessible online.
- Wach, K. (2008b). *Skutki akcesji do Unii Europejskiej dla polskich przedsiębiorstw*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie. Open access - accessible online.
- Wach, K. (2014). Theoretical Framework of the Firm-Level Internationalisation in Business Studies (chapter 1). In: A. Duréndez & K. Wach (Eds.) (2014). *Patterns of Business Internationalisation in Visegrad*

- Countries – In Search for Regional Specifics*. Cartagena: Universidad Politécnica de Cartagena. Open access - accessible online.
- Wach, K. (2015): Entrepreneurial Orientation and Business Internationalisation Process: The Theoretical Foundations of International Entrepreneurship. *Entrepreneurial Business and Economics Review*, 3(2): 9-24. doi: <http://dx.doi.org/10.15678/EBER.2015.030202>
- Wach, K. (2016). Otoczenie międzynarodowe jako czynnik internacjonalizacji polskich przedsiębiorstwa. *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 30(1): 7-20. Open access - accessible online.
- Wei, Y., Liu, X., & Liu, B. (2004). Entry Modes of Foreign Direct Investment in China: A Multinomial Logit Approach. *Lancaster University Management School Working Paper*, No. 2004/001, <http://eprints.lancs.ac.uk/48698/1/Document.pdf> - access date: 1 June 2016.
- Wiktor, J.W., Oczkowska, R., & Żbikowska, A. (2008). *Marketing międzynarodowy: Zarys problematyki*. Warszawa: PWE

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Special Economic Zones as Growth and Anti-growth Poles as Exemplified by Polish Regions

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Abstract

The objective of this paper is to present the effects of special economic zones (SEZ) on the polarisation of public economic space in Polish regions. The paper looks at both positive and negative effects of economic zones on the polarization of economic space in Polish regions. In an empirical analysis of internal and external effects of SEZs growth centres are identified. Centre of the polarised region, as a source of development incentives, characterised with a higher growth dynamics in comparison to the other part of the region is identified as a growth pole; while the centre of a polarised region being a source of crisis factors higher than in the region is identified as an anti-growth pole. In the result of conducted studies 8 growth poles, 19 centres of unstable economic situation have been identified, anti-growth poles has not been identified. Factors that result in the polarisation as well as its positive and negative characteristics were identified. The new model, which captures growing changes and can activate an appropriate action aimed at avoiding crisis can be used as a potential early warning system by the authorities of territorial units. The originality of this work lies in proposing a new methodological approach to identify poles and anti-poles. This approach can be applied for various tiers of taxonomic division for regions in various countries and forms of public aid.

Keywords: anti-growth poles; investment attractiveness; growth poles; public aid; special economic zones (SEZ)

JEL codes: L52, R53, R12, P48

INTRODUCTION

Special economic zones (SEZs) are considered one of the most successful measures in regional policy that are applied to overcome barriers to regional development. One should consider not only a positive scenario in which the special economic zones become growth poles, but also think about the opposite course of actions. It is possible that the zones generate adverse effects, which not only fail to create growth generators, but may even hamper the growth or cause a spate of negative phenomena that intensify one another (i.e. negative synergy).

A negative scenario is probable when state aid is not adjusted in terms of its scale, kind or form to the characteristics of a given region/locality and investments in the zones. This causes overexploitation/misappropriation of resources instead of stimulating development in a viable manner. Therefore it is important to identify mechanisms which either cause the positive scenario to happen, in which case a growth pole is created by the special economic zones, or activate the negative scenario productive, which involves the creation of an “anti-growth pole”.

For the purpose of this study, we decided to use the term growth pole in a reference to a centre of a polarised region, which is the source of growth incentives and is characterised by a higher growth dynamics in comparison to other parts of the region. Anti-growth pole is a polarised region’s centre, which is a source of the crisis signals higher than the rest of the region. Region can be considered as a group of spatial units on different levels of taxonomic division (e.g. local, mezo-regional, macro-regional).

The role of poles or anti-poles can be played by not only single entities, but whole groups of them, or by development strategies of large enterprises (especially corporations), as well as by economic incentives systems, which can cause spatial structure modifications created by large enterprises. Special economic zones can have a special role in this.

The goal of this paper is to demonstrate both positive and negative effects of economic zones on the polarization of economic space as exemplified by Polish regions. Conclusions presented in this paper will help to identify the factors that either increase the chances of the positive effects contributing to the development of the economic zones or cause their negative effects to prevail.

The proposed research methodology aims at delimiting poles and anti-poles on the level of municipalities that have SEZs within their borders. Delimitation procedure was conducted on the basis of internal and external activities of the SEZ in the municipality. The evaluation of internal effects was based on direct effects of enterprises located in these zones, while the external effects evaluation was a result of assessment of multiplier effects of a supply and income character. The paper proposes a procedure and a research tool developed for monitoring the changes that occur because of the polarisation of the region. This model can serve as the basis of an early warning system which could potentially be used by the authorities of territorial units.

The results of the analysis may be applied not only to foster the development of Poland’s regions, but also the regions located in other countries, based not only on SEZ, and also on other forms of public aid, as the mechanisms of polarisation are universal in character. Consequently, they may be particularly useful to stimulate regional economy in underdeveloped agricultural regions and problem regions characterized by an anach-

ronistic structure of regional economy based on industrial monoculture. Polish regions demonstrate a broad diversity and different capacities to absorb state aid, because polarisation mechanisms are universal.

The first part of the paper presents a literature review on the growth poles theories, development polarisation with a special attention to their positive and negative impact on development of other units. Furthermore, we presented considerations on the influence of special economic zones – as a kind of public aid – on the economic development with an emphasis on multiplier effect of a supply and income character. The conducted literature studies suggest that majority of studies concentrate on positive effects of SEZ that stimulate economic development on the different spatial scales. Literature lacks research analysing factors influencing the negative effects of this kind of public aid. It is a cognitive gap that we try to fill with this paper.

The next part of the article identifies Polish municipalities that are a subject of this research and have special economic zones within their borders. As a next step we have proposed a research method aimed at finding poles anti-poles of growth. Boundary conditions have been specified, which should be met by municipalities in order to become positive or negative centres towards nearby areas. Measures of the assessment of the internal and external effects (being the reflection of supply and income effects) have been described. Poles and anti-poles delimitation criteria have been identified depending on the measures describing external effects.

In the course of the studies 8 growth poles, 19 centres of an unstable economic situation have been identified and anti-poles have not been identified. Next, we have conducted the econometric analysis of polarization types in municipalities dependency from municipalities investment attractiveness, which have zones located within their borders. Also the results of the supplementary qualitative research with the use of an in-depth interview with the directors of five special economic zones in Poland were presented. It can be noted that qualitative studies confirmed the existence of poles in indicated places and lack of anti-poles in the studied period.

The last part of the paper presents the results of conducted analyses. During the research the most important factors of SEZs positive and negative influence on local and regional development polarization were identified. It needs to be stated that numerous threats connected with the creation of SEZs and the creation on anti-growth poles require to use the monitoring system of changes present in local and regional economy. Our model allows grasping the intensifying changes and preparing the prevention measures. The proposed method has a universal character and allows the assessment of a variety of public aid forms on the region's or country's economy no matter the given country's socio-economic starting point. It also fills the cognitive gap on the public aid's influence assessment on the municipality's economic growth.

LITERATURE REVIEW

The concept of the growth pole (fr. *pôle de croissance*) was introduced to the literature by Perroux (1955) as a phenomenon that surpasses the average level, and not one of extremes. The proposed conception of sectoral polarisation identifies the pole with the company, which is a driving force and exhibits a strong market position, rapid growth of economic activity and a number of network cooperation (Perroux, 1955). In the course of its evolution,

the theory of growth poles has provided a spatial dimension. Myrdal (1957) and Hirschman (1958) are considered the creators of the regional version of the growth pole theory.

Significant contribution to the development of the concept of growth pole in terms of a geographical viewpoint was also introduced by Boudeville (1972) and Paelinck (1965). Among the new theoretical concepts relating to the theory of polarized development, a new concept of endogenous growth and the concept of a new economic geography may be distinguished. According to Churski (2011), the latter concept is actually a new theory of polarised development.

In the literature, the term pole may theoretically determine both positive and negative effects of the impact of the growth of one unit on the development of other units. According to Perroux (1955), these are stimulating, inductive (fr. *effets d'entraînement*) or inhibitory effects (fr. *effets de stoppage*). Hirschman (1958) explains poles as opposite endpoints of one axis, wherein the positive effects are described as trickling-down effects, while the negative effects are presented as the polarisation effects. Myrdal (1957) described progressive effects as spread effects, and regressive ones as backwash effects.

In the theory of growth poles less attention is paid to a negative scenario of polarization effect. However, in accordance with the principle of circular cumulative causation by Myrdal (1957), positive changes cause the cumulative growth process, while negative changes – a cumulative shortening process. It is the result of feedbacks increasing intensity of mutual influences of both positive and negative character, being one of the reasons that boost inequalities between growth centres and regions and other areas.

The role of a growth pole can vary over time. The natural ebb and flow of the system may cause the existing poles to become centres of stagnation. Maturation of growth poles and their gradual replacement by others is a natural and necessary process in the national economy, but may cause the collapse of the process of economic development for some local areas. Diversification and supporting the development of service activities may to some extent mitigate the negative effects of the changes (McKee, 1987).

Shanzi and Feser (2010) studied the occurrence of spread-backwash effects on a part of the territory of China. They analysed the impact of economic growth in bigger cities on the support or inhibition of growth in smaller cities and counties and the geographic scope of the occurrence of spread-backwash effects. Their empirical study has generated mixed evidence of the spread effects of large cities growth. It should be noted that the growth poles in large cities could generate both positive and negative regional growth spillovers.

Parr (1999a) analysed the concept of growth poles in the context of regional economic planning. However, at the same time, it should be noted that the growth pole strategy may be recommended with regard to various regional problems, such as depressed-area revival, the encouragement of regional deconcentration, the modification of a national urban system and the pursuit of interregional balance. Among the characteristics of the strategy, the author mentioned the following: encourages employment growth and population growth in certain areas of the region, changes the spatial structure of employment and population growth within a region, identifies limited number of places that are potential growth poles and allows spatial discrimination or selectivity between locations. Spatial configuration of the planned poles, economic activity at the poles, external effects of the poles and the presence of a pole within an existing urban system (Parr, 1999a; 1999b) are all important for the implementation of the strategy.

Followers of the concept of polarised development emphasise that in reality, growth poles can develop independent of the surrounding peripheries, which challenges the theories of sustainable development. Nowadays, growth poles are described as a network connection system, which may be characterised by greater intensity than associations with the nearest geographical environment and companies from the periphery (Gorzalak & Jałowiecki, 2000; Gancarczyk & Gancarczyk, 2002). Then, the effect of growth pole on economic space may be marginalised or limited only to the negative effects that are described as exploration of endogenous resources of the region.

Large enterprises play a special role in the concept of Perroux (1955). They are treated as leading units creating growth poles. Classical approach to the leading units in accordance with growth poles theory in a global economy needs a modification due to changes in enterprises, as well as in the environment. Today an important role can be played by groups of enterprises (especially by those who cooperate with each other and share their knowledge), as well as development strategies of great enterprises (especially corporations) and by the economic incentives system which can cause the modification of spatial structures created by large enterprises. Special economic zones can have a special role to play, as well as ownership connections and supply chains caused by quality reasons and safety reasons.

Economic zones in terms of the economy are an instrument of economic policy for the development of the whole country, which it does by supporting certain regions or sectors. On the other hand, from the perspective of economic geography, it is an element of economic space capable of creating new spatial structures and developing location advantages. In physical terms, these are geographically separate places doing business on preferential terms. Zones are oriented to attract new investors. Relationships that business entities create with the environment are one of the main factors of economic development of the region. The level of investment in the enterprise decides about its influence on the spatial structure of the regional arrangements, leading to the perpetuation or transformation of the spatial structures of the region.

Few studies concern SEZs as growth poles. Most authors note that SEZs are created in order to accelerate regional development and focus on the functioning of the areas with economic advantages. As such, the impact mechanism of this instrument is rarely present in the literature.

Considerations on the SEZs impact on the economy can be found in literature. Kryńska (2000) notices that the idea of creating special economic zones in Poland in its first assumptions, was supposed to support economic development of problematic areas through attracting large industrial enterprises. According to Ofiarska (2000) SEZs were intended to complement Poland's industrial policy within the progress of selected industries, increase of domestic services and products' competitiveness, modern technologies and support of production for exports. On the other hand Fierla (2000) and Brdulak (2003) stress out that SEZs were supposed to limit the negative effects which accompany the transformation process, such as unemployment increase and rising differences in the development level of particular Polish regions. The SEZs importance as an instrument of counteracting marginalisation of the least economically developed regions was also noticed by Nazarczuk and Kisiel (2013), who implies that SEZs goals include, apart from new jobs creation in the underdeveloped regions, boosting economic development through

the improvement of selected sectors, production structure diversification and local economy reconstruction.

Some of the authors emphasize the macroeconomic dimension of SEZs activity. Miśszewicz (2011) spotted the SEZs role in the country's economic modernization through the influence on the increase of capital expenditure. On the other hand, Pastusiak (2011) perceives SEZs as an active investment policy tool, which aim is to attract foreign investors and economy's activation and in a result unemployment decrease and inflow of new technologies. Pilarska (2009) has a similar understanding. She describes SEZs as state's economic policy tool for decreasing unemployment, increasing underdeveloped regions' investment attractiveness and attracting foreign investors. Laskowski (2009) also points to the regional aspect of zones' functioning and identifies them as an instrument for fighting the inconvenient effects of public-economic transformation through bringing foreign investors to the areas in a danger of poverty and the use of existing technical and technological solutions, as well as smart management of unused industrial assets.

Usually the roles and goals of SEZs manifest themselves on the macroeconomic and regional levels. But some of the researchers point to its local character. Jarczewski (2007), Lizińska, Marks-Bielska and Kisiel (2011) perceive the SEZs role in the investment attractiveness of municipalities. Krzemiński (2009) underlines the SEZs' role in the spurring of local entrepreneurship in the underdeveloped, or affected with high unemployment, regions. Przybyła (2010) links the existence of zones with transformations in the city's functional structure especially connected with city's exogenous functions, thereby stressing the SEZs influence on the cities' economic base changes. In turn Ambroziak (2009) notices that zones became the tools of state's impact on the actions of economic entities, tools for economic growth stimulation of specific regions and for attracting foreign investments.

There are number of studies that examine how special economic zones contribute to the stimulation of regional development, but not in the perspective of the growth pole. Advocates of special economic zones as national or regional development strategies argue that the zones offer various benefits. At the national level direct benefits include foreign investments, job creation and export promotion, whereas indirect benefits involve transfer of technology and know-how, as well as facilitation of institutional liberalisation. At a local level the benefits for human resources entail increase in income and acquisition of professional skills, often described as the 'spillover effects.' Authors focus mostly on success stories of SEZs (Wong & Chu, 1984; Moura & Forte, 2010; Osinubi & Amaghionyeodiwe, 2010; Brautigam & Xiaoyang, 2011; Zeng, 2011; Saqib, Masnoon & Rafique, 2013) and indicate the causes being the joint presence of various institutional and legal instruments, which range from tax havens to some combinations of areas with economic advantages and forms of support for the transfer of technology and know-how like science and technology parks or centres for entrepreneurship.

Examples of clusters that are created as a result of cooperation between SEZs and companies operating in the zones are widespread (Zhao, Chan & Chan, 2012; Hsu, Lai & Lin, 2013). Researchers also describe eco-parks, which may offer attractive conditions for the growth of companies that develop green innovations (Shi, Chertow & Song, 2010), or apply corporate social responsibility (Lai, 2006; Shen, 2007), or shared social responsibility (Christensen & van Bever, 2014).

The literature is prevalingly descriptive and indicates the role of SEZs in regional development. However, studies on the mechanism of impact of SEZs on the economy and the universality of this impact are rare. Typa (2012; Typa, 2013a; Typa, 2013b) is one of the few scholars who describe special economic zones as growth poles. In her studies growth poles are presented through investigating the dynamics of development of municipalities (gminy), where SEZs are located, in comparison with one-tier higher taxonomic areas (LAU2). Typa's (2012) research leads to a conclusion that communes in the SEZs only develop into a growth pole if they are characterised by high investment attractiveness. They are mostly located in national and international transport corridors, densely populated regions with historically industrial background, which bear many features of problematic regions (prevalence of heavy industry, significant negative externalities, exceeding economies of scale). Studies also show heavy influence of SEZs location on the manufacturers of means of transport that are in a position of creating numerous cooperation ties. The municipalities in which SEZs, clusters and business environment institutions generated a synergy effect were the most successful. This author, however, only concentrated on positive aspects of space polarization.

Some authors also criticise SEZs. They believe the SEZs produce worse effects than complete economic liberalisation (Farole, 2011). The results of analysis of the role of SEZs in the liberalisation of the economies of China and India allow us to conclude that export and an increase in FDI have a positive statistically significant impact on the economic growth in those countries. The presence of SEZs increases the pace of regional development, but an increased number of SEZs have a scarce effect on economic growth. Increased pace of liberalisation seems to be the key to expedited economic growth. SEZs have also been investigated as liberalisation and development strategy vehicle for the economies of China and India (Leong, 2013). It should be noted that the creation of further subzones within the SEZs may potentially cause a dispersion of investments and a reduction in their desirable effects in addition to 'subzone cannibalisation,' i.e. rivalry between the subzones within one SEZ (Hajduga, 2011).

Broszkiewicz (2011) has reported on the disadvantages in the functioning of SEZs, which appear as a result of the influence of different factors characterised by legal and economic fluctuations. According to him, the possibility of doing business in the zone is strictly dependent on the current laws and changes in that area, as well as on global factors, e.g. economic crisis. The author also mentions that SEZs in Poland did not fulfil the purpose of their formation, which was the equalisation of disparities in the region.

Other authors highlight the needs of sectors that should be developed complementary to one another, and question their restricted learning faculty, their capacity for a technological spillover, or they argue that in fact SEZs intensify the discrepancy in the region's income (Park, 2005). However, it is difficult to generalise the effects of SEZs, as an overall research result is normally contingent upon a specific situation. According to Sigler (2014), the SEZs may in fact worsen the disparities in social development by creating entry barriers for a majority/part of a society (both physical and social restraints); allowing the import of a highly skilled workforce (instead of developing local training schemes); diminishing the benefits of international investments through a tax system that provides excessive tax reliefs; and allowing public authorities to be passive in implementing social development means and measures. For example, despite Panama's

recent economic success many of its regions have been neglected by social services schemes, e.g. state-funded education or public healthcare. In the SEZ-supported sectors, entry barriers are high both in terms of required skills or know-how/qualifications and necessary capital outlays, whereas most positions with high or mean remuneration are occupied by national elite or well-educated expats. SEZs consequently contribute to the overall development of a national economy. If they are, however, intended to serve as a local development generator, broad complementary social development schemes need to be implemented to maximise social benefits of economic growth (Sigler, 2014).

It should be noted, though, that companies are not isolated but settled in certain locations and socioeconomic contexts that are also shaped by political and institutional players (Tödting, Asheim & Boschma, 2013). Although such zones turned out to be successful in the Dominican Republic, critics of the idea of creating various areas of economic advantages (here: export processing zones) underline the unfavourable lack of links and relations between companies located in the zone and firms outside it. This results in economic enclaves. According to the researchers, Export Processing Zones are not an optimum industrial development generator. They argue that it would be more beneficial to support export in the entire national economy because that generates network effects and adds higher value, which in turn contributes to an increased local employment rate, income and transfer of technology (Willmore, 1995). A study on another kind of economic enclave, Special Economic Zone of the Kaliningrad Oblast in Russia (Russian region surrounded by UE states, Lithuania and Poland), was presented in a paper by Gareev (2013).

Therefore, attracting a foreign investor does not necessarily safeguard its positive impact on the national or regional economy. Important determinants of absorptiveness and benefit maximisation for the local economy include technology gap, cultural and mental distance between individuals, homophily, spatial proximity, idiosyncratic character of sectors and host countries, high degree of foreign ownership, level of development of host economy, relative size of firms, degree of trade protection and the institutional framework (Tavares & Young, 2005).

To the list of positive effects, one should also add activation of cost-sensitive mature sectors located in the proximity of less-developed territories, due to the emergence of industries in major cities. A drainage of well-educated workers and potential capital investments from the surrounding areas is one of the negative effects of the growth pole (Shanzi & Feser, 2010).

Referring to the classical model of business location by Smith (1966), it was noted that SEZs should be a form of subsidy for investors, which aims to direct them to places that otherwise would not be of interest. These areas are located outside either the spatial boundaries or area of production profitability, or are perceived by investors as unattractive in comparison with competing locations.

Subsidised business investments in the area of SEZ should have a positive impact on the local environment through increased income and employment in other companies, as well as an increase in tax revenue to local governments. Grzeszczak (1999) observes that the function of the growth centre in regional development is its ability to ensure the spread effects. The spread effects occur when the core area and the periphery are incorporated to the economy through: (i) increase in demand for goods and services produced in the periphery; (ii) investments of companies from the core as

a result of searching for new markets and the desire to reduce costs; (iii) income and supply multiplier effects. These effects also occur in a less tangible form, e.g. through the diffusion of styles and management patterns.

For the first time, the multiplier effects in the context of SEZ were described by Domański and Gwosdz (2005) when summarising the activities of the SSE Euro-Park Mielec. They distinguished two basic types of multiplier effects: supply and income. The supply effects arise from the extra demand created by newly established or growing enterprises, enabling the growth of companies supplying goods and services. Income effects are the result of an increase in the purchasing power of the population through increased salaries, which when spent contribute to the development of companies that meet consumers' needs. This way, the development of some companies through additional demand for products and services is 'multiplied' in the form of development of other economic entities. These entities, in turn, also create more demand, inducing another cycle of multiplier effects.

According to Domański (2001), the size of multiplier effects depends on the type of business and the size and characteristics of the company. Individual activities (industries) and companies also differ in the spatial range of multiplier effects, including the degree of local closure. Stronger local supply effects usually occur in companies that operate longer in a given location and native capital enterprises, especially those that have their own premises. Sometimes supply effects are weaker in some foreign companies, especially new factories, oriented to foreign markets. Local multiplier effects generated by outsourcing services are usually stronger than the effects arising from the supply of production. Typically, the local nature is exhibited by income multiplier effects associated with the place of residence of employees. Their size is strongly related to the number of job positions and salary levels in companies.

In the result of conducted literature studies, we found that the majority of research concentrates on SEZs positive effects stimulating economic development on the regional level. The literature lacks the sources analysing negative effects of such public aid and its impact on the local level.

In the literature, the prevailing opinion is that of the growth pole being held up as an example of positive polarisation; however, the concept of an anti-growth pole should be also introduced to draw attention to the existence of a negative polarisation associated with the overlapping in a given location of various development constraints, ultimately causing the opposite phenomenon of economic development.

Therefore, an attempt to present both aspects of polarisation offers a pioneering and fresh approach to the subject. It is important to point out under what conditions a growth pole may collapse and transform into an anti-growth pole (crater) or where and under what circumstances an anti-growth pole (crater) may come into existence in a previously non-polarised area. This is a research gap that should be filled. It may have implications for the development of studies on economic geography and regional economics and for practical applications as managing the state aid requires a knowledge of failure factors. It may also contribute to the formation of an early warning system to enable the planning of necessary activities aimed at avoiding a crisis.

MATERIAL AND METHODS

In Poland, special economic zones are located in 356 municipalities, which represent 14% of all municipalities (LAU2) in Poland, while the total area of economic zones does not exceed 12 000 ha. There is a high geographic dispersion of the areas, as a result of which they affect the local economy significantly only in a few cases, their effect on the regional economy being rarely felt.

This may be proved by analysing the basic indexes of SEZs activity; that is, the value of investments accomplished by the companies and the number of jobs created by regional business. By the end of 2013, investment spending in the zones has surpassed 93.14 billion PLN. In 2008-2012, on an average 6% of the annual investments in Polish enterprises were completed by regional enterprises. In the area of SEZs, 196 000 new job positions were created and 70 580 jobs were retained. Thus, 1.9% of the total working population were employed in the regional enterprises.

Taking into account the nature and extent of the expected changes caused by new investments in SEZ, it is reasonable to assess whether, in the case of SEZs, flotation of multiplier mechanisms, particularly fiscal and supply, is noticed and whether SEZs became a factor which promotes economic growth at the local level. The analysis aims at answering a question whether the enterprises operating in SEZs positively influence the economic growth on the local level and thus have the ability of extending the growth to the regional level. A hypothesis was adopted for this purpose, which states that investments of subsidised entities located in SEZs should influence the local environment through the income and employment increase, as well through tax revenues for the local governments.

For this reason, we analysed the direct effects of SEZs' activity in Poland and selected indexes assessing the level of economic development of the municipalities in which the SEZs were established. For the analysis, we used data of the Ministry of Economy and Central Statistical Office of Poland regarding:

- cumulative investment spending in SEZs according to the status at the end of 2012 and 2013, when division into municipalities was conducted,
- newly created and maintained job positions in SEZs according to the status at the end of 2012 and 2013, when division into municipalities was conducted,
- the number of entities registered in the system per 1000 individuals of reproductive age between 2008 and 2013, when division into municipalities was conducted,
- the number of employees per 100 individuals of reproductive age between 2008 and 2013, when division into municipalities was conducted,
- shares of municipal budgets in taxes constituting the state budget revenue, income tax from every natural and legal person of reproductive age between 2008 and 2013, when division into municipalities was conducted.

Based on the above-mentioned data, the following factors were evaluated:

1. internal effects based on:

- share of newly created and maintained job positions in SEZs in the number of employees in the municipality according to the status at the end of 2012 [W1],
- cumulative investment spending in PLN of regional enterprises according to the status at the end of 2012, when division into municipalities was conducted [W2],

2. external effects based on:

- the annual average growth rate of the number of entities registered in the system per 1000 individuals of reproductive age between 2008 and 2012 [T1],
- the average annual growth rate of municipal budgets in taxes constituting the state budget revenue income tax on every legal and natural persons of reproductive age between 2008 and 2012 [T2]¹,
- average annual growth in the number of working people per 100 individuals of reproductive age between 2008 and 2012 [T3].

Based on such calculations, firstly we identified municipalities, which, thanks to the activity of SEZs, are able to develop faster than the sub-meso regional environment and thus act as growth centres. At the same time, as a boundary, we considered the fulfilment of two conditions regarding:

- a significant share of SEZs in the management of labour resources—the reflection of a significant impact is the W1 index at the minimum level of 10%; and at the end of 2012, 86 communes met this requirement,
- significant value of new investments, i.e. such which are able to induce an effect on the regional market—according to the authors, a significant impact was observed among these municipalities for which the W2 level amounted to a minimum of 200 million PLN, by analogy to the minimum value of the large investment project in accordance with the EU² legislation; at the end of 2012, 35 regional municipalities met this requirement.

Altogether among the 356 municipalities in general in 2012 when SEZs were completed, only 27 municipalities met the boundary conditions, leading to the hypothesis that the economic zone significantly affected their development.

Identification of municipalities with a significant level of internal effects does not allow us to conclude that these regional locations became zonal ones:

- growth pole, that is the centre of the polarised region emitting growth stimuli characterised by a higher growth rate compared to the remaining part of the region. The region may be applied to spatial units of different levels of taxonomic division (e.g. local, meso-regional, macro-regional)³,
- anti-growth pole that is a centre of the polarised region emitting crisis stimuli of higher growth rate compared to the remaining part of the region.

The answer to this question is possible only on the basis of an assessment of external effects, which reflect the supply effects (T_1) and income effects (T_2 , T_3). In order to accomplish that, we compared T_1 , T_2 , T_3 indices of each municipality that had a SEZ within

¹ One of the income sources in regional municipality are shares in taxes that constitute the income of country budget. This benchmark indicates indirectly on the salary level and purchasing power of the local community and the economic condition of firms located in the regional municipality.

² Art. 100 Regulation of the European Parliament and the Council (EU) No. 1303/2013 from 17 December 2013 establishing common regulations on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for the Rural Area Development and the European Maritime Fund and Fisheries and establishing general regulations on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (WE) No 1083/2006 (L 347/320).

³ This definition refers to the concept of growth poles by Perroux (1955).

its border with the same indices of a local government of a higher level, i.e. district, sub-region, or region depending on the municipality status according to NTS.

The period which was considered when calculating average annual growth rate for the purpose of T_1 , T_2 , T_3 calculation, is similar to the permanence period required for projects supported from public funds under the guidelines on national regional investment aid⁴. Results of the calculations are presented in Table 1.

Depending on the level of T_1 , T_2 , T_3 index, following delimitation criteria were established: poles (T_1 , T_2 , T_3 , greater than zero), anti-poles (T_1 , T_2 , T_3 , equal to zero or less) and the centres of unstable growth rate (T_1 , T_2 , T_3 above or below zero) (Table 2).

Then, econometric analysis was carried out analysing the type of polarisation that occurs in the regional municipalities and investment attractiveness of communes, where special economic zones are found. For this purpose, the index of potential investment attractiveness developed by Godlewska-Majkowska (2012) was used⁵.

Based on Gretl statistical program, we analysed the correlations between the effects of external economic zones (based on the average of W1 and W2 variables) and:

- index of potential investment attractiveness for the local economy,
- particular aggregated data describing each individual key location factors (labour resources, technical infrastructure, social infrastructure, market sales, administration),
- all variables building the local attractiveness of individual municipalities (matrix of dimensions 78×78 was analysed) where economic sub-zones were formed.

⁴ EC regulation on regional aid for 2014-2020 (Text which is relevant for EOG) (2013/C 209/01).

⁵ Potential investment attractiveness is an approach referring to the assessment of localisation prior to investment. In this perspective, location advantages are analysed. The construction of indexes describing potential investment attractiveness refers to the leading location factors, grouped into components describing demographic and marketing factors, as well as technical and social infrastructure and pro-investment behaviour of local governments. In addition, according to the accessibility to the data, research and development issues, as well as social capital (relational) are considered.

The advantage of this index is the design enabling full comparability of ratings of investment attractiveness at all levels of the static division of the country. The disadvantage is the limitation regarding a set of diagnostic variables, due to the need of their accessibility for all levels of the static distribution of the country. Despite these difficulties, this index is based on 45 diagnostic variables, which appear to be a sufficiently broad foundation for comparisons. All indexes are calculated based on weight-correlation method, allowing determination of weights of pseudo-attribute variables based on the statistical distribution, which minimizes the subjectivity of the final evaluations.

The method adopted allows for minimising the effect of subjective assessment of the author on the final results, while taking into account the uneven impact of individual variables on the size of the final index. It corresponds to reality to a greater extent compared to exclusion of ranks of residual variables.

The calculated values of the synthetic pseudo-attribute index form the basis of a subset to the set of spatial units of A F classes, the scope of which was determined by the left-closed intervals with the following lower boundaries: Class A: $Av + S(x)$, Class B: $Av + 0.5S(x)$, Class C: Av , Class D: $Av - 0.5S(x)$, Class E: $Av - S(x)$, Class F: 0, where Av – arithmetic mean, $S(x)$ – standard deviation.

The design of indexes also allows for their decomposition to the level of sub-aggregates, so that each territorial unit may be assessed in terms of the attractiveness included in each microclimate (labour resources, technical infrastructure, social infrastructure, market sale and administration). If necessary, it is possible to explore the profile of the particular unit and to determine the formation of source variables in particular locations. For further details see Godlewska-Majkowska (2012).

Table 1. United States Case Studies of Immigrant Entrepreneurs as boundary spanners

Municipality	Province	SEZ	W ₁	W ₂	T ₁	T ₂	T ₃
Polkowice (3)	DOLNOŚLĄSKIE	Legnicka	22%	3 156 650 621.00	0.62	3.87	0.05
Legnickie Pole (2)	DOLNOŚLĄSKIE	Legnicka	21%	433 540 367.00	0.27	2.25	8.57
Nowogrodziec (3)	DOLNOŚLĄSKIE	Kamiennogórska	18%	1 143 716 511.99	0.92	0.60	2.01
Jelcz-Laskowice (3)	DOLNOŚLĄSKIE	Wałbrzyska	18%	1 486 475 875.01	0.68	0.34	0.39
Głogów Małopolski (3)	PODKARPACKIE	Mielecka	14%	271 736 177.00	1.13	2.77	5.40
Ksawerów (2)	ŁÓDZKIE	Łódzka	12%	218 804 551.29	0.61	4.93	4.45
Nowe Skalmierzyce (3)	WIELKOPOLSKIE	Łódzka	11%	358 933 777.00	2.86	3.15	3.27
Gliwice (1)	ŚLĄSKIE	Katowicka	10%	6 492 477 518.79	0.88	0.23	1.36
Kobierzyce (2)	DOLNOŚLĄSKIE	Tarnobrzeska/ Wałbrzyska	93.94%	4 150 382 000.00	2.13	0.57	-0.02
Mielec (1)	PODKARPACKIE	Mielecka	32.22%	3 536 834 799.00	-0.28	0.31	0.00
Wielbark (2)	WARMIŃSKO-MAZURSKIE	Warmińsko-Mazurska	30.30%	260 842 760.00	-1.50	7.27	10.79
Kostrzyn nad Odrą (1)	LUBUSKIE	Kostrzyńsko-Słubicka	25.91%	1 083 524 606.88	-1.31	-2.69	1.32
Żarów (3)	DOLNOŚLĄSKIE	Wałbrzyska	22.45%	919 040 617.30	0.89	-0.57	1.11
Skarbimierz (2)	OPOLSKIE	Wałbrzyska	22.33%	1 301 710 921.60	2.02	-1.66	25.14
Łysomice (2)	KUJAWSKO-POMORSKIE	Pomorska	19.14%	836 867 534.41	0.44	0.23	-7.56
Gorzyce (2)	PODKARPACKIE	Tarnobrzeska	19.11%	219 172 200.00	0.54	-1.41	-1.75
Dębica (2)	PODKARPACKIE	Mielecka	18.42%	207 316 332.00	2.13	0.04	-0.50
Mława (1)	MAZOWIECKIE	Warmińsko-Mazurska	17.46%	523 062 198.00	0.00	0.42	1.25
Stalowa Wola (1)	PODKARPACKIE	Tarnobrzeska	13.73%	1 118 906 400.00	-0.24	-0.57	0.53
Piechowice (1)	DOLNOŚLĄSKIE	Kamiennogórska	12.55%	238 079 233.14	-2.20	3.50	-0.61
Tychy (1)	ŚLĄSKIE	Katowicka	12.07%	3 271 164 639.79	0.28	-0.57	0.02
Ozorków (1)	ŁÓDZKIE	Łódzka	11.83%	532 669 610.93	-1.55	0.64	-1.43
Starachowice (1)	ŚWIĘTOKRZYSKIE	Starachowicka	11.73%	616 628 829.00	-0.39	0.29	1.14
Kwidzyn (1)	POMORSKIE	Pomorska	11.62%	1 079 030 205.00	-0.28	0.85	-0.53
Nowa Dęba (3)	PODKARPACKIE	Tarnobrzeska	11.33%	325 516 900.00	-0.10	1.07	2.30
Krotoszyn (3)	WIELKOPOLSKIE	Wałbrzyska	10.32%	415 155 000.00	-0.14	0.34	0.07
Barlinek (3)	ZACHODNIOPOMORSKIE	Kostrzyńsko-Słubicka	10.06%	426 665 776.08	-0.14	-1.23	0.49

Source: <http://www.ilctr.org/promoting-immigrants/immigrant-entrepreneurship/video-interviews/>

Statistical analysis using the Gretl program revealed no significant correlation, expressed by the index of potential investment attractiveness, between the nature of the polarisation and localisation values of Polish regions, as well as for the remaining sections of the analysis. Statically significant correlation (positive) was observed between external effects, zone and local development plan of individual municipalities. At the same time a negative correlation was reported in analogy in terms of accessibility to health care (number of consultations per 1000 inhabitants, accessibility to pharmacies per 1000 inhabitants).

The first statistical correlation obtained is confirmed when considering the organization of the investment process; if in a given municipality, properties are covered by the local development plan, then the investment process is not delayed due to waiting for the decision on conditions for construction and land management.

The second correlation, a negative one, indicates the importance of accessibility for people with relatively good health status, which is understandable considering the specialisation of Polish special economic zones in the manufacturing industry.

Table 2. Criteria for the delimitation of the poles and the anti-poles in the area of regional municipalities

Category/criterion	W ₁	W ₂	T ₁	T ₂	T ₃
POLE	>=10%	>= 200 MM PLN	>0	>0	>0
ANTI-POLE	>=10%	>= 200 MM PLN	<0	<0	<0
UNPOLARISED CENTRE	>=10%	>= 200 MM PLN	<0 or >0	<0 or >0	<0 or >0

Source: own study.

RESULTS AND DISCUSSION

Among 27 municipalities meeting the boundary criteria, on the basis of external effects criteria, we identified 8 growth poles and 19 centres of unstable economic situation; the anti-growth pole was not identified. Growth poles are located mainly in southwestern Poland (Polkowice, Legnickie Pole, Nowogrodziec, Jelcz-Laskowice) and one pole in each of the other parts of Poland (Glogow Malopolska, Nowe Skalmierzyce, Gliwice, Ksawerów).

Analysis of cartograms does not indicate a straightforward relation between location and the nature of polarisation (Figure 1). One can only observe the spatial concentration of the poles in southern Poland, which is associated with supply networks for the automotive sector. In addition, it may be related to the distribution of Polish industrial districts, focusing on the southern area from the NUTS2 region of Lower Silesia, through Silesian, Małopolskie, to Subcarpathian. Regional poles generally occurred in urban-rural municipalities, i.e. those where there is a small town with surrounding rural areas. They are often located in the areas that were formerly industrial centres manufacturing commodities or in urban areas. In that case, the polarisation effect is possible as a result of free investment areas, enabling further investments based on cooperative relationships and low cost of doing business. In addition, there are no other significant sources of agglomeration benefits, typical of urban environment.

Analysis of structure of the trade economy indicates an association between the formation of poles and the regional specialisations supply network. Among the growth

poles, we distinguished those that arose based upon investments completed by automotive industry companies (Polkowice, Legnickie Pole, Jelcz-Laskowice, Gliwice) and those that adopt a spatial model based on investments of leading entity cooperating with entities outside the zone (Nowe Skalmierzyce) or investments of many entities cooperating together in the supply network (Nowogrodziec, Jelcz-Laskowice, Głogów Małopolski, Gliwice).

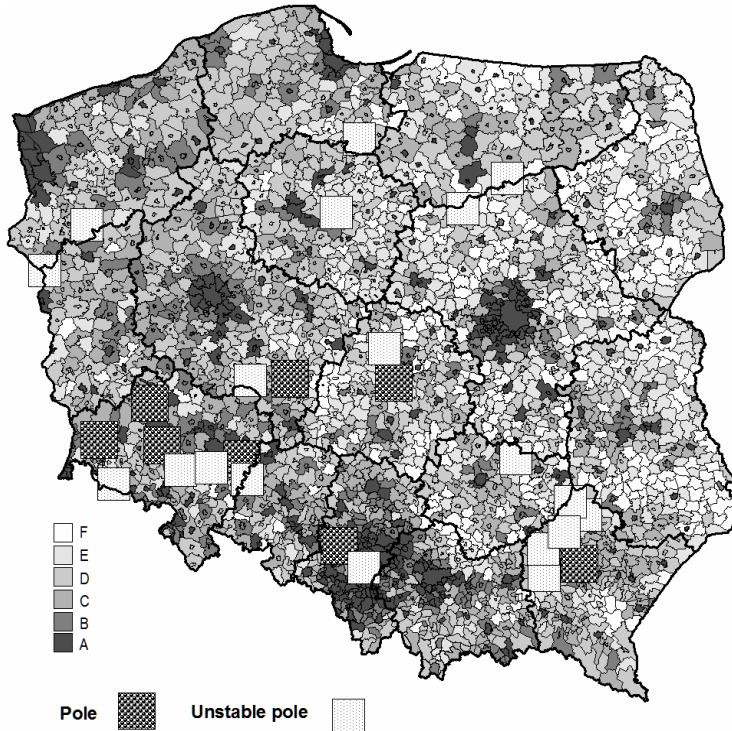


Figure 1. Distribution of regional poles in Poland in 2012 against the investment attractiveness of municipalities

Source: own elaboration based on self-reported data.

The proposed method of identification of growth and anti-growth poles may be used not only to evaluate the effects of SEZs on regional development, but also to assess the impact of various forms of public aid on the region’s economy, e.g. clustering and networking, subsidies for investments, support of entrepreneurship development etc.

Due to the fact that conclusions regarding the presence of poles and anti-poles should be verified using qualitative methods, our methodological procedure was supplemented by in-depth interviews addressed to the management of five among the fourteen special economic zones established in Poland.

From the results of the study, the following key factors were considered as necessary for stimulating the local and regional economic development: large scale of the investments to induce the effect in the local/regional economy, entry to the zone of an important investor and doing business with a high investment multiplier. To these very important factors, we can also include the presence and the quality of the business envi-

ronment, a high level of economic development of the host region and adaptation of the industry to the host region (including business activities in accordance with the investment potential of the parent region and corresponding to the specificity of place in terms of the size and structure of resources) as well as strong relations with the local business.

Important factors of positive impact of SEZs on the local or regional economy appeared to be (i) lack or limited power of the decision-making centres (e.g. large independence of regional companies in the structure of the corporation) and (ii) presence of linkages and associations as elements providing benefits from the parent unit to the stimulated units. The least important role was assigned to geographical and cultural proximity of enterprises investing their business in the area of SEZ.

In the course of the conducted studies it was noted that the most important factors of economic zones that affect the positive polarisation of regional development are:

- entry of an important investor into the area and the large scale of investment exerting an effect on the local and regional economy, e.g. in the areas of Legnickie Pole, Gliwice, Jelcz-Laskowce—the automotive industry,
- embedding of business, resulting in conducted reinvestments in the zone proving the positive impact of location in SEZ on the company's objectives—e.g. it applies to the poles such as Legnickie Pole, Polkowice, Głogów Małopolski; Nowe Skalmierzyce, Jelcz-Laskowice, Gliwice,
- technological advancement of regional companies, particularly important are innovations on a global scale, facilitating the export of products or business relations with a foreign corporation (new technologies which relate to thermomanagement, i.e. for Volkswagen and Audi).

Study results suggest that for the most important factors negatively affecting the local and regional economic development, we can name abandonment of the zone by the leading investor, insufficient quantity and quality of business entities' environment, the presence of linkages and associations as transmitters transferring the crisis from the parent unit to the stimulated ones and low level of economic development of the host region. In this context, decision-making instability and dependence of enterprises in the zone on foreign decision-making centres are also important. Other important factors include permitting small-scale investment, generating no significant effects in the local/regional economy, doing business of low investment multiplier, cultural distance and lack of adjustment of the industry to specificity of the host region.

In one of the analysed zones, withdrawal of strategic investors for the purpose of its development was observed due to unsatisfactory economic performance of the company, the global economic crisis or a strategic decision made by the decision centre located outside the country. Despite this, in the analysed SEZ, no remedial program or any procedures which can be run during an emergency situation, e.g. related to the abandonment of the zone by an important investor, was mentioned.

An important role is certainly played by the active attitude of management zones and local and regional authorities, towards investors already operating in the area, in the form of additional incentives to reinvest in the area of SEZ. Among the activities of this type, we can mention business-related services, workshop offers, networking meetings, seminars, conferences, foreign missions and fairs, supporting clusters' activity and networking.

Generally speaking, it can be concluded that qualitative research confirmed the existence of poles in the targeted locations and confirmed the lack of anti-pole disclosure over the considered period. On one hand, this may be explained by the small size of Polish investments in the zones, and thus a domino effect is questioned. This resulted mainly from efforts aimed at developing labour resources released as a result of redundancies. It is favoured by spatial organization of zones characterised by the territorial dispersion. In the face of global crisis, particularly the one in 2009 that affected the Polish economic zones, the expression of solidarity between the particular zone managements was evident in their efforts to generate new job positions in other locations within the economic zone for workers who were about to lose their jobs.

The question arises, to what extent can this method be applied in economic zones with a different organizational structure to that in Poland. Throughout the world, public aid offered in the zones takes several forms (exemption from customs duty, exemption from income tax, investment funding, giving the premises for infrastructure usufruct on better than market conditions, investment guarantees, administrative privileges) and depends on the generation of the zone (commercial areas, production zones, service areas, research areas, competitive zones, transnational areas).

Despite this diversity, the expected short-term goals of SEZs activity are similar (inflow of investments, new job positions). However, the objective of the zones from the point of view of regional inequality is not and cannot be the inflow of investment alone. What is expected from the zones in a long-term perspective relates to structural changes in the regional economy, diversification of economic activities, technology transfer, networking of foreign investors from the zones with the national economy and increased mobility of labour resource from the area to the rest of the region/country to establish the diffusion of knowledge and skills.

New investments and new job positions as well as faster development of administrative centre are the direct effects of the zones. Thus, the proposed method of evaluation of changes induced at the location of economic zones exemplified by SEZs in Poland is very universal. It allows assessing the impact of various forms of economic zones on the economy of the region/country, regardless of the initial level of socioeconomic development of a particular country or the zone.

Depending on the size of the economy of a particular country, the dispersion of zone's location, size of the administrative areas covered by the privileges, boundary criteria relating to the minimum value of investment spending in the zone and minimal participation in the use of labour resources, as well as the reference area in relation to which growth effects will be studied, should be factored into the methodology of future studies. In contrast, the selection of indexes (T_1 , T_2 , T_3) on the basis of which one assesses the occurrence of polarisation effects can be similar due to the fact that they reflect the emergence of income and supply multiplier effects that determine the polarisation of the economic space.

CONCLUSIONS

In order to ensure the sustainability of development throughout an area, it is necessary to develop a concept of zone activities, which will provide the conversion of their structures in the new industrial spaces. A well designed and consistently implemented SEZ policy can bring the desired results, i.e. increase employment, foreign investments and increase of exports. Poorly executed program for the zones can result in negative outcomes, such as reduction of the tax base and low “quality” of investments, which are unstable and weakly associated with the economic and social environment of the zone. It results from the fact that the special economic zones can cause both positive and negative polarisation of regions.

Positive polarisation in the form of a growth pole occurs when the zone is entered by, a large company or co-operating companies (e.g. cluster), characterised by the following features: (i) the ability to elicit regressive and progressive feedbacks, (ii) scale large enough to produce a substantial economic effect, (iii) doing business with high investment multiplier, (iv) strong associations with the local business ecosystem, (v) lack or limited power of the decision-making centres (e.g. large independence in the corporate structure), (vi) doing business in accordance with the investment potential of the parent region.

To induce long-lasting effects exerted by these characteristics, favourable conditions created by regional, national and international environments (within their competencies) are necessary, such as stability of regulations and generation of the anticipated attractive investment areas, thanks to which it is possible to reduce the capital of investment spending expenditure and the time taken to obtain income from business activity.

An economic zone can become the origin of a new industrial space. For this to happen, the zone should be created based on the dominance of one, or more external investors, private or public, together with a set of small- and medium-sized enterprises. External investors should be guarantors of innovative, technologically advanced activity, and small- and medium-sized enterprises should act as a guarantee of the use of endogenous potential. Entities located within and in close proximity to the area should cooperate with each other in a competitive environment to discount the external benefits, i.e. the advantages of specialisation, enabling the achievement of high competencies within the process phases regarding the product manufacture and scale effect, diffusion of innovations as a result of exchange of information and knowledge through mobile personnel and benefits of access to qualified personnel.

External benefits are related to the requisite presence of business environment institutions, such as R & D units, technology transfer centres and financial institutions. The confluence of these conditions will lead to the evolution of economic zones in clusters or industrial districts. The joint incidence of the above-mentioned conditions is essential for inducing the development of growth poles in the regional environment as a result of regional multiplier effects.

The pole may be subject to “collapse” or anti-poles may occur in a so far unpolarised region, if (i) economic zones compete with each other rather than cooperate based on competition, creating an excessive number of economic zones, which leads to their excessive dissipation, (ii) regional companies do business ill-suited to the location specificity in terms of size and structure of the resources, as well as excessive cultural distance, (iii)

economic zone develops at the expense of the environment, absorbing the factors of production resources, (iv) regional companies establish stronger relations between themselves resigning from the cooperation with local business partners, (v) leading company forming a chain of cooperative relations withdraws from the economic zone, (vi) regional enterprises are unstable in decision making, and not self-reliant in relation to foreign decision-making centres, (vii) feedbacks and associations are responsible for transferring the crisis from the leading unit to the stimulated units, (viii) in the direct vicinity of zones, there is a lack of enterprises ready to establish cooperation, (ix) local resources, especially labour resources are insufficient in terms of both quantity and quality, (x) laws regarding the running of business in the zone are unclear or unstable. If the above-mentioned negative phenomena occur simultaneously, then a phenomenon of negative synergy takes place. The sum of adverse circumstances acts stronger than each of them separately.

In Poland, cases of inhibition of local subzone development, which lost their strategic investors (lack of investment in the assumed time or withdrawal of permission due to non-compliance of investment with permission conditions) were observed. However, it did not exhibit the character of a collapse of a pole, but rather scratching a weak anti-pole development, which lost the ability to polarise space over time.

Withdrawal of investors from the zone has an adverse effect not only on the investment potential of the area, but also promotes a negative social phenomena, such as the inhibition of entrepreneurship, the emergence of counterproductive behaviour and "schadenfreude" (malicious joy). It is intensified when there is no economic justification for such decision, and is based on political factors or strategic decisions established at higher levels of the organizational structure of the corporation.

Among the currently operating growth poles in Poland, a characteristic, strong specialisation is observed in the automotive industry. One should avoid monocultural development of areas, especially changing the rules of public aid during the course of long-term economic networking, breaking down the previous lock-in and lock-out of regions. This type of model development, to a great extent, threatens the development of anti-poles as a result of the collapse of the anti-growth pole.

Inflow of investments, which does not induce profit and supply multiplier effects and consequently does not lead to polarisation of space, may indicate that inflow of new investments is inadequate to the needs of the region, or industrial structure of new investments is not adapted to the potential of the region and its endogenous potential as well, or new investments do not create associations with the economy of the region.

Lack of polarisation may be the result of a bad location of the zone or improper determination of conditions of running business within the zones, which consequently leads to the the following effects:

- neutral gear – some investments in SEZ would arise in the region, even in the absence of SEZ within their area, or any opportunities to obtain tax exemptions; this reduces the incentive effect generated by subsidies for less-developed regions. In this way, one reduces the investment attractiveness of the subsidised area, which was originally located outside the spatial boundaries of profitability. However, in contrast to the initial situation, much greater benefits are reached by investors due to reduced operating costs in the area within the boundaries of profitability, and the budget loses due to smaller tax revenues,

- substitution – the gradual transfer of business from outside the area to within the zone (and in accordance with the authorisation), thereby reducing or eliminating existing business outside the privileged area,
- displacement – assistance for businesses in SEZ, due to costs of reduction and their operation, may contribute to the displacement of public entities, which are not covered by public aid,
- enclaves – enterprises from the zone use tax exemptions and cheap labour resources, but acquire business partners located outside the region, where they also sell manufactured goods.

In such a situation, positive effects resulting from the SEZ functioning in the region are basically limited to reduction of the level of unemployment. Formation of economic zones should be supported by complementary actions in relation to tax preferences, i.e. generation of associations and cooperation with the business environment. Support from the public funds should not be limited to homogeneous forms of assistance in the form of subsidies, or tax exemptions, but should sign in to wider financial activities from the public funds.

Establishing favourable conditions for running a business in the form of a special economic zone entails a risk that may have negative effects for regional development and formation of investment attractiveness of the region. External investors, who decided to invest in the zone, may constitute the source of risk. Their negative impact on regional development results from deepening of monoculture, provisional state of activity, lack of innovation, not adjusting to the specific nature of the environment or loss of the ability to fulfil the conditions of the permission. The surrounding area may also constitute a source of risk, especially unclear or unstable laws, lack of technological absorption, low level of development of entrepreneurship and local business partners and adjusting the resources of production to investor's needs. Moreover, the risk can be created by the spatial structure of the zone. It occurs when the privileged area is not defined properly, and there is a lack of relevant partners essential for cooperation (leading entities, lack of small- and medium-sized enterprises, research and development institutions, business environment institutions).

The above-mentioned source of investment risk, in most cases, results from the lack of implementation of the conditions necessary to achieve the growth and development of the investment attractiveness of the SEZ.

Numerous risks associated with the formation of special economic zones and anti-growth poles therefore require the use of a system for monitoring changes in the local and regional economy. Our model captures the growing changes and implements the preventive actions aimed at protecting job positions and facilitating the transfer of released labour resources as a result of lost jobs in the economic zones. This phenomenon may occur not only at the local level, as exemplified in the Polish areas, but also in larger regions. The method proposed in this paper may be used at different levels of taxonomic divisions, bearing in mind that the critical size of the investment, which separates the small from the large zones, must be adjusted appropriately to the scale of the concentration of business activity and the size of the region stimulated by the zones.

One of the limitations of the proposed research method, is the fact that the research was accreied out during a specified period of time, without taking into account effects of

earlier, or later investments. We make an assumption, simplifying the case, that the analysed investments have not started before the conducted analysis. This error will be present for any analysed period. In order to eliminate this effect, one can use the 5-year analysis period with a 1-year shift. It would allow creating a changes monitoring system, using a proper level of taxonomic system for establishing a spatial scale for observations (not only in the LAU2 scale, as it is used in Poland, due to the low scale of Polish special economic sub-zones). It points to the further need of research concerning dynamic aspects' use in the proposed method.

REFERENCES

- Ambroziak, A.A. (2009). *Krajowa pomoc regionalna w specjalnych strefach ekonomicznych w Polsce*. Warsaw: Warsaw School of Economics Press.
- Boudeville, J.R. (1972). *Aménagement du territoire et polarization*. Paris: Editions M.-Th. Génin.
- Brautigam, D., & Xiaoyang, T. (2011). African Shenzhen: China's Special Economic Zones in Africa. *The Journal of Modern African Studies*, 49(1), 27-54.
- Brdulak, J. (2003). Ewolucja uprzywilejowania ekonomicznego specjalnych stref ekonomicznych w Polsce. In I. Fierla (Ed.), *Regionalne aspekty rozwoju wybranych rodzajów działalności gospodarczej w Polsce* (pp. 69-80). Warsaw: Warsaw School of Economics Press.
- Broszkiewicz, P. (2011). Odpyływanie kapitału inwestycyjnego ze specjalnych stref ekonomicznych zlokalizowanych w województwie dolnośląskim – implikacje społeczno-ekonomiczne. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 152, 25-36.
- Christensen, C.M., & van Bever, D. (2014). The Capitalist's dilemma. *Harvard Business Review*, 92(6), 60-68.
- Churski, P. (2011). Obszary wzrostu i obszary stagnacji gospodarczej w Polsce – kontekst teoretyczny. *Biuletyn KPZK PAN*, 248, 9-43.
- Domański, B., & Gwosdz, K. (2005). *Dziesięć lat doświadczeń pierwszej polskiej specjalnej strefy ekonomicznej*. Kraków-Mielec: Instytut Geografii i Gospodarki Przestrzennej Uniwersytetu Jagiellońskiego w Krakowie, Agencja Rozwoju Przemysłu S.A.
- Domański, B. (2001). *Kapitał zagraniczny w przemyśle Polski. Prawidłowości rozmieszczenia, uwarunkowania i skutki*. Cracow: Jagiellonian University in Cracow.
- Farole, T. (2011). *Special Economic Zones in Africa: Comparing Performance and Learning from Global Experiences*. Washington: World Bank.
- Fierla, I. (2000). Narastanie przestrzennych dysproporcji rozwojowych w Polsce. In J. Brdulak (Ed.), *Przedsiębiorstwo w regionalnym środowisku innowacyjnym XXI wieku* (pp. 103-118). Warsaw: Polskie Towarzystwo Ekonomiczne.
- Gancarczyk, J., & Gancarczyk, M. (2002). Konkurencyjność skupisk przemysłu (clusters) – od korzyści zewnętrznych do korzyści sieci. *Studia Regionalne i Lokalne*, 2-3(9), 75-90.
- Gareev, T. (2013). The special economic zone in the Kaliningrad region: development tool or institutional trap? *Baltic Journal of Economics*, 13(2), 111-127.
- Godlewska-Majkowska, H. (Ed.) (2012). *Atrakcyjność inwestycyjna regionów Polski jako źródło przedsiębiorczych przewag konkurencyjnych*. *Studia i Analizy Instytutu Przedsiębiorstwa*. Warsaw: Warsaw School of Economics.
- Gorzela, G., & Jałowiecki, B. (2000). Konkurencyjność regionów. *Studia Regionalne i Lokalne*, 1, 7-24.

- Grzeszczak, T. (1999). Bieguny wzrostu a formy przestrzeni spolaryzowanej. *Prace Geograficzne*, 173, 11-14.
- Hajduga, P. (2011). Oddziaływanie specjalnych stref ekonomicznych na rozwój społeczno-gospodarczy Dolnego Śląska w pierwszej dekadzie XXI wieku. *Biblioteka Regionalisty*, 11, 65-79.
- Hirschman, A.O. (1958). *The Strategy of Economic Development*. New Haven: Yale University Press.
- Hsu, M-S., Lai, Y.L., & Lin, F-J. (2013). Effects of Industry Clusters on Company Competitiveness: Special Economic Zones in Taiwan. *Review of Pacific Basin Financial Markets and Policies*, 16(3), 1-28.
- Jarczewski, W. (2007). Specjalne strefy ekonomiczne w gminach. *Samorząd Terytorialny*, 7-8, 89-96.
- Kryńska, E. (2000). *Polskie specjalne strefy ekonomiczne – zamierzenia i efekty*. Warsaw: Wydawnictwo Naukowe Scholar.
- Krzemiński, P. (2009). Specjalne strefy ekonomiczne jako stymulator przedsiębiorczości. *Przedsiębiorczość – Edukacja*, 5, 218-227.
- Lai, Q. (2006). *Corporate Social Responsibility of SMEs in China: Challenges and Outlooks*. Berichte des Arbeitsbereichs Chinaforschung 18, Institut für Weltwirtschaft und Internationales Management der Universität Bremen und Internationaler Studiengang Volkswirtschaft, Hochschule Bremen, 1-32.
- Laskowski, P. (2013). Specjalne strefy ekonomiczne jako czynnik rozwoju regionalnego na przykładzie wałbrzyskiej specjalnej strefy ekonomicznej "INVESTPARK". *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 307, 317-329.
- Leong, C.K. (2013). Special economic zones and growth in China and India: an empirical investigation. *International Economics and Economic Policy*, 10, 549-567.
- Lizińska, W., Marks-Bielska, R., & Kisiel, R. (2011). Atrakcyjność inwestycyjna gmin i znaczenie w jej kształtowaniu preferencji specjalnej strefy ekonomicznej. *Roczniki Nauk Rolniczych Seria G*, 98(3), 191-204.
- Mckee, D.L. (1987). On Services and Growth Poles in Advanced Economies. *The Service Industries Journal*, 7(2), 165-175.
- Miłaszewicz, D. (2011). Specjalne strefy ekonomiczne jako narzędzie modernizacji gospodarki. *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania*, 22, 7-34.
- Moura, R., & Forte, R. (2010). The Effects of Foreign Direct Investment on the Host Country Economic Growth - Theory and Empirical Evidence. *Fep Working Papers*, 390, 1-32.
- Myrdal, G., (1957). *Economic theory and under-developed regions*. London: Duckworth.
- Nazarczuk, J.M., & Kisiel, R. (2013). Postrzeganie pomocy publicznej w SSE jako instrumentu pozyskiwania bezpośrednich inwestycji zagranicznych. *Acta Universitatis Nicolai Copernici, Ekonomia*, XLIV, (1), 7-16.
- Ofiarska, M. (2000). Specjalne strefy ekonomiczne w Polsce. Zagadnienia publicznoprawne. *Rozprawy i Studia Uniwersytetu Szczecińskiego*, 346, 317-342.
- Osinubi, T.C., & Amaghionyeodiwe, L.A. (2010). Foreign Direct Investment and Economic Growth in Nigeria. *Review of Economic Business Studies*, 3(1), 105-127.
- Paelinck, J. (1965). *La théorie du développement regional polarisé*. Paris: Cahiers de L'I.S.E.A., 159, 5-47.
- Park, B.-G. (2005). Spatially Selective Polarization and Graduated Sovereignty: Politics of Neo-Liberalism and "Special Economic Zones" in South Korea. *Political Geography* 24(7), 850-873.

- Parr, J.B. (1999a). Growth-pole Strategies in Regional Economic Planning: A Retrospective View. Part 1. Origins and Advocacy. *Urban Studies*, 36(7), 1195-1215.
- Parr, J.B. (1999b). Growth-pole Strategies in Regional Economic Planning: A Retrospective View. Part 2. Implementation and Outcome. *Urban Studies*, 36(8), 1247-1268.
- Pastusiak, R. (2011). *Specjalne Strefy Ekonomiczne jako stymulator rozwoju gospodarczego*. Łódź: University of Łódź Press.
- Perroux, F. (1955). Note sur la notion de „Pole de Croissance”. *Economie Applique*, 8(1-2), 307-320.
- Pilarska, Cz. (2009). *Specjalne strefy ekonomiczne w Polsce*. Cracow: Cracow University of Economics.
- Przybyła, K. (2010). *Wpływ specjalnych stref ekonomicznych na kształtowanie się bazy ekonomicznej miast*. Wrocław: Wrocław University of Environmental and Life Sciences Press.
- Saqib, N., Masnoon, M., & Rafique, N. (2013). Impact of Foreign Direct Investment on Economic Growth of Pakistan. *Advances in Management & Applied Economics*, 3(1), 35-45.
- Shanzi, KE., & Feser, E. (2010). Count on the Growth Pole Strategy for Regional Economic Growth? Spread-Backwash Effects in Greater Central China. *Regional Studies*, 44(9), 1131-1147.
- Shen, Y. (2007). Entrepreneurship corporate social responsibility and flexible innovation networks: On the interaction between TNCs' R&D activities and local development. *Chinese Business Review*, 6(6), 1-12.
- Shi, H., Chertow, M., & Song Y. (2010). Developing country experience with eco-industrial parks: a case study of the Tianjin Economic-Technological Development Area in China. *Journal of Cleaner Production*, 18(3), 191-199.
- Sigler, T.J. (2014). Panama's Special Economic Zones: Balancing Growth and Development. *Bulletin of Latin American Research*, 33(1), 1-15.
- Smith, D. (1966). A theoretical framework for geographical studies of industrial location. *Economic Geography*, 42, 95-113.
- Tavares, A.T., & Young, S. (2005). FDI and multinationals: patterns, impacts and policies. *International Journal of the Economics of Business*, 12(1), 3-16.
- Tödting, F., Asheim, B., & Boschma, R. (2013). Knowledge sourcing, innovation and constructing advantage in regions of Europe. *European Urban and Regional Studies*, 20(2), 161-169.
- Typa, M. (2012). Specjalne strefy ekonomiczne jako bieguny rozwoju lokalnego. In H Godlewska-Majkowska (Ed.), *Atrakcyjność inwestycyjna regionów Polski jako źródło przedsiębiorczych przewag konkurencyjnych*. *Studia i Analizy Instytutu Przedsiębiorstwa* (pp. 142-173). Warsaw: Warsaw School of Economics.
- Typa, M. (2013a). Polskie specjalne strefy ekonomiczne na tle stref działających w innych krajach Unii Europejskiej. In H. Godlewska-Majkowska (Ed.), *Atrakcyjność inwestycyjna regionów Polski na tle Unii Europejskiej*. *Studia i Analizy Instytutu Przedsiębiorstwa* (pp. 109-126). Warsaw: Warsaw School of Economics.
- Typa, M. (2013b). Specjalne strefy ekonomiczne w Polsce jako stymulator konkurencyjności regionów. *Kwartalnik Nauk o Przedsiębiorstwie*, 27(2), 16-25.
- Willmore, L. (1995). Export Processing Zones in the Dominican Republic: A Comment on Kaplinsky. *World Development*, 23(3), 529-535.
- Wong, K.-Y., & Chu, D.K.Y. (1984). Export Processing Zones and Special Economic Zones as Generators of Economic Development: The Asian Experience. *Geografiska Annaler*, 66(1), 1-16.

- Zeng, D.Z. (2011). How Do Special Economic Zones and Industrial Clusters Drive China's Rapid Development? *Policy Research Working Paper*, 5583, The World Bank.
- Zhao, S.X., Chan, R.C.K., & Chan, N.Y.M. (2012). Spatial polarization and dynamic pathways of foreign direct investment in China 1990-2009. *Geoforum*, 43(4), 836-850.

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Regulatory Framework as the Primary Reason for (No)Internationalization of SMEs

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Abstract

The objective of this article is to identify the barriers in regulatory frameworks that affect SMEs and entrepreneurs' participation in the international markets. The idea was to analyse how regulatory framework affects an internationalization of Small and Medium Enterprises (SMEs). Member states differ significantly in the way in which they regulate the establishment of new businesses. The reduction of legal burden in European Union is a top-priority not only for the European Commission but also for national legislators. A competitive and dynamic economy requires an adequate regulatory framework so a business friendly environment for existing and potential small and medium-sized entrepreneurs must stay one of the European Union's main objectives. The contribution of this article is to analyse how regulatory frameworks affect the internationalization of Small and Medium Enterprises (SMEs) and suggest ways to overcome the barriers to SMEs and entrepreneurs' participation in the international markets.

Keywords: small and medium-sized enterprises (SMEs); regulatory framework; internationalization; legal form; freedom of establishment

JEL codes: K2, K20

INTRODUCTION

European internal market and globalization process have erased the barriers of trade, developed competitive environment and made significant changes on entrepreneurial enterprises. Theory defines business enterprises in terms of small and medium enterprises (SMEs) on the one hand and large enterprises on the other. With their specifics, SMEs differ significantly from large enterprises.

According to the latest Annual report on European SMEs of European Commission, small and medium-sized enterprises (SMEs) represent more than 90% of all businesses in the EU, and form the backbone of a European Union's economy.¹ The market for small and medium-sized enterprises (SMEs) worldwide plays a key role in shaping and developing the economy (Rozstek, 2015). Support for SMEs is one of the European Commission's priorities for economic growth, job creation and economic and social cohesion (McLaughlin, 2013, p. 29). On average about 13% of all SMEs in the European Union invest abroad but due to their size, SMEs realize additional challenges when doing business abroad (Eckard & Kerber, 2013, p. 3).

Considering Internationalization as an important means of enhancing SMEs' long-term growth and survival, the objective of this article is to identify the legal and administrative barriers in regulatory frameworks that affect SMEs and entrepreneurs' participation in the international markets. The reason for studying regulatory frameworks impact on the internationalization SMEs is the fact that the regulation of entry, as one part of the Economic regulations, is in the TOP 10 burdensome EU laws identified by SMEs (European Commission, 2013).

The structure of the article is as follows. After defining small and medium enterprises (SMEs), in section three, the article analyses the role of SMEs in national and international economy and detects administrative and legal burdens for internationalization process of SMEs. As earlier said European Union's regulatory framework for small and medium enterprises showed to be one of the burdens for internationalization of SMEs and many Member States already adapted their legislative frameworks to the requirements of entrepreneurs.

For the purpose of this article, author compares existing empirical studies on how the regulation of entry affects doing internationally business of SMEs and in addition, author does a descriptive overview of SMEs Exporting Landscape in selected countries.

The contribution of this article is to analyse how various European regulatory frameworks affect the internationalization of Small and Medium Enterprises (SMEs) and to suggest ways to overcome the barriers to SMEs and entrepreneurs' participation in the international markets. Conclusion brings analysis of the latest European Commission's regulation proposal for business friendly regulatory framework.

MATERIAL AND METHODS

For the purpose of this article, it is made a descriptive overview of small and medium sized enterprises role in national and international economy through the number of employees in SMEs and their contribution in national and European Union's GDP. The EU Commission, Eurostat and data available in recent literature are used in the article. For the definition of small and medium sized enterprises qualitative and quantitative methods are used. Then, the author analyses and compares the theoretical literature to iden-

¹ Same Annual Report shows that in 2014 SMEs accounted for 99.8% of all enterprises in the non-financial business sector in the EU28. For every km² of land surface, the EU has an average of five SMEs. Moreover, in 2014 SMEs employed almost 90 million people – 67% of total employment, and generated 58% of the sector's value added.

tify regulatory burdens for small and medium sized enterprises internationalization but also to answer the question does the legal form effects the internationalization of SMEs.

At the end, the article analyses the latest European Commission's regulation proposal for business friendly regulatory framework.

LITERATURE REVIEW AND THEORY DEVELOPMENT

There are two main strands of literature dealing with the problem addressed in this article: the literature on SME internationalization and the literature on corporate law. The literature on SME internationalization mostly deals with defining SMEs and reasons pro and contra internationalization of SMEs (Singer & Alpeza, 2015; McLaughlin, 2013, Calabro et al., 2009; Mohanty & Nandi, 2010; Molyneux, 2015) The literature on corporate law deals with legal forms of SMEs² and legal burdens for internationalization of SMEs (Becht et al., 2008; Djankov et al., 2002; Djankov, 2009; Eckardt, 2014, Purnhagen & Rott, 2014). The article is in the spirit by Becht et al. and Djankov et al. (2008) as well as by Eckardt (2014). Becht et al. (2008) studied how the decisions of entrepreneurs of where to incorporate affects deregulation of corporate law, while Djankov (2009) presents data on simplifying entry regulation of entry in 116 countries.

The main hypothesis thus states that friendly regulatory frameworks have a positive impact on internationalization of SMEs and that countries with low cost of business entry are more attractive for entrepreneurs. (H1) First, to define small and medium sized enterprises, it is necessary to make survey of the literature on SME internationalization and then the literature on corporate law.

Table 1. Classification criteria of micro, small and medium-sized enterprises

Enterprise category	Number of employees	Annual turnover (EUR million)	Annual balance sheet total
	EU/Croatia	EU/Croatia	EU/Croatia
Micro	< 10	≤ 2	≤ 2
Small	< 50	≤ 10	≤ 10
Medium-sized	< 250	≤ 50	≤ 43

Source: adapted from: Singer & Alpeza (2015); McLaughlin (2013); OECD (2005, p. 17).

There are similar definitions of the term SME. The European Union defines SMEs as micro, small and medium sized enterprises' (making it an odd abbreviation since the introduction of the 'micro' category) (European Union, 2003, p. 36). The three criteria used by the EU to assess whether an enterprise is micro, small or medium-sized are the number of employees (or headcount), the annual turnover (the sum received for goods and services in a year) and the annual balance sheet total (the total value of the assets or property of the enterprise, less the amount it owes), (McLaughlin, 2013, p. 29; Singer & Alpeza, 2015, p. 11). Table 1 shows classification criteria of small enterprises in Euro-

² With special accent on Limited liability legal form.

pean Union and Croatia³ as the small and open economy and the youngest European state member.

According to above-mentioned criteria, a micro enterprise is defined as an enterprise that employs fewer than ten persons and whose annual turnover and/or annual balance sheet total, does not exceed two million EUR.

A small enterprise is defined as an enterprise that employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total, does not exceed ten million EUR. A medium-sized enterprise is defined as an enterprise that employs fewer than 250 persons and whose annual turnover does not exceed 50 million EUR or whose annual balance-sheet total does not exceed 43 million EUR.

THE ROLE OF SMES IN NATIONAL AND INTERNATIONAL ECONOMY

Small and medium sized enterprises play significant role in national and international economy. Despite last financial crises, employment in the SME sector remains positive and it can be said that in the twenty-first century to date, in the EU, new jobs have been created primarily by SMEs, not by large companies.⁴

In the European Union, SMEs account about 99% of all business enterprises and 67% of all employment. McLaughlin (2013, p. 29) represents data that this figures in the UK are 99.9% and 59%, although, pointing out that we must take care in interpreting the figures, as they are not directly comparable due to different underlying methodologies used to compile them. Similar data brings Buliga (2014, p. 5) saying that 99% of all German enterprises are small and medium-sized and they employ about 60.7% of the working population. According to the German Federal Ministry for Economic Affairs and Energy and „AG Mittelstand“, SME sector in Germany created a total of 250 000 new jobs in 2014 (Federal Ministry for Economic Affairs and Energy, 2016).

Table 2 is overview of SMEs in the private business sector, number of their employees and value added in selected European countries in context of SMEs role in national economies.

As seen from the statistics, Small and medium sized enterprises create most of all new jobs in Europe, and they contribute significantly to economic growth.

The good condition of SMEs affects the state of the overall economy both locally and globally (Rozstek, 2015) Globalization has faded the barriers of trade and development and made a competitive environment for SMEs (Mohanty & Nandi, 2010). Many SMEs have discovered that online sales present opportunities for exporting and are finding

³ Criteria for classification of entities in the small and medium enterprise sector in Croatia are defined by the *Accounting Act* (Official Gazette, NN 109/07, 54/13) and the *Small Business Development Promotion Act* (Official Gazette, NN 29/02, 63/07, 53/12, 56/13).

⁴ According to the Annual Report of European SMEs 2014/2015, the tentative green shoots of growth of 2013 gained in strength in 2014. Namely, in 2014 EU28 SME value added grew by 3.3% and employment by 1.2%, while in 2013 value added grew by 1.6% and employment declined by 0.5%. However, not all Member States shared the positive 2014 experience – SMEs in Cyprus, Sweden, Croatia, Greece, Italy and the Czech Republic showed a decline in value added, which in the case of Cyprus and Italy was also accompanied by a reduction in employment.

innovative logistical solutions to reach global customers (UPS, 2014, p. 7). Table 3 brings out an overview of SMEs Exporting Landscape in selected countries.

As it can be seen, small and medium sized enterprises in Belgium, the United Kingdom, and the Germany send the highest number of shipments outside the European Union. The United States is the most likely export country destination for SMEs shipping outside Europe. Among those exporting outside Europe, 53% are exporting to the United States, 49% to countries in Europe outside the EU and 47% to Asia. The United States is the top-ranking export country for SMEs in the UK (54%), Belgium (40%), and Italy (40%). (UPS, 2014, p. 11)

Table 2. SMEs and national economy in 2015

Country	Criteria (in all businesses)	National employment	Value added
Austria	99.7	67.7	61.2
Belgium	99.8	69.3	61.4
Germany	99.5	62.7	54.4
Croatia	99.7	67.9	54.1
Italy	99.9	79.6	69.5
Poland	99.8	50.0	68.8
Slovenia	99.8	72.7	63.0
United Kingdom	97.7	51.0	53.0

Source: own study based on: Singer & Alpeza (2015); European Commission (2015).

Table 3. The number of SMEs shipping

Country	Inside EU / %	Outside EU / %	Total / %
Belgium	96	75	171
Germany	81	14	95
Italy	16	4	20
Poland	18	1	19
United Kingdom	90	43	133

Source: adapted from: UPS (2014, p. 10).

INTERNATIONALIZATION OF SMES

Internationalization has been defined as “the process by which firms both increase their awareness of the direct and indirect influence of international transactions on their future, and establish and conduct transactions with firms in other countries” (Bearnish, 1990, p. 77, in: Calabro et al., 2009, p. 395). Traditionally, way of making individual companies present worldwide was export and import. Another ways of internationalization SMEs are alliance or subsidiaries and branches and joint ventures abroad (Mohanty & Nandi, 2010; European Business Development Group, 2016).

Thinking about the internationalization of SMEs, the question is what are the motives for internationalization of SMEs? Many SMEs view Europe as the new domestic market and are now looking for markets further afield. Therefore, we can say that access to new and larger markets is the main reason for internationalization by SMEs that export or have establishments abroad. For SMEs that have only imports, this access is not

a more frequent motive than access to know – how and technology, or high production costs on the domestic market. Still, not of all SMEs tend to be international and there are two main reasons for that. One of the reasons for no internationalization of SMEs is the fact that external barriers are too high.

Currently, there are 21 million SMEs in Europe, and even though 25% of European SMEs export to countries within the European Union, only 13% does business outside the European border. Speaking about burdens, they can be divided in internal and external. For the purpose of this article, the focus is on external burdens only.⁵

The regulation of entry, as one part of the Economic regulations, is in the top ten burdensome EU laws identified by SMEs.⁶ Last global financial crisis has brought changes in Europe's financial regulatory framework that also led to financing problems for SMEs. Their situation further complicates the European economic crisis, which led to a fragmentation of financial markets in the euro area. Belke and Verheyen (in: Calciano et al., 2015) deal with the new tools for the financing of SMEs, which face problems such as information asymmetries, when trying to access funding.

REGULATORY FRAMEWORK AS BURDEN FOR INTERNATIONALIZATION OF SMES

Countries differ significantly in the way in which they regulate the entry of new businesses⁷ (Djankov et al., 2002). Size, to some extent, determines the legal rules applicable to a company registered under the Companies Acts and to an LLP.⁸ (McLaughlin, 2013)

As earlier said, registration (or cost of entry), as one part of the Economic regulations, is in the top ten burdensome EU laws identified by SMEs. When surveying the regulation of entry Djankov et al. (2002) came to the following conclusions: The number of procedures required to start up a firm varies from the low of two in Canada to the high of 21 in the Dominican Republic, with the world average of around ten.⁹ The minimum official time for such a start-up varied from the low of two business days in Australia and Canada to the high of 152 in Madagascar, assuming that there are no delays by either the applicant or the regulators, with the world average of 47 business days.

⁵ Available results show that more than 30% of the internationalized SMEs perceive no internal barriers for the internationalization process at all.

⁶ The following EU laws have been identified by SMEs as the TOP 10 most burdensome EU laws: REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals); VAT – Value added tax legislation; General Product Safety and market surveillance package; Recognition of professional qualifications; Shipments of waste – Waste framework legislation – List of waste and hazardous waste; Labour market-related legislation; Data protection; Working time; Recording equipment in road transport (for driving and rest periods); Procedures for the award of public contracts (public works, supply and service contracts); Modernised customs code.

⁷ To meet government requirements for starting to operate a business (in 2002.) in Mozambique, an entrepreneur had to complete 19 procedures taking at least 149 business days; an entrepreneur in Italy needed to follow 16 different procedures, and wait at least 62 business days to acquire the necessary permits. In contrast, an entrepreneur in Canada could finish the process in two days and completing only two procedures.

⁸ The Companies Act 2006, for example, applies less rigorous public disclosure and audit requirements to small and medium-sized companies, as those terms are defined in the Companies Act 2006 (as amended and supplemented by the Companies Act 2006 (Amendment) (Accounts and Reports) Regulations 2008 (SI 2008/393).

⁹ The survey contained data on the regulation of entry of start-up firms in 75 countries including numbers of procedures, official time and official cost that a start-up must bear before it can operate legally.

A large academic literature has followed: 201 academic articles have used the data compiled by Djankov et al. (2002) and subsequently by the World Bank.

Simplifying entry regulation has been a popular reform since the publication of Djankov et al. (2002). In the context of burdens to the internationalization of SMEs, it should be noted that 193 reforms took place in 116 countries (Djankov, 2009, p. 183).

Limited liability legal form plays an important role in supporting entrepreneurial activities. Private limited enterprises account for nearly 60% of all SMEs in the EU-28. SMEs react to incentives resulting from differences in minimum capital requirements in different member states (Eckardt, 2014). Some of significant regulatory reforms of corporate law, made for that reason, were those in United Kingdom's Company Act 2006, Germans "Gesetz betreffend die Gesellschaften mit beschränkter Haftung (GmbHG)" in 2008, but also the other European countries such as Spain, Austria, France and Croatia. The reforms were in field of company law and regulation of the most used legal form SMEs – Private limited company (Ltd.).¹⁰ Becht et al. (2008) as well as Eckardt and Kerber (2013) found empirical evidence that companies migrate to member states with lower costs of establishing a limited liability enterprise.

To this end, through the Small Business Act¹¹, European Commission proposed a number of measures to support SMEs in general as well as concerning internationalization (Eckardt, 2014). Knowing that SMEs can thrive best in a business environment in which regulation respects the specific needs of SME, the European Commission has put the interests of SMEs into the core of its smart regulation agenda. The Commission follows the "Think Small First" principle, which requires that impacts on SMEs be taken into account when designing legislation and that the existing regulatory environment be simplified so that SMEs find it easier and cheaper to comply with regulatory requirements (MEMO/13/68). One of the latest documents for business friendly environment is Regulatory Fitness and Performance Programme (REFIT), which implement 164 initiatives for simplification and regulatory burden reduction identified by the European Commission.

DISCUSSION

SMEs with international business show a significantly better performance in job creation, turnover growth and to innovation related activities. Statistics show that on average 44% of SMEs in the 28 European Union member states are engaged in international business activities in some form or another. Descriptive overview of SMEs exporting Landscape in selected countries showed that exports outside the European Union lead Belgium, the United Kingdom and the Germany. In all of these international SMEs, 90% are micro enterprises, 8% are small enterprises and 2% are medium-sized enterprises (Eckardt, 2014).

In doing business, entrepreneurs select countries with business friendly legal framework. The regulation of entry, as one part of the Economic regulations, is in the top ten burdensome EU laws identified by SMEs. Reducing the regulatory burden on smaller firms is the first step in making business friendly environment for SMEs. As Eckardt

¹⁰ German: Gesellschaft mit beschränkter Haftung (GmbH), Croatian: društvo s ograničenom odgovornošću (d.o.o.).

¹¹ The Small Business Act (SBA) is an overarching framework for the EU policy on Small and Medium Enterprises (SMEs). It aims to improve the approach to entrepreneurship in Europe, simplify the regulatory and policy environment for SMEs, and remove the remaining barriers to their development.

(2014) points out, SMEs react to incentives resulting from differences in minimum capital requirements in different member states. Becht et al. (2008) and Eckardt and Kerber (2013) found empirical evidence that companies migrate to member states with lower costs of establishing a limited liability enterprise.

Although many Member States already adapted their legislative frameworks to the requirements of entrepreneurs, simplifying the legislation and reducing the regulatory costs on the European level is necessary in order to achieve a clear, stable and predictable regulatory framework that will support economic growth and job creation.

In accordance with the REFIT, and to implement the SME initiatives and reforms, countries are reducing paperwork and bureaucracy, minimising administrative burdens and reducing compliance costs for SMEs. Still, all reforms should be made with great caution. Researches show that the best economies are not those with little regulation but those with good rules that allow efficient and transparent functioning of businesses and markets while protecting the public interest.

CONCLUSIONS

Small and medium sized enterprises form the backbone of national and European economy. European internal market and globalization process have erased the barriers of trade, developed competitive environment and made significant changes on entrepreneurial enterprises. Due to their size, SMEs realize additional challenges when doing business abroad. Although they represent more than 90% of all businesses in the EU, only 2% of all SMEs in the European Union invest abroad.

Member states differ significantly in the way in which they regulate the establishment of new businesses so the reduction of legal burdens in European Union is a top-priority not only for the European Commission but also for national legislators. The regulation of entry is one of the biggest legal burdens for internationalization of SMEs. Available statistics show that friendly regulatory frameworks have a positive impact on internationalization of SMEs. European Commission but the national legislators also, are very active in resolving legal burdens for internationalization of SMEs.

The latest document for making business friendly regulatory environment is Regulatory Fitness and Performance Programme (REFIT), which implement initiatives for simplification and regulatory burden reduction identified by the European Commission. A competitive and dynamic economy requires an adequate regulatory framework so a business friendly environment for existing and potential small and medium-sized entrepreneurs must stay one of the European Union's main objectives.

If we really want to take advantages of all the potentials of SMEs in the international market, we must create legal framework with clear aim of supporting SME, creating jobs and facilitating investment. The latest reforms in the field of company law in many European countries made significant step forward. Also, it is necessary to consider that the implemented reforms should serve the improvement of the regulatory framework and not only its simplification.

REFERENCES

- Accounting Act. Official Gazette, NN 109/07, 54/13.
- Becht, M., Mayer, C. & Wagner, H.F. (2008). Where do firms incorporate? Deregulation and the cost of entry. *Journal of Corporate Finance*, 14, 241-256.
- Buliga, O. (2014). *Measures for Innovating Business Models, Best Masters*. Wiesbaden: Springer Fachmedien.
- Calabro, A., Mussolino, D. & Huse, M. (2009). The role of board directors in the internationalisation process of small and medium sized family businesses. *Int. J. Globalisation and Small Business*, 3(4), 393-411.
- Calciano, F., Fiordelisi, F. & Scarano, G. (2015). *The Restructuring of Banks and Financial Systems in the Euro Area and the Financing of SMEs*. London: Palgrave Macmillan.
- Djankov, S. (2009). The regulation of entry – a Survey. *World Bank Research Observer*, 24(2), 183-203.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F. & Shleifer, A. (2002). The regulation of entry. *Quarterly Journal of Economics*, 117(1), 1–37.
- Eckardt, M. (2014). *Legal Form and Internationalization of Small and Medium-Sized Enterprises in the EU*. Andrassy Working Paper Series No 31, Budapest.
- Eckardt, M. & Kerber, W. (2013). *Horizontal and Vertical Regulatory Competition in EU Company Law: The Case of the European Private Company (SPE)*. Andrassy Working Paper Series No. 28, Budapest.
- European Business Development Group (2016). *EuroDev Whitepaper – Internationalization of small and medium-sized enterprises*. Retrieved from: <http://www.eurodev.com/wp-content/uploads/Internationalization-of-small-and-medium-sized-enterprises1.pdf> (10.02.2016).
- European Commission (2013). *Top 10 most burdensome EU laws for small and medium-sized enterprises: How the Commission is helping SMEs*. Published: 7 March 2013. Retrieved from: http://europa.eu/rapid/press-release_MEMO-13-168_en.htm (10.02.2016).
- European Commission (2015). *Annual Report on European SMEs 2014/2015 – SMEs start hiring again*. doi: 10.2873/886211.
- European Union (2003). *Commission Recommendation of 6 May 2003* (2003/361/EC), OJ L 124.
- Eurostat (2016). *Eurostat Newsrelease*. Eurostat Press Office, No. 201/2015. Retrieved from: <http://ec.europa.eu/eurostat/documents/2995521/7076793/4-17112015-ap-en.pdf/1db58867-0264-45c0-94bf-ab079e62d63f> (10.02.2016).
- Federal Ministry for Economic Affairs and Energy (2016). *The German Mittelstand: Facts and figures about German SMEs – Current Economic Climate*. Berlin: German Federal Ministry for Economic Affairs and Energy. Retrieved from: <http://www.bmwi.de/English/Redaktion/Pdf/wirtschaftsmotor-mittelstand-zahlen-und-fakten-zu-den-deutschen-kmu,property=pdf,bereich=bmwi2012,sprache=en,rwb=true.pdf> (10.02.2016).
- McLaughlin, S., (2013). *Unlocking company law*. 2nd Edition, New York: Routledge.
- Mohanty, S. & Nandi, T.K. (2010). *Globalization of SMEs: indepth analysis of impact of internationalization of firms*. Retrieved from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1593104 (10.02.2016)
- Modina M. (2015.). *Credit Rating and Bank – Firm Relationships. New Models to Better Evaluate SMEs*. London: Palgrave Macmillan. doi: 10.1057/9781137496225

- OECD (2005). *OECD SME and Entrepreneurship Outlook: 2005*. Paris: OECD.
- OECD (2015). *Financing SMEs and Entrepreneurs 2015: An OECD Publishing*. Paris. DOI: http://dx.doi.org/10.178/fin_smeent-2015-en (10.02.2016).
- Purnhagen, K. & Rott, P. (2014). *Varieties of European Economic Law and Regulation*. Springer International Publishing Switzerland. doi: 10.1007/978-3-319-04903-8.
- Rostek, K. (2015). *Benchmarking Collaborative Networks – A Key to SME Competitiveness*. Springer International Publishing Switzerland. doi: 10.1007/978-3-319-16736-7.
- Singer, S. & Alpeza, M. (Eds.) (2015). *Small and Medium Enterprises Report – Croatia 2014*. Zagreb: CEPOR.
- Small Business Development Promotion Act*. Official Gazette, NN 29/02, 63/07, 53/12, 56/13.
- UPS (2014). *European SME Exporting Insights. Doing business throughout Europe and beyond: A UPS Consultation Paper on SME Exporting Activity*. Retrieved from: <http://worldsmeforum.org/wp-content/uploads/2016/04/UPS.pdf> (10.02.2016).

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Policies Towards the OFDI and IFDI in the European Union after the 2008+ Crisis

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Abstract

The objective of this paper is to evaluate the (post)crisis FDI policies in Europe, taken the significant drop in international foreign direct investment (FDI) flows as observed in the aftermath of 2008+ crisis as well as the accompanying ideological shifts as to the role of the State in the economy. By synthesising the available sources – critical literature review, evaluation of rankings and scoreboards and experts' survey - this paper seeks to classify the EU member states according to their policies pursued towards outward and inward foreign direct investment (IFDI, OFDI) in the context of 2008+ crisis. A matrix with four possible combinations of FDI policy has been proposed. It distinguishes: an open model with “a double positive strategy”, closed with “a double negative strategy”, competitive with “a positive outward and negative inward strategy”, and a capital model with “a positive inward, negative outward strategy”. Obtained results point to the dominance of two opposite models where countries seem to apply combinations of rather friendly IFDI (or OFDI) and unfriendly OFDI (or IFDI) policies. Current scarcity of a proper metric of FDI policy has made it necessary to draw on some imperfect substitutes, hence findings must be treated with caution. Properly designed, reliable international database enabling cross-country comparisons in terms of FDI policies would certainly improve the quality of future research.

Keywords: FDI; OFDI; IFDI; policy towards FDI; crisis; EU; classification

JEL codes: F00, F21, F23

INTRODUCTION

The significant drop in international foreign direct investment (FDI) flows as observed in the aftermath of 2008+ crisis and accompanying ideological shifts as to the role of the

State in the economy as expressed by some European politicians and feared by scholars – “return of neo-protectionism” – have been the inspiration for conducting research on the interface of these two (Szalavetz, 2015; Gestrin, 2014; Götz, 2015; Evenett, 2012). The aim of this study has been to assess if policies towards FDI might have altered in the consequence of the economic downturn. Research has been undertaken to map the member states in terms of their approach towards incoming (IFDI) and outflowing (OFDI) investments. The applied methodology combines simple quantitative and qualitative techniques which draw on international databases and scoreboards and enables cross-country comparison. The classification of the EU countries with respect to the pursued FDI policies has been proposed.

Following the 2008+ financial turbulences, trade imbalances, instability of fiscal policies and labour market deterioration various measures have been launched to cushion the blow. Whereas major economic policies such as the fiscal, monetary or labour market policies have been respectively adjusted, relatively little is known about possible modifications in other less popular areas of government activity such as the policy towards foreign direct investment. By synthesising available sources this paper seeks to classify the European Union member states (EU MS) according to their policies pursued towards outward and inward foreign direct investment after 2008.

This paper is structured as follows. First part outlines the concept of FDI policy as proposed in selected literature. Next, the employed data being proxy of FDI policies and applied methodology enabling cross-country comparison are briefly described. Part three discusses the results obtained i.e. the EU countries classification and is followed by the conclusions which close the text.

LITERATURE REVIEW: FDI POLICY

In empirical studies on FDI, policy is modelled as one of the factors influencing investor’s decision on where to locate. In most cases this is one of the independent variables in regression equations which assess the magnitude of an impact of given element on FDI. Golub (2009) argues that despite its increasing prominence, very little systematic information is available on policies towards this FDI. “Unlike international trade where international comparisons of tariff and non-tariff barriers are widely available, there have been few previous efforts to quantify and systematically compare national policies towards FDI. Yet, indicators of the policy stance towards FDI are just as important as measures of trade barriers, given the prominence of FDI in the world economy and the policy debates surrounding FDI” (Golub, 2009, p. 1248).

The Oxford Dictionary (2015) defines “policy” as a course or principle of action adopted or proposed by an organization or individual. Policy discussions in the literature have been centered around government support for IFDI. Also, the economic impacts of IFDI have been widely discussed, while those of OFDI are far less recognised and understood (Gorynia, Nowak, Trąpczewski, & Wolniak, 2013). “In many countries, government policies towards MNEs exaggerate the benefits of inward investment and understate the benefits of outward investment” (Casson, 2007, p. 323). According to Buckley, Clegg, Cross and Voss (2010, p. 244): “OFDI policy, in both developed and developing countries, is generally much more amorphous, diffused, and less clearly delineated in comparison with the policies towards inbound FDI.” Studies on FDI mostly deal with the policy in the context of

general terms and conditions referring to the regime adopted by the host country usually affecting all companies and not discriminating a priori between domestic and foreign ones. Hence, such “FDI oriented policy” features frequently in empirical investigations (Bellak, Leibrecht, & Stehrer, 2010, p. 38).

For the sake of the clarity and brevity and given the space limitations the broader considerations on the conceptual aspects of FDI policy have been skipped, as they have been comprehensively covered in multiple studies (Jankowska, Gorynia, & Dzikowska, 2015; Faeth, 2009; Guimón & Filippov, 2012; Harding & Javorcik, 2011; Drahokoupil, 2008; Sauvant, 2015; Brewer, 1993; Cuervo-Cazurra & Genc, 2011; Hymer, 1976; Dowling & Pfeffer, 1975; Scott, 1995; Kline, 2002; Mistura, 2011; Ratten, Dana, Han, & Welpe, 2007; Torres, 2014; Globerman, Chen, 2010). Based on the critical review of available literature two approaches to FDI policy can be suggested. FDI policy drawing on the broad set of indirect measures is a policy *sensu largo*. *Sensu stricte* FDI policy encompasses dedicated measures with “foreign element” which per se seems a tricky political issue in the light of the EU regulations seeking harmonised and equal conditions for all European investors. It can be actually equated with the activity of Investment Promotion Agencies (IPAs) in case of inward FDI, and economic diplomacy (economic missions and activities of specialised economic, trade and investment departments of country's embassies) for outgoing FDI. The recognised deficiency as far as good proxies for genuine FDI policy are concerned, is further compounded by the problem of their dual use. Available variables – standardised, comparable and reliable for all EU members - may stand for conditions affecting incoming as well as outgoing investors as they fit the *sensu largo* definition of FDI policy.

MATERIAL AND METHODS: PROXIES FOR FDI POLICY

The objective of this paper has been to evaluate the (post)crisis FDI policies in Europe. The simplest categorisation of FDI policies would differentiate between OFDI and IFDI and between hostile/anti and friendly/pro FDI approaches. In the light of this deficit of FDI policies' variables, it has been inevitable to tap into other sources which can serve as proxies of outward and inward FDI policies. In the first step the review of possibly suitable databases has been conducted. Next, a number of indicators stored in the repositories of international organizations has been selected. In particular, reference has been made to: Investment Regulatory Restrictiveness Index (IRR) by OECD, Reform Responsiveness Index (RRI) by OECD, concluded Bilateral Investment Treaties (BITs) as provided by the EU and UNCTAD, launched claims under Investment State Dispute Settlement procedures (ISDS) reported by UNCTAD, ranking Doing Business of World Bank, the number of OFDI support centres provided by the EU Commission, corporate tax rates published by the US based Tax Foundation, Attractiveness' ranking available in the Global Competitiveness Report by World Economic Forum, Index of Economic Freedom, an annual guide published by The Wall Street Journal and The Heritage Foundation and indicators of discriminatory measures “harmful for foreign commercial interests” reported by the Global Trade Alert. These elements inform either about the progress in reforms launched (RRI, Doing Business, taxes), international openness/closeness (BITs, IRR, freedom index, IFDI attractiveness, OFDI support centres), or observance of existing anti-discriminatory law (ISDS, Global Trade Alert). Selected indicators may serve as close proxies of FDI policy. Their choice has been guided also by their ability to trace the recent (post)crisis developments with respect

to approaches towards foreign investors. It goes without saying that other additional and alternative sources could be useful. Hence, further research should certainly enrich current set of indicators by employing new variables.

For classification purposes the following technique has been adopted. Firstly, for rankings such as IRR, RRI, Doing Business, Tax rates, Freedom index or Attractiveness as measured by GCR, where it is in general possible to categorise country's policies according to the places occupied; countries best performing and/or recording the most positive changes have been classified as running "pro" FDI policy; laggards and/or these with deteriorating performance as running "anti" FDI policy. For each ranking the average value has been calculated which can serve as certain benchmark. Referring to this level enables sorting all countries in ascending order and classifying accordingly. Secondly, in case of bilateral investment treaties (BITs) and OFDI support institutions the categorisation reflects the total number of concluded agreements or officially registered facilities. It must be stressed that for BITs the evaluation takes into account also recently (in the aftermath of crisis) signed treaties. The average value of existing treaties can be regarded as a reference point for countries' categorisation. Thirdly, for irregular signal information such as the reported ISDS claims, or Global Trade Alert "naming and shaming" i.e. when some countries appear but some are not mentioned, for classification purposes it has been decided to regard countries with these negative notorious cases as pursuing "anti" FDI policies.

Countries assessed as positive (or negative) in the Global Trade Alert, countries posting fewer (or new and/or more) ISDS cases, countries which have concluded new BITs and whose total number of BITs is above (or below) the EU average, countries having a low (or high) Investment Restrictiveness Index and countries with above (below) the average EU score in GCR subindex on FDI attractiveness have been classified as running rather friendly (or hostile) policies towards incoming investors. The countries whose Reform Responsiveness Index is below (or above) the EU average, who have less (or more) than the EU average number of OFDI support centres, who have higher (or lower) than the average and increasing (or decreasing) corporate tax rates, whose Economic Freedom ranking is worsening (or improving) and whose Doing Business ranking is decreasing (or increasing) have been classified as pursuing rather unfriendly (or stimulating) policies towards outward FDI. Country's model i.e. the profile of its FDI policies is achieved by combining all collected proxies for IFDI and OFDI policies respectively.

RESULTS AND DISCUSSION: COUNTRY CLASSIFICATION

The adopted approach allows to distinguish four models of FDI policies a country hypothetically may pursue.

1. An open model with "a double positive strategy", where both types of FDI are seen as making positive contributions to the economy. Hence, the policy is pursued with the aim of increasing the inflow of new foreign investors and fostering the internationalisation by domestic firms.
2. A closed model with "a double negative strategy", where both outbound and inbound investment is associated with certain losses to the national economy. Adopted policy would reflect in such case the efforts to rather hamper the inflow of foreign newcomers and prevent venturing abroad by national companies.

3. A competitive model with “a positive OUT, negative IN strategy”, where the State seeks to promote domestic champions which will stimulate the rise of internationally competitive domestic companies while restricting foreign investment which is perceived as posing a threat to incumbent businesses.
4. A capital model with “a positive IN, negative OUT strategy”, where the State seeks clearly to promote capital accumulation, preventing the outflows of domestic businesses while attracting foreign investment.

Table 1. Summary of identified models of FDI policies

Open model	Capital model
2	7
Competitive model	Closed model
8	5

Source: own elaboration.

The proposed classification must be regarded with caution and should be seen as a rudimentary template enabling simple cross-country comparison in terms of rather neglected and underexplored policy domain i.e. policy towards FDI.

It must be stressed that conclusions on each country's FDI policy and resulting classification draw on the set of selected variables – in most cases, due to the data availability and / or topic sensitivity - rather imperfect substitutes of FDI policy measures. Hence, results obtained must be treated cautiously and risk of possible misinterpretation must be taken into account. Properly designed reliable international database enabling cross-country comparisons in terms of FDI policies would certainly improve the quality of future research. Table 1 and 2 summarise the result for all 28 EU countries with respect to all proposed variables.

Based on the conducted research eight competitive models have been identified, seven capital models, five closed ones, and two open models (table 3). For 6 member states it has not been possible to diagnose a specific model given their unclear (neutral) stance towards certain FDI flows.

Conducted mapping of the EU MS in terms of pursued (post)crisis policies towards FDI shows that 10 EU countries has run friendly policy towards IFDI and 11 EU members the policy favourable towards OFDI. In general, the competitiveness model assuming stimulating OFDI while rather preventing IFDI has been applied 8 times; featuring second is the opposite capital model – detected among 7 countries. Open model has been adopted only by 2 and closed model by 5 member states.

Table 2. Summary of variables standing for FDI policies in the EU member states

Variables	GTA		ISDS		BIT		REG restr.	inward GCR	reform resp.	DB	HF	no.service providers	corpor tax rate + change		IFDI policy	OFDI policy
	neg	pos	incr/decr=const	new '14	to	recent										
Austria	-2	(-)	(.)	(.)	<avg.	3	high	>avg.	<EUavg.	decr	decr	<avg.	>avg.	const	anti	anti
Belgium	(-)	(-)	const	(-)	>avg.	6	low	>avg.	<EUavg.	decr	decr	>avg.	>avg.	const	pro	anti
Bulgaria	(-)	1	incr	(-)	>avg.	1	(.)	<avg.	(.)	decr	incr	<avg.	<avg.	const	pro	pro
Croatia	(-)	1	incr	(-)	<avg.	1	(.)	<avg.	(.)	incr	incr	<avg.	<avg.	const	anti	pro
Cyprus	-1	(-)	incr	new	<avg.	3	(.)	>avg.	(.)	decr	decr	<avg.	<avg.	incr	anti	anti
Czech R.	1	(-)	incr	new	>avg.	7	high	<=avg.	>EUavg.	incr	incr	<avg.	<avg.	decr	anti	pro
Denmark	(-)	(-)	(.)	(.)	<avg.	3	high	>avg.	<EUavg.	incr	decr	<avg.	>avg.	decr	~	anti
Estonia	(-)	(-)	const	new	<avg.	5	low	>avg.	(.)	decr	decr	<avg.	<avg.	decr	pro	anti
Finland	(-)	(-)	(.)	(.)	>avg.	2	low	>avg.	<EUavg.	decr	decr	<avg.	<avg.	decr	pro	anti
France	-5	1	incr	(-)	>avg.	4	high	<=avg.	<EUavg.	incr	decr	>avg.	>avg.	const	anti	~
Germany	-2	(-)	incr	(-)	>avg.	3	low	>avg.	>EUavg.	decr	incr	>avg.	>avg.	fluctu	pro	anti
Greece	(-)	(-)	incr	new	<avg.	(-)	low	<avg.	>EUavg.	incr	decr	<avg.	>avg.	fluctu	anti	anti
Hungary	-1	(-)	incr	new	<avg.	(-)	high	<avg.	>EUavg.	incr	decr	<avg.	<avg.	incr	anti	~
Ireland	(-)	(-)	(.)	(.)	<avg.	(-)	high	>avg.	>EUavg.	incr	decr	<avg.	<avg.	const	anti	pro
Italy	-5	(-)	incr	new	>avg.	3	high	<avg.	>EUavg.	decr	decr	>avg.	>avg.	decr	anti	~
Latvia	(-)	(-)	incr	(-)	<avg.	(-)	high	>avg.	(.)	decr	incr	<avg.	<avg.	const	anti	pro
Lithuania	-1	(-)	incr	(-)	<avg.	5	low	<avg.	(.)	incr	incr	>avg.	<avg.	decr	anti	pro
LUX	(-)	(-)	(.)	(.)	>avg.	(-)	low	>avg.	<EUavg.	incr	decr	<avg.	>avg.	fluctu	pro	anti
Malta	(-)	(-)	(.)	(.)	<avg.	4	(.)	>avg.	(.)	decr	incr	<avg.	>avg.	const	pro	anti
Netherl.	-1	(-)	(.)	(.)	>avg.	2	low	>avg.	<EUavg.	decr	decr	<avg.	>avg.	decr	pro	anti
Poland	-1	(-)	incr	(-)	<avg.	(-)	high	<avg.	<EUavg.	decr	incr	>avg.	<avg.	const	anti	pro
Portugal	(-)	(-)	const	(-)	<avg.	7	low	<avg.	>EUavg.	decr	incr	>avg.	>avg.	incr	pro	~
Romania	(-)	(-)	incr	new	>avg.	(-)	low	<avg.	(.)	incr	incr	<avg.	<avg.	const	anti	pro
Slovakia	(-)	(-)	incr	new	<avg.	8	high	<=avg.	<EUavg.	decr	decr	<avg.	<avg.	fluct	anti	anti
Slovenia	(-)	(-)	incr	(-)	<avg.	1	low	<avg.	(.)	decr	incr	<avg.	<avg.	decr	anti	pro
Spain	-1	(-)	incr	new	>avg.	3	low	<avg.	<EUavg.	decr	decr	>avg.	>avg.	decr	anti	anti
Sweden	(-)	(-)	(.)	(.)	>avg.	(-)	high	>avg.	<EUavg.	incr	incr	<avg.	<avg.	decr	pro	pro
UK	-1	(-)	incr	(-)	>avg.	3	high	>avg.	>EUavg.	incr	decr	<avg.	<avg.	decr	~	pro

*data as available in October 2015, ~ unclear - pro and anti measures offset each other; New 14 – new ISDS cases brought in 2014 as reported by UNCTAD > -means more than average, < - lower than average;

(-) - the phenomenon did not occur; (.) - data not available

Source: own elaboration.

Table 3. Diagnosed models of FDI policies by country

Policy towards IFDI	Policy towards OFDI	Country	Suggested Model
unfriendly	unfriendly	Austria	Closed
friendly	unfriendly	Belgium	Capital
friendly	friendly	Bulgaria	Open
unfriendly	friendly	Croatia	Competitive
unfriendly	unfriendly	Cyprus	Closed
unfriendly	friendly	Czech Republic	Competitive
~	unfriendly	Denmark	Closed/ capital
friendly	unfriendly	Estonia	Capital
friendly	unfriendly	Finland	Capital
unfriendly	~	France	Closed/competitive
friendly	unfriendly	Germany	Capital
unfriendly	unfriendly	Greece	Closed
unfriendly	~	Hungary	Closed/competitive
unfriendly	friendly	Ireland	Competitive
unfriendly	~	Italy	Closed/competitive
unfriendly	friendly	Latvia	Competitive
unfriendly	friendly	Lithuania	Competitive
friendly	unfriendly	Luxembourg	Capital
friendly	unfriendly	Malta	Capital
friendly	unfriendly	The Netherlands	Capital
unfriendly	friendly	Poland	Competitive
friendly	~	Portugal	Open /capital
unfriendly	friendly	Romania	Competitive
unfriendly	unfriendly	Slovakia	Closed
unfriendly	friendly	Slovenia	Competitive
unfriendly	unfriendly	Spain	Closed
friendly	friendly	Sweden	Open
~	friendly	United Kingdom	Open/competitive

Source: own elaboration.

An interesting observation can be inferred from the conducted research and mapping process. Namely that “old EU” MS seem to pursue policies more friendly towards incoming FDI and have rather unfriendly attitude towards OFDI; whereas the opposite is true in many Central and East European Countries (CEEC). Competitiveness model seems to be the most widespread among CEEC and new MS, whereas capital model is popular particularly among “old EU” advanced members. Whether it reflects just the policy evolution and can be somehow referred to the Dunning’s Investment Development Path (IDP) or has some other deeper reasons would be an interesting research area for further studies.

The policy mix typical for given model (IFDI & OFDI) may reflect the deliberate combination of strategies adopted towards IFDI and OFDI. They would then derive from the underlying perception of international capital flows. Whether OUTFDI is seen as loss of precious capital and jobs or as a factor contributing to the national economy by improving country's competitiveness and seen as a way to create own multinationals / TNCs. Whether INFDI is

perceived as so wanted capital and labour creation or as unwelcome competition and threat to the domestic firms. I would not, however, go that far and argue that generated classification and models assigned to the member states can be seen as manifestation of their preferred policies. These models are rather evidence of actual approaches taken towards incoming and outflowing investors in recent (post)crisis years. In other words, running unfriendly policies towards incoming and outflowing investors does not have to imply that government considers such flows as a threat for home economy or distortion for domestic competitiveness. Such lack of evident “1 to 1” translation between the policy understood as the country development strategy and a daily policymaking is nothing new since “rhetoric” and “practice” often diverge. Other studies in the context of recent crisis point also to some incoherence where bold anti-liberal declarations did not trickle down to actually implemented actions (Aalbers, 2013, p. 1083; Sellar, Pástor, 2015, p. 352; Szalavetz, 2015).

CONCLUSIONS

Obtained results of the mapping of the EU MS in terms of pursued (post)crisis policies towards FDI show that merely ten EU countries have run clearly friendly policy towards IFDI and eleven EU members have opted for policy favourable towards OFDI. In general, the competitiveness model assuming stimulating OFDI while rather preventing IFDI has been applied eight times. The opposite capital model has been detected among seven countries. Open model has been adopted only by two and closed model by five member states. Presented research findings can be seen as the voice in the discussion on FDI policy in Europe, in particular on the issue of operationalisation of such policy.

Presented findings can contribute to the research on FDI, in particular to the less pronounced and touched upon in the literature issues of FDI policies. There has been identified a clear need for designing and developing the set of comparable indicators being proxies of genuine FDI policy. They would enable conducting international comparative studies with the aim to assess policies pursued towards incoming and outflowing investment. Current scarcity of the proper metric of FDI policy made it often necessary to draw on some imperfect substitutes. Dual use of available indicators manifests itself in the fact that they can serve as proxies of both IFD and OFDI policies. Hence this project leads to the conclusion that some differentiation between genuine and narrowly defined policy towards FDI (*sensu stricte*) and just FDI-related policy (*sensu largo*) would be recommended. Existing bias towards inward FDI dominating in the literature and empirical studies poses also some challenge and should be addressed by scholars. Hidden protectionism, more nuanced FDI policy, and lack of comparable reliable data have hampered research in this area.

Applied methodology by drawing on international databases, rankings and scoreboards, enables systematic, cross-country comparison, which takes into account not only the policy towards incoming FDI (dominating in the literature), but also outflowing investments and captures the changes in approaches towards FDI witnessed after 2008+crisis, not just reports the current state.

Systematic approach to studying the possible crisis-induced changes in FDI policies in the EU suffers from the quality of proxies. Another limitations results from the tacit assumption that improvements or deteriorations of selected categories, which had happened in the examined period 2008-2015 can be attributed to the financial turbulences.

An alternative way of assessing the problem would be to tap into paid survey-based reports drafted by the leading consultancy firms. Research on FDI policy changes in the EU might also harness the content analysis method, which would allow exploring the media coverage of the FDI policy in the crisis context and reveal how much the rhetoric has changed in the aftermath of 2008. Another alternative might be approaching the largest EU-external investors and surveying them.

Research covering comprehensively all 28 EU MS comes at the expenses of deeper analysis taking into account several nuances playing undoubtedly an important role in FDI. In the future, a more nuanced scale of evaluating FDI policy's restrictiveness exceeding the simple dichotomy "pro / anti" or "friendly / hostile" should be employed. It may focus on selected countries as case studies and account for the mode of entry, country of origin or sector of FDI. For the moment, the proposed template may serve as the departing point for further exploration.

REFERENCES

- Aalbers, M. (2013). Neoliberalism is dead...long live neoliberalism! *International Journal of Urban and Regional Research*, 37(3), 1083-1090.
- Bellak, C., Leibrecht, M., & Stehrer, R. (2010). The role of public policy in closing foreign direct investment gaps: an empirical analysis. *Empirica*, 37(1), 19-46.
- Brewer, T. (1993). Government Policies, Market Imperfections and Foreign Direct Investment. *Journal of International Business Studies*, 24(1), 101-120.
- Buckley, P.J., Clegg, J.L., Cross, A.R., & Voss, H. (2010). What Can Emerging Markets Learn from the Outward Direct Investment Policies of Advanced Countries? In Sauvant, K.P., & McAllister, G., (eds.), *Foreign Direct Investments from Emerging Markets. The Challenges Ahead* (pp. 243-276). New York: Palgrave Macmillan.
- Casson, M. (2007). Multinational enterprises: their private and social benefits and costs. *World Economy*, 30(2), 308-328, doi: 10.1111/j.1467-9701.2007.00884.x
- DICE Database (2014). Foreign Direct Investment (FDI) Regulatory Restrictiveness Index, 1997 – 2012. Ifo Institute, Munich, Retrieved from <http://www.cesifo-group.de/DICE/fb/YRDxIc5A>
- Cuervo-Cazurra, A., & Genc, M. (2011). Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957-979.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: social values and organization behavior. *Pacific Sociological Review*, 18 (1), 122-136.
- Drahokoupil, J. (2008). The Investment-Promotion Machines: The Politics of Foreign Direct Investment Promotion in Central and Eastern Europe, *Europe-Asia Studies*, 60 (2), 197 – 225.
- Evenett, S.J. (2012). The Landscape of Crisis-Era Protectionism, 19-40, in: *Débâcle: The 11th GTA Report on protectionism*. Retrieved from http://www.globaltradealert.org/sites/default/files/GTA1_1_chapter2.pdf accessed March 2015.
- Faeth, I. (2009). Determinants of foreign direct investment – a tale of nine theoretical models. *Journal of Economic Surveys*, 23(1), 165-196. doi: 10.1111/j.1467-6419.2008.00560.x
- Gestrin, M. (2014). *International investment in Europe: A canary in the coal mine?* OECD Investment Insights. Retrieved from <http://oecdinsights.org/2014/11/17/international-investment-in-europe-a-canary-in-the-coal-mine/>

- Globerman, S., & Chen, V.Z. (2010). Best Policy Practices for Promoting Inward and Outward Foreign Direct Investment. Ottawa: The Conference Board of Canada. Report October 2010. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1722003 accessed September 2015.
- Golub, S.S. (2009). Openness to Foreign Direct Investment in Services: An International Comparative Analysis. *World Economy*, 32, 1245–1268. doi: 10.1111/j.1467-9701.2009.01201.x
- Gorynia, M., Nowak, J., Trąpczyński, P., & Wolniak, R. (2013). Overview and Evaluation of Policy Measures Supporting Outward FDI: The Case of Poland, , In Kaynak, E., & Harcar, T.D. (eds.), Twenty Second World Business Congress Flexibility, Innovation and Adding Value as Drivers of Global Competitiveness: Private and Public Sector Challenges (pp. 108-115). , Taipei: National Taipei University.
- Götz, M. (2015). Remarks on (post)crisis developments of inward and outward FDI in the EU, , in: Opolski, K., & Górski, J., (eds.), *Strategie gospodarcze i społeczne Unii Europejskiej*, (pp. 307-317). Warsaw: Uniwersytet Warszawski.
- Guimón, J., & Filippov, S. (2012). Competing for High-Quality FDI: Management challenges for investment promotion agencies. *Institutions and Economies*, 4(2), 25-44.
- Harding, T., & Javorcik, B. (2011). Roll Out the Red Carpet and They Will Come: Investment Promotion and FDI Inflows. *The Economic Journal*, 121(557), 1445–1476, DOI: 10.1111/j.1468-0297.2011.02454
- Hymer, S. (1976). *The international operations of national firms: a study of foreign direct investment*. Cambridge: The MIT Press.
- Kline, J.M. (2002). *Enhancing the development dimension of home country measures, The Development Dimension of FDI: Policy and Rule-making perspectives*. Proceedings of the Expert Meeting held in Geneva from 6 to 8 November 2002, UNCTAD/ITE/IIA/2003/4, 101-114.
- Mistura, D.G. (2011) *The Promotion of Outward Foreign Direct Investment: A Comparative Policy Analysis of BRIC Countries*, Sao Paulo, 2011, mimeo.
- OECD (2012). *OECD Economic Policy Reforms 2012*. Retrieved from http://www.oecd-ilibrary.org/economics/economic-policy-reforms-2012_growth-2012-en
- Ratten, V., Dana, L.P., Han, M., & Welpe, I. (2007). Internationalisation of SMEs: European comparative studies. *International Journal of Entrepreneurship and Small Business* 4(3), 361–379.
- Sauvant, K.P. (2015). *AIM Investment Report 2015: Trends and policy challenges*. Presentation at the opening of the Annual Investment Meeting, Dubai. Retrieved from <http://ccsi.columbia.edu/2015/03/31/aim-investment-report-2015-trends-and-policy-challenges/>
- Scott, W.R. (1995). *Institutions and Organizations*, Thousand Oaks: Sage.
- Sellar, C., & Pástor, R. (2015). Mutating Neoliberalism: The Promotion of Italian Investors in Slovakia before and after the Global Financial Crisis. *International Journal of Urban and Regional Research*, 39, 342–360. doi: 10.1111/1468-2427.12210
- Szalavetz, A. (2015). Post-crisis approaches to state intervention: New developmentalism or industrial policy as usual? *Competition & Change*, 19(1), 70–83, DOI:10.1177/1024529414563009
- Tax Foundation (2014). *Corporate income tax rates around the world* . Retrieved from <http://tax-foundation.org/article/corporate-income-tax-rates-around-world-2014>
- The Centre for Economic Policy Research (2016). *Global Trade Alert*. Retrieved from <http://www.globaltradealert.org/>
- The Heritage Foundation (2016). *Index of Economic Freedom*. Retrieved from <http://www.heritage.org/index/>
- Jankowska, B., Gorynia, M., & Dzikowska, M.M. (2015). *Economic crisis as an internationalization trigger in a transition economy? Addressing the ambiguity issue*, Paper presented at the 41st Annual International EIBA Conference, , Rio de Janeiro.

- The Oxford dictionary (2015). *Policy*, Retrieved from <http://www.oxforddictionaries.com/definition/english/policy>
- The World Economic Forum (2016). *Global Competitiveness Report*. Retrieved from - <http://www.weforum.org/reports/global-competitiveness-report-2014-2015>
- Torres, M.M., & Clegg, L. J. (2014). Policy effectiveness and “misalignment” with firms’ strategies. A study of pro-internationalization incentives. *The Multinational Business Review*, 22(4), 1-22.
- UNCTAD (2016). *Investment Policy Hub*. Retrieved from <http://investmentpolicyhub.unctad.org>
- World Bank (2016). *Doing Business Ranking*. Retrieved from <http://www.doingbusiness.org/>

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Involving Young People in Polish and Lithuanian Social Enterprises by Fostering Entrepreneurial Skills and Abilities as Entrepreneurial Opportunity at University

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Abstract

The paper aims to analyse theoretically and empirically the development of social entrepreneurship in Poland and Lithuania, emphasizing the development of appropriate skills and abilities gained at university as entrepreneurial opportunity. The research undertaken for the purposes of the paper is based on a literature review and empirical research partly devoted to a situational analysis of social entrepreneurship in Poland, as well as a pilot survey of target groups pertaining to the entrepreneurial skills and abilities as entrepreneurial opportunity of Lithuanian and Polish students as potential social entrepreneurs. The main research findings imply that despite the existence of entrepreneurial opportunity as education at university, social entrepreneurship is increasingly important in Poland. Overall support is needed for the creation of social enterprises and attracting young people to them. Empirical research based on Lithuanian and Polish students' perception of acquiring entrepreneurial skills and abilities at university can be entrepreneurial opportunity for social entrepreneurship. Implementing further research in the field, as empirical this research was just a pilot one.

Keywords: social entrepreneurship; entrepreneurial opportunities; entrepreneurial skills and abilities; young entrepreneurs

JEL codes: M30

INTRODUCTION

The European Union (EU) is subject to a rather complicated situation in terms of employment of young people. This relates to several European countries, especially Greece and Spain; however, in both Lithuania and Poland, a somewhat difficult situation on the labour market exists as well. The demographics of unemployment show that a significant proportion of the unemployed are youths. The EU suggests and promotes numerous instruments aimed at reducing the level of unemployment amongst young people. One of these instruments is the development of entrepreneurial skills and abilities among young people and subsequently attracting those young people to business in order to bring the ideas they have to fruition. Numerous examples of 'good practice' might be found in other EU countries – therefore it is of vital importance to use those examples appropriately in EU countries.

The analysis is focused on the situation in Poland and Lithuania in terms of solving economic and social problems through the involvement of young people in entrepreneurship; especially social enterprises. Prior research in the field covers many spheres and viewpoints researching social entrepreneurship. Thomson (2002), Drayton (2002), Korosec and Berman (2006), Peredo and McLean (2008) defined characteristics of social entrepreneurs. Mair and Marti (2006) analysed different combinations of resources implementing social activity, Hausner (2008) was analysing the role of social entrepreneurship, Zahra, Gedajlovic, Neubam and Shulman (2009) analysed the concept of social entrepreneurship, including entrepreneurial opportunities, Doherty, Haugh and Lyon (2014) analysed social value creation peculiarities. In the context of this paper, other analysed research works might be grouped as analysing some special issue of entrepreneurship as entrepreneurial opportunities. Casson (1982), Shane and Venkataraman (2000), Shane (2003), Ardichvili, Cardozo and Sourav (2003), Davidsson and Honig (2003), Audretsch and Acs (2003), Dutta and Crossan (2005), Shepherd and DeTienne (2005), Dimov (2007), Aldrich and Martinez (2007), Plummer, Haynie and Godesiabois (2007), Davidson (2008), Smith, Matthews and Schenkel (2009), Ucbasaran, Westhead and Wright (2009), De Jong (2009), Short, Ketchen, Shook and Ireland (2010), Fuentes *et al.* (2010), Soderqvist (2011), Dahlqvist, Wiklund (2012). Jesensky (2013) analysed different aspects of entrepreneurial opportunities possibly actual in social enterprises creation. Despite analysed research, the research fulfilled in this article focuses on less analysed field as authors trying to develop social entrepreneurship creation possibilities through accepting entrepreneurial skills and abilities as entrepreneurial opportunity especially for young people involvement in social enterprises creation.

The scientific problem of the article pertains to the question of how to improve the environment for entrepreneurial development in Poland and Lithuania, and attract young people to business in order to exploit entrepreneurial opportunities for creating social enterprises. The subject of the research is social entrepreneurship, based on the support of social entrepreneurship through the education and teaching of appropriate skills and abilities at university as entrepreneurial opportunity. The research aim is to analyse theoretically and empirically the development of social entrepreneurship in Poland and Lithuania, emphasizing the development of appropriate skills and abilities gained at university as entrepreneurial opportunity. The research tasks are:

1. To analyse entrepreneurial opportunities of social entrepreneurship development focusing on entrepreneurial skills and abilities;
2. To evaluate the potential and situation of social entrepreneurship development, especially in the case of social enterprises in Poland;
3. To present comparative analysis of pilot empirical research into entrepreneurial skills and abilities gained at university as entrepreneurial opportunity in Lithuania and Poland;
4. To provide recommendations and suggestions on how to engage young people in entrepreneurship, especially social enterprises, integrating the education process in the overall support system for entrepreneurship in Poland and Lithuania.

The first part of the article is devoted to presenting the essential issues related to the analysed object from theoretical viewpoint: the concept of social entrepreneurship and its dimensions are presented; entrepreneurial skills and abilities are analysed as entrepreneurial opportunity for deeper analysis of social entrepreneurship involving young people. Second part of the article presents the methodological assumptions applied to empirical research. Third part presents the results and discussion of situation analysis in Poland and pilot empirical research results about fostering and developing entrepreneurial skills and abilities at university for developing social entrepreneurship in Lithuania and Poland. In the end, some conclusions and recommendations are provided.

LITERATURE REVIEW

Entrepreneurship itself is analysed in a vast number of different scientific publications. Different angles of analysis are chosen and various aspects have been researched. In the framework of the scientific problem raised in this article, it is most important to review and analyse the scientific works on the concept of social entrepreneurship and entrepreneurial opportunities and the exploitation thereof, paying attention to the place of entrepreneurial skills and abilities in this context.

Concept of Social Entrepreneurship

In recent decades, entrepreneurship research has focused on social value, influence on and interaction with society and has been preconditioned to the foundations of social entrepreneurship and analysis. Zahra *et al.* (2009), in summarising various assumptions on social entrepreneurship, state that social entrepreneurship encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organisations in an innovative manner. A social entrepreneur simply might be someone who organises and/or operates a venture or corporation, which fulfils social goals (Peredo & McLean, 2006).

The role of communities is especially stressed in the context of social entrepreneurship. Korosec and Berman (2006) define social entrepreneurs as individuals or private organisations that take the initiative to identify and address important social problems in their communities. According to Thompson (2002), social entrepreneurs are also said to possess the qualities and behaviours generally associated with business entrepreneurs, but they operate in communities and are more concerned with caring and helping than with making money. The approach of social entrepreneurship unites business and com-

munities, and the essence of it relies upon the coherence of business and society. The term 'social enterprise' links two main attributes: 'entrepreneurship' and 'community'. The first means that it relates to the organisation, which conducts business that is associated with the economic risk and verification of the effects of this economic activity. In turn, the second attribute, i.e. 'community', indicates on the one hand the basic resources that are used by the company (based on social capital, shaped within a particular community), and, on the other hand, its mission (the activity of the company is focused on social integration within the local community and its main aim is to prevent social exclusion through professional elicitation and activity) (Hausner, 2008, p. 10).

The other important aspect in any discussion of social entrepreneurship relies upon the allocation of resources, which leads to the creation of new enterprises. Mair and Marti (2006) perceive social entrepreneurship as a process of creating value by combining resources in new ways. Secondly, these resource combinations are intended primarily to explore and exploit opportunities to create social value by stimulating social change or meeting social needs. Third, researchers viewing social entrepreneurship as a process emphasise that it involves offering services and products, but can also refer to the creation of new organisations. The authors argue that the profit motive of entrepreneurship can be a partial motive for social entrepreneurship as it might be presumed that the motives for social entrepreneurship can be, for example, personal satisfaction or fulfilment. It is also said that entrepreneurship in the business sector also has a social aspect. Drayton (2002) emphasises the strong ethical fibre of the entrepreneur. Societal focus appears strongly related to the character of entrepreneurs, as such; people are frequently very active in society because of the nature of their behaviour and character features, as well as the skills and abilities, which the social entrepreneur possesses.

The dual mission – financial and social sustainability – of social enterprises shapes the processes of opportunity recognition and exploitation in that value capture is tied, either directly or indirectly, to social value creation (Doherty *et al.*, 2014). Such a hybrid nature of social enterprises increases the complexity of management processes. In these enterprises, the activities of different partnerships are involved as well (Thompson, 2002; Doherty *et al.*, 2014).

Two distinct types of problems are frequently solved by social enterprises. The first one is financing problems, which are related to the social mission of such enterprises and without any defined profit because of their activity. Social enterprises lack support from traditional financing institutions. Therefore, the demand for special financing instruments remains in this sector.

The other group of problems inherent in social enterprises is related to human resource management. Social enterprises suffer shortages in terms of the skilled labour force, sometimes due to financial problems, sometimes perhaps related to the specific activity of social enterprises. Attracting volunteers and minor groups is a specific issue with different managerial aspects. Work with minor groups' demands managerial capabilities and the skills effectively solve various situations and concerns arising from casual activity. Voluntary work has its own issues based on, for example, unpredictable resources in the appropriate moment, the motivation of the work force, the amount of free time allocated to different tasks, and so on. However, it should be taken into consideration that volunteers in most cases are young peo-

ple, especially students. That could become a precondition for the involvement of young people in creating social enterprises. They are often full of entrepreneurial ideas and need to see entrepreneurial opportunities and exploit them.

Entrepreneurial Opportunities for Social Enterprise Creation: Focus on Entrepreneurial Skills and Abilities Gained at University

Without an opportunity, there is no entrepreneurship (Jesensky, 2013). Shane and Venkataraman (2000) state that to have entrepreneurship, we must first have entrepreneurial opportunities. A potential entrepreneur can be creative and hardworking, but without an opportunity, entrepreneurial activities cannot take place (Short *et al.*, 2010). According to this, social entrepreneurship without entrepreneurial opportunity cannot take place.

Entrepreneurship involves the nexus of entrepreneurial opportunities and enterprising individuals. This nexus indicates that opportunities are an important part of the entrepreneurial process (Shane, 2003). Opportunity is a central concept within the field of social entrepreneurship. Understanding entrepreneurial opportunities is important because the characteristics of an opportunity influence the entrepreneurial process (Shane, 2003).

Following Casson (1982), Shane and Venkataraman (2000), Eckhardt and Shane (2003) defined entrepreneurial opportunities as situations in which new goods, services, raw materials, markets and organising methods can be introduced through the formation of new means, ends, or means-ends relationships.

An entrepreneurial opportunity is more accurately described as an opportunity to engage in entrepreneurial action, in which entrepreneurial denotes a sub-class of some broader category of human action, which is motivated by profit. The adjective 'entrepreneurial' is used to qualify the manner by which this profit is sought – i.e. through the introduction of new goods or services (Companys & McMullen, 2007).

Entrepreneurial opportunities can be represented as a stream of continuously developed ideas, driven and shaped by one's social interaction, creative insights, and action at each stage of entrepreneurship (Dimov, 2007).

Entrepreneurial opportunities consist of a set of ideas, beliefs and actions that enable the creation of future goods and services in the absence of current markets for them (Shane & Venkataraman, 2000). Entrepreneurial opportunity consists of new idea/s or invention/s that may or may not lead to the achievement of one or more economic ends that become possible through ideas or inventions; beliefs pertaining to factors favourable to the achievement of those possible valuable ends; and actions that generate and implement those ends through specific economic artefacts (the artefacts may be goods such as products and services and/or entitles such as firms and markets, and/or institutions such as standards and norms) (Audretsch & Acs, 2003).

Shane and Venkataraman (2000) have argued that entrepreneurial opportunities are "objective phenomena", existing in time and space even though they may not be known to all people at all times (Companys & McMullen, 2007). Holcombe (2003) opined that the information needed to seize some entrepreneurial opportunities comes from sources available in principle to everyone, although recognising that information that a person acquires constitutes an entrepreneurial opportunity may also require some specific knowledge of time and place. The duration of any opportunity depends on a variety of factors – such as patent rights, information diffusion, or the inability of others to imitate (Shane & Venkataraman, 2000).

Social enterprises have to pay attention to three valuable ways of categorising opportunities: by the locus of changes that generate the opportunity; by the source of the opportunities themselves; and by the initiator of the change (Eckhardt & Shane, 2003).

Schumpeter (1934) suggested in brief detail five different loci of these changes: those that stem from the creation of new products or services, those that stem from the discovery of new geographical markets, those that emerge from the creation or discovery of new raw materials, those that emerge from new methods of production, and those that are generated from new ways of organising.

Prior research suggests four important ways of categorising opportunities by sources. The first involves considering differences between opportunities that result from asymmetries in existing information between market participants and opportunities that result from exogenous shocks of new information. The second comparison lies between supply- and demand-side opportunities. The third differentiates between productivity-enhancing and rent-seeking opportunities, and the fourth lies in identifying the catalysts of change that generate the opportunities.

The final dimension by which opportunities have been classified is by the actor that initiates the change. Different types of entities initiate the changes that result in entrepreneurial opportunities, and the type of initiator is likely to influence the process of discovery as well as the value and duration of the opportunities. Among the different types of actors that researchers have identified are non-commercial entities, such as governments or universities; existing commercial entities in an industry, such as incumbents and their suppliers and customers; and new commercial entities in an industry such as independent entrepreneurs and diversifying entrants (Eckhardt & Shane, 2003).

To sum up, an entrepreneurial opportunity could arise from the locus of the change, the source of the opportunities themselves and the initiator of the change. As claimed by Fuentes, Arroyo and Perez (2010), if opportunities exist, why are they not exploited? The answer is clear: the process of identifying and subsequently exploiting opportunities is complex and involves some “discovery costs” (Casson & Wadeson, 2007).

Entrepreneurial opportunity exploitation is part of the entrepreneurial process. According to Davidson (2008), the exploitation process is defined in terms of entrepreneurial actions or behaviours, such as resource acquisition and coordination and market making, networking, and business planning, which are aimed at the fulfilment of a venture concept. Exploitation is associated with the full-scale operation, which requires the full commitment of the new venture's resources in building efficient production and business systems (Choi & Shepherd, 2004).

Entrepreneurial opportunity exploitation is explained by the ability to execute a new venture, which is driven by motivation, the ability to mobilise resources and control the new organisation (Aldrich & Martinez, 2007; Dahlqvist & Wiklund, 2012). Social enterprises could be one of the results of entrepreneurial opportunity exploitation.

Zahra, Korri and Yu (2005) emphasise that only during the process of exploiting an opportunity is the opportunity actually created (Soderqvist, 2011). Opportunities are usually exploited only when human beings decide to act (De Jong, 2009). As claimed by Zahra *et al.* (2005), the exploitation of opportunities always involves uncertainty and risk (Soderqvist, 2011). Opportunity exploitation also correlates with individuals' attitude and perceived subjective norms towards the opportunity, and perceived behavioural control

in order to successful implementation of opportunity (De Jong, 2009). Moreover, successful opportunity exploitation depends on opportunity characteristics, the environment, and the entrepreneur's individual motives (Plummer *et al.*, 2007).

An entrepreneur starting a venture is strongly attached to the opportunity and tends to avoid any exit from the venture process. Rather, when an opportunity seems unviable (perhaps because a competitor has moved faster on it) entrepreneurs are likely to modify it or move onto a new, but related, opportunity (Choi, Levesque & Shepherd, 2008).

Shane and Venkataraman (2000) state that the exploitation decision is influenced by both the nature of the opportunity and by individual differences. The former refers to aspects such as the expected return provided by the opportunity, the costs involved, its lifespan as well as the level of demand. The latter implies that there are also differences between people regarding how much risk they are willing to take.

As Ardichvili *et al.* (2003) argue, the most important factors that influence the recognition and exploitation of opportunities are the entrepreneur's alertness to such opportunities, asymmetrical information and prior knowledge, social networks, the personality traits of the entrepreneur and the nature of the opportunity itself. Roure, González, Nieto, García and Solís (2007) find that the number of new firms depends on the externalities of knowledge of a region and the entrepreneur's possession of abilities and knowledge.

There are three main determinants influencing entrepreneurial opportunity exploitation: prior knowledge, personal traits and social networks (Shane, 2003). The role of prior knowledge and learning in the identification and exploitation of entrepreneurial opportunities has received consistent attention in the literature (Dutta & Crossan, 2005; Dimov, 2007; Smith *et al.*, 2009; Ucbasaran *et al.*, 2009).

Prior knowledge comes from various sources: education, personal history, and work experience, advice from experts, imitation and copying (Davidsson & Honig, 2003; Shepherd & DeTienne, 2005). Different external sources of prior knowledge can help social enterprises recognise and exploit different types of opportunities.

Choi and Shepherd (2004), in analysing the major dimensions of prior knowledge, suggest that entrepreneurs are more likely to exploit opportunities when they have more knowledge of customer demands for new products, or they have more fully developed the necessary technologies or greater managerial capability (Fuentes *et al.*, 2010). According to von Hippel (1994), people tend to notice information that is related to information they already know. Shane (2000) postulated that entrepreneurs would discover opportunities because prior knowledge triggers recognition of the value of the new information. Drawing on the Austrian economics argument that entrepreneurship exists because of information asymmetry between different actors (Hayek, 1945), Shane maintains that any given entrepreneur will discover only those opportunities related to his or her prior knowledge. To sum up, prior knowledge has an important role in the exploitation of entrepreneurial opportunities. It triggers the creation of social enterprises. Social entrepreneurs are more successful if they have sufficient prior knowledge. It can be presumed that entrepreneurial skills and abilities might be entrepreneurial opportunity as well as raise itself entrepreneurial opportunities.

In summary, without an entrepreneurial opportunity, there is no social entrepreneurship, and only during the process of exploiting an opportunity is that the opportunity is actually created. An entrepreneurial opportunity could arise from the locus of the

change, the source of the opportunities themselves and the initiator of the change. The main determinants influencing entrepreneurial opportunity exploitation are prior knowledge, personal traits and social networks. All of these determinants have an impact on the success of a social enterprise. Prior knowledge enables young social entrepreneurs to exploit entrepreneurial opportunities. The source of this prior knowledge could successfully augment education gained at university, providing appropriate entrepreneurial skills and abilities for young social entrepreneurs.

The contribution to the research area of social entrepreneurship development through entrepreneurial skills and abilities development at university as entrepreneurial opportunity is not researched enough and the linking these two-research objects presumably might lead to improvement of social entrepreneurship implementation. Social entrepreneurship research especially in Poland and Lithuania is lacking, as the object is rather new for analysis worldwide and especially in these countries. Especially practical implementation questions are discussed quite fragmentally and lack deeper analysis. Scientific discussion on social entrepreneurship mostly takes place on a conceptual level: what it is, what functions are fulfilled by phenomena, what benefit is created by implementing it. This paper seeks to make a contribution to the theory combining theoretical and empirical research to entrepreneurial skills and abilities as entrepreneurial opportunities preconditioning social enterprises creation.

MATERIAL AND METHODS

The empirical part of the article is based on situation analysis, document analysis and pilot target survey analysis. There are two main aims of our study: 1) the empirical research aim is to evaluate the potential of social entrepreneurship development, with an emphasis on Poland, and 2) to present the analysis of empirical research on entrepreneurial skills and abilities gained at university (entrepreneurial opportunity) in Lithuania and Poland. Both the situation and document analysis are designed to analyse the potential and development of social entrepreneurship in Poland, focusing attention on social enterprises and youth involvement in this activity. The analysis is focused on the economic, political, legal and social environments. Emphasis is placed on the education system as an entrepreneurial opportunity for social entrepreneurs. Qualitative research as empirical research method is selected as mostly appropriate.

The pilot target survey analysis is fulfilled in target groups of students (Kaunas University of Technology, Master students, Study programme – International Business, $n = 20$, year 2013, 2014; called Group A in the Results section). Target group B is students of Polish Dabrowa Gornicza University, studying International communication ($n = 22$, year 2016). This target survey is kept as pilotage one (authors wanted to analyse the approach of young students from two neighbouring countries to the issue of entrepreneurship). The results obtained could be then further developed on larger samples. Therefore, authors decided to choose two relatively small groups of students consisting of ca. 20 people especially for confirmation of necessity of such research and further improvement of questionnaire as an instrument for research as well as such sample selection was based on such assumptions as:

- Lithuanian students' group was listener of special Entrepreneurship course;

– Polish students' group was non-listeners of any special course of Entrepreneurship.

Such differences allow comparing in general very different groups and making assumptions based on similarities and distinctions in both target groups as empirical research object. It should be stressed that this research is unique in its construct and fulfilled in Lithuania and Poland without existing similar research results. The research is not focusing on the education of entrepreneurial skills and abilities, its techniques or methods. The research is focuses on entrepreneurial opportunity creation through teaching social entrepreneurship at universities, colleges or even schools for inspiring young people for becoming social entrepreneurs.

Lithuanian Target group A students were participants in the teaching course 'Entrepreneurship and good practice examples of SMEs'. The questions in the survey were similar for all target groups:

1. Have you ever attended a course on entrepreneurship? If yes, name the course.
2. What is your opinion about the background of entrepreneurs: are entrepreneurs born or can they be made?
3. Which features of character do you think are most important in terms of entrepreneurial activity? How might these features be developed during tertiary study?
4. What entrepreneurial skills and abilities might be developed during tertiary study?
5. What conditions or/and measures could strengthen entrepreneurial potential at university?
6. To what extent is the analysis of best practice or good practice important to the development of entrepreneurial spirit?
7. What new methods or measures could be appropriate for the development of entrepreneurial skills and abilities at university? Should some special attention be paid to an understanding of social entrepreneurship?
8. How important is the complex learning and education process of entrepreneurial skills and abilities when it is undertaken at the primary, secondary and tertiary stages of education respectively?
9. What is the most important factor in successful entrepreneurial education and the implementation of entrepreneurial ideas in practice?
10. Social entrepreneurship, social entrepreneurs, social enterprises, and social innovation are priorities in the developing economy in Lithuania and throughout the EU. Have you heard of them and would you be interested in finding out more about the management of social enterprises during your studies?

The interpretation of results is presented in the next section. The results are also compared to those of another target survey undertaken at X University in EU where the respondents were representatives of international students ($n = 11$, year 2015; target group called Group C) participating in the 'European civilisation history and culture' course and studying the Bachelor programme of Business Management. The selection of the group was based on their internationalization, seeking to make an advanced comparison of different study experiences. It must be stressed that this Group C does not represent any particular country results (not Poland nor Lithuania). In analysing the results of this focus group (international students at X University), it became apparent that just one respondent was involved in the entrepreneurship course in reality, meaning that this

target group is rather different from the previous one Target group A. The questions were the same as those mentioned above and used to target group A, B, and C.

RESULTS

Social Entrepreneurship in Poland: Situation Analysis

Social Entrepreneurship in Poland: a Historical Approach

Nowadays in Poland, there is a depth of discussion on social entrepreneurship taking place. Among numerous publications, several studies are worth mentioning. A study by Hausner (2008) provides a comprehensive scientific analysis on the conditions for the establishment and activities of social enterprises in Poland (the genesis and specificity of social enterprises, their institutional fixation and the related regulations, as well as Polish and international good practices concerning the establishment and activities of social enterprises). Both areas of activity of enterprises and their financial structure have been described in detail. In turn, Ciepielewska-Kowalik (2013, 2015) raised different topics in her studies, which were mostly concentrated on trends and challenges for social enterprises in Poland, models of social enterprises, and the institutional and historical context of social enterprises in the country. Leś (2004) as well as Leś and Ciepielewska-Kowalik (2014) focuses her deliberations on cooperatives, as well as trends, challenges and obstacles in the social economy sector. Finally, Kurleto (2013) analyses the possibility of the application of American solutions in the sphere of social entrepreneurship in Poland.

Generally, it is necessary to state that social enterprise organisations in Poland have strong and complicated traditions, dating back to long before the Second World War (Ciepielewska-Kowalik, Pieliński, Starnawska & Szymańska, 2015; Herbst, 2008). In some cases (e.g. cooperatives), they even appeared before the beginning of the nineteenth century, since when they have undergone turbulent periods of change. Three basic historical periods of the development thereof may be distinguished (Ciepielewska-Kowalik *et al.*, 2015):

- the period prior to the Second World War (the first period),
- the period during Communist rule, i.e. between 1945 and 1989 (the second period),
- the transition period, after 1989 (the third period).

There were significant differences between the particular sub-periods regarding the perception of social enterprises as well as actions taken. There were also some similarities, especially between the first and second period. The real re-interest in the concept of the social economy as an instrument of social policy increased substantially during the third period, and especially after accession to the EU (Kurleto, 2013; Greblikaite, Sroka & Grants, 2015).

Despite these facts, it is necessary to mention that no comprehensive research has been conducted in Poland to measure the nationwide development of social entrepreneurship. The available analyses relate to selected aspects of the phenomenon or a particular region, case studies and reports on programmes oriented towards the development of social entrepreneurship (Kusa, 2012), and despite growing interest in social entrepreneurship among scholars over the last two decades, the literature on social entrepreneurship still remains diffuse and fragmented (Austen-Tynda, 2008).

Social Enterprises in Poland: Selected Data and Key Factors of Development

There is no official data on the number of social enterprises in Poland. One estimates that in 2012 there were around 5200 entities in Poland, which could be classified as social enterprises by applying the EU Operational Programmes, employing around 70 000 people. This represents around 0.3% of all registered and active enterprises (including sole trader ships) and around 0.4% of the total employment in the economy (European Commission, 2014). Social enterprises play an important role in work integration activities for groups endangered by social exclusion, which specifically affects the long-term unemployed, homeless, addicts and the isolated (Kożuch & Żukovskis, 2014). They also provide a wide variety of services of general economic interest such as education, social care services, as well as other specialised services.

Given the data presented, the Polish Government promotes social entrepreneurship. Therefore, a National Programme for Social Economy Development (KPRES) was implemented and now has the status of an official government document. It is the first comprehensive legal act that fully recognises the social economy in Poland, and determines the key directions of public support for the social economy. This act defines the activities, which should be undertaken by the Polish public authorities to strengthen the sector of the social economy. As a result, the position of the social economy has been given new developmental opportunities. According to the KPRES Programme, organisations of the social economy are to have several major goals, such as to integrate the socially excluded (or those threatened by social exclusion), to create workplaces, to provide welfare services, and to support local development. It should also contribute significantly to employment growth, social coherence, and the development of social capital.

The growth of social enterprises in Poland does not necessarily mean that there is no need to support them. On the contrary, there are several forms of support for social enterprises, which were indicated by the representatives of this sector. The most important include direct subsidies, as well as preferential loans and credits. On the other hand, the European Commission (2014) claims that there are no specialist investors or intermediaries investing in or offering financial products to social enterprises in Poland. In theory, social enterprises may borrow on the same terms as mainstream enterprises, albeit in practice, demand for financing appears very limited and access is limited. Grant funding is available to social economy entities from structural funds programmes.

There are also a limited number of financial instruments specifically aimed at social economy entities including social enterprises. They include two commercial loan funds:

- The Polish-American Community Assistance Fund (PAFPIO) financing non-governmental organisations,
- TISE financing all social economy entities.

In addition, one can find examples of small local initiatives such as microloan and guarantee funds and social venture capital funds that are piloted from time to time. Another example could be certain regional funds, such as the Fund for Social Economy in Małopolska (Małopolski Fundusz Ekonomii Społecznej), which was established in 2009 by private and public entities and specialises in the provision of credit guarantees for social enterprises. To date it has provided 103 guarantees and

small loans totalling 1.2 million EUR, contributing to the creation of 32 social cooperatives and 35 microenterprises (European Commission, 2014).

When speaking on other forms of support of social entrepreneurship in Poland, one may mention access to free information and advice services, a wider promotional range, as well as the use of guarantee funds and credit guarantee funds. These, however, are regarded as the least important form of support (Hausner, 2008). Fortunately, there are some positives in this regard. For example, as was stated by Starnawska (2011), the promotion of social enterprise and social entrepreneurship has been undertaken by several initiatives. One of them is a national competition for Social Enterprise of the Year, introduced in 2011 by the Foundation of Social and Economic Initiatives (FISE). Another such initiative is the world-renowned program by Ashoka Foundation that has been identifying its fellows in Poland since 1995. An additional initiative, which promotes social enterprise, comes from other international programmes, such as NESsT and the JPMorgan Chase Foundation, which have announced the first awards for the best business plan from a social enterprise in 2014. Generally, it is necessary to state that although these initiatives and programs are varied in their scope and aims, they contribute to the promotion of social enterprise and the development of social entrepreneurship in Poland.

Barriers to the Growth of Social Entrepreneurship in Poland

Despite the dynamic growth of social enterprises, there are a number of barriers to their development, which include the accumulation of negative, social and economic features in rural and underdeveloped areas, lack of trust in the initiatives undertaken by social enterprises, the low level of activity of local communities, lack of social trust in partnership-building skills and collaboration in achieving common objectives and lack of cooperation between social enterprises (Greblikaite *et al.*, 2015). A large group of representatives of social enterprises surveyed were also of the opinion that it is easier to find an employee or customer by concealing the social nature of the business.

A very important factor in weakening the position of the social enterprises operating in the market is to treat them under the law as non-governmental sector entities. The result of this treatment is the existence of a kind of social enterprise discrimination when compared to commercial entities. This type of discrimination is particularly evident in access to preferential training and raising funds for investment. Furthermore, these companies are not recognised by law as non-governmental organisations, and cannot obtain financial funds in a similar manner.

Despite the problems mentioned, it is possible to surmise that the development of social entrepreneurship should be expected to continue, driven by both demand and the capacity of social entrepreneurship to meet this demand. Despite systematic progress in all areas of life, social needs, exclusion or stratification continue apace. Societies have limited public resources to tackle social problems. On the other hand, increasing numbers of individuals have the capabilities (including time and skills) to join the process of finding solutions to social problems. The standards of enterprise knowledge and skills are rising and can be taken advantage of to solve problems of a social nature (Kusa, 2012).

The Role of the Educational System in Poland

The education system plays an important role in shaping and developing social entrepreneurship in Poland. It is said that the only effective method of teaching social entrepreneurship is learning it in practice and drawing upon good examples of successfully prospering social enterprises. Despite this fact, the vast majority of experts claim that the Polish education system currently plays no significant role in developing the idea of social entrepreneurship. Generally, too little attention is paid to education and shaping a positive attitude towards social economy, social commitment and responsibility. Unfortunately, the Polish education system tends to focus on test scores and the race towards better work, and universities in Poland prepare students by providing general knowledge (Praszquier, Zabłocka-Bursa & Jozwik, 2014, pp. 24-25). Meanwhile, students should already gain work experience during their studies, and should learn how to establish relationships, participate in building a variety of initiatives, as well as participate in foreign internships. Practical issues are extremely important in education but unfortunately completely neglected at this point. Polish employers have also empirically confirmed this thesis.

Although the Polish education system has introduced a subject called “Entrepreneurship” in secondary and high schools, there are no qualified teachers who could teach it. Therefore, “Entrepreneurship” is usually taught by a teacher of another subject and treated by the students, as well as their parents, as “something unnecessary” or “a subject which can improve your general average grade”. The entrepreneurship classes lack any element of practical experience and there is no place for any innovation.

Despite this rather “dark” picture of the role of the educational system in entrepreneurship, there are, however, some positive factors. As an example, the Polish Ministry of Education and Sport has attempted to introduce 25 interesting and innovative projects aimed at instruction of the Entrepreneurship subject by providing numerous grants for the creation of innovative curricula and the pilot implementation of these programs (Praszquier *et al.*, 2014, pp. 24-26). An average student should learn that entrepreneurship is a certain activity, a way of thinking about and treating problems. It is also crucial to sensitise students to the common good, to educate young citizens to develop their social skills and empathy. Furthermore, it is important to present students the idea of community and to familiarise them with the local environment.

However, in order to teach well, a society and its rulers should learn at the beginning what social entrepreneurship really is and apply it to the education system thereafter. Schools, at every level of education, should teach both the theory and practice of social entrepreneurship, and should distinguish and teach what social entrepreneurship, social entrepreneurs and social enterprises are. It requires a whole new generation of initiators and those who can prove it to be possible (Praszquier *et al.*, 2014, p. 26).

The situational analysis revealed that social entrepreneurship is quite slowly developing in Poland. Additional attention is needed in all levels for further improvement of situation. Special attitude should be put on young people as potential for creating social enterprises. Entrepreneurial skills and abilities gained and/ or developed at university might be effective entrepreneurial opportunity created for starting social business. Empirical research seeks to emphasize the importance of such an opportunity.

Development of Entrepreneurial Skills and Abilities at University as Entrepreneurial Opportunity for Young Lithuanian and Polish Social Entrepreneurs

When researching the opinion of Lithuanian students on entrepreneurship, the development and improvement of skills and abilities, it becomes obvious that students agree that the teaching process can reinforce the desire and opportunity to become entrepreneurs. According to the opinions of the student target group A (Lithuanian students), the main characteristics such as confidence, risk-taking, courage, creativity, seeking adventure, opportunity creation, leadership, flexibility, originality, innovativeness, spontaneity, communicativeness, capability of decision-making, competitiveness, and persistence might be enforced in the study process. The means to the development of such characteristics could be situation and case study analysis, discussions, teamwork, model creation and decision-making, listening to success stories, as well as various improvisations.

Analysing the results of target group B (Polish students) it should be mentioned that just three of students were attending the course of entrepreneurship. None of them declared of some knowledge about social entrepreneurship. As potential measures for raising young entrepreneurs respondents emphasized the important role of practical examples, features of character such as imagination, adaptiveness were mentioned.

As the most important features of character for entrepreneurial activity, the respondents from target group C indicated: open-mindedness, social ability, management skills, financial and economic knowledge, creativity, responsibility, reliability, leadership, communication skills, languages, self-confidence, risk-taking, positivity, and flexibility. These characteristics could be supported at university by special courses, as well as scientific literature on entrepreneurship.

During the study process, certain entrepreneurial skills and abilities might be introduced and developed as well. According to group A, analytical thinking, adaptiveness to innovation, grounded decision-making, situation and environmental analysis, knowledge of new technologies, organisational skills, communication skills, creativity, responsibility, teamwork, and effective knowledge management might be introduced and/ or developed during tertiary study. For personal features development at university becoming entrepreneur target group B students named knowledge gained at university and teamwork as potential measures.

The most effective measures at university for impetus in creating young entrepreneurs might be: analysis of examples of success; cooperation between the science and business sectors; teamwork; encouragement of competition; generation of ideas; meeting real entrepreneurs; work experience at entrepreneurial enterprises; and innovative projects. In turn, the respondents from group C indicated management skills, strategic and marketing skills, accounting, organisational skills, communication skills, teamwork, leadership, negotiation skills, analytical thinking, forecasting, networking, flexibility, and encouragement to "free thinking" as entrepreneurial skills and abilities which might be developed during tertiary study.

The most important conditions and/or measures for strengthening entrepreneurial potential at university were given as lectures from current entrepreneurs, practical examples, internships, and project-based activity. As potential measures how to develop entrepreneurial skills and abilities at university target group B stu-

dents emphasized the importance of time management, creativity development and internships provided by university.

In terms of the most important factors for raising and developing young entrepreneurs, respondents from target group A emphasised such factors as a systematic approach to raising entrepreneurs from primary education and high schools, and later at college and university; real stories of successful entrepreneurs in Lithuania; cooperation between business and university; entrepreneurs' involvement in the study process, and interdisciplinary education. Such measures might help develop social entrepreneurs as well, given the emphasis on social value. Young people are interested in social activity, which might be the first step towards social enterprise creation. Interdisciplinary study programmes have started to be implemented in Lithuania, which may be classed as one of the entrepreneurial opportunities for developing social entrepreneurs. These results are compared in Table 1.

Table 1. Development of entrepreneurial skills and abilities at university

Group A	Group B	Group C	Comment
Measures of personal entrepreneurial features development			
<ul style="list-style-type: none"> - situation and case analysis; - discussions, teamwork; - model creation and decision making; listening to success stories; - various improvisations. 	<ul style="list-style-type: none"> - teamwork; - appropriate knowledge gaining. 	<ul style="list-style-type: none"> - special courses; - scientific literature on entrepreneurship. 	Lithuanian students, after completing the entrepreneurship course, enumerated further measures on how to develop entrepreneurial features at university.
Measures of ways to develop entrepreneurial skill and abilities at university			
<ul style="list-style-type: none"> - analysis of examples of success; - cooperation between science and business sectors; - teamwork; - encouragement of competition; - generation of ideas; - meeting real entrepreneurs; - work experience at entrepreneurial enterprises; - innovative projects. 	<ul style="list-style-type: none"> - tight schedule with additional activities; - creativity development; - internships. 	<ul style="list-style-type: none"> - lectures from current entrepreneurs; - practical examples; - internships; - project-based activity. 	Group A and Group C had a similar attitude to the question; it means that they proposed measures in the same manner. Group B showed the lack of comprehension on deeper suggestions.
Measures for raising and developing young entrepreneurs			
<ul style="list-style-type: none"> - systematic approach to raising entrepreneurs from primary education and high schools, and later at college and university; - real stories of successful entrepreneurs in Lithuania; - cooperation between business and university; - entrepreneurs' involvement in the study process; - interdisciplinary education. 	<ul style="list-style-type: none"> - involving real entrepreneurs in education process; - strong character development; - practice; - imagination; - adaptiveness. 	<ul style="list-style-type: none"> - managerial skills; - simulations; - traineeships; - good ideas; - planning; - teamwork; - decision making; - critical thinking. 	Group B and C (non-students of the special course) mostly were focused on character and managerial skills development and did not demonstrate a complex view of the problem.

Source: own study.

The students' research disclosed one of the most significant aspects pertaining to the role of education in the development of social entrepreneurs. Students, being young people and potential young entrepreneurs, strongly believe that entrepreneurial skills and abilities might be strengthened or even acquired at university and could be leading to entrepreneurial possibilities. They are interested in finding out more about social entrepreneurship and its peculiarities. It reaffirms the main conclusion that education institutions and the study process might be an appropriate place and an effective instrument for raising and enhancing young social entrepreneurs in Lithuania. The completed research implies future perspectives for the research of some task groups at Polish universities, where students have already been studying course of Entrepreneurship. It might be considered that students who are more experienced internationally, studying at different universities, have different experience. In the same time target group C students exposed weak knowledge in analysed question.

DISCUSSION

The fulfilled analysis and research allowed discovering several important aspects associated with social entrepreneurship in Poland and Lithuania. Students believe that entrepreneurial skills and abilities might be strengthened or even acquired at university. Therefore, one may say that education system plays an important role in shaping and developing social entrepreneurship in both countries. When coming to the details, however, one could see unless there are both similarities as well as differences in this aspect. For example, Polish respondents stressed that despite the fact there are 'Entrepreneurship' topics at the secondary schools, they are generally taught by unqualified teachers. In contrast to this fact, the Lithuanian respondents did not raise this aspect. In turn, both group of respondents generally agree as to the features the potential entrepreneur should have.

Secondly, the results achieved suggest that the education system is a strong tool for social entrepreneurship development providing entrepreneurial opportunities for young entrepreneurs. It requires, however, enforcement and flexibility, a review of study programmes, and especially a constant support from business and society. Lack of these elements will cause that the potential of this will not be fully utilized or even lost.

Thirdly, one seems to us that there is a difference in development level of social entrepreneurship in Lithuania and Poland. Lithuania is a little more advanced in this regard. However, the existence of various entrepreneurial opportunities, especially education at the university, caused that social entrepreneurship has been increasingly attracting interest in Poland and starting to develop very quickly. One of the reason may be the size of the countries analysed: in case of the smaller countries, it is always easier and faster to implement certain solutions. Despite these differences, overall support is needed at economic, political, legal, and social levels for the creation of social enterprises and, especially, for attracting young people to them. It relates to both countries as, based on the experience of Western countries, one may state that there is a big potential in social entrepreneurship.

Fourthly, empirical research based on Lithuanian and Polish students' perception of the development of entrepreneurial skills and abilities at university as entrepreneurial opportunity demonstrate several very positive tendencies and trends. For example, involvement in entrepreneurship attracts more and more interest, and the appropriate skills and abilities can be gained or/and developed at university during the study process. On the

other hand, this process still requires further work and analyses, e.g. case studies, presentation of achievements of real entrepreneurs, participation in the business projects etc.

CONCLUSIONS

The literature review undertaken in our paper allows to emphasise the importance of scientific problems raised in the article in the framework of the subject analysed – social entrepreneurship. It is something of a new phenomenon in Poland and Lithuania from both perspectives – research and practice. The EU initiatives strongly support social enterprises and force countries to take the appropriate actions in developing social entrepreneurship while exploiting the entrepreneurial opportunities, which exist or can be created. Theoretical research reveals that education can be regarded as the entrepreneurial opportunity, which can be exploited by young people in terms of gaining entrepreneurial skills and abilities at university.

Empirical research allows concluding that despite fragmental initiatives, the development of social entrepreneurship remains slow in Poland. The role of the education system is not sufficient effectively assist young people in gaining the appropriate entrepreneurial skills and abilities. A similar situation remains in Lithuania in terms of the education system and teaching entrepreneurship – although some initiatives are positive, a lack of any form of systemic approach still exists. Students are keen on learning entrepreneurial skills and abilities but they state that methods and measures could be improved for a more effective study process in the field of entrepreneurship, especially social. Empirical research in Lithuania revealed that education is a powerful tool for inspiring and motivating young people to become the creators of social enterprises. As empirical research remains just pilotage these assumptions could be applied just in similar situations arising applying research instrument. The more respondents should be involved if gaining more explicit results in different Polish and Lithuanian universities, especially focusing on concrete entrepreneurial skill and abilities research, which is important for social entrepreneurship.

In conclusion, it should be mentioned that both countries require better-integrated and well-managed actions in the development of social entrepreneurship and encouraging young people to become creators of social enterprises. Empirical research results provide opportunity to develop study programmes at university based on entrepreneurial skills and abilities development as exposing entrepreneurial opportunity. Empirical research limitations are mostly based on limited target groups. Future research could be based on quantitative method and different countries; especially EU, research as well as research instrument could be different for listeners of specialised *Entrepreneurship* course and non-listeners of such courses.

REFERENCES

- Aldrich, H., & Martinez, M. (2007). Many are Called, but Few are Chosen: An Evolutionary Perspective for the Study of Entrepreneurship. In A. Cuervo, D. Ribeiro, & S. Roig (Eds.), *Entrepreneurship: Concepts, Theory and Perspective* (pp. 293-311). Berlin: Springer.
- Ardichvili, A., Cardozo, R., & Sourav, R. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of business Venturing*, 18, 105-123.

- Audretsch, D.B., & Acs, Z.J. (2003). *Handbook of entrepreneurship research: an interdisciplinary survey and introduction*. New York: Springer.
- Austen-Tynda, A. (2008). Social entrepreneurship in Poland: implications for public management. *Management*, 12(2), 199-212.
- Casson, M.C. (1982). *The Entrepreneur: An Economic Theory*. Oxford: Martin Robertson.
- Casson, M.C., & Wadeson, N. (2007). The Discovery of Opportunities: Extending the Economic Theory of the Entrepreneur. *Small Business Economics*, 28(4), 285–300.
- Choi, Y.R., & Shepherd, D.A. (2004). Entrepreneurs' Decision to Exploit Opportunities. *Journal of Management*, 30(3), 377-395.
- Choi, Y.R., Levesque, M., & Shepherd, D.A. (2008). When should entrepreneurs expedite or delay opportunity exploitation? *Journal of Business Venturing*, 23(3), 333-355.
- Ciepielewska-Kowalik, A. (2013). *Trends and challenges for social enterprises in Poland. A new model of social investments and social cohesion*. Paper presented at 4th EMES International Research Conference on Social Enterprise "If Not For Profit, For What? And How?", July 1-4, 2013, Liege: University of Liege.
- Ciepielewska-Kowalik, A. (2015). *Socio-economic, political and historical context of the emergence of the Social Economy in childcare in Poland (1989-2014). Looking for social inclusion and cohesion enhancement*. Retrieved on June 30, 2016 from http://www.ciriecportugal.org/uploads/9/6/4/3/9643491/ciriec2015_0259_paper.pdf
- Ciepielewska-Kowalik, A., Pielniński, B., Starnawska, M., & Szymańska, A. (2015). *Social enterprise in Poland: institutional and historical context*. ICSEM Working Papers, No. 11, Liege: The International Comparative Social Enterprise Models (ICSEM) Project.
- Companys, Y.E., & McMullen, J.S. (2007). Strategic Entrepreneurs at Work: The Nature, Discovery, and Exploitation of Entrepreneurial Opportunities. *Small Business Economics*, 28(4).
- Dahlqvist, J., & Wiklund, J. (2012). Measuring the market newness of new ventures. *Journal of Business Venturing*, 27, 185-196.
- Davidsson, P. (2008). *The entrepreneurship research challenge*. Cheltenham: Edward Elgar.
- Davidsson, P., & Honig, B. (2003). The role of social human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- De Jong, J.P.J. (2009). *The decision to innovate: antecedents of opportunity exploitation in high tech small firms*. Scales: Zoetermeer.
- Dimov, D. (2007). Beyond the single-person, single-insight attribution in understanding entrepreneurial opportunities. *Entrepreneurship Theory and Practice*, 31(5), 713-731.
- Doherty, B., Haugh, H., & Lyon, F. (2014). Social Enterprises as Hybrid Organizations: A Review and Research Agenda. *International Journal of Management Reviews*, 16(4), 417–436.
- Drayton, W. (2002). The citizen sector: becoming as entrepreneurial and competitive as business. *California Management Review*, 44(3), 120-132.
- Dutta, D.K., & Crossan, M.M. (2005). The Nature of Entrepreneurial Opportunities: Understanding the Process Using the 4I Organizational Learning Framework. *Entrepreneurship Theory and Practice*, 29(4), 425-449.
- Eckhardt, J.T., & Shane, S.A. (2003). Opportunities and Entrepreneurship. *Journal of Management*, 29(3), 333-349.
- European Commission (2014). *A map of social enterprises and their eco-systems in Europe*. Country Report: Poland. Brussels: European Commission.

- Fuentes, M., Arroyo, M.R., & Perez, V.F. (2010). Prior Knowledge and Social Networks in the Exploitation of Entrepreneurial Opportunities. *International Entrepreneurship Journal*, 6, 481-501.
- Greblikaite, J., Sroka, W., & Grants, J. (2015). Development of social entrepreneurship in European Union: policy and situation of Lithuania and Poland. *Transformations in Business & Economics*, 14(2B) (35B), 376-396.
- Hausner, J. (Ed.) (2008). *Przedsiębiorstwa społeczne w Polsce. Teoria i praktyka*. Kraków: Uniwersytet Ekonomiczny w Krakowie, Małopolska Szkoła Administracji Publicznej.
- Hayek, F. (1945). The use of knowledge in society. *American Economic Review*, 35(4), 519-530.
- Herbst, J. (2008). *Polski trzeci sektor w świetle teorii przedsiębiorstwa społecznego*. In J. Dąbrowska (red.), *Od trzeciego sektora do przedsiębiorczości społecznej – wyniki badań ekonomii społecznej w Polsce* (pp. 125-142). Warszawa: Stowarzyszenie Klon/Jawor.
- Holcombe, R.G. (2003). The origins of entrepreneurial opportunities. *The Review of Austrian Economics*, 16(1), 25-43.
- Jesensky, D. (2013). *Creating entrepreneurial opportunities: Interpretative Research about Role of POP Advertising Displays in Customer Purchase Decision Making*. Jyväskylä: University Library of Jyväskylä.
- Korošec, R., & Berman, E. (2006). Municipal support for social entrepreneurship. *Public Administration Review*, 66(3), 446-462.
- Koźuch, A., & Žukovskis, J. (2014). Effective managing of social co-operatives as a form of social enterprise: the case of Poland. *International Journal of Contemporary Management*, 134(4), 83-96.
- Kurleto, M. (2013). Possibility of using in Poland contemporary solutions concerning philanthropy and social entrepreneurship adopted in the U.S. *Global Management Journal*, 5(1-2), 28-35.
- Kusa, R. (2012). *Social entrepreneurship in Poland. A preliminary comparison of research approaches*. 1st Virtual International Conference on Advanced Research in Scientific Fields (ARSA-2012), 3-7 December, 94-97.
- Leś, E. (2004). Co-operatives in Poland: from state-controlled institutions to new trends in cooperative development. In C. Borzaga, & R. Spear (Eds.), *Trends and challenges for cooperatives and social enterprises in developed and transition countries* (pp. 185-196). Trento: Edizioni 31.
- Leś, E., Ciepielewska-Kowalik, A. (2014). *Social economy and social enterprises in Poland: trends, challenges and obstacles*. Paper presented at 54th ERSA Congress, St. Petersburg, August 26-29.
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41, 36-44.
- Peredo, M., & McLean, M. (2006). Social entrepreneurship: a critical review of the concept. *Journal of World Business*, 41, 56-65.
- Plummer, L.A., Haynie, J.M., Godesiaboiss, J. (2007). An Essay on the Origins of Entrepreneurial opportunity. *Small Business Economics*, 28, 363-379.
- Praszkier, R., Zabłocka-Bursa, A., & Jozwik, E. (2014). *Social enterprise, social innovation and social entrepreneurship in Poland*. EFSEIIS National Report, Warsaw: University of Warsaw.
- Roure, C.L., González, N., Nieto, M., García, C., & Solís, V. (2007). Influencia de la existencia y el descubrimiento de oportunidades sobre la actividad emprendedora. *Revista de Empresa: La Fuente de Ideas del Ejecutivo*, 20, 66-77.
- Schumpeter, J. (1934). *Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448-469.
- Shane, S. (2003). *A general theory of entrepreneurship: the individual-opportunity nexus*. Cheltenham, UK: Edward Elgar.

- Shane, S., & Venkatarman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Shepherd, D.A., & DeTienne, D.R. (2005). Prior knowledge, potential financial reward, and opportunity identification. *Entrepreneurship Theory and Practice*, 29, 91–112.
- Short, J.C., Ketchen, D.J., Shook, C.L., & Ireland, R.D. (2010). The Concept of "Opportunity" in Entrepreneurship Research: Past Accomplishments and Future Challenges. *Journal of Management*, 36(40), 40-62.
- Smith, B.R., Matthews, C.H., & Schenkel, M.T. (2009). Differences in entrepreneurial opportunities: the role of tacitness and codification in opportunity identification. *Journal of Small Business Management*, 47(1), 38-57.
- Soderqvist, A. (2011). *Opportunity exploration and exploitation in international new ventures: a study of relationships' involvement in early entrepreneurial and internationalization events*. Helsinki: Edita Prima.
- Starnawska, M. (2011). *Resourcing in social enterprise – content analysis of 'good practices' profiled in 'Atlas of social economy' in Poland*. Retrieved on April 30, 2016 from http://emes.net/content/uploads/publications/resourcing-in-social-enterprise-content-analysis-of-good-practices-profiled-in-atlas-of-social-economy-in-poland/5ESCP-02-Resourcing_in_social_enterprise_content_analysi_s_Marzena_Starnawska.pdf
- Thompson, T.L. (2002). The world of the social entrepreneur. *International Journal of Public Sector Management*, 15(5), 412-431.
- Ucbasaran, D., Westhead, P., & Wright, M. (2009). The extent and nature of opportunity identification by experienced entrepreneurs. *Journal of Business Venturing*, 25, 99–115.
- Von Hippel, E. (1994). 'Sticky information' and the locus of problem solving: implications for innovation. *Management Science*, 40(4), 429–439.
- Zahra, S.A., Korri, J.S., & Yu, J. (2005). Cognition and international entrepreneurship: implications for research on international opportunity recognition and exploitation. *International Business Review*, 14(2), 129-146.
- Zahra, S.A., Gedajlovic, E., Neubam, D.O., & Shulman, J.M. (2009). A typology of social entrepreneurs. Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24, 519-532.

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Student Entrepreneurship in Hungary: Selected Results Based on GUESSS Survey

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Abstract

This study investigates students' entrepreneurial activities and aims to answer questions regarding to what extent do students utilize the knowledge gained during their studies and the personal connections acquired at universities, as well as what role a family business background plays in the development of students' business start-ups. This paper is based on the database of the GUESSS project investigates 658 student entrepreneurs (so-called 'active entrepreneurs') who have already established businesses of their own. The rate of self-employment among Hungarian students who study in tertiary education and consider themselves to be entrepreneurs is high. Motivations and entrepreneurial efforts differ from those who owns a larger company, they do not necessarily intend to make an entrepreneurial path a career option in the long run. A family business background and family support play a determining role in entrepreneurship and business start-ups, while entrepreneurial training and courses offered at higher institutions are not reflected in students' entrepreneurial activities. Universities should offer not only conventional business courses, but also new forms of education so that students meet various entrepreneurial tasks and problems, make decisions in different situations, explore and acquaint themselves with entrepreneurship.

Keywords: entrepreneurship education; higher education; youth entrepreneurship; self-employment; family business background

JEL codes: L26, I21

INTRODUCTION

Business enterprises have become indispensable institutions of modern market economies because they stimulate economic and social development through innovation and job creation. As early as 1980s small-sized enterprises started to play an outstanding role in lowering the rate of unemployment, which had considerably increased due to downsizing and restructuring activities in large companies (Audretsch & Thurik, 2001). Currently, decision-makers are also attempting to seek solutions for the problem of unemployment which grew considerably during the financial crisis of 2008 and the following economic recession. They believe that entrepreneurship as a career opportunity can be a viable solution to youth unemployment.

Although the moderate economic recovery after the crises has improved the rate of youth employment to some extent, a real breakthrough in reducing the unemployment rate has not been achieved yet. Statistical data clearly show that the rate of youth unemployment has increased in most countries, which resulted in difficult to manage economic and social problems. The rate amounted to 21.6% in the EU member states in 2014 (Eurofound, 2015). An important element of managing this problem is the promotion of self-employment and youth entrepreneurship (Eurofound, 2015). Research studies also show that there is some transition of young unemployed people into self-employed (Shutt & Sutherland, 2003).

There are several documents dealing with youth entrepreneurship and its fostering. The Entrepreneurship 2020 Action Plan identifies three areas of intervention. One of these areas is entrepreneurial education and training. Both the Youth Entrepreneurship Strategies (YES), a project stimulating entrepreneurial aspirations of young people, and Erasmus for Young Entrepreneurs (EYE), a business exchange programme, aim at fostering entrepreneurship.

These important documents have come to a common conclusion, namely, that students studying in higher educational institutions must be provided complex assistance to be able to create new businesses. They should be taught good practices, offered reformed entrepreneurial education and given access to financial support.

This study investigates students' entrepreneurial activities. We are seeking an answer to questions such as how much students utilise the knowledge gained during their studies and the personal connections acquired at universities, as well as what role a family business background plays in the development of students' entrepreneurial aspirations, intentions and business start-ups. Also, students' objectives and motivations in becoming entrepreneurs as well as their success and growth orientations are investigated. In order to answer these questions, the Hungarian database of the international research project GUESSS (Global University Entrepreneurial Spirit Students' Survey) is used. After giving a literature overview, this study describes the main characteristics of the database and analyses student-entrepreneurs and their businesses in detail based on the survey of 2013, as this is the last available database.

LITERATURE REVIEW

Main Definitions

Entrepreneurship is a complex concept. It is “the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation” (European Commission, 2003, p. 5). The definition of youth entrepreneurship also attempts to highlight this complexity: youth entrepreneurship is defined as a “practical application to enterprising qualities, such as initiative, innovation, creativity and risk-taking into the work environment (either in self-employment or employment in small start-up firms), using the appropriate skills necessary for success in that environment and culture” (Schnurr & Newing, 1997) quoted in (Eurofound, 2015, p. 11).

The term ‘youth entrepreneurship’ constitutes an integral part of the general definition of entrepreneurship. Half a dozen or so common elements of youth entrepreneurship and entrepreneurship (opportunity recognition, risk-taking, commitment, etc.) indicate that there are only age differences between the two concepts. As for the age of ‘youth entrepreneurship’, the United Nations (UN) uses the age band of 15-24 years. Eurostat includes people who are 15-29 years old in the group of ‘youth entrepreneurs’. The Global Entrepreneurship Monitor (GEM) defines young entrepreneurs as people between the ages of 18-34 years. Although students studying in tertiary education make up only a special subset of the youth population, they are the target audience of this study. This study considers self-employed students to be young entrepreneurs in order to comply with the methodology used by the European data sampling.

Importance of Youth Entrepreneurship

Fostering entrepreneurship of students in higher education results not only in improving unemployment prospects of students, but also has some further benefits. According to GEM findings, the levels of entrepreneurial intentions of respondents belonging to this age group are 1.6 times higher than those of adults (Schot, Kew & Cheraghi, 2015), whereas the proportion of respondents pursuing actual entrepreneurial activities is significantly lower. In addition, businesses run by young entrepreneurs have lower survival rates than those of older entrepreneurs (OECD, 2015). The surviving businesses are more growth oriented. The questionnaire survey on Factors of Business Success conducted by Eurostat shows that enterprises run by people under the age of 30 more than doubled their growth during the examined period of three years, whereas entrepreneurs aged 40 and over achieved only an average growth of 131% (Schrör, 2006).

As for levels of education, the proportion of respondents with tertiary education background established more businesses in higher added-value industries (high-tech) and with higher initial capital (Richert & Schiller, 1994) quoted in (Lüthje & Franke, 2002). According to Autio (2005), enterprises run by well-qualified young entrepreneurs with a solid financial background who are motivated to utilise good business opportunities show higher growth potential.

In the 28 EU member states the rate of self-employed young people amounts to 6.5%, which translates into 2.67 million people. There are considerable differences between countries. Greece with its 16% shows the highest self-employment activity and

Luxembourg the lowest with 3.5%. As for the rate of self-employed respondents, Hungary takes the middle position among 28 EU member states. Studies limited to investigating self-employment came to the same conclusion as above, and state that there is a correlation between higher levels of education and self-employment rate, which means that the knowledge, competences and skills gained in higher educational institutions considerably contribute to entrepreneurship and business start-up intentions (Blackburn, 1997; Green, 2013). Generation role models are also significant in terms of self-employment because a high rate of children follow in their parents' footsteps (Mungai & Valemuri, 2011). 'Older' young people, especially males, are more likely to become self-employed than others (Dolton & Makepeace, 1990).

Who Will Become an Entrepreneur?

Since the threshold of active enterprises is entrepreneurial intention, a great number of business models can be adopted (Ajzen, 1991; Bandura, 1977; Shapero & Sokol, 1982). All of the models focus on complexity of decision-making processes. Numerous attempts have been made to understand the role of entrepreneurial attitudes, activities, conditions, characteristics and aspirations in entrepreneurship (GEM, 2014; YBI, 2011).

Several individual factors (personality traits and attitudes) and institutional factors affect the respondents' decisions to become an entrepreneur. Research studies differ in terms of factors included in the models and in the level of importance assigned to factors. Here are a few examples to show the diversity of coexisting findings. Willingness to take risks and striving to become independent are considered to be of extremely important individual factors (Meager, Bates & Cowling, 2003). Autio and Wennberg's (2010) findings are very surprising. They believe that norms and attitudes of the social group have a stronger impact on entrepreneurial behaviour than the personal attitudes and perceived self-efficacy of the individual herself¹. According to Bartha (2015), institutional factors, such as the taxation system, the level of transaction costs and the administrative burdens might have a significant effect on growth orientation of companies and lead to diverse business structure.

There is a consensus among academics and researchers that education and training provide the knowledge and competencies that are indispensable for entrepreneurship. Particular entrepreneurial knowledge and competencies can be taught and improved by effectively incorporating some subjects in the standard curricular (business studies, marketing, etc.), while others can further be developed by applying innovative teaching methodology (entrepreneurial thinking) (Borsi & Dóry, 2015; Imreh-Tóth, 2015). Universities have not only teaching tasks and responsibilities, but they also play a determining role in shaping opinions and building relationships.

Our previous papers dealt with modelling of students' entrepreneurial intention in detail. The database was analysed with multinomial logistic regression, based on Ajzen's theory of planned behaviour (Gubik, 2013; Gubik, 2015).

¹ Self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations.

Hypotheses

After reviewing the available literature and previous research findings, it turned out that there are still some questions that remained unanswered in the field of student entrepreneurship. Also, a gap in the research literature has been identified since student entrepreneurs' motivation by company size and their effect on students' long-term career plans are to be investigated. That is why the authors of this study formulated and tested the following hypotheses:

- H1:** The rate of self-employment among Hungarian students who study in tertiary education and consider themselves to be entrepreneurs is high.
- H2:** A great majority of self-employed students do not intend to make an entrepreneurial path a career option in the long run. They prefer working as employees in companies.
- H3:** A family business background and family support play a determining role in entrepreneurship career and business start-ups.

MATERIAL AND METHODS

GUESSS (Global University Entrepreneurial Spirit Students' Survey) investigates entrepreneurial intentions and activities of students. The survey explores the students' career intentions immediately after graduation and several years later, examines families' and students' own businesses and investigates their future entrepreneurial visions.² Systematic and long-term analyses help to identify the processes and factors that can have a decisive impact on entrepreneurial intentions.

The first survey was conducted in 2003 with the participation of two countries. Ten years later (in 2013) 34 countries had joined the project and 109,026 students from 759 higher educational institutions sent their responses to the questionnaire. In Hungary 8,839 students completed the questionnaire. Only the institutions where over 1000 students studied were selected for the survey in Hungary.

The distribution of respondents in our database partially represents the distribution of students by higher institution in Hungary. The distribution by the level of study and gender corresponds to the country ratios. As for the field of study, 41.5% of the respondents studied business and economics, 35.5% of them studied humanities and natural sciences, and the remaining 16.2% studied social sciences. The average age of the respondents was 23. About 27.0% of all respondents were younger than 20 and 88% were younger than 30 when they completed the questionnaire.

Mainly descriptive statistics were used to answer the stated hypotheses and the stochastic relationships among the variables were tested. We consider these methods appropriate for highlighting the main differences between different groups of entrepreneurs.

We used SPSS software to analyse the database. The structure of the tables follows the logic of the output tables of the software.

² See project and partners at <http://www.guesssurvey.org>. For more information on the Hungarian database and methodology see Gubik (2015).

RESULTS AND DISCUSSION

Main Characteristics of the Students' Enterprises

In the sample 7.4% of the respondents (658 students) indicated that they ran a business of their own. Over 25% of the respondents running their own businesses were nascent entrepreneurs and had established their businesses in the year when the survey was conducted (2013) (Table 1). The rate of enterprises that were 3 years old or younger amounted to over 50%. Since a major part of enterprises were new or established not long ago, the students did not have much experience.

Table 1. Student enterprises by year of establishment

Answers	Year of establishment	Frequency	%	Valid %	Cumulative %
Valid	2013	152	1.7	25.2	25.2
	2012	84	1.0	14.0	39.2
	2011	89	1.0	14.8	54.0
	2010	64	0.7	10.6	64.6
	2009	30	0.3	5.0	69.6
	2008	29	0.3	4.8	74.4
	2007	16	0.2	2.7	77.1
	2006	18	0.2	3.0	80.1
	2005	20	0.2	3.3	83.4
	Earlier	100	1.1	16.6	100.0
Total	602	6.8	100.0	–	
Missing	left unanswered	56	0.6	–	–
	System	8181	92.6	–	–
	Total	8237	93.2	–	–
Total		8839	100.0	–	–

Source: own elaboration.

Over half of the students running their own businesses were self-employed, 38.4% owned micro enterprises and 3.5% small-sized enterprises. The sample included only three medium-sized enterprises, which will be analysed only in an aggregate form, but they are not included in the comparative analysis of companies by size.

Table 3 shows the distribution of students' enterprises by activity areas and company size. The most popular sectors are 'Trade' (14.9%), 'Education and training' (14.4%) and 'Other services' (18.5%). In the sample 11.7% of respondents listed their activities as 'Other services', where such sectors as food industry, sports and media were the most popular.

The self-employed students were the most active in 'Other services' (including finance and insurance) and 'Education and Training' (18.3%). The indicated services were very varied: cosmetic beauty advisor, insurance advisor, amateur artistic activities and so on. These illustrative examples of performed activities show that students established enterprises to supplement their income in order to finance their studies, and the performed activities contain very few real entrepreneurial elements that would differ from employee elements.

Most micro-enterprises operated in 'Trade' (17.2%) and 'Other services' (16.7%). In the sample businesses out of the 21 small-sized enterprises three operated in 'Trade', three in 'Education and training', three in 'Tourism and catering' and three in 'Other' sectors.

Table 2. Student enterprises by company size

Answers		Frequency	%	Valid %	Cumulative %
Valid	Self-employed (0 employees)	350	4.0	57.7	57.7
	Micro enterprises (1-9 employees)	233	2.6	38.4	96.0
	Small enterprises (10-49 employees)	21	0.2	3.5	99.5
	Medium enterprises (50-249 employees)	3	0.0	0.5	100.0
	Total	607	6.9	100.0	–
Missing	System	8232	93.1	–	–
Total		8839	100.0	–	–

Source: own elaboration.

Table 3. Student enterprises by sector (in %)

Answers	Self-employed	Micro enterprise	Small enterprise
Information technology and communication	9.2	9.5	9.5
Trade (wholesale/retail)	12.9	17.3	14.3
Consulting (law, tax, management, HR)	9.2	10.4	0.0
Advertising / Marketing / Design	4.9	4.8	9.5
Education and training	18.4	9.1	14.3
Tourism and catering	1.7	6.9	14.3
Health services	4.6	2.6	0.0
Other services (including finance, insurance, etc.)	20.4	16.9	9.5
Architecture and engineering	3.7	3.5	9.5
Construction and manufacturing	1.4	4.3	4.8
Agriculture	3.2	2.2	0.0
Other	10.3	12.6	14.3
Total	100.0	100.0	100.0
<i>n</i>	348.0	231.0	21.0

Source: own elaboration.

A considerable proportion of the students cannot be viewed as entrepreneurs if we define an entrepreneur as a person, who takes risks, explores opportunities, is willing to experiment and is performance and future-oriented. Although most students are engaged in different types of enterprises, they perform activities that are very similar to activities performed by employees (e.g. insurance advisors and Avon advisors working on commission bases). It is obvious that these activities are very beneficial for entrepreneurship and entrepreneurial activities, because they allow students to gain an insight into the administrative burden related to entrepreneurship and specificities of entrepreneurial lifestyles (autonomy and working hours).

The high rate of self-employed students indicates how valuable this student group is. However, self-employed students rarely become entrepreneurs who operate ventures with substantial growth rates.

Company Foundation Process

More than half of the respondents started their businesses alone, without co-founders. The rate of respondents with one co-founder amounted to 31%, another 10% had 2 co-founders and the remaining respondents founded ventures with 3 or more co-founders (Table 4).

Table 4. Number of co-founders in student enterprises

Answers		Frequency	%	Valid %	Cumulative %
Valid	No Co-Founders	325	3.7	53.3	53.3
	1 Co-Founder	189	2.1	31.0	84.3
	2 Co-Founders	61	0.7	10.0	94.3
	3 Co-Founders	24	0.3	3.9	98.2
	>3 Co-Founders	11	0.1	1.8	100.0
	Total	610	6.9	100.0	–
Missing	left unanswered	48	0.5	–	–
	System	8181	92.6	–	–
	Total	8229	93.1	–	–
Total		8839	100.0	–	–

Source: own elaboration.

As for co-founder persons, they were mostly family members, as indicated by 189 respondents. A lower rate of co-founders (70 responses) came from non-university and non-college friends, 66 respondents had co-founders from professional networks and only 51 entrepreneurs founded their companies together with peers from higher institutions.

Questions related to company formation (Table 5) clearly show that students did not really express planned behaviour in the process of company formation. The table contains the mean values of the students' answers. Calculating mean of the scale values is also often used in the literature dealing with entrepreneurial intention and student entrepreneurship to aggregate different attributes of attitudes and other Likert scale statements (Ozaralli & Rivenburgh, 2016; Sieger, Fueglistaller & Zellweger, 2014; Zellweger, Sieger & Englisch, 2012; Lüthje & Franke, 2002; Szerb & Márkus, 2007).

The company size significantly affected the assessment (business strategy, target and market analyses, competitiveness analyses and marketing). The larger the enterprise the students owned, the more thoughtful answers they gave to the questions related to company formation. Surprisingly, business family background did not really affect the evaluation of the statements with the exception of two statements 'I was careful not to commit more resources than I could afford to lose' and 'I was careful not to risk more money than I was willing to lose'. Hence, even respondents with family business backgrounds did not make any serious preparations before forming a company. Neither the respondents' age, nor their field of education had any impact on the variables. Thus it is clear that the business and economics knowledge gained during studies is not incorporated in students' entrepreneurialships. The analyses of enterprises by year of their establishment show the same results. It means that enterprises formed during students' studies also show an insignificant relationship with these variables.

Particular variables correlate with each other, which indicates that the respondents either considered themselves to be considerate and thoughtful or they did not.

Table 5. Company foundation process

Answers	Self-employed	Micro enterprises	Small enterprises
I designed and planned business strategies.*	4.06	4.56	5.25
I researched and selected target markets and did meaningful competitive analyses.*	3.93	4.42	4.60
I designed and planned production and marketing efforts.*	4.09	4.48	5.05
The product/service that I now provide is substantially different from the one I first imagined.	3.37	3.36	3.60
I tried a number of different approaches until I found a business model that worked.	3.94	4.08	4.67
I was careful not to commit more resources than I could afford to lose.	4.96	5.27	4.25
I was careful not to risk more money than I was willing to lose.*	4.96	5.06	4.05
I allowed the business to evolve as opportunities emerged.	5.16	5.18	5.20
I adapted what I was doing to the resources we had.	5.11	5.31	5.00
I was flexible and took advantage of opportunities as they arose.	5.28	5.39	5.71

(1=strongly disagree, 7=strongly agree)

*Significant effect of company size

Source: own elaboration.

The Role of Parental Support

A family business background plays a significant role in students' career aspirations (Gubik, 2013; Gubik & Farkas, 2014). In the sample 38.1% of respondents had parents or other family members who were entrepreneurs compared with 28% of students with non-family business backgrounds.

The positive effect of family business background favourably influenced students' entrepreneurial aspirations and was also experienced in the provision of parental support. Parental support was measured on the Likert scale from 1 to 7. Table 6 clearly shows that parents with business experience provided substantial support to their children in all areas. Students had access primarily to contacts and networks. Also, knowledge and advice were highly valued.

Table 6. Parental support

Answers	<i>n</i>	Without a family business background	<i>n</i>	With a family business background
Materials (equipment, facilities)	383	2.45	228	4.25
Contacts and networks	382	2.60	228	4.42
Knowledge and advice	384	2.89	228	4.54
Idea generation / evaluation	380	2.49	225	4.29
Financial resources (e.g., debt and equity capital)	383	2.43	226	4.21

(1=not at all, 7=very much)

Source: own elaboration.

Performance

The responses to the question relating to hours spent at work showed that students worked 25.8 hours per week on average, but there were significant differences. In larger

companies respondents worked more than the average (Table 7). There was a significant correlation between company sizes and the invested amount of work ($r = 0.149$, $p = 0.000$). Students studying economics and business worked more than those studying social sciences ($\text{Eta} = 0.152$, $p = 0.004$).

Table 7. Hours worked per week by company size

Answers	Mean	<i>n</i>	Std. Deviation
Self-employed	21.33	315	19.341
Micro-enterprises	31.00	226	20.281
Small enterprises	32.14	21	17.289
Medium enterprises	58.00	3	11.357
Total	25.79	565	20.308

Source: own elaboration.

The average age of respondents involved in business activities (27.5) was higher than the age of those without enterprises (23.4). In the sample two-thirds of student running enterprises had regular jobs in addition to their studies, which may indicate that they were part-time students studying within the framework of correspondence or distance learning programmes (this was not part of the questionnaire). They are likely to have an established living standard and have an operating enterprise, when they decide to develop themselves. It was not their studies that inspired them to get engaged in entrepreneurial activities.

The surveyed entrepreneur students had to compare themselves with their competitors. The analyses of average scores provided only a limited basis for making any conclusions about competitors because respondents gave average scores to almost all questions (an average value of 4 on a 7-point Likert Scale) except to the question related to job creation. The majority of respondents generally considered that they lagged behind their competitors. When the company sizes were analysed, it turned out that the respondents who owned larger companies (and invested more efforts in their businesses) compared favourably with their competitors. This correlation is significant at $p=0,000$, Eta values are between 0.164 and 0.300 (Table 8).

Table 8. Company performance compared to competitors

Performance type	Mean	Self employed	Micro enterprise	Small enterprise
Sales growth	4.05	3.81	4.32	4.63
Market share growth	3.73	3.43	4.06	4.47
Profit growth	3.97	3.73	4.22	4.65
Job creation	3.01	2.56	3.42	4.84
Innovativeness	3.99	3.67	4.25	5.62

(1=worst, 7=best)

Source: own elaboration.

Future Plans

In the sample 33.8% of the respondents did not plan any increase in the number of employees, 2.8% intended to decrease the workforce and the remaining entrepreneurs indicated growth intentions in the next five years. The company size had a significant impact on expansion plans since owners of larger companies had more positive visions regarding their growth potential. Some respondents (14 students) seemed to have unrealistic expansion plans.

Owners of micro-enterprises intended to transfer into middle-sized companies within a couple of years. Half of these respondents were involved in 'IT/communication' and 'Other' sectors of industry. It was difficult to judge whether the surveyed students gave these responses to the questions in the questionnaire because of the anonymity and confidentiality guaranteed or because they really thought that there was a huge potential in their business ideas.

The same differences in the responses were experienced in students' intended career paths. Among active entrepreneurs 54.5% of students intended to work as employees after graduation. This rate among self-employed was the highest accounting to 62.3% and decreased with company size (Figure 1).

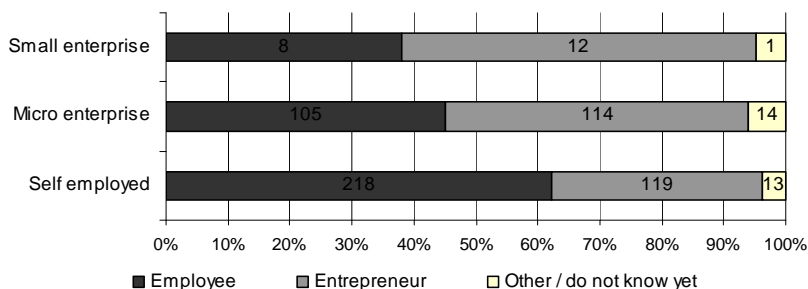


Figure 1. Career aspirations right after graduation by company size

Source: own elaboration.

This correlation is also significant (Cramer V = 0.148, p = 0.000) and is related to the higher performance and longer working hours. Both long working hours and high performance are also experienced in major companies.

Motivations

'Making money and becoming rich' appeared to be the most important goal of entrepreneurial students (mean 5.0 on the Likert scale from 1 to 7). Respondents considered 'to advance my career' to also be important (4.8). The types of motivation such as solving social problems, changing the conditions or changing the way the world works belonged to the least popular motives (Table 9).

Table 9. Motivations and goals

I created my firm in order...	n	Mean	Std. Deviation
... to make money and become rich	613	5.00	1.781
... to advance my career in the business world	612	4.80	1.877
... to solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community)	611	4.34	2.034
... to play a proactive role in shaping the activities of a group of people that I strongly identify with	613	4.18	2.035
... to solve a societal problem that private businesses usually fail to address (such as social injustice, destruction of environment)	618	3.74	2.169
... to play a proactive role in changing how the world operates	611	3.84	2.210
Valid n	605	-	-

(1=strongly disagree, 7=strongly agree)

Source: own elaboration.

Table 10 shows that the level of importance of different elements of motivations and goals decreased with the increase in age of entrepreneurs. Similar changes were experienced in the case of the companies' age (the significant correlation between the two variables, namely the age of entrepreneurs and the age of companies may provide an explanation for this). Money and success appear to be the driving force of young people. They would like to be powerful shapers of their environment. This idealism decreases with the age of the company.

The analysis of company sizes show significant relationship only in case of the motivation of 'to advance my career in the business world'.

Table 10. Effect of entrepreneurs' age and company characteristics on motivations and goals (correlation matrix)

Answers	1	2	3	4	5	6	7	8	9
1. Your age?	1								
2. When did you found your firm (year)	0.492** (0.000)	1							
3. How many employees do you have today (full-time equivalent)?	0.056 (0.254)	0.063 (0.125)	1						
4. to make money and become rich	0.198** (0.000)	0.124** (0.002)	0.058 0.156	1					
5. to advance my career in the business world	0.205** (0.000)	0.162** (0.000)	0.135** (0.001)	0.563** (0.000)	1				
6. to solve a specific problem for a group of people that I strongly identify with (e.g., friends, colleagues, club, community)	0.084 (0.086)	0.111** (0.007)	0.071 (0.084)	0.084* (0.038)	0.331** (0.000)	1			
7. to play a proactive role in shaping the activities of a group of people that I strongly identify with	0.032 (0.519)	0.118** (0.004)	0.075 (0.068)	0.065 (0.109)	0.316** (0.000)	0.833** (0.000)	1		
8. to solve a societal problem that private businesses usually fail to address (such as social injustice, destruction of environment)	0.110* (0.024)	0.110** (0.007)	0.035 (0.390)	0.034 (0.395)	0.294** (0.000)	0.658** (0.000)	0.673** (0.000)	1	
9. to play a proactive role in changing how the world operates	0.123* (0.012)	0.139** (0.001)	0.033 (0.427)	0.067 (0.099)	0.280** (0.000)	0.585** (0.000)	0.620** (.000)	0.770** (0.000)	1

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed).

Spearman's rho values were calculated.

Source: own elaboration.

CONCLUSIONS

The composition of entrepreneur groups is very heterogeneous, starting from Avon advisors through advisors selling financial products to owners of small processing businesses. Particular activities require different amounts of time, money and other investments, involve different risks and show specific characteristics of entrepreneurship. Major conclusions of this study are as follows:

- The vast majority of entrepreneurial students work under conditions that are more characteristic of the status of employees and are considered to be students. Only a small group of respondents comply with the status of 'entrepreneurs' so it is they who make up the student-entrepreneur group.

- A significant part of students are self-employed. They invest less time in their work, are less considerate and growth-oriented than students with larger enterprises and prefer to work as employees after graduation. However, entrepreneurial activities of students who view entrepreneurship as a temporary source of living or supplementary income can also be beneficial because they have to resolve various entrepreneurial tasks and problems, make decisions in different situations and explore and acquaint themselves with entrepreneurship. Students belonging to this group are more likely to become entrepreneurs and are less uncertain about their career path than students who do not pursue entrepreneurial activities at all.
- Entrepreneurial training and courses offered at higher institutions are not reflected in students' entrepreneurial activities. To simplify the survey results, there are two extreme situations: a self-employment form that finances studies and studies that are accompanied by mature entrepreneurship.
- As for the size of enterprises, respondents who owned larger enterprises had a more serious approach to entrepreneurship. They worked longer hours and achieved better performance. The majority of them intended to be entrepreneurs and own enterprises with growth potential.
- Family business background plays a determining role in shaping the entrepreneurial intentions of students. Start-up intention highly depends on the amount of the financial support offered by parents and on a planned and proactive approach towards founding an enterprise.

Based on the research results of the paper we accept the hypotheses of H1, H2 and H3. The results of the survey are useful for training, education and enterprise development. In the training and education context, teaching and learning forms that comply with particular education levels and may be useful in entrepreneurial processes should be developed. Universities should offer not only conventional business courses (for example, business planning) but also new forms of education. This does not necessarily require a substantial investment from educational institutions if they are willing to support the elaboration of new programmes within the current inflexible regulatory environment (for example, higher education training and certification requirements) and finance the development work performed by academic and teaching staff from project resources.

As this database contains more than 8000 answers from more than 30 higher education institutions, the results of the analysis can be generalised in terms of Hungarian students. At the same time, further econometric calculations and qualitative techniques are required to be carried out in order to identify the reasons for the existing differences between the analysed groups.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.
- Audretsch, B.D., & Thurik, A.R. (2001). What's New about the New Economy? Sources of Growth in the Managed and Entrepreneurial Economies. *Industrial and Corporate Change*, 10(81), 267-315.

- Autio, E. (2005). *Report on High-Expectation Entrepreneurship*. London: Business School-Babson College.
- Autio, E., & Wennberg, K. (2010). *You think, therefore, I become: Social attitudes and the transition to entrepreneurship*. Proc. DRUID Summer Conference 2010. Imperial College London Business School, 16-18 June 2010, London. Retrieved on April 30, 2016 from <http://www2.druid.dk/conferences/viewpaper.php?id=501642&cf=43>
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Bartha, Z. (2015). The effect of the tax system as an Institutional Factor on the Business Structure in Europe. In A.S. Gubik & K. Wach (Eds.), *Institutional Aspects of Entrepreneurship* (pp. 97-109). Miskolc: University of Miskolc.
- Blackburn, R. (1997). *Enterprise support for young people: A study of young business owners*. Proc. 20th ISBA Conference, Belfast, November 1997.
- Borsi, B., & Dóry, T. (2015). *A vállalkozóképzés nemzetközi trendjei és a vállalkozói készségek egyetemi fejlesztése* (International trends in entrepreneurship education and developing entrepreneurial competences at university level). *Közgazdasági Szemle*, 57(7-8), 835-852.
- Dolton, P.J., & Makepeace, G.H. (1990). Self-employment among graduates. *Bulletin of Economic Research*, 42(1), 35-53. doi: 10.1111/j.1467-8586.1990.tb00290.x
- European Commission (2003). *Green Paper, Entrepreneurship in Europe*. Retrieved on February 15, 2016 from http://ec.europa.eu/invest-in-research/pdf/download_en/entrepreneurship_europ_e.pdf
- Eurofound (2015). *Youth Entrepreneurship in Europe: Values, Attitudes, Policies*. Luxembourg: Publication Office of the European Union.
- GEM (2014). *Global Entrepreneurship Monitor: 2013 Global Report*. Retrieved on February 15, 2016 from <http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM%202013%20Global%20Report.pdf>
- Green, F. (2013). *Youth entrepreneurship: A background paper for the OECD Centre for Entrepreneurship, SMEs and Local Development*. Paris: OECD.
- Gubik, A.S. (2013). *A magyar hallgatók vállalkozásindító szándékát befolyásoló tényezők modellje: Ajzen tervezett magatartás elméletének kiterjesztése* (The model of factors affecting business start-ups of Hungarian students: the expansion of Ajzen's Theory of Planned Behaviour). *Veze-téstudomány*, 44(7-8), 18-29.
- Gubik, A.S. (2015). Understanding Career Aspirations of Hungarian Students (Chapter 9). In A.S. Gubik & K. Wach (Eds.), *Institutional Aspects of Entrepreneurship* (pp. 131-150). Miskolc: University of Miskolc.
- Gubik, A.S., & Farkas, S. (2014). Entrepreneurial activities of Hungarian students. In A. Vécsey (edit.), *Management, Enterprise and Benchmarking – In the 21st Century* (pp. 125-140). Budapest: Keleti Károly Faculty of Business and Management, Óbuda University.
- Imreh-Tóth, M. (2015). *Az egyetemi vállalkozásoktatás lehetséges szerepe a vállalkozóvá válás elősegítésében*. (The Potential Role of the Entrepreneurship Education of Universities in the Promotion of Entrepreneurship). Szeged: JATEPress.
- Lüthje, C., & Franke, N. (2002). *Fostering entrepreneurship through university education and training: Lessons from Massachusetts Institute of Technology*. European Academy of Management, 2nd Annual Conference on Innovative Research in Management, 2002, May, 9-11, Stockholm. Retrieved on February 20, 2016 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.2530&rep=rep1&type=pdf>
- Meager, N., Bates, P., & Cowling, M. (2003). An evaluation of business start-up support for young people. *National Institute Economic Review*, 186, 59-72. doi: 10.1177/002795010300100111

- Mungai, E., & Velamuri, S.R. (2011). Parental entrepreneurial role model influence on male offspring: Is it always positive and when does it occur? *Entrepreneurship Theory and Practice*, 35, 337-357. doi: 10.1111/j.1540-6520.2009.00363.x
- OECD (2015). *Policy Brief on Youth Entrepreneurship. Entrepreneurial Activities in Europe*. Luxembourg: Publications Office of the European Union.
- Ozaralli, N., & Rivenburgh, N.K. (2016). Entrepreneurial intention: antecedents to entrepreneurial behavior in the U.S.A. and Turkey. *Journal of Global Entrepreneurship Research*, 6(3), 1-32. Doi: 10.1186/s40497-016-0047-x
- Richert, J., & Schiller, R. (1994). *Hochschulabsolventen als Existenzgründer*. Report of the "Deutsche Ausgleichsbank" for the Federal Ministry of Education and Science in Germany, Bonn.
- Schnurr, J., & Newing, A. (1997). *A conceptual and analytical framework for youth enterprise and livelihood skills development: Defining an IDRC niche*. Ottawa: International Development Research Centre.
- Schot, T., & Kew, P., & Cheraghi, M. (2015). *Future Potential. A GEM perspective on youth entrepreneurship*. 2015 Global Enterprise Monitor. Retrieved on March 5, 2016 from <http://www.innovacion.gob.cl/wp-content/uploads/2015/08/gem-2015-youth-report-1436523546.pdf>
- Schrör, H. (2006). *The profile of the successful entrepreneur Results of the survey 'Factors of Business Success'*. Statistics in focus 29/2006, Eurostat.
- Shapero, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. In C.A. Kent, D.L. Sexton & K.H. Vesper (Eds.), *Encyclopaedia of entrepreneurship* (pp. 72-90). New Jersey: Prentice-Hall.
- Shutt, J., & Sutherland, J. (2003). Encouraging the transition into self-employment. *Regional Studies*, 37(1), 97-103. doi: 10.1080/0034340022000036427
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2014). *Student Entrepreneurship Across the Globe: A Look at Intentions and Activities*. St. Gallen: Swiss Research Institute of Small Business and Entrepreneurship at the University of St.Gallen (KMU-HSG).
- Szerb, L., & Márkus, G. (2007). *Karrierválasztás és az oktatási környezet hatása a vállalkozói attitűdökre az egyetemi hallgatók körében Magyarországon, nemzetközi összehasonlításban 2006-ban* (Carrier expectations and the influence of the education environment on student's entrepreneurial attitudes). *Közgazdasági Szemle* (Hungarian Economic Review), 54(3), 248-273.
- YBI (2011). *Global Youth Entrepreneurship Survey 2011*. London: Youth Business International. Retrieved on February 20, 2016 from <http://www.youthbusiness.org/wp-content/uploads/2012/08/YouthEntrepreneurshipSurvey2011.pdf>
- Zellweger, T., Sieger, P., & Englisch, P. (2012). *Coming Home or Breaking Free Career Choice Intentions of the Next Generation in Family Businesses*. St. Gallen: University of St. Gallen.

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Internationalisation Strategies in the Family-owned Businesses: Evidence from Poland

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Abstract

The empirical research was to identify the internationalization strategies in the family-owned business and to analyse the internal factors in family-owned business, which can impact the choice of the certain internationalization strategy. The research had a qualitative character. It was conducted on thirty Polish family-owned companies with their headquarters across the whole country. For the research the method of direct interview was used and it was conducted with 30 family-owned companies owners. The interviews lasted from January 2014 to April 2014. The interviews indicate the most common internationalization strategies: strategy of market development and exploration strategy. The research has confirmed, that family-owned enterprises are characterized by a desire to maintain control over the company in the family hands. The control is thought, as an enterprise property or as a possibility of possession a decisive voice, a specially in the enterprise strategy. The study allowed us to observe the following relations that may be important for policy makers, family business owners, managers in family businesses and advisors. First of all, the family has a significant influence on the choice of the internationalisation strategy. Evidence also shows that the greater experience in the local market, then the greater is the willingness of undertaking an external expansion. The next generation risen-up in the spirit of the enterprise and educated in the consciousness of existing a global market will endeavour to undertake or develop already started internationalisation.

Keywords: Family-owned companies, Internationalisation; internationalisation strategies

JEL codes: F23

INTRODUCTION

Internationalisation is one of the most complex achievement for an every company. Nevertheless, international economy is getting more and more integrated in the proceeded decrease of the obstacles in the exchange market and constant progress in the technological field [Lu, Beamish, 2001, ss.565-586]. Thus, starting internationalisation seems to be a strategy needed for the further development of the company. Considering markets globalization even family companies, historically tended to be concentrated in the local market, can be forced to the external expansion [Donckels, Frohich, 1991, ss.149-160; Floren, 2001 ; Gallo, Estape, 1992 ; Gallo, Garcia-Pont, 1993, ss.45-59; Gallo, Sveen, 1991, ss.181-190 ; Graves, Thomas 2006, ss.207-223; Okoroafo 1999, ss.147-158]. The easiest and the widest definition of the internationalisation is an every kind of business activity taken by the company abroad.

It is believed, that the conception of the company internationalisation process makes an exceptional opportunity to run the company in the external markets, granted that the external market manifests strong differences in comparison to the local environment [Fernandez, Nieto 2005, ss.77-90]. Internationalisation strategy shows the company's activity in the external area. There is a lot of definitions of the internationalisation and the similar number we can find in the literature in the strategies definitions field. In case, when both conceptions (strategy and internationalisation) are understood differently, analysis of the internationalisation strategies require precise definition. Nevertheless, arrangement and confirmation of the certain definition or classification do not solve the problem. While conducting empirical research other authors were often thinking about all different kinds of activities in the small companies. What is more, the level of the analysis were notoriously mistaken, while focusing on the quite common lack of distinction between strategy and mode (method, instrument, path) require a special attention. This is why the results of the researches are so difficult to compare. Despite of the definitional misunderstandings, in the internationalisation strategies research field existing (or not) relation between the firm's characteristic, internationalisation and ways of external expansion is crucial. As far as an internationalisation, as such, was described and examined by many of the authors, there is relatively a little knowledge about internationalisation in the context of the family-owned business [McKibbin, Pistrui 1997, ss.263-280; Sirmon, Arregle, Hitt, Webb 2008, ss. 979-998]. Special features of the family-owned business result in desire to maintain the control over the company in family's hands, an aversion to take an excessive risk and a longtime perspective, which activities can determine both benefits and threats of external expansion taken. The culture of the organization in the company, which is often a reflection of the system of values in the owners family, the formal and informal engagement of the family, the attachment to the tradition and drawing from the experience of the older generations make the internationalisation strategies in those companies theoretically different from the internationalisation in non-family-owned business [Coviello, Munro 1995, pp.49-61; De Chiara, Minguzzi 2002, pp.144-153; Gankema, Snuif, Van Dijken 1997, pp.185-197; Leonidu 2004, pp.279-302; Manelova, brush, Edelman, Greene 2002, pp.9-31; McDougall, Oviatt 1996, ss.23-40; Wolff, Pett 2000, pp.34-47].

The main goal of the empirical research was to identify the internationalisation strategies in the family-owned business and to analyze the internal factors in family-owned business, which can impact the choice of the certain internationalisation strategy. Paper divide in two parts. In the first part definitions of the strategies, the internationalisation strategies and the internal factors, which can impact the choice of the internationalisation strategy will be presented. In the second part will be presented the results of the empirical research.

THE DEFINITION OF THE STRATEGY

In the management and the strategy management field literature we can find many company strategy definitions; M. Marchesnay has quoted over 30 [Marchesnay, 1994]. Among them the author recalls those which can be useful only for his book considerations. However, according to R. Krupski [Krupski, 2001] defining strategies can be general, very formal and not reflect the problem specificity. In this kind of definitions recognition of the strategy in the classical form of contents of the plan is dominating, which means forms of targets, methods (tactics) and resources. As an example, definition of A.D. Chandler [Chandler, 1962] can be given, according to which “the strategy is to identify the main long-term company’s targets and take those course of actions and resources allocation, which are essential to achieve the goal”. In other definitions the authors try to find some kind of essential factor ex. the position in the environment. An example of this approach can be H. Mintzberg definition [Mintzberg, 1979], according to which “the strategy is the method of relation between the organization and the environment formation”. Also Mintzberg has formed definitions so-called 5P, according to which it can be said, that strategy exists if the organizations: approach to the certain goals (Plan), works in hostile, turbulent environment (Ploy), endeavor to the proper patterns and standards reinforcement (Pattern), try to take a certain position in the environment (Position), and try to anticipate, what can happen in their environment (Perspective). However, according to M.E. Porter [Porter, 1996] „the company strategy is to create unique valuable position by the means of differential, relatively to the competition set of actions”. Therefore the substance of the strategy is the selection of the action, which will be different from the selection of the competition.

The foregoing review of the strategy definitions is certainly not comprehensive. Nevertheless, further continuation would be pointless. However, it is worth to recall a very useful, for the present paper considerations, classifications of the strategy conceptions according to K. Obłój [Obłój, 1988]. The author classifies the differences in concepts and approaches in four main concepts:

- Treating strategies as creation and enforcement of the action plan;
- The strategy as an organization’s position in the environment;
- The strategy as a relatively permanent pattern of the organization’s action, as a set of a certain permanent rules, methods of the reactions, supported with the culture of the organization.

The strategy as an emphasis of the organization’s self-identity process significance, an exploration and formulation of the identity, self-owned “me”. Fonfara, Gorynia, Najlepszy i Schroeder [Fonfara, Gorynia et al., 2000, p.13] draw an attention to the

evolution of the strategy understanding during the last several dozen of years. Early strategy definitions referred to the large freedom of the companies actions, and changes in the company environment were not significantly considered, nor necessary, neither sufficient to initiate the company activity. Afterwards, began to notice, that company needs to adapt to the conditions and expectations of the environment, as it has no complete ease to formulate their actions. Thus, the company's action can be not only action but reaction to the environmental changes.

INTERNATIONALISATION STRATEGIES

Since the company expands the markets outside the local markets the internationalisation begins. This implies the need to develop and apply new strategy of adjusted products or services offer to the final consumer. Then it can be said, that the company has internationalisation strategy. Extracting the internationalisation strategy of total company strategy is all the more purposeful, the more external environment differs from the local level. H. J. Ansoff [1965] suggests the classical division of the internationalisation strategies in view of the directions of the portfolio of products- market changes.

The strategies are as follows:

- Defensive – the enterprise offers the same products to the same markets as usual;
- The markets development – the enterprise enters with unchanged offer of the goods or services but to the new markets;
- The product development – the enterprise offers changed product to the old markets;
- Diversification – the enterprise enters to the new markets with the new products.

Similarly as in M.E. Porter's analysis, the factors, which prejudge the internationalisation strategy success are, most of all, configuration and coordination of the enterprise actions. Classical division includes two forms of the configuration: concentrated and dispersed. Concentrated strategy involves the most important chain link of the values on the territory of one or a few countries, when the enterprise produces on the territory of its own country and afterwards exports its products with use of the worldwide dispersed web of distribution. The concentration allows the achievement of the significant benefits from the large scale of production. The main criteria of the concentration strategy are: scale benefits in the particular values chain link: critical mass, productivity, unconsolidated costs reduction, experience effect in particular function, logistic benefits arising out of two chain link of values coordination: costs reductions and terms of deliver. Dispersion strategy means territorial dispersion of the activity. However, this kind of configuration requires significant direct external investments. We can meet this kind of strategy in the sectors, in which the costs of transportation, supplies storage and communication are high. The main strategies of dispersion are: transportation costs or difficulties, the need to adapt products or services to the local needs, the significance of the state power: non-tariff barriers, public procurements, subsidies. Besides the strategies adopted by the company, three additional factors can have significant role in the company internationalisation: key competencies management (technological, production, organizational and managerial), the speed of market entry in regard to the world leaders achievements in the particular field. Other often quoted in the world internationalisation strategy classification literature suggests J.C. Leontiades [1985]]. This strategies differ in the goals, the

essential investments level, required organization costs and use instruments. Those are: skimming, dumping, exploration and penetration. Skimming is an enter to the external markets limited segments, with a low costs, organizational effort of the enterprise and the risk at the same time. The products offer does not change in the significant way. The intermediate export through the agents and licenses is an instrument used to implement that form of strategy. Also dumping means the minimum organizational and financial expenditures and small risk. The sale of the products at low prices allows an increase in the turnovers. The instrument used in dumping strategy is most of all intermediate export through the agents and distributors. In the exploration strategies company is interested in obtaining the information on external markets in order to assess potential for direct investment on a large scale. The company establishes the trade relations, which are characterized by low costs and the limited organizational involvement; the company shall not determine the short-term goals, such as the level of the profits or the share in the market. The company analyzes the consumers behaviors, the potential buyers, suppliers, local authorities and public administration. The most commonly used instruments are export, licenses and joint ventures. The penetration strategy requires the company financial maximum and organizational involvement in a foreign country and its goal is to obtain markets maximum shares in the long term. In this case the risk is high and the instrument are the direct foreign investments. The resources are often transmitted not only for commercial purposes but also to ease the movement of the production phases. It should be emphasized, that the foregoing internationalisation strategies were created for the description of the large companies strategies. The adaptation of all above approaches for the family-owned companies analysis is possible, as all of the above strategies can be efficiently used by small, medium and, already mentioned, large companies. However, it is difficult to deny, that certain strategies are used by small companies more willingly – these are defensive and skimming.

IMPACT FACTORS ON INTERNATIONALISATION STRATEGY IN FAMILY-OWNED BUSINESSES

A family-owned enterprise is a special and complex economic entity from both sociological and economical points of view. Mainly due to the fact of coexistence and functioning two entity in the one body – the family and the business. In 1980 two researchers Davis and Stern [1980] presented a model depicting a family-owned company as a system of three circles – a family, an enterprise and a property. Every of those subsystems is described as an independent link but coexisted in a very tight relationship. Based on the theoretical frames (eclectic Duninng's theory [1988] and resourceful internationalisation enterprise strategy) and own researches and observations a set of key resources was extracted, which affects the family business and its internationalisation. Amongst them was family engagement, both formal and informal, in the preset and strategic activity of the company. It can be measure by use of the family members in the decision process, and also the number of the generations working in the company. As a rule, it is taken by consideration the number of the family members in the managerial and leadership positions in a relation to the all employees. Another resource, resulting directly from the family nature of the company is the values system of the enterprise. This system will be often a calque of the values system of the family. It can be divided in two different dimensions:

an internal dimensions, called a company organization culture and an external dimension, which consist of reputation, renown and good name of the company. To the set of the key factors the author classified also resource based on knowledge, a specially the knowledge arising from the experience. Widely understood knowledge resource is considered one of the most important resource in any enterprise. In the family enterprise the knowledge resource is based on an experience and tradition, which are considered, the so-called, a knowledge hidden, difficult to accessible for others and a specially for the competition. To the family-own company internal factors list, which have an influence on its internationalisation we should also include a special kind of trust, which exist between the family members, the company employees and also relations with its external environment.

Foregoing considerations have led to the formulation of the following propositions:

Proposition 1: the family-owned enterprises taking external expansion are driven by desire to maintain control over the company in the family hands, the desire to minimize the risk, and also establish long-term relations.

P1a: A specific features of the family-owned enterprises impact the choice of concentration strategy in the external expansion (according to Porter).

P1b: A specific features of the family-owned enterprises impact the choice of markets development strategy in the external expansion (according to Ansoff).

P1c: A specific features of the family-owned enterprises impact the choice of exploration strategy in the external expansion (according to Leonides).

RESEARCH RESULTS

Methodology

The research had a qualitative character. It was conducted on thirty Polish family-owned companies with their headquarters across the whole country. The companies were selected by using author's personal contacts. For the research the method of direct interview was used and it was conducted with 30 family-owned companies owners. Each interview lasted about hour and a half.

The interviews lasted from January 2014 to April 2014. In the chosen family-owned enterprises the family has control over the company and it has significant influence on the property, the management and it has the long-term activity perspective. The family is engaged in the present enterprise functions both formal and informal. The intensification of the internationalisation process is measured with the number of the external markets operated and the share of the external expansion profits in the general profits of the enterprise.

Findings

The purpose of the research was to identify the foreign expansion strategy in the family-owned companies. Hereafter there are presented the main characteristics of the family-owned enterprises chosen to the research including the analysis of the selected strategy of the foreign expansion.

Among 30 family-owned enterprises 25 deals with industrial goods, 4 – with services and only 1 with consumption goods (table No.1.). Considering the level of the employment those are: 20 family-owned company from 11 up to 50 persons, 4 enterprises em-

ploy up to 10 persons, whereas 6 of the companies employ from 51 up to 250 persons (table No. 1.). 20 enterprises are in the range of company turnovers from 2,1 up to 10 million euro, 8 family-owned companies are in the level of company turnovers up to 2 million and only two enterprises reach the level of the company turnovers from 10,1 up to 50 million euro (table No.2). In the all 30 analyzed family-owned enterprises the property of the enterprise is in 100% in the family hands. Those are private enterprises, limited to the Polish capital only (table No.2). The average existing period of those family-owned companies is 15 years. 25 of the family-owned enterprises are managed by the first generation and in 15 of enterprises examined also the second generation is involved in the present company management. The remaining 5 family-owned enterprises, have already done the succession to the second generation. In the all analyzed cases the founders (first generation) are still actively participating in the company life.

Table 1. Characteristic of the business activity and the level of the employment in examined family-owned enterprises

Business characteristics	Number of the family-owned enterprises	Level of employment	Number of the family-owned enterprises
Industrial goods	25	0-10 persons	4
services	4	11-50 persons	20
Remained	1	51-250 persons	6
	30		30

Source: own elaboration.

Table 2. Level of the company turnovers and property in the enterprises interviewed

Level of turnovers	Number of the family-owned enterprises	Property	Number of the family-owned enterprises
up to 2 mln euro	8	Private enterprise/ only Polish capital	30
2,1-10 mln euro	20	Percentage of family ownership	100%
10,1-50 mln euro	2		
	30		

Source: own elaboration.

The interviews indicate the most common internationalisation strategies: strategy of market development and exploration strategy. 25 enterprises owners have indicated those strategies as leading internationalisation strategies in the company activity (compare table No.3). 4 of the owners have indicated only the markets development and 10 admit to concentration strategy. Among analyzed family-owned enterprises did not appear such internationalization strategies, as defensive strategy, diversification strategy, skimming or dumping strategies.

The selected enterprises cooperate in general with the European Union countries such as: Germany, Spain, Italy, Greece, France, Switzerland, Holland, Belgium, UK and also with Russia, Norway and USA. The external expansion process of the family-owned enterprises examined seems to be an intensive process, as 22 of family-owned companies operates in total 10 foreign markets. Half of the family-owned enterprises reach up to 85% share of the

total company profits. Only one of analyzed family-owned enterprises expands just one external market. Despite of the form of cooperation taken, this company reaches up to 25% share of the total company profits, which can indicate a large intensification of the process. All family-owned companies interviewed indicate the willingness of further intensification the forms of foreign cooperation taken. Whereas, 3 of family-owned companies owners are searching for a partner to create joint venture. In the table No.4 it is shown an intensification of the internationalisation process in the chosen family-owned enterprises.

Table 3. The internationalisation strategies in family-owned companies examined

Foreign expansion strategy	Number of family-owned enterprises ¹
Exporation strategy	25
Markets development strategy	
Markets development strategy	4
Concentration strategy	10

Source: own resource.

Table 4. Intensification of the internationalisation process in the chosen family-owned enterprises

Number of family-owned enterprises	Number of markets operated	Profits share of the foreign expansion
15	6	85%
7	4	65%
5	3	40%
2	2	25%
1	1	25%

Source: own resource.

The second purpose of the examination was analysis of the family-owned enterprise internal factors, which can impact the internationalisation strategy taken. Internal factors of the family-owned company were presented in the first chapter of this paper. The research has confirmed, that family-owned enterprises are characterized by a desire to maintain control over the company in the family hands. This is indicated also by the fact, that in above 30 family-owned enterprises sample, all in 100% are the family property. Up to 25 of family-owned enterprises owners admitted, that when it comes to decision on foreign cooperation the crucial is the ability to control a certain strategy by the family. The control is thought, as an enterprise property or as a possibility of possession a decisive voice, a specially in the enterprise strategy. It is also confirmed in chosen by the family-owned enterprises foreign expansion strategies. In the great majority the concentration and markets development strategies were chosen (compere table 3). These strategies are characterized by the possibility of maintaining control ex. over decisions concerning the enterprise, obviously assuming, that those decisions do not impact the other factors ex. of market. Mentioned above strategies also allow to stay independent. Due to the fact, that in family-owned enterprises the company is the center of the family life, mentioned above independency is the desired feature for the owners of the family-owned company. It is

¹ The number of the enterprises does not sum up, as the respondents could indicate more than one internationalisation strategy.

confirmed in the responses of the owners interviewed enterprises, who have indicated independency as a main motive of undertaking their own business. As a result of the research, very important is to minimize the risk during taking certain decisions concerning the enterprise, including those connected with internationalisation strategy. The owners of the family enterprises admitted to the aversion to an excessive risk taken. As the arguments, they pointed at responsibility for family function, family welfare, and protecting the family property. Obviously, it does not mean that any risk decision can be taken. Nevertheless, decisions are determined by long-term perspective and not short-term speculations. It is confirmed by family-owned companies strategies taken. Observations and interviews suggest, that the strategy and the foreign partners are chosen in such a manner, to permit a long-term cooperation. In all family-owned enterprises examined, a willingness of having the own foreign branch was shown. However, the connected with this risk for 23 of 30 companies owners seemed to be too high. An additional factor inhibiting starting a foreign business activity is financial issue, which was mentioned by all respondents. Because of own resources limitation, to take this form of cooperation, the companies would be forced to resort to an external financing. Unlike family-own companies in other countries, Polish family-owned enterprises are not afraid to use ex. bank loans. Nevertheless, the situation in the banking sector influenced by economic crisis resulting with restrictions in bank lending interfere the family-owned companies granting the banking loans.

The family-owned companies interviewed are characterized with certain hermeticity compering to the environment. According to the author, it is in the most due to the emotional approach of the family members towards their own enterprise. Such behavior is not only pejorative constituent, but it is thought to be an expression of the family involvement in the functions and activities of the company. All the family members respond, that their company is the family members with their formal, as the employees and informal approach. The author's observations confirm the power of influence also those members of the family, which are not the company employees. The decisions connected with the enterprise are not discussed and analyzed only in the company, but equally often during the family meeting, and so to say, at the dinner table. However, it is need to remember, that the family widespread involvement has both pros and cons. The success lies in the ability to perceive and prevent those threats. The family-owned companies characterized with an exceptional system of values, which, as the author mentioned above, often are a reflection of the family system of values. This system of values reflects in the organizational culture of the family-owned company. Up to 29 family-owned company owners state, that the culture of the enterprise is formed by the family and impact the strategy choice, including strategy. For the example, if the members of the family travel a lot, learn foreign languages and get to know other cultures etc., then they start to notice in the external expansion a chance for development. In the analyzed family-owned enterprises all mentioned elements have occurred. Additionally, the successors are trained on the faculties connected with conducting international business. These elements form an organizational culture and in the same way affect the opening to start or develop international expansion.

The 5 of family-owned companies owners have also indicated, that experience of the previous generation is not without significance for internationalisation strategy. The experience gained by the founders in the one foreign market was also used on taking expansion into another. It is also worth to analyze the role of the experience as a knowledge transfer.

In the family-owned companies there is a knowledge transfer to the next generations. In half of the enterprises examined, even though they are still managed by the first generation, the second one is already formally present in the company. The author has conducted interviews with the representatives of the second generation in 10 of the companies. According to the conversations it can be stated, that familiarization with the company, its functions, advantages and problems, has taken place from the childhood. This is, of course due to the affiliation to the family, in which family life interweave with the company life. The most of the respondents confirmed rising up in the spirit of the enterprise. They are also willing to use the experience of predecessors. For undertaking international cooperation extremely important issue proved to be the level of confidence, which the foreign partner can be granted. 29 of 30 analyzed family-owned companies owners claimed, that the smallest concerns, when starting international cooperation, appear when the potential foreign partner is also a family-owned company. Apart from above-mentioned family-owned companies internal factors, which can impact the choice and realization of certain external expansion strategy the owners mentioned also the role of the environment and ability to finance the foreign expansion. Due to occurrence of the complex relation between the environment and family-owned company and specificity of financing in the family-owned companies, the author allowed herself not to include in analysis those issues, which certainly may be the subject of the further research. The author has decided on such an assumption also due to the willingness of fulfilment only internal characteristic of the family-owned companies.

IMPLICATIONS & RECOMMENDATIONS

The study allowed us to observe the following relations that may be important for policy makers, family business owners, managers in family businesses and advisors. There is a strong relation between the engagement and the family property and undertaking an internationalisation. It means that, the family has a significant influence on the choice of the internationalisation strategy. It can both encourage and support this process and inhibit it. All depends on whether internationalisation is seen as a chance or a threat. In the enterprises examined the external expansion has an equal meaning as the enterprise development strategy, a chance for an improvement the company function and enlargement of the family property. In all examined family-owned enterprises the company development has an equal meaning, that the enrichment of the family ownership. There is a relation between the level of the experience, reputation and renown and undertaking an internationalisation. It means, that the greater experience in the local market, then the greater is the willingness of undertaking an external expansion. The next generation risen-up in the spirit of the enterprise and educated in the consciousness of existing a global market will endeavor to undertake or develop already started internationalisation. Whereas, if the company has a good reputation and renown in the local market it will be the factor encouraging to undertake an international cooperation. Here arises the presumption of the possibility of transferring a good renown positive effect and reputation from the home market to the foreign market. There is a relation between the system of values expressed in family-owned company organizational culture and undertaking an external expansion. It is not just about concept of the culture-oriented development, opening to the new challenges, but also about trust, which the foreign partners can be granted. The strong and compact organization causes, that the family-owned companies

are more willing to undertake a certain, long-term cooperation. The choices of the international expansion strategies confirmed, that the family-owned enterprises follow the willingness to maintain the control in the family hands, endeavor to minimize the risk and also to establish a long-term forms of cooperation. Specific features of the family-owned companies make the foreign family-owned companies, as a business partners preferable.

CONTRIBUTION & VALUE ADDED

The purpose of this paper was to present the results of the empirical research conducted on the sample of 30 family-owned companies. The presented examination identifies family-owned companies internationalization strategies and analyzes the internal factors, which determine the choice of the certain strategy. The examination has also shown the relation between the above-mentioned family-owned companies characteristics and the choice and realization of a certain enterprise internationalisation strategy. Of course, there are certain limitations resulting, inter alia, in the number of the companies participating in the study. It is, obviously too small to make generalizations for all family-owned companies. However, this studies can provide a starting point for the further research.

REFERENCES

- Ansoff H.J. *Corporate Strategy*. McGraw-Hill, New York 1965.
- Arregle, J.-L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73-95.
- Astrachan, J. H. (2010). Strategy in family business: Toward a multidimensional research agenda. *Journal of Family Business Strategy*, 1(1), 6-14.
- Basly, S. (2007). The internationalization of family SME: An organizational learning and knowledge development perspective. *Baltic Journal of Management*, 2(2), 154-180.
- Bell, J., Crick, D., & Young, S. (2004). Small firm internationalization and business strategy. *International Small Business Journal*, 22(1), 23-56.
- Bennedsen M., Van der Heyden L. (2010), What Can We Learn From Long-Lived Family Firms, Faculty and Research Working Paper, s. 81.
- Björnberg Å., Nicholson N. (2012), Emotional Ownership, The Next Generation's Relationship With the Family Firm, *Family Business Review*, z. 25, s. 374-390.
- Borrmann, W.A, 1970, Managementprobleme international er Unternehmungen,
- Casillas, J. C., & Acedo, F. J. (2005). Internationalisation of Spanish family SMEs: An analysis of family involvement. *International Journal of Globalisation and Small Business*, 1(2), 134-151.
- Casillas, J. C., Acedo, F. J., & Moreno, A. M. (2007). *International entrepreneurship in family businesses*. Cheltenham, UK: Edward Elgar Publishing.
- Chandler A.D. *Strategy and structure*. Cambridge, Massachusetts, 1962, s. 13.
- Claver, E., Rienda, L., & Quer, D. (2007). The internationalisation process in family firms: Choice of market entry strategies. *Journal of General Management*, 33(1), 1-14.
- Claver, E., Rienda, L., & Quer, D. (2008). Family firms' risk perception: Empirical evidence on the internationalization process. *Journal of Small Business and Enterprise Development*, 15(3), 457-471.
- Coviello, N. E., Munro, H. J., 1995, Growing the entrepreneurial firm: Networking for international market development, *European Journal of Marketing*, 29 (7).

- Davis J.A, Stern D.,1980, Adaptation, survival, and growth of the family business: An integrated system perspective, *Human Relations*, nr 34.
- Davis, P. S., & Harveston, P. D. (2000). Internationalization and organizational growth: The impact of internet usage and technology involvement among entrepreneur led family businesses. *Family Business Review*, 13(2), 107-120.
- De Chiara, A., Minguizzi, A., 2002, Success factors in SMEs' internationalization processes: An Italian investigation, *Journal of Small Business Management*, 40 (2).
- Donckels, R., Frohlich, E., 1991, Are family businesses really different? European differences from STRATOS, *Family Business Review*, 4(2).
- Dunning, J., 1988, The eclectic paradigm of international production: A restatement and some possible extension, *Journal of International Business Studies*, 19 (1).
- Ellis, P. (2008). Social ties and international opportunity recognition. Unpublished manuscript. Hong Kong Polytechnic University
- Erdener, C., & Shapiro, D. M. (2005). The internationalization of Chinese family enterprises and Dunning's eclectic MNE paradigm. *Management and Organization Review*, 1(3), 411-436.
- Fernandez, Z., & Nieto, M. J. (2005). Internationalization strategy of small and medium-sized family businesses: Some influential factors. *Family Business Review*, 18(1), 77-89.
- Fernandez, Z., Nieto, M.J., 2005, Internationalization strategy of small and medium-sized family businesses: Some influential factors, *Family Business Review*, 13(3).
- Flören, R., 2001, Internationalization of family business in the Netherlands: Research results about implementation of new international strategies and barriers to growth in international markets., w: BDO Accountants and Advisors, University of Nyenrode, Breukelen, Netherlands.
- Fonfara, K, Gorynia, M, Najlepszy, E, Schroeder, J., 2000, Strategie przedsiębiorstw w biznesie międzynarodowym, Wyd. Akademii Ekonomicznej, Poznań.
- Gallo, M. A., & Pont, C. G. (1996). Important factors in family business internationalization. *Family Business Review*, 9(1), 45-59
- Gallo, M.A., Estapé, M.J., 1992, Internationalization of the family business, Research paper n. 230, IESE Business School, Barcelona, Spain.
- Gallo, M.A., Garcia-Pont, C., 1996, Important factors in family business internationalization, *Family Business Review*, 9 (1).
- Gallo, M.A., Sveen, J., 1991), Internationalizing the family business: Facilitating and restraining factors, *Family Business Review* 4 (2).
- Gankema, H.G.J., Snuij, H.R., Van Dijken, K.A., 1997, The internationalization process of small and medium sized enterprises: An evaluation of the stage theory. In R, Donckels A. Miettinen (red.), *Entrepreneurship and SME research: On its way to the next millennium*.
- Gorynia, M., (red.) 2005, Strategie firm polskich wobec ekspansji inwestorów zagranicznych, Polskie Wydawnictwo Ekonomiczne.
- Graves, C., & Thomas, J. (2004). Internationalisation of the family business: A longitudinal perspective. *International Journal of Globalisation and Small Business*, 1(1), 7-27.
- Graves, C., & Thomas, J. (2006). Internationalization of Australian family businesses: A managerial capabilities perspective. *Family Business Review*, 19(3), 207-224.
- Graves, C., & Thomas, J. (2008). Determinants of the internationalization pathways of family firms: An examination of family influence. *Family Business Review*, 21(2), 51-167.
- Graves, C., Thomas, J., 2006, Internationalization of Australian family businesses: A managerial capabilities perspective, *Family Business Review*, 19 (3).

- Leonidou, L., 2004, An analysis of the barriers hindering small business export development, *Journal of Small Business Management*, 42 (3).
- Leontiades J.C. *Multinational Corporate Strategy*, D.C. Heath, Lexington 1985.
- Lu, J.W., Beamish, P.W., 2001, The internationalization and performance of SMEs, *Strategic Management Journal*, 22(6/7).
- Manolova, T.S., Brush, C.G., Edelman, L.R, Greene, P.G., 2002, Internationalization of small firms: Personal factors revisited, *International Small Business Journal*, 20 (1).
- Marchesnay M. *Zarządzanie strategiczne. Geneza i rozwój*. Poltex, Warszawa 1994.
- McDougall, P.P., Oviatt, B.M., 1996, New venture internationalization, strategic change, and performance: A follow-up study, *Journal of Business Venturing*, 11 (1).
- McKibbin, P., & Pistrui, D. (1997). East meets west: Innovative forms of foreign trade finance between Italian family enterprises and emerging SMEs in Romania. *Family Business Review*, 10(3), 263-280.
- McKibbin, P., Pistrui, D., 1997, East meets west: Innovative forms of foreign trade finance between Italian family enterprises and emerging SMEs in Romania, *Family Business Review*, 10(3).
- Menéndez-Requero, S. (2005). Growth and internationalization of family businesses. *International Journal of Globalisation and Small Business*, 1(2), 122-133.
- Mintzberg H. *The Structuring of Organization*. Englewood Cliffs, 1979, s. 14.
- Misala, J., 1990, *Teorie międzynarodowej wymiany gospodarczej*, Państwowe Wydawnictwo Naukowe, Warszawa.
- O'Farrell, P. N., Wood, P. A., & Zheng, J. (1997). Internationalisation by business service SMEs: An inter-industry analysis. *International Small Business Journal*, 16(2), 13-33.
- Obłój K. *Koncepcje strategii organizacyjnej*. „Przegląd Organizacji”, 1988, nr 11.
- Ojala, A. (2008). Entry in a psychically distant market: Finnish small and medium-sized software firms in Japan. *European Management Journal*, 26(2), 135-144.
- Ojala, A. (2009). Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International Business Review*, 18(1), 50-59.
- Ojala, A., & Tyrvaänen, P. (2007). Market entry and priority of small and medium-size enterprises in the software industry: An empirical analysis of cultural distance, geographical distance, and market size. *Journal of International Marketing*, 15(3), 123-149.
- Okoroafo, S.C. (1999). Internationalization of family businesses: Evidence from north-west Ohio, U.S.A.. *Family Business Review*, 12(2), 147-158.
- Okoroafo, S.C., 1999, Internationalization of family businesses: Evidence from Northwest Ohio, USA, *Family Business Review*, 12.
- Parker, B., 1998, *Globalization and Business Practice: Managing Across Boundaries*, Sage Publications, London.
- Popczyk, W., *Przedsiębiorstwa rodzinne w otoczeniu globalnym*, 2013.
- Popczyk, W., Winnicka – Popczyk, A., 1999, *Przedsiębiorstwo rodzinne – determinanty dalszego rozwoju w gospodarce polskiej*, doctoral dissertation, Uniwersytet Łódzki;
- Porter M.E. What is Strategy. „*Harvard Business Review*”, 1996, nr 11-12.
- Rynarzewski, T., Zielińska-Głębocka, A., 2006, *Międzynarodowe stosunki gospodarcze. Teoria wymiany i polityki handlu międzynarodowego*, Wydawnictwo Naukowe PWN, Warszawa.
- Safin, K., 1991, *Przedsiębiorstwa rodzinne*, *Ekonomika i Organizacja Przedsiębiorstwa*, 5/1991.

- Safin, K., 1993, Zachowania strategiczne przedsiębiorstw rodzinnych w RFN, *Ekonomika i Organizacja Przedsiębiorstwa* nr 2/1993.
- Safin, K., 2002, Zarządzanie małą firmą, Wrocław.
- Salvato, C., & Melin, L. (2008). Creating value across generations in family-controlled businesses: The role of family social capital. *Family Business Review*, 21(3), 259-276.
- Sciascia, S., Mazzola, P., Astrachan, J. H., & Pieper, T. (2010). The role of family ownership in international entrepreneurship: Exploring nonlinear effects. *Small Business Economics*. doi:10.1007/s11187-010-9264-9, Published online 07 March 2010.
- Sirmon, D.G., Arregle, J.-L., Hitt, M.A., Webb, J.W., 2008, The role of family influence in firms' strategic responses to threat of imitation, *Entrepreneurship Theory and Practice*, 32(6).
- Svinth, R. L., & Vinton, K. L. (1993). Do family-owned businesses have a strategic advantage in international joint ventures? *Family Business Review*, 6(1), 19-30.
- Thomas, J., & Graves, C. (2005). Internationalising the family firm as a demonstration of an entrepreneurial culture. *Journal of Small Business and Entrepreneurship*, 17(2), 91-113.
- Tsang, E. W. K. (2001). Internationalizing the family firm: A case study of a Chinese family business. *Journal of Small Business Management*, 39(1), 88-94.
- Tsang, E. W. K. (2002). Learning from overseas venturing experience: The case of Chinese family businesses. *Journal of Business Venturing*, 17(1), 21.
- Wolff, A. J., Pett, T. L., 2000, Internationalization of small firms: An examination of export competitive patterns, firm size, and export performance, *Journal of Small Business Management*, 38 (2).
- Wright, M., Westhead, P., & Ucbasaran, D. (2007). Internationalization of small and medium-sized enterprises (SMEs) and international entrepreneurship: A critique and policy implications. *Regional Studies*, 41(7), 1013-1029.
- Yeung, H. W. (2000). Limits to the growth of family-owned business? The case of Chinese transnational corporations from Hong Kong. *Family Business Review*, 13(1), 55-70.
- Yip G.S, 1996, Strategia globalna. Światowa przewaga konkurencyjna, PWE, Warszawa.
- Zahra, S. A. (2003). International expansion of U.S. manufacturing family businesses: The effect of ownership and involvement. *Journal of Business Venturing*, 18(4), 495-512.
- Zarządzanie strategiczne. Konceptcje. Metody. Krupski R. (red.). Wydawnictwo Akademii Ekonomicznej im. Oskara Langego we Wrocławiu, Wrocław 2001. s. 13

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Key Success Drivers of Innovative Technologies: Empirical Analysis of Consumers' Acceptance of Mobile in-store Payment

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Abstract

Despite the growing usage of mobile devices for a number of everyday tasks, diffusion of in-store mobile payment (M-Payment), i.e. proximity payment, is still low and customers' acceptance is sparse. To clarify this topic, this study combines the individual disposition to adopt and use M-Payment technologies with system-based evaluations in an extended Technology Readiness and Acceptance Model. In order to test the hypotheses, we conducted an online survey in cooperation with a German grocery retailer. Using the retailer's newsletter subscription list, a large sample of N=3,250 could be generated. This sample is representative for German citizens regarding gender and brand of mobile device and almost representative regarding age, job and net household income. Findings provide evidence for a general effect of technology readiness on the determinants of behavioural intention to use in-store M-Payment and show a significant effect on actual usage. 'Convenience' is the determinant, which fosters the acceptance of mobile payment technologies the most. By combining technology readiness factors with constructs from Davis (1989) technology acceptance model, we offer a conceptual framework that helps to understand how and why consumers adopt new technologies. By applying our model to a representative sample in a large European country market, we provide evidence for a general effect of technology readiness on consumers' behavioural intention to use in-store M-Payment and discover a significant effect on actual M-Payment usage.

Keywords: Success Drivers of Innovative Technologies; In-Store Mobile Payment (M-Payment), Technology Readiness Index (TRI 2.0)

JEL codes: C33, F21

INTRODUCTION

Mobile devices, especially smartphones, have become our everyday companions. Consumers use their smartphones for more and more activities (e.g., social networking, gaming) and to accomplish certain tasks (e.g., shopping, information gathering) (TNS Infratest and Google, 2015). At the same time, proximity payment or in-store mobile payment (M-Payment) services are struggling with a low penetration rate and restrained acceptance (Mays, 2015). For example, in the U.S. only 1 out of 10 smartphone users has used the mobile device for a proximity mobile payment in 2014 (eMarketer, 2015).

Although the underlying technology is available for several years and a number of retailers have introduced it to their stores, industry experts and academic researchers are at issue of what is hindering market diffusion of M-Payment systems. One mostly overlooked reason could be that consumers are “technologically not ready” for M-Payment utilization. These thoughts lead to two important research questions: (1) Are people psychologically ready to use M-Payment technologies yet and (2) which motivational benefits would foster the acceptance of mobile payment technologies?

Parasuraman (2000) argued that the relative dominance of positive and negative feelings about technology would vary across people and cause corresponding variations in people’s reaction to embrace and employ new technologies which is manifested in the technology readiness index (TRI, here referred to as TRI 1.0). Since the introduction of TRI 1.0, the pace of technological change has accelerated, with the advent of advances such as high-speed mobile Internet access, augmented reality, location-based services or touch-screen control. Hence, recently an updated and streamlined TRI 2.0 was developed, consisting of four dimensions: optimism, innovativeness, discomfort and insecurity (Parasuraman & Colby, 2015). The authors describe TRI 2.0 as a robust predictor of technology-related behavioural intentions as well as actual behaviours but also mention some methodological limitations that make it necessary to empirically validate its utilizability. Within this research, we use TRI 2.0 to investigate the effects of technology readiness in the context of in-store M-Payment.

The contribution of this study is three-fold: (1) We investigate what might motivate individuals to use their mobile devices for in-store M-Payment, (2) we develop a conceptual model for in-store M-Payment acceptance and (3) we provide one of the first studies that empirically employ TRI 2.0 in a large sample field study.

CONCEPTUAL BACKGROUND & HYPOTHESES

Based on the Theory of Reasoned Action Davis (1989) developed the technology acceptance model (TAM) which states that the intention to use certain technology is a consequence of beliefs on two dimensions: usefulness and ease of use. Moreover, researchers extended TAM by integrating additional dimensions (e.g., trust or convenience) to enhance its explanatory power (Childers, Carr, Peck, & Carson, 2001; Ha & Stoel, 2009). Lin, Shih, and Sher (2007) combined TRI 1.0 and TAM to propose and test a technology readiness acceptance model. The authors also called for more comprehensive research to investigate further variables and their interactions that could influence

technology adoption. Hence, we combine TRI 2.0 with dimensions of the extended technology acceptance model to determine consumers' intention to use in-store M-Payment.

TRI 2.0 was mainly developed to obtain information about motivators and inhibitors underlying the adoption and use of cutting-edge technologies (Parasuraman & Colby, 2015). The authors indicate that TRI 2.0 can be used as a potentially valuable psychographic variable in applied, decision-oriented research in contexts where technology-based innovation plays an important role. One key proposition of our study is that consumers' technology readiness has a considerable potential in explaining users' M-Payment motivations. Testing the Technology Readiness and Acceptance Model (TRAM), Lin et al. (2007) found empirical evidence for an impact of technology readiness on perceived usefulness and perceived ease of use. Several follow-up studies confirm these effects (e.g., Chen, Liu, & Lin, 2013; Lin et al., 2007). Due to similarity between perceived usefulness and convenience, we expect a related effect of technology readiness on convenience. Chandra, Srivastava and Yin-Leng Theng (2010) have shown that in a mobile payment context not only the characteristics of mobile service providers but also the characteristics of the technology are antecedents of consumer trust. Thus, we expect an impact of technology readiness, i.e., the individual's disposition to adopt and use technology, on trust. Summing up, we postulate:

H1: Consumer's technology readiness has a positive effect on perception of (a) usefulness, (b) ease of use, (c) trust and (d) convenience of in-store M-Payment.

Perceived usefulness is regarded as a relevant factor in determining consumers' intentions to adopt a new technology (Davis, 1989). If consumers perceive a technology as useful, i.e., an advantageous and effective way to pay a transaction, they generally develop a positive intention toward its use (Kim & Forsythe, 2008). The easier a technology is to use, the less mental effort is required to handle it. Because consumers attempt to minimize the effort in their behaviour, they tend to choose the way of shopping and paying that is most effortless (Venkatesh & Davis, 2000). In an uncertain environment, such as the M-Payment context, trust functions as a catalyst for a transaction (Pavlou, 2003). With other words, lack of trust would be a reason for consumers not to engage in M-Payment. As previous research demonstrates, convenience functions as a valid determinant of consumers' intention to transact (Rohm & Swaminathan, 2004). In the M-payment context, convenience is a motivational benefit resulting from a payment alternative that helps consumers to save time and effort. In summary, we assume that the more useful, easy, trustful and convenient it will be perceived to pay via a mobile device, the more motivated consumers will be to use in-store M-Payment. This leads us to the following hypotheses:

H2: Consumers' intention to use in-store M-Payment is positively influenced by perceived (a) usefulness, (b) ease of use, (c) trust, and (d) convenience.

One of the key assumptions of TAM is that behavioural intention is a determinant of actual system use (Davis, 1989). For example, Yi and Hwang (2003) found a direct and significant influence of behavioural intention on actual usage of a web-based information system. Transferred to our research context, we thus propose:

H3: Consumers' intention to use in-store M-Payment positively affects the actual usage of in-store M-Payment.

The hypotheses are summarized and illustrated in our extended Technology Readiness and Acceptance Model (eTRAM) (Figure 1).

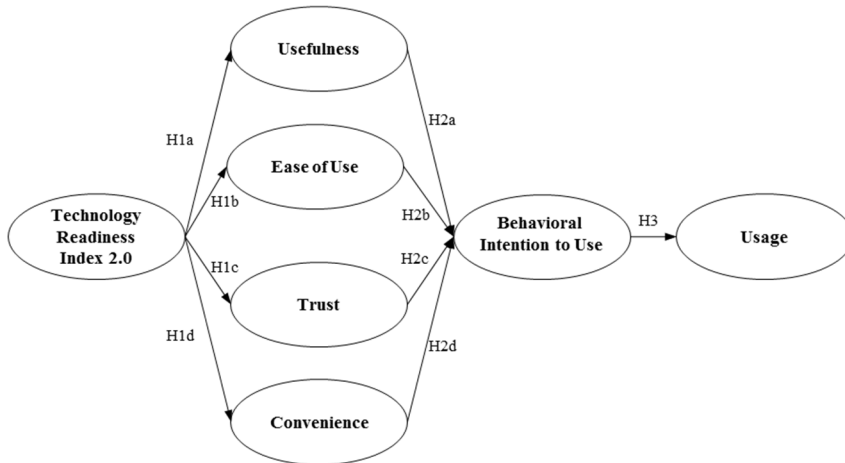


Figure 1. Conceptual Framework: Extended Technology Readiness and Acceptance Model (eTRAM)]

Source: own elaboration.

METHODOLOGY

In order to test the hypotheses, we conducted an online survey in cooperation with a German grocery retailer. Using the retailer's newsletter subscription list, a large sample of $N=3,250$ could be generated. This sample is representative for German citizens regarding gender and brand of mobile device and almost representative regarding age, job and net household income. 50.8% of the respondents are female and the average age of the sample is 49.2 years ($SD=13.6$ years), ranging from 19 to 84 years. 72.5% of the participants own a smartphone, but only 4.9% use it for in-store M-Payment underlining the sparse diffusion. The average TRI 2.0 of the sample is 2.967 ($SD=.625$) on a scale from 1.0 (strongly disagree) to 5.0 (strongly agree). Higher TRI 2.0 levels are correlated positive with higher adoption rates of new technologies.

Established multi-item scales from previous studies were adapted to the context of our study and translated to German. These items were assessed using 5-point Likert scales, ranging from "strongly disagree" (1) to "strongly agree" (5). Usage was measured using a 5-point frequency scale, ranging from "never" (1) to "very often" (5). All constructs, related items and key figures are shown in Table 1.

The confirmatory factor analyses (CFA) show solid results. Due to need of computing the TRI 2.0 for estimating the SEM, the four dimensions of technology readiness were examined in a separate CFA. Reliability was evaluated by calculating means of composite scale reliability (CR), Cronbach's Alpha (α) and average variance extracted (AVE). For all measures, except usage ($CR=.614$; $\alpha=.596$; $AVE=.445$), the belonging cut-off values ($CR \geq .6$; $\alpha \geq .7$; $AVE \geq .5$) were achieved (Hair Jr., Black, Babin, & Anderson, 2009). The values for usage are below the recommended thresholds. However, the difference is only

small and other studies report that an AVE higher than .4 is acceptable (Zheng Zhou, Yim, & Tse, 2005). In addition, Goodness-of-Fit criteria were met and we found support for discriminant validity of all measures applying Fornell-Larcker test method.

Table 1. Confirmatory factor analyses results of core constructs

Item	λ	α	AVE	CR
Perceived Usefulness – Adapted from (Davis, 1989)				
PU1: I would find Mobile Payment useful.	.940	.928	.865	.928
PU2: Using Mobile Payment would improve my payment processing.	.920			
Perceived Ease of Use – Adapted from (Davis, 1989)				
PEOU1: Using Mobile Payment without errors would be easy for me.	.845	.873	.778	.875
PEOU2: My interaction with Mobile Payment would be clear and understandable.	.918			
Trust – Adapted from (Mayer, Davis, & Schoorman, 2007); (Pavlou, 2002)				
TR1: I would qualify Mobile Payment as honest and trustworthy.	.923	.874	.779	.875
TR2: I think that the technology of Mobile Payment will be used responsibly by its providers.	.840			
Convenience – Adapted from (Childers et al., 2001)				
CON1: Using Mobile Payment would be convenient for me.	.954	.923	.858	.924
CON2: Using Mobile Payment would make my shopping less time consuming.	.898			
Behavioural Intention to Use – Adapted from (Venkatesh & Bala, 2008)				
BI1: I intend to use Mobile Payment as payment method.	.921	.906	.831	.908
BI2: Assuming I had access to the system during the next months, I predict that I would prefer it over other payment solutions.	.902			
Usage – Own design				
US1: Usage of following payment solutions in stationery retail stores: Contactless or mobile payment	.603	.596	.445	.614
US2: Usage of following payment methods: Payments via your smart phone	.725			
TRI 2.0: Optimism* – Adapted from (Parasuraman & Colby, 2015)				
OPT1: New technologies contribute to a better quality of life.	.837	.830	.558	.833
OPT2: Technology gives me more freedom of mobility.	.795			
OPT3: Technology gives people more control over their daily lives.	.641			
OPT4: Technology makes me more productive in my personal life.	.700			
TRI 2.0: Innovativeness* – Adapted from (Parasuraman & Colby, 2015)				
INNO1: Other people come to me for advice on new technologies.	.746	.791	.561	.793
INNO2: In general, I am among the first in my circle of friends to acquire new technology when it appears.	.782			
INNO3: I keep up with the latest technological developments in my areas of interest.	.717			
TRI 2.0: Insecurity* – Adapted from (Parasuraman & Colby, 2015)				
INS1: People are too dependent on technology to do things for them.	.642	.779	.549	.783
INS2: Too much technology distracts people to a point that is harmful.	.846			
INS3: Technology lowers the quality of relationships by reducing personal interaction.	.721			
TRI 2.0: Discomfort* – Adapted from (Parasuraman & Colby, 2015)				
DIS1: Technical support lines are not helpful because they don't explain things in terms I understand.	.634	.764	.525	.767
DIS2: Sometimes, I think that technology systems are not designed for use by ordinary people.	.804			
DIS3: There is no such thing as a manual for a high-tech product or service that's written in plain language.	.726			

The items of these constructs were examined in a separate confirmatory factor analysis; Reverse Coding of INS and DIS items; Note: PU = Perceived Usefulness; PEOU = Perceived Ease of Use; TR = Trust; CON = Convenience; BI = Behavioural Intention to Use; US = Usage; OPT = Optimism; INNO = Innovativeness; INS = Insecurity; DIS = Discomfort; MV/Std. = Mean values and standard deviations; λ = Standardized Factor Loadings (confirmatory factor analysis); α = Cronbach's alpha ; AVE = Average Variance Extracted; CR = Composite Reliability
Source: own study.

RESULTS

To test our research model, we calculated a covariance-based structural equation model (CBSEM), using AMOS 21. We chose CBSEM because it is known to be extremely robust with respect to violations of its underlying distributional assumptions and is favourable in terms of parameter consistency and accuracy for large sample sizes (Reinartz, Haenlein, & Henseler, 2009).

Several fit indices were examined to assess the fit of the hypothesized model. Both GFI and AGFI as well as TLI, CFI and RFI exceed the recommended values of .9. RMSEA also meets the required value. The chi-square/degree of freedom ratio is with 6.166 slightly too high, but can be explained with our large sample size (Bentler & Bonnet, 1980).

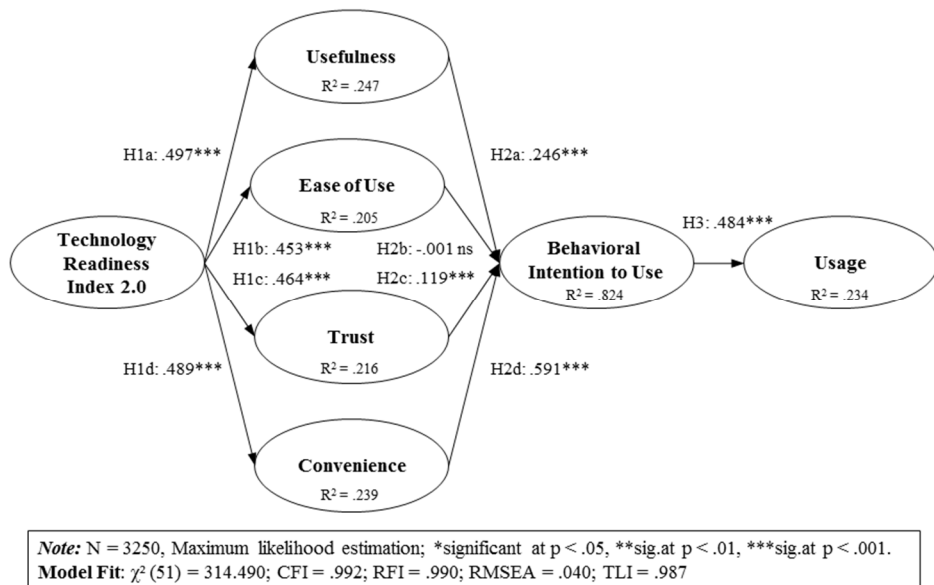


Figure 2. Effects of extended Technology Readiness and Acceptance Model

Source: own elaboration.

The results of CBSEM analysis are illustrated in Figure 2. The findings support most of our hypotheses with exception of H2b. We found no significant effect of ease of use on the behavioural intention to use M-Payment. Though there is extensive empirical evidence that ease of use is significantly linked to behavioural intention to use, other studies in the context of M-Payment also found a non-significant relation between ease of use and behavioural intention to use (Chandra et al., 2010; Slade, Williams, Dwivedi, & Piercy, 2015).

Our results show an impact of technology readiness on all determinants of behavioural intention to use, ranging from $\beta = .453$ to $\beta = .497$. This indicates a general influence of the disposition to adopt and use technology on the assessment of system characteristics. Convenience has the strongest effect on behavioural intention to use ($\beta = .591$), followed by usefulness ($\beta = .246$) and trust ($\beta = .119$). This order emphasizes the relevance for payment services and retailers to develop fast and effortless M-Payment solutions. The

results also show a significant positive relation between behavioural intention to use and actual (self-reported) usage, indicating support for H3. The good model fit as well as the verified relations between the constructs indicate nomological validity.

CONCLUSIONS

This research investigated the potential of an extended Technology Readiness and Acceptance Model (eTRAM) in explaining the self-reported usage of in-store M-Payment. Testing this model by extensive Web-based survey data, the effects of convenience, perceived usefulness and trust were found to significantly influence behavioural intention to use in-store M-Payment, which has a significant effect on self-reported usage itself. Furthermore, our results indicate a general effect of TRI 2.0 on all examined determinants of behavioural intention to use in-store M-Payment.

From a theoretical perspective, our contribution is that we empirically validate the brand-new TRI 2.0, which is the successor of Parasuraman's (2000) often cited TRI (1.0). By combining technology readiness factors with constructs from Davis (1989) technology acceptance model we offer a conceptual framework that should help to understand how and why consumers adopt new technologies. Furthermore, this study incorporates the frequently discussed link between behavioural intention to use and actual usage and underlines the emphasized relationship.

In terms of managerial implications, the aim of the paper is to sensitize managers for the key drivers of consumers to use in-store M-Payment. Retailers and payment service providers have to emphasize the advantage and convenience for consumers when introducing a new payment service. Additionally, we recommend that in-store M-Payment should be included into a broad service environment including, e.g., mobile couponing and mobile receipts. While available market numbers and usage rates of our study show that consumer's willingness to adopt in-store M-Payment services is rather low, there are already some best practices in the market. For example, the coffeehouse company Starbucks, that combines a mobile payment function with loyalty awards, reports that mobile in-store payments accounted for about 21%, or \$1.03 billion, of 2015 last quarter's total sales of \$4.91 billion (Internet Retailer, 2015). It would be of certain interest to investigate if the Starbucks clientele scores higher on TRI 2.0 than the average smartphone user does.

Finally, we have to point out that to better understand consumer's intention to use M-payment, additional research is needed because the present study is not without limitations. Although this study includes actual usage into the model, actual usage figures (e.g., transaction data) would provide more valid results than self-reported usage does. To better understand how and why consumers adopt M-Payment services it might be useful to cluster consumers and to investigate how to develop strategies for individual segments. With the ongoing increasing diffusion of mobile devices certainly more research on how mobile companions alter daily consumer behaviour is necessary.

REFERENCES

- Bentler, P. M., & Bonnet, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, (88), 588-606.
- Chandra, S., Srivastava, S. C., & Yin-Leng Theng. (2010). Evaluating the Role of Trust in Consumer Adoption of Mobile Payment Systems An Empirical Analysis. *Communications of the Association for Information Systems*, 27, 561-588.
- Chen, S.-C., Liu, M.-L., & Lin, C.-P. (2013). Integrating Technology Readiness into the Expectation-Confirmation Model An Empirical Study of Mobile Services. *CyberPsychology, Behavior & Social Networking*, 16(8), 604-612.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511-535.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319-340.
- eMarketer. (2015). *Mobile Payments Will Triple in the US in 2016*. Retrieved from <http://www.emarketer.com/Article/Mobile-Payments-Will-Triple-US-2016/1013147>
- Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in a technology acceptance model. *Journal of Business Research*, 62(5), 565-571.
- Hair Jr., J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate Data Analysis* (7th ed.). Upper Saddle River: Prentice Hall.
- Internet Retailer. (2015). *Mobile payments account for 21%, or \$1.03 billion, of Starbucks' Q4 sales*. Retrieved from <https://www.mobilestrategies360.com/2015/11/05/mobile-payments-account-21-starbucks-q4-sales>
- Kim, J., & Forsythe, S. (2008). Sensory enabling technology acceptance model (SE-TAM): A multiple-group structural model comparison. *Psychology and Marketing*, 25(9), 901-922.
- Lin, C.-H., Shih, H.-Y., & Sher, P. J. (2007). Integrating technology readiness into technology acceptance: The TRAM model. *Psychology and Marketing*, 24(7), 641-657.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (2007). An integrative model of organizational trust. In *Organizational trust. A reader* (pp. 82-108). Oxford [u.a.]: Oxford Univ. Press.
- Mays, K. (2015). *Mobile Payment Systems: What's Holding Consumers Back?* Retrieved from <http://www.itbusinessedge.com/articles/mobile-payment-systems-whats-holding-consumers-back.html>
- Parasuraman, A. (2000). Technology Readiness Index (TRI): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies. *Journal of Service Research*, 2(4), 307-320.
- Parasuraman, A., & Colby, C. L. (2015). An Updated and Streamlined Technology Readiness Index: TRI 2.0. *Journal of Service Research*, 18(1), 59-74.
- Pavlou, P. A. (2002). What drives electronic commerce? A theory of planned behavior perspective. *Academy of Management Proceedings & Membership Directory*, A1-A6.
- Pavlou, P. A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, 7(3), 69-103.
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332-344.
- Rohm, A. J., & Swaminathan, V. (2004). A typology of online shoppers based on shopping motivations. *Journal of Business Research*, 57(7), 748-757.

- Slade, E., Williams, M., Dwivedi, Y., & Piercy, N. (2015). Exploring consumer adoption of proximity mobile payments. *Journal of strategic marketing*, 23(3), 209-223.
- TNS Infratest and Google. (2015). *Consumer Barometer with Google*. Retrieved from <https://www.consumerbarometer.com/en/insights/?countryCode=GL>
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273-315.
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186-204.
- Yi, M. Y., & Hwang, Y. (2003). Predicting the use of web-based information systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International Journal of Human-Computer Studies*, 59(4), 431-449.
- Zheng Zhou, K., Yim, C. K., & Tse, D. K. (2005). The Effects of Strategic Orientations on Technology- and Market-Based Breakthrough Innovations. *Journal of Marketing*, 69(2), 42-60

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Captive Offshoring Services for SMEs in Poland: The Role of Mutual Trust and Cultural Aspects

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Abstract

The study examines one of the governance models of offshoring and empirically tests relationships and differences in culture between employees within one company, from two different countries. The study outlines the current position of Poland as an example of destination for entrepreneurs deciding to offshore their services. This research joins case study method, together with surveys and personal observation. The qualitative method aims to investigate relations within the company and examine frequencies of employees' behaviours. Quantitative research method is used to identify the frequencies of qualitative results. The study proved that building common goals and positive relations facilitates working relations. Regular communication and maintaining trust between the countries is a crucial factor for the effective offshoring process. The originality of this work lies in focusing on cultural aspects of offshoring such as cultural distance and cross-culture communication. Further research into the issue of mutual trust in the context of offshoring processes is recommended.

Keywords: offshoring; communication; culture; Poland

JEL codes: M14, M51, D83, J21, L84

INTRODUCTION

Outsourcing is acknowledged by many managers as the best solution for reduction of costs. This happens because some of the business activities are moved to a subsidiary or an independent service provider in a chosen destination. With the crucial development of the economy, the global market forces companies to focus on their own business. General outsourcing and offshore outsourcing help to improve production efficiency, lower opera-

tional costs and following all these operations, increase profits. According to Oshri, Kotlarsky and Willcocks (2009, p. 8), global sourcing might offer various advantages which are associated with the benefits of outsourcing in general. Any firm may obtain significant cost advantages through the creation of economies of scale, access to the unique expertise of a third party, and the reduction or stabilization of additional costs. Furthermore, a company may gain benefits from outsourcing by concentrating on essential activities, on organizational specializations, or focusing on achieving key strategic objectives. No doubt, offshoring has become a valid business tool to be successful. How small and medium-sized enterprises (SMEs) should use offshore outsourcing effectively is a question that these companies need to consider and carefully establish necessary strategy.

The study outlines the current position of Poland as an effective destination for entrepreneurs deciding to offshore their services. The authors describe benefits of captive offshoring to Poland for small and medium-sized companies based on the example of one of British locum agencies¹. The agency began offshoring operations to Poland in November 2010. Although lower costs in the beginning were key factors that attracted the company to offshore, other advantages such as skilled young workers and foreign government policy also played roles.

The aim of the study is to examine one of the governance models of offshoring and empirically test relationships between employees within one company, from two different countries presenting advantages and disadvantages of offshoring and investigate cultural differences and similarities. To be able to do that, authors provide an overview of development of offshore outsourcing activities within the medium-sized enterprise. By use of personal observation and surveys with the company's founders, its workers in the country and those who work offshore, the study discovers how to build relationship and succeed in captive offshoring.

The paper is divided into three main parts: theoretical study, research and discussion. The theoretical background gives sufficient frameworks of outsourcing, offshoring and describes the notions, explaining the importance of location choice and outlines the cultural specifics. The authors describe positive effects for the outsourcing in two different countries. The second part conducts research methods. The latter section reveals consequently the findings of the research. The paper ends with conclusions for practice and research alike.

LITERATURE REVIEW AND THEORY DEVELOPMENT

Concepts of Outsourcing

Nowadays, almost any service can be outsourced. Types of outsourced processes differ between call centres, technical or IT support, third-party logistics, food services, distribution services, aircraft maintenance, back-office help etc. Outsourcing, mostly associated with activities outside companies, also creates its own sub-companies that work for the parent agency and carry out selected tasks to support its own company's actions. Defini-

¹ 'Locum' is a medical professional that temporary holds a position at a hospital, clinic or private practice. The term locum tenens is a Latin word and is translated as 'stand-in' or 'substitute'. The NHS in United Kingdom has approximately 3,500 locum doctors working in trusts and hospitals every day. There is also about 15,500 locum general practitioners (National Association of Sessional GPs, 2008). Statistics differ on how many physicians are locum tenens. In most hospitals, there is approximately 50-80% doctors who work on a temporary agreements. Majority of locum doctors are contracted through locum agencies.

tions of outsourcing changed and evolved within time, technology progress and globalization. Various academics and practitioners claim that outsourcing is a form of external sourcing, or vertical disintegration. Some say there are two forms, outsourcing and purchasing, others that there are three forms, including outsourcing, purchasing, and subcontracting. Finally, it was commented that it is not very useful to treat various outsourced processes, including BPO, maintenance, IT, manufacturing, operations, repair, and R&D outsourcing as the same form (Mol, 2014, p. 7). Handfield (2006) explains the differences between the perceptions and understanding of the notion in the past and in recent times. He claims that until 1989 outsourcing has not been officially defined a business strategy. He also underlies that majority of companies were not completely self-sufficient as they outsourced activities that they were not competent of. In the 1990s managers started focusing more on cost-saving benefits. This caused that companies were outsourcing functions they needed, but they were not entirely related to the business. Entrepreneurs started to sign contracts with appearing companies which provide business services on the market. Through this process they wanted to deliver various services, ranging from data processing accounting, human resources, to security and maintenance. According to Handfield (2006) the current stage in the evolution of outsourcing is the development of strategic partnerships.

One of the most recent and commonly used forms of outsourcing is offshoring. Encyclopaedia Britannica defines the concept as offshoring as the practice of outsourcing operations overseas, usually by companies from industrialized countries to less-developed countries, with the intention of reducing the cost of doing business. Among the main reasons for locating services outside a corporation's home country are lower taxes, lower labour costs, less strict labour regulations, more lenient environmental regulations, and proximity to raw materials' (Encyclopaedia Britannica). Oshri *et al.* (2011) explains that offshore-outsourcing implies contracting with a third party (vendor) based at an offshore location (...) to accomplish some work for a specified length of time, cost, and level of service. Fariñas *et al.* (2014, p. 1815) agree with those definitions, claiming that the term 'offshoring' refers to firms that subcontract to suppliers that are located in a foreign market'. GAO Report to Congressional Committees from United States Government Accountability Office (2006) explains that offshoring intensive manufacturing operations began in the 1960s, followed in the 1970s and 1980s by increasingly complex operations, including design work and some research and development (R&D) and wafer fabrication. Offshoring became very important in international development in the middle of twentieth century. Companies focused their outsourcing activities at first on low-skilled or unskilled manufacturing jobs and simple assembly tasks. In the beginning of the twenty-first century, the exported jobs increasingly included skilled employees. The term offshoring splits into in-offshore house sourcing and offshore outsourcing (Table 1). First one is a production of goods or services sent to foreign countries within the same group of firms. The second one concerns specific transfer of the production of goods or services outside the home country not to the connected company.

It is important to pay attention to different 'shores' that might be involved in relocation of business services. Offshoring, on-shoring and nearshoring are derivatives from the word outsourcing. From a point of view of the location, companies can change place of activities from distant countries or only "nearshore" (Slepniov, Brazinskas & Wæhrens,

2013, p. 6). Nearshoring is outsourcing to foreign subsidiary but in a nearby country. Onshoring is the process of bringing home facilities currently located in foreign countries. It can minimize communication problems and improve the product development.

Table 1. Offshore outsourcing

Location	Internal production (in-house)	External production (outsourcing)
Within the country (domestic)	Production within the enterprise and the country (domestic in-house)	Production outside the enterprise but within the country (domestic outsourcing)
Abroad (offshoring or cross-border)	Production within the group to which the enterprise belongs but abroad (by its own affiliates) (off-shore in-house sourcing in the sense of relocation abroad)	Production outside the enterprise (or the group) and outside the country by non-affiliated firms. This involves foreign subcontracting (offshore outsourcing or subcontracting)

Source: Hatzichronoglou (2007).

These models differ across involved effort, level of interaction, cultural differences and various time-zones. Some offshore outsourcing activities might be done entirely on the offshore location, but others on onsite location. In the offside offshoring, the company providing services will have its office close to its client's location and offshore outsourcing facilities at some other geographical region. Offsite outsourcing organization is used to act as a middleman in communication between the client and the offshoring enterprise.

Reasons for Offshoring Services and the Choice of Location

Offshoring becomes more and more popular thanks to the progress of technology and globalization. Multicultural political environment caused growth of international business operations. World exports grew from \$60 billion in 1950 to \$19.01 trillion in 2014 (World Bank, 2014). Lower labour cost is the initial key factor that attracts firms to offshore to other locations. Outsourcing activities abroad allows for exploitation of economies of scale. It also provides better and more flexible access to specific resources (Nielsen & Nielsen, 2008). Offshoring can also work other way round as not only residents of poorer countries may be happy for such solutions, it can also bring benefits for the inhabitants of the developed countries. Authors of *Applied Economics* (Fariñas *et. al.*, 2014) write about estimated effects of offshoring on productivity in US manufacturing industries. It was found that service offshoring has a valuable positive effect on productivity, accounting for around 10% of labour productivity growth between 1992 and 2000. Offshore outsourcing inputs have a good influence on productivity but the range is smaller. On the basis of examination of establishment-level data for UK manufacturing industries, it was found that the establishment's outsourcing intensity is positively related to its productivity growth (Fariñas *et. al.*, 2014).

Outsourcing services is quite advanced in the United Kingdom when it comes to small and medium-sized enterprises (SMEs), in comparison to other European countries. Locum agencies are generally SMEs. Agencies decide to outsource projects with which they have some difficulties. It may be lack of specific skills or shortage of time. M. Edge, KPMG UK Head of Markets, said: "Our own research shows that UK businesses are increasingly optimistic about their prospects. In moving forward, businesses need the right people with

the right skills. Increasingly, they are looking overseas to address this skills gap recruiting people to the UK or deciding to offshore both work and job” (KPMG, 2009). There is a lack of skilled workers across UK so the companies are forced to search for workers in European Union or further. The survey regarding labour market conducted by KPMG, shows that over 21% of 600 companies recruited migrant employees (Woods, 2010). When the problems are specified and a company is sure that it wants to use help from a foreign country, the other problem arises: to choose appropriate country with inhabitants that would help to develop the business (Outsource Magazine, 2010). According to the research conducted at the University of Nottingham, UK companies prefer to offshore to rather large countries which are relatively wealthy and close to the UK. Other important fact was the ability to speak English on a high level of fluency and understanding. The survey also reveals that UK firms value a relative abundance of human capital, good information technology and a market-friendly environment (Greenaway, 2007).

Offshoring gives agencies the possibility to use skills and experience of skilled workforce. Other than experience are also such important characteristics as willingness to work in international environment and interests in foreign culture which can result in friendly work environment and following this, greater will for work. Scholars from University of Institute of Economics of the Hungarian Academy of Sciences and University of Hertfordshire conducted a research among countries from Visegrád Four: Czech Republic, Hungary, Poland and Slovakia regarding offshoring and outsourcing business services. They carried out 30 interviews with senior managers in business service foreign investment and found out that cost of educated and skilled professionals and their flexibility was acknowledged by all of the questioned companies as one of the most influential factors in their decision to start investments in the Visegrád Four. Very important factors available in these countries for foreign investors are also qualified graduates with a wide range of language abilities and excellent communication and interpersonal skills. 50% of the respondents also valued such factors as location, quality of infrastructure and political and business environment which is viewed as favourable in these countries (Sass & Fifekova, 2011). All the above-mentioned factors have a significant influence on the costs for the companies deciding to offshore.

Poland, as one of the CEE countries is most gladly chosen offshore destination. The World Bank's *Doing Business* report placed Poland on 44th place out of 189 countries ranked for how easy it is to do business in 2014 and in 2015 Poland jumped up to 32nd place (*Doing Business 2015*, 2014). What is more, Poland is ranked 17th out of 28 EU member states. Poland has much to do if it wants to be compared with the best places to do business in (Dembinski, 2013). According to Polish Agency of Information and Foreign Investments (PAiIZ, 2015): “Among ca. 20 cities in the CEE Region internationally recognized as potential offshoring locations almost 50% are located in Poland with 3 leading cities of Warsaw, Kraków and Wrocław”. Poland is the biggest territory in the Central and Eastern Europe Region with as much as 16 large cities where outsourcing industry is growing since 1995 (Doktor, 2013). Poland is a country in the centre of Europe and produces about 400 000 university graduates each year which gives opportunities for its development and foreign companies are really keen to invest to start business in such countries. Poland has an advanced management culture that has improved enormously over the last two decades. Annual survey published in a ‘World Investment Report’

shows that Poland has achieved sixth place in the world and was acknowledged as most attractive FDI host countries which are perceived by multinational corporations. According to the United Nations Conference on Trade and Development (2013), Poland has become the most attractive foreign direct investment country in the European Union. According to survey conducted by A.T. Kearney (2014), Poland (Figure 1) is placed on the 11th place, straight after top ten which proves country's great potential, offering highly skilled players and mature industry.

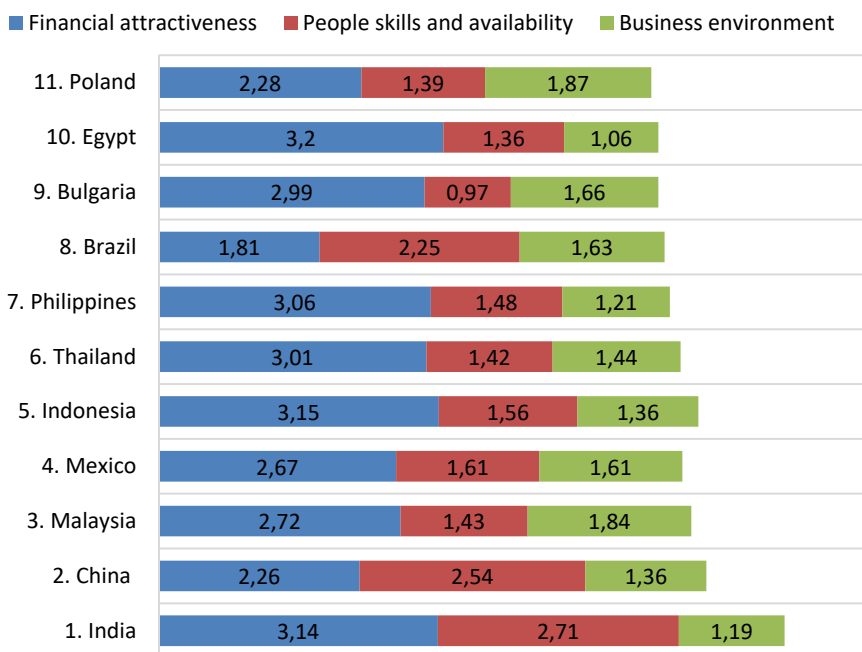


Figure 1. Country ranking

Source: A.T. Kearney (2014).

Poland is considered to be on seventh place of the most hard working economies in the world, way ahead of the OECD average of 1,776 hours (Warsaw Business Journal Group, 2013). The country specializes in various fields, such as: software products, business analytics, human resources, finance/banking and accounting, multilingual contact centres and tele-information network management. Firms that used to out-source some of their business activities to Poland include Google, Shell, IBM, Heineken, HP, Motorola, Procter & Gamble, Citibank, and many others. The number rates to even more than 50 companies from the Fortune 500 list (Gera, 2013) and the number of companies investing in Poland workers is still rising. Additionally, the vacancy rate of office space in Poland in 2015 stood at 12.3% in Warsaw and maintains similar position in other cities in Poland (Młyniec & Polkowski, 2016). It gives opportunities to open new offices for foreign companies. What is more, Poland has not remained indifferent to the globalization and growing international market and helped to draw attention of foreign investors. Not only the economic development of the country attracted

companies from abroad but also Polish Information and Foreign Investment Agency introduced varieties of programs to streamline the process.

Culture and Communication

Culture is about human preferences, values, attitudes and behaviours and is connected to human identity. Although learning from diverse cultures and markets that are stimulated differently or exploitation of economies of scale or better and more flexible access to resources from specific countries, it might not be easy for managers to conduct business abroad. The survey conducted by Vantage Partners shows that cultural differences can prevent both parties from achieving the full value of their deal: 64% of respondents say that the impact of cultural differences is greater than 10% of annual contract value, and 33% say the impact is more than 20% (Ertel *et al.*, 2010, p. 4).

Cultural distance reflects a difference in cultural values among countries that should be assessed at the cultural or country level. Psychic distance is based on the individual's perception and should be assessed at the individual level (Sousa & Bradley, 2006). Centre for International Business University of Leeds conducted a research concerning Poland and United Kingdom. The research found that British managers do not think much about Poland. One of the most striking features of the British vision of Poland was their attitude towards the influence of the communist system on the Polish psyche. British executives treated Poland as a very distant country with narrow thinking. The 'communist past' in Poland also affected the British idea about Polish authorities. For British managers Poles are reluctant to take decisions and do not question the decisions of their superiors. What is more, Polish managers were considered to be very much Western European in terms of their jobs, careers, and a lifestyle.

Hofstede's differences in power distance (Table 2) between the two countries illustrate an influence of the history on culture. High power distance makes gap between superior and his/her subordinates. Ordinary workers that occupy lower positions are afraid of their supervisors. Managers have power which can also have a negative impact on the relations between other companies. High power distance in Poland is still an influence after long-lasting communist system that is why British managers still perceive Poland as a communist country. However, it is crucial for managers to overcome potential obstacles of starting a new business in foreign country. There are two levels of cultural impact on the company: macro and micro and only combination of those two may bring positive effects for the company. It means that not only the culture of the country matters but also own company's organizational culture. Before starting any business with foreign nation, a company has to study all cultural factors that influence inhabitants' behaviours but also implement its own organizational culture to maximally minimize cultural distance.

Table 2. Hofstede dimensions: Poland and UK

Cultural dimensions	Great Britain	Poland
Power distance	Low	Very high
Individualism/Collectivism	Very high individualism	High individualism
Masculinity/Femininity	Rather high masculinity	High Masculinity
Uncertainty avoidance	Rather high	Very high
Long-time orientation	Low	Low

Source: <http://geert-hofstede.com/dimensions.html> (10.01.2016).

Drogendijk and Zander (2010, p. 192) while studying cultural distance came into conclusion that when the foreign environment is 'further away' from our own, there are more cultural differences between them, and it is likely that we have more difficulty understanding the other. It means that the larger the distance, between the countries and the less they have in common, the harder it is to communicate and, following on from that, it is more difficult to conduct business in this country. It is not easy to interpret values and behaviours that shape the society when the two countries do not have much in common. Table 2 shows that except from power distance, other dimensions between UK and Poland are quite similar which gives opportunities for successful business between Poland and UK. Both countries represent masculinity which means that in these societies, gender roles are clearly distinct and there is recognition for a good job and high earnings, advancement and challenge to have personal accomplishments. In Britain it is slightly lower as the country attaches great significance to such aspects of life as good working relationships, cooperation, desirable living area for family, and employment security but Poland is still developing in this direction and tries to catch up with UK. What is more both cultures are highly individualistic, dynamic and future-oriented.

International Business scholars studied a concept of psychic distance, which is explained as the degree of uncertainty of a foreign market a firm considers entering. It covers not only the cultural differences between regions but also differences in languages, business practices and environment, political and legal systems, human capital, infrastructure, and economic development (Garcia-Prieto & Point, 2009, p. 3). However, the cultural barrier has been underlined as a main challenge for offshore services. According to Persson (2013), in development of globalisation, face-to-face meetings, temporal locations and frequent visits in the other countries are best practices with such benefits as for example trust and effective teamwork. However, when the distance is large between the two countries, the workers function relying on technology-mediated communication and this form of contact may fail.

Cross-culture communication is not only country cultural dimensions, influenced by the history and passing time but also all the other factors of human life, such as language, manners, religion or a world view. Thus, for example differences in languages can be a huge barrier in the cross-culture communication. Communication and translation of foreign languages requires more than the transfer of meaning from one context to another. Change of language may sometimes change our way of thinking as we have to adjust to the language conditions. Certain language is linked to specific culture and with specific associations which may be alien to our own mother language. This refers to the claim that foreign languages may be used differently by the foreigners which may lead to miscommunication and certain obstacles while conducting international business. Communication comes from Latin word "communicare" and means "to make common" so it is a process of transferring meanings (Halliyavar, 2013). According to authors of the book *Effective Internal Communication*, each organization has its own culture and when two of them try to merge, the importance of those cultures comes to the force. They define culture as the patterns of behaviour and attitudes exhibited by employees and management (Smith & Mounter, 2005, p. 3). In a 2010 Vantage Partners conducted a survey in which they revealed that the majority (57%) of respondents claimed that cultural differences influence their capability to manage relations. They also said that communication

between people is somehow difficult between different nations. (Ertel, Enlow & Bubman, 2010). Communication can constitute huge problem when workers communicate only through technological devices. What is more, when employees are in different offices and come from different cultures, the process of communication becomes more complicated. According to Jakobson (1960), both addresser and the receiver can be Polish or British workers, depending who wants to address a message. There is always certain message, code, and context applied, however, the communication takes place between two cultures, so there are certain noises between sender and a receiver. First of all, the communication is carried on by the phone, so there are technical issues and noises that are not dependent on the sender, neither on the receiver. It is called physical noise and it is external to the speaker and listener. There is also a psychological noise occurring in communication which is mental interference that prevents from listening. It can occur when a person has some problems or when there is too much work and it is difficult to focus. Additionally, there noises connected with the behaviour might occur, cultural background and language barrier of interlocutors and these are the most important factors in the business communication for the offshoring companies. It is called semantic noise as it occurs when there is no shared meaning in a communication. Semantic barriers are related to individual understanding of words and their meaning. They arise from differences of words or other symbols (Satyanarayan, 2008, p. 16).

In response to the view of differences as an obstacle, an alternative view has emerged where the differences are presented as a business opportunity for companies to develop a competitive advantage. The European Business Test Panel (EBTP) identifies some economic benefits of cultural differences. They mentioned ethical and legal reasons that lead companies to adopt diversity policies. 42% of respondents claimed that conducting business offshore helps resolving labour shortages, 38% of those polled considered enhancing company's image, and enhancing creativity and innovation was an advantage for 26% of the respondents (Garcia-Prieto & Point, 2009, p. 7).

As a solution for the problems connected with cross-cultural dangers can be the concept of cultural intelligence which explains features of each person, regardless of the nationality. Cross-cultural relationships have to be managed at individual level, depending on the country so managers have to learn how to deal with differences between cultures and teach their company's workers how to adapt to the new culture. Following this, cultural intelligence has emerged to explain and help to facilitate the cooperation between various cultures. The concept can be defined as a person's capacity to adapt effectively to new cultural settings or contexts based on multiple facets including cognitive, motivational, and behavioural features (Gregory, Prifling & Beck, 2008). A person with high cultural intelligence can find and describe universal or belonging to specific group or specific culture features shortly after observation. The concept divides into three main dimensions: cognitive, motivational, and behavioural. The first one is the self, a person's mental representation of his or her own personality, social identity, and social roles. Motivational means that a person is capable to attain a determined level of his/her performance. The last one is a range of specific skills that person has to possess while deciding to cooperate with other cultures. All of the above has to be accomplished due to the success at every stage of the cooperation.

MATERIAL AND METHODS

To explore the role of mutual trust and cultural similarities and differences in the captive offshoring process, the research has been conducted with Holt Doctors Ltd., medium-size company, one of the leading British suppliers of locum doctors to NHS clients. The company has its main office in Great Britain and all of its operations are being done within the country. Back office services are being outsourced to Poland and conducted by its captive centre. The division in Poland constitutes a part of the company and provides support to recruiters and administration staff, assisting to complete the full registration process and to reach compliant status.

All of the agency's employees (both from UK and Poland) took part in the study. Invitations were sent to all company's workers. 68 (the total number of people working in the company – including the management board – 20 from Poland, 48 from UK) people received the invitation in total but 57 agreed to take part in the research. The majority of the respondents were women. The respondents occupy different positions within the company, from the lowest position to the directors. The age of the company workers differ from 20 to 60-years old. The average age of all the company workers is 36. The employees from Poland are younger than all the employees working in UK, thus the average age in Poland is 31 and the average age in UK is 37,5. Within the company, each of the workers corresponds to each other, each division is connected with the other one, including employees in Poland. Thus, the authors decided to send questions to all company's workers, to have a wide view on how the offshore outsourcing is perceived by each of the company member. Also, the response rate was taken into consideration, before deciding who should answer the questions.

This research joins single case study method, together with personal observation and surveys. The case study method could help investigate "contemporary phenomenon in its real-life context, especially, when the boundaries between phenomenon and context are not clearly evident" (Yin, 1981, p. 18). The method allows to conduct an in-depth understanding of cross-culture relations (Hurmerinta & Nummela, 2011). Observation of certain behaviours of the company workers allows to draw conclusions regarding their attitude towards the co-workers from the foreign country and allows the authors to confront the reactions with the answers. Thanks to the authors' close relations to the company workers, they are able to conduct deeper interviews if explanation of their answers is needed.

The survey data is collected via online questionnaire. It consisted of open-ended and multi-choice questions and was arranged in a five-point Likert scale. Quantitative research method is used to identify the frequencies of qualitative results. Some scholars claim that quantitative and qualitative approaches in combination provide better understanding of research problems than either approach alone. S. Lieberman said in his 1991 presidential address to the American Sociological Association: "The qualitative/quantitative distinction is itself somewhat arbitrary....What we really need is an effort to integrate both these methods, to take advantage of both procedures and combine their outcomes ... Thinking this through would be far more useful than method bashing. If we are truthseekers, then there should not be a qualitative truth and a quantitative truth" (Axinn & Pearce, 2009, p. 15).

The general purpose of the research is to identify the key factors of a successful captive offshore outsourcing and check if mutual trust influences the whole process. All of the questions are provided in English, both for British and Polish respondents. Open-ended questions allow the researchers to deeply analyse respondents' attitudes. It allows the interviewers to be highly responsive to individual differences and situational changes. Open-ended questions also helped the interviewers to avoid accidentally imposing any of his or her own preconceptions and furthermore, the validity of data was protected. To facilitate the analysis of the interviews, the authors used standardized questions for all the respondents.

RESULTS AND DISCUSSION

British and Polish Viewpoint

Individual views on communication and managing relationship is presented below. The study shows how UK mother company and the subsidiary office in Poland manage relationships with each other, what they consider important in managing their outsourcing relationships, what cultural differences they noticed and how they influence their perception on the offshore outsourcing relations.

Maintaining constant communication with the workers from Poland is frequently identified in the relationship management by the British workers. The workers from the subsidiary have more difficult task as they are not only in different location but also are historically and culturally different. They do not see what happens in the main office, thus they have to be focused all the time and put more effort on caring about the good relations. The respondents answered that honesty is one of the main assets that helps in effective communication. What is more, those polled write that understanding of the requests and information given is a key to work effectively. Politeness is also acknowledged as important factor. Without it, employees could have misunderstood their intentions.

When it comes to the relationship management, British acknowledged that the most important factor is that both sides understand what the other side means when communicating. They answered that all of the employees need to know what is the goal of the company and they have to be informed constantly about everything that happens in the company in UK, thus the incessant communication is required. Feed-backing and mutual help occurred to be also valid factor in building the relationships for both countries' participants not only from the vendor's perspective but also from the mother's company point of view. Polish employees also pointed that travels and meetings in their country are valid in the whole communication process. They believe that management visits to their country give directors an opportunity to understand resources and processes at the subsidiary's site. Others pointed language as the critical factor in managing the relationship. Many of the British respondents also underlined that the differences in accents and use of phrasal verbs might be a problem for Polish co-workers.

Honesty is acknowledged as most valid in maintaining trust for both, mother and daughter company. Most of the British workers answered that being honest to each other, solving problems, asking for help and keeping in touch can help maintaining the trust to each other. Managing directors also reported that Polish workers' commitment helped them to keep trusting the employees abroad. The results show that it is equally

important both for the main office as well as for the subsidiary to instil a sense of trust between each other. According to the questionnaire, trust results from frequent and relevant information exchange and building positive relationships between all the company workers. More effective communication between the members results in higher level of trust and consequently, the work becomes more effective.

Almost no one from the British members noticed any cultural differences. One person mentioned that there are different ways of working which may indicate as it was acknowledged as a cultural difference. The respondent noticed difference in the way of being polite, saying: "In Poland it is not normal to flower the conversations, i.e. "thank you", etc., at the beginning/end of conversations". No other comment regarding cultural differences was mentioned by the British. However, there were a few comments about economic conditions of the country and local laws which according to the English respondents might occur as an obstacle in the effective relationship. The British culture is considered less formal than the Polish one. Study shows that there are certain differences in the behaviour that are constituted by history, customs and the laws governing the countries which occur as an obstacle. Majority of the respondents answered that only language may be a barrier but did not recognize any additional differences connected with the habits, behaviour and cultural background. Surprisingly, Polish employees noticed many differences in culture and in the work pattern. The respondents acknowledged British as those who do not care so much about the Polish workers. The subsidiary employees believe that making an effort to trying to understand the Polish employees and their situation, would help to build better relations. The reluctance to learn about the foreign country and Polish mentality was recognized as an obstacle in international business. Also, forgetting that English is Poles' second language, caused obstacles in effective communication. Polish think of themselves to be more flexible than their British colleagues. Many of the Polish respondents reported that British workers do not go behind their responsibilities, while the employees from Poland try to do as many tasks as possible. What is more, Polish workers think that all of the employees from UK, not only the managing board expect from them more flexibility than from themselves.

Regular contact, constant communication and good language skills are the most frequent answers in the survey for the British employees. The common aim of the company was also mentioned few times. The employees expected from its vendor more flexibility and work to learn the language better so the communication would be more efficient. The respondents from Poland answered that first of all, control from the management is crucial, especially at the beginning of cooperation. For those polled, it is also valid that both sides have to learn from each other how to behave, what to do and how to perform different tasks. Observing others and asking for help were acknowledged as key factors in achieving the effective communication between the countries.

There are similarities and differences in perceptions of mother-company and its daughter-company on their considerations of achieving and maintaining trust in offshore outsourcing relationships. Both groups answered that constant communication between the countries is a key to maintain the relationship. Critical factors are also trust and language experience for both sides. What is more, both Polish and British members of the company identified the importance of personal visits, both in the home country as well as at the vendor country. Honesty was also mentioned as one of the critical factors in

maintaining trusts for both parties. Majority of all respondents also answered that asking for help might be helpful for the company to manage the relationship. Both sides also considered that working together would facilitate their work and tighten the relations between them. It has been noticed that knowledge and experience exchanges occur only on informal basis and there are no formal meetings between the company workers. However, the company members that successfully implemented the cooperation with the offshore unit, do not feel any need of sharing their experiences. When it comes to the cultural differences, all of the company workers mentioned language and different accents as an obstacle in the effective communication.

The research showed that all of the company workers are satisfied with the cooperation between both countries. Home country employees value the skills of their colleagues abroad. Majority of the respondents claim that the quality of work is maintained on the higher level and reduces costs. Furthermore, the research shows that almost all of the respondents are satisfied with the communication between two countries and that their trust their co-workers. This leads to the conclusion that mutual trust influences firm's offshore in-house sourcing strategy.

Effective Communication

Most of the Holt Doctors respondents pointed that communication is the main issue in the offshore outsourcing process. One of those polled suggested: "Whenever you come across a problem or you don't understand something – speak up. The key is to clarify any misunderstanding as soon as possible". The process of communication is a complex process.

The process works not only from the side of the employees but also downwards. When an employee receives appropriate downward communication from management, he/she can better understand the message, thus his/her work is more efficient and the person is better motivated. The key point is not to send only orders and requests but also facts about organizational goals, procedures, viewpoints, management decisions, so the employees are involved for all of the company's undertakings and have a feeling that they constitute a part of the company. One of those polled in the survey writes: "the most important factor in managing relationships is keeping in touch, keeping all parties aware of everything that's happening". Furthermore, team members have to be able to identify problems together, analyse alternatives and recommend solutions for the company. Each of the company's members, no matter if a managing director or a worker on the lowest position have to be able to communicate his/her ideas persuasively to the others.

The environment in which we live or spend a lot of time, constitutes our way of thinking and imposes specific meanings on the words we communicate with. One of the Holt Doctors respondents wrote that the difficulties in communication is: "not being in the same office, it would be a lot easier to work together if we were, it would be better if we could see how each other works and what we do day to day". It happens that one side does not understand the other, thus meaning of symbols articulated by sender have different meaning in the mind of encoder. What is more, all of the respondents noticed that language and use of different accents and phrases might be an obstacle in effective communication. One of the employees noticed that: "as all others clear communication and being as polite as possible especially via e-mail to avoid any misinterpretation of tone". Again, the symbols are used differently and the meaning of words is constituted by the culture. Workers communicating to each other from two different countries have

to pay special attention to what they say and how they express themselves as even single word used inappropriately can be misunderstood.

Communication is not only verbal. When it comes to the business, half of the communication process occurs through emails or texts. As there is no other form of day-to-day communication than phone calls and emails, employees have to also pay special attention to what they write. This form is even harder as the sender and a receiver cannot hear the tone of the addresser and it is more difficult to express feeling through writing. One of the respondents wrote: "clear communication and being as polite as possible especially via e-mail to avoid any misinterpretation of tone" are the most important factors in the communication. Business messages, both formal and informal are an integral part of all the communication process. All of the ideas in written communication have to be arranged logically and diplomatically, in order to satisfy the encoder motivational, practical and informational needs.

Next to the many positive aspects of the studied case, the research also showed dissatisfaction with certain issues. First of all, geographical distance was viewed as a boundary in the effective communication. More frequent visits would facilitate the relations between the offices. The ineffective communication due to the long distance and very rare face-to-face meetings result in dissatisfaction of work and generates time waste. Additionally, implementation of the offshoring process might have been done without planning and deep investigation into the country.

Differences in worldview, different cultures and environments impose the meaning on different words. Thus the viewpoint of the employees from the mother-company is slightly different from those of the foreign office subsidiary. Almost everything that is done during the offshore outsourcing process is prepared to achieve the best value. That is why paying attention to the relationship and culture is such important factor. Cultural differences can prevent both parties from achieving the full value of their deal. Holt Doctors respondents noticed this relation. Some of the views are very similar, however, there are slight differences in the understanding of the whole process of communication among the respondents.

The qualitative part of the survey indicates the frequencies of the presented quantitative data. The questionnaire answers give general view on other offshore outsourcing factors that constitute the effectiveness of the company cooperation. The results indicate the similarities between both methods, since again, majority of the respondents claim that the offshore outsourcing process works and it is effective, basing on their experience. The researchers asked if the offshore outsourcing process is cost effective and half of the respondents answered that they agree with the statement. 9% wrote that they totally agree but 3% of those polled disagreed with it. What is interesting, the majority of the respondents from the group that totally agreed that the process is cost effective, were Polish and those who did not express their opinion on the statement were British employees. All of the respondents agreed that qualified employees perform the tasks, thus the quality of the business process increases, and only 4% did not express their opinion. There were certain differences when it comes to the time, effectiveness and flexibility of the workers from the offshoring country. 9% of the British respondents answered that they strongly disagree that the offshored work is carried out more effectively and 8% of them claimed that it does not save time, when the

Polish did not answer the question negatively. What is more, over 30% of British respondents wrote that their neither agree nor disagree with the statement that workers who outsource services are more flexible so the quality of work improves when almost all of the Polish respondents agreed with it.

Except from the slight differences between the answers of Polish and British employees, all agree that the offshore outsourcing is effective. Both countries are culturally similar, thus the management board does not have any bigger issues connected with the effective management. The results indicate that a combination of low cost and good quality is critical to motivate clients to outsource. However, the managers have to remember that cost saving cannot become the main motivator for outsourcing.

CONCLUSIONS

Offshore SMEs outsourcing is relatively new, and the number of studies looking at the outcome is very limited (Mohiuddin & Su, 2013). Since the business services are being developed, technology and globalisation progress, companies can take advantage of the offshoring processes, by focusing on core competencies and relying on its subsidiaries or external service providers. However, thorough market research of the targeted country is required. First of all, a comprehensive assessments of the offshore subordinates have to be prepared to guarantee fulfilment of company's assumptions. Each stage of company's operations, such as expertise, geographical location, local laws, financial stability, etc. have to be considered. Educated workforce, strategic location, and a strong domestic market are also reasons for choosing the service provider and the paper shows that these have positioned Polish economy as one of the best investment destinations in Europe. The studied case is a good example which confirms the recent researches regarding Poland which show the country as a leader in back-office activities such as shared-service and contact centres that provided 9% of FDI projects and almost a quarter of jobs created (EY, 2015, p. 18).

According to Khan and Azeem (2014), "national culture", "communication style" and "difference in mutual understanding", intercultural challenges have statistically significant differences. With regards to Hofstede dimensions, Great Britain and Poland are culturally similar. Except for power distance, other dimensions between UK and Poland remain approximate which gives opportunities for successful business between Poland and UK. The study shows that slight differences in behaviour are driven by historical past, however, the differences remain at very low level and can be explained by constant and honest communication. Communication is a valid issue in the process of offshoring services. According to Rai and Rai (2008), communication involves ensuring that a message has received the target audience and that the receiver understands and responds as the sender expects. It also involves ensuring that the receiver takes care to receive, understand, interpret and respond to messages that are sent to him/her. Regular communication and maintaining trust between the countries is a crucial factor in the process. The study proves that building common goals and positive relations helps to understand the other side and facilitates working relations. Frequent visits and listening to both sides of the process help building trust and positive relations and this in a consequence influences the quality of services provided to the company's clients.

The studied example shows that captive offshoring contributes to enhancing firms' effectiveness, however, the research reveals that there are some obstacles and they should

be taken into consideration in offshoring processes. The Holt Doctors agency started their services in 2010. Due to quite short time of conducting offshore operations and managing the office in Poland the proper evaluation of the operations is not entirely measurable. Offshoring is a long term strategy, thus the results are measured and assessed only in a short-term period. As this research does not take into account personal observation from the UK side, an extension to this study is proposed. Finally, similar studies in the sector would be useful, to compare the significant determinants. Further research into the issue of mutual trust in the context of offshoring processes is recommended.

REFERENCES

- A.T.Kearney (2014). A wealth of choices: From anywhere on Earth to no location at all. The 2014 A.T. Kearney Global Services Location Index™. Retrieved from: <https://www.atkearney.com/strategic-it/global-services-location-index/2014> (10.01.2016).
- Axinn, W.G., & Pearce, L.D. (2009). *Mixed Method Data Collection Strategies. Ch. 1: Motivations for Mixed Method Social Research* (1-27). Cambridge: Cambridge University Press.
- Dembiński, M. (2013). *Poland Continues to Climb Doing Business Rankings*. Warszawa: British Polish Chamber of Commerce.
- Doing Business 2015. (2014) Going Beyond Efficiency. A World Bank Group Flagship Report. 2014 International Bank for Reconstruction and Development.
- Doktór, W. (2013). Poland, Quietly Leading – An overview about Poland as destination for ITO and BPO services. *The Outsourcing Journal*. Retrieved from: <http://outsourcing-journal.org> (10.01.2016).
- Drogendijk, R., & Zander, L. (2010). The Past, Present and Future of International Business & Management Advances in International Management, In: *Walking the Cultural Distance. In Search of Direction Beyond Friction*. Emerald Group Publishing Limited.
- Ertel, D., Enlow S., & Bubman, J. (2010). *Managing Offshoring Relationships: Governance in Global Deals*. Boston: Vantage Partners. Retrieved from: <http://info.vantagepartners.com/managing-offshoring-relationships> (15.01.2016).
- Fariñas, J.C., López, A., & Martín-Marcos, A. (2014). Assessing the Impact of Domestic Outsourcing and Offshoring on Productivity at the Firm Level. *Applied Economics*, 46(15), 1814-1828. doi: 10.1080/00036846.2014.884704
- Garcia-Prieto, P., & Point, S. (2009). *Cultural Differences in Offshoring: Turning the Threat of Diversity Around*. Duke University Offshoring Research Conference, Durham, US, April 5-7.
- Gera, V. (2013). *Poland Emerging as Major European Outsourcing Hub*. The Big Story AP.
- Greenaway, D. (2007). *Offshoring and the UK Economy*. Leverhulme Centre for Research on Globalisation and Economic Policy, The University of Nottingham
- Gregory, R., Prifling, M., & Beck, R. (2008). *Managing Cross-Cultural Dynamics In It Offshore Outsourcing Relationships: The Role Of Cultural Intelligence*. Second Information Systems Workshop on Global Sourcing.
- Halliyavar, N.R. (2013). Communication and Culture. *Golden Research Thoughts*, 3(1), 1-3.
- Handfield, R. (2006). *A Brief History of Outsourcing*. Supply Chain Resource Cooperative. Retrieved from: <https://scm.ncsu.edu/scm-articles/article/a-brief-history-of-outsourcing> (10.01.2016).
- Hatzichronoglou, T. (2007). *Offshoring and Employment: Trends and Impacts*. Paris: OECD Publishing.

- Hurmerinta, L., & Nummela, N. (2011). Mixed-method case studies in international business research. In: R. Piekkari & C. Welch (Eds.), *Rethinking the Case Study in International Business and Management Research* (210-228). Cheltenham, UK: Edward Elgar Publishing.
- Jakobson, R. (1960). Closing statement: Linguistics and poetics. In: T. Sebeok (Ed.), *Style in Language* (pp. 350-377). Cambridge: The MIT Press.
- Khan, S.U., & Azeem, M.I. (2014). Intercultural challenges in offshore software development outsourcing relationships: an exploratory study using a systematic literature review. *IET Software*, 8(4), 161-173. doi: 10.1049/iet-sen.2013.0012.
- KPMG (2009). *Personnel Security in Offshore Centres. Summary of Findings*. KPMG LLP.
- Młyniec, A., & Polkowski, M. (2016). *Office Market Profile: Poland Q4 2015*. Warszawa: Jones Lang LaSalle. Retrieved from: <http://propertyinvestors.pl/aktualnosci/office-market-profile-poland-q4-2015.html> (30.01.2016).
- Mohiuddin, M., & Su, Z. (2013). Manufacturing Small and Medium Size Enterprise's Offshore Outsourcing And Competitive Advantage: An Exploratory Study On Canadian Offshoring Manufacturing SMEs. *The Journal of Applied Business Research*, 29(4), 1111-1130.
- Mol, M.J. (2014) *What we know about Outsourcing*. Cambridge: Cambridge University Press.
- Nielsen, B.B., & Nielsen, S. (2008). *International Diversification Strategy and Firm Performance: A Multi-level. Analysis of Firm and Home Country Effects*. Academy of International Business Best Paper Proceedings.
- Oshri, I., Kotlarsky, J., & Willcocks, L. (2009). *The Handbook of Global Outsourcing and Offshoring*. Hampshire: Palgrave Macmillan.
- Outsource Magazine (2010). UK skills gap fuels offshoring. Retrieved from: <http://outsourcemag.com/uk-skills-gap-fuels-offshoring> (15.01.2016).
- PAliiZ (2015) *How to do Business: Investors' Guide-Poland*. Warszawa: PAliiZ and Deloitte Advisory.
- Persson, J.S., (2013). *The Cross-Cultural Knowledge Sharing Challenge: An Investigation of the Co-location Strategy in Software Development Offshoring*. Grand Successes and Failures in IT. Private and Public Sectors: IFIP WG 8.6 International Working Conference on Transfer and Diffusion of IT, TDIT 2013, Bangalore, India, June 27-29, 2013. Proceedings, 402, 310-325. Springer Publishing Company.
- Rai, U., & Rai, S.M. (2008). *Business Communication*. Mumbai India: Himalaya Publishing House.
- Sass, M., & Fifekova, M. (2011). Offshoring and Outsourcing Business Services to Central and Eastern Europe: Some Empirical and Conceptual Considerations. *European Planning Studies*, 19(9), 1593-1609.
- Satyanarayan, P. (2008). *Modern Business Communication*. Global Media.
- Slepniov, D., Brazinskas, S., & Wæhrens, B.V. (2013). Nearshoring practices. *Baltic Journal of Management*, 8(1), 5-26.
- Smith, L., & Mounter, P. (2005). *Effective Internal Communication*. Kogan Page Limited.
- Sousa, C.M.P., Bradley, F. (2006). Cultural Distance and Psychic Distance: Two Peas in a Pod? *Journal of International Marketing*, 14(1), 49-70.
- United Nations Conference on Trade and Development (2013). *World Investment Report 2013: Global Value Chains: Investment and Trade for Development*. New York and Geneva.
- United States Government Accountability Office (2006). *Offshoring: U.S. Semiconductor and Software Industries Increasingly Produce in China and India*. GAO-06-423 International Trade
- Warsaw Business Journal Group (2013). *Made in Poland. A Guide to Polish Export 2013*. Warszawa: PARP.

- Woods, D. (2010). Employers are struggling to fill their vacancies according to a report from the CIPD and KPMG. *HR Magazine*. Retrieved from: <http://www.hrmagazine.co.uk> (10.01.2016).
- Yin, R. K. (2009). *Case Study Research: Design and Methods*. 4th Ed.

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The Impact of Cultural Distance on Opportunity Recognition by Migrant Entrepreneurs

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Abstract

In this paper we focus on the impact of cultural distance on the ability to recognize opportunities by individuals migrating from one country to another. To conduct our quantitative empirical analysis we leverage on individual data on migrant entrepreneurs from the German Statistical office as well as Hofstede data on national cultures and test our hypothesis with curve linear multiple regression analysis. We find empirical evidence for an inverted U-shaped relationship between cultural distance and opportunity recognition (OR) by migrant entrepreneurs. Our study shows that migration may be considered as a great potential to increase entrepreneurial action and, thus, economic growth. To do so, public entrepreneurial support programs need to create different options for migrant entrepreneurs to achieve OR advantages by moving towards an optimal cultural distance level. First, we provide a theoretical discourse to explain how culture and more precisely cultural distance between home country and destination country impacts the OR ability of migrant entrepreneurs. Secondly, we contribute methodologically by measuring OR of migrant entrepreneurs with individual level data from the German Census 2011 aggregating it on a country level and combining it with a novel measurement of cultural distance using country-level data on national culture from Hofstede. Finally, we contribute empirically by providing evidence for the hypothesized relationship between cultural distance and OR of migrants.

Keywords: Opportunity recognition; entrepreneurship; migrant entrepreneur; migrant entrepreneurship; cultural distance

JEL codes: L26, F22, Z13

INTRODUCTION

The question “[w]hy some individuals and not others recognize opportunities and engage in entrepreneurship” should be at the centre of entrepreneurship (Shane, 2003; Shane & Venkataraman, 2000). This focus is especially deemed to be of importance with regards to the distinct migrant entrepreneurs’ OR abilities, often neglected by classical ethnic entrepreneurship literature (Basu, 2006; Waldinger, Aldrich, & Ward, 1990). Shedding light on the distinct abilities of migrant entrepreneurs with regards to their opportunity recognition (OR) abilities contributes to “understanding the influence of national culture on entrepreneurship [, which] is of considerable theoretical and practical value” (Hayton, George, & Zahra, 2002, 33).

In this paper we address this need by focusing on the impact of cultural distance on the ability to recognize opportunities by individuals migrating from one country to another, so called migrant entrepreneurs. Culture, as the system of collective values, beliefs and attitudes (Hofstede, 1980) is one of the most important factors influencing the individual ability to perceive opportunities (Shinnar, Giacomini, & Janssen, 2012) as well as the decision to engage into entrepreneurship (Hayton et al., 2002; Nguyen, Bryant, Rose, Tseng, & Kapasuwan, 2009; Pinillos & Reyes, 2011). In the case of migrants, the influence of culture on the decision to engage in entrepreneurship is particularly relevant (Light, 1973). By now, however, research on migrant entrepreneurs widely neglected the role of culture with regards to their distinctive abilities to see OR.

This paper contributes threefold to entrepreneurship literature. First, we provide a theoretical discourse combining opportunity with ethnic and social-cognitive theory to explain how culture and more precisely cultural distance between home country and destination country impacts the OR ability of migrant entrepreneurs. We hypothesise an inverted U-shaped relationship between cultural distance and OR for migrant entrepreneurs. Secondly, we contribute methodologically by measuring OR of migrant entrepreneurs with individual level data from the German Census 2011 aggregating it on a country level and combining it with a novel measurement of cultural distance using country-level data on national culture from Hofstede (1980). Finally, we contribute empirically by providing evidence for the hypothesized relationship between cultural distance and OR of migrants.

LITERATURE REVIEW

Before we delve into the concepts of culture, cultural distance, opportunity, and OR as well as the effects of migration on OR we need to clarify the terms entrepreneurship, entrepreneur, and migrant entrepreneur. We follow Shane & Venkataraman (2000, 217) and define entrepreneurship as a field that is “concerned with the discovery and exploitation of profitable opportunities”. Entrepreneurship is performed by “individuals who start their own businesses” (Bhide, 2000, 29). Migrant entrepreneurs are, thereby, distinct as they are united by a socio-cultural set of “connections and regular patterns of interaction among people sharing a common national background or migratory experience” (Waldinger et al., 1990, 33). To put it in even more precise terms for our study, we focus on all (im-)migrants that migrated to the Federal Republic of Germany since 1949 and all foreigners born in

Germany as well as all Germans born in Germany with at least one parent who migrated or was born as a foreigner in Germany (German Federal Statistical Office, 2015).

Defining Culture and Cultural Distance

Entrepreneurial action is a context-related construct and, thus, embedded in a particular social context, whereby the (potential migrant) entrepreneur's cognitive processes and behaviours are shaped by the interaction within their environment (Alvarez & Barney, 2007; Muzychenko, 2008; Shane, 2003; Zahra, Korri, & Yu, 2005). The respective (national) culture may be considered as one of many defining parameters of an (migrant) entrepreneur's environment (Hayton et al., 2002; Mitchell, Smith, Seawright, & Morse, 2000). Culture is a complex construct, and defining the phenomenon remains an equal challenge to date (Muzychenko, 2008; Shenkar, 2015; Sousa & Bradley, 2008). Social scientists describe culture "as a set of parameters of collectives that differentiate the collectives from each other in meaningful ways" (Dorfman & House, 2004, 57). Thereby, culture may be understood as a "system of values, beliefs, and attitudes that are shared by members of a society" (Muzychenko, 2008, 370). Hofstede (1998) notes that culture is the description of a society not of an individual, while this system of values, beliefs, and attitudes leads to a "collective programming of the mind" (Hofstede, 1991, 5) that distinguish groups of people from one another.

In this context, value-belief theory argues that the above-mentioned system of values and beliefs impact behaviours of individuals, groups, and institutions that are associated with a certain culture (House & Javidan, 2004; Shinnar et al., 2012). Furthermore, this system influences the way of how certain behaviours are viewed as legitimate, acceptable, and effective (Hofstede, 1998; House & Javidan, 2004) and provide an implicit understanding of the societal rules of the game (Gudykunst & Kim, 1992). Thus, value systems are "one of the most powerful constructs that delineates national culture" (Muzychenko, 2008, 370).

Alongside the socio-economic aspects, starting a business has also a cultural dimension (Chand & Ghorbani, 2011). Culture is one of the most important factors influencing the individual ability to perceive opportunities (Shinnar et al., 2012) and the decision to engage into entrepreneurship (Hayton et al., 2002; Nguyen et al., 2009; Pinillos & Reyes, 2011). Irrespective of their national origin, entrepreneurs share a set of cultural values (McGrath, MacMillan, Yang, & Tsai, 1992). Yet, some of these values mirror the value system of an entrepreneur's national culture (Mueller & Thomas, 2001). This interplay of national cultural and entrepreneurial values is demonstrated in Figure 1.

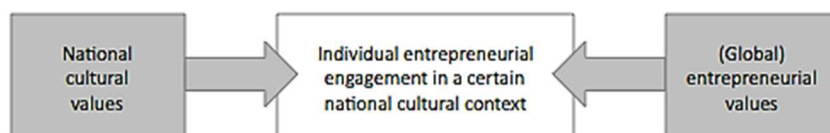


Figure 1. The influence of national cultural and entrepreneurial values on entrepreneurial engagement

Source: Own illustration based on McGrath et al. (1992), Mueller & Thomas (2001), Muzychenko (2008)

An individual who is engaged in entrepreneurship (or is able to recognize opportunities) in a certain national culture may, however, not necessarily be engaged in entrepreneurship in a different cultural context (Muzychenko, 2008). It is, therefore, necessary to develop a certain cultural fit between the national and entrepreneurial cultural value set to engage in entrepreneurship in a given cultural context (Hayton et al., 2002; Mitchell, Smith, Seawright, & Morse, 2000; Muzychenko, 2008; also, see Figure 5).

When national cultural values differ among a migrant population with regards to the indigenous population within a given country, we speak of cultural differences among these populations (Gudykunst & Kim, 1992; Mitchell et al., 2000). The national cultural differences between populations may be measured as national cultural distance which we define as “the degree to which the cultural norms in one country are different from those in another country” (Morosini, Shane, & Singh, 1998, 139). Focussing on migrant entrepreneurs, we revise this definition to the degree to which the cultural norms of a migrant population are different to the indigenous population¹.

Types of Opportunities And OR

To develop an understanding for OR, it is essential to begin with the definition of opportunities. We define an entrepreneurial opportunity according to Casson (1982) followed by Shane (2003, 18) as situations “in which a person can create a new means-ends framework for recombining resources that the entrepreneur believes will yield a profit”. Literature distinguishes between two main theories explaining the types and sources of opportunities, namely, the ‘creation theory’ by Schumpeter (1934) and ‘discovery theory’ by Kirzner (1973) (Alvarez & Barney, 2007; Shane, 2003). Schumpeter sees opportunities as being constructed by the entrepreneur, which is contrasted by Kirzner’s who postulates that opportunities objectively – independent of the entrepreneur – exist and are discovered by an entrepreneur.

The creation theory is based on Schumpeter’s creative destruction and sees the entrepreneur as the creative innovator who mentally constructs an entrepreneurial opportunity based on new information (Sarasvathy, 2001; Schumpeter, 1934; Shane, 2003). Opportunities, therefore, do not exist prior to their social construction by the entrepreneur’s perceptions which are influenced by his/her interaction with the environment (Alvarez & Barney, 2007; Shane, 2003; Venkataraman, 1997).

Looking at opportunities from a discovery perspective, Kirzner underlines the importance of entrepreneurial alertness: “... the ability to notice – without search – opportunities that have hitherto been overlooked” (Kirzner, 1979, 48). This state of heightened alertness to information (Ray & Cardozo, 1996) is necessary to discover apriori and objectively existent opportunities through search processes (Drucker, 1985; Eckhardt & Shane, 2003; Kirzner, 1973; McDougall, Shane, & Oviatt, 1994; Shane, 2003).

Both types of opportunities exist on markets in line with Mainela, Puhakka, & Servais (2014) and Shane & Venkataraman (2000) but differ along their degree of innovative-

¹ It may be noted that the conceptualisation and measurement of cultural distance remains challenging and are heatedly debated (Dow & Larimo, 2009; Shenkar, 2015). Referring to our subsequently analysed data set, we focus only on exogenous cultural differences on the national cultural while neglecting furthermore important aspects as language, institutional, perceived psychic distance, etc. (see, e.g., Dow & Larimo, 2009; Johanson & Vahlne, 1977). Our conceptualization of national cultural distance will be explained in the Material and Methods section of this paper.

ness. While Schumpeterian opportunities may be classified as highly innovative, rare and disequilibrating on markets, Kirznerian opportunities are less innovative, often of imitative character, common and affect markets in an equilibrating manner by eliminating market imperfections (Anokhin, Wincent, & Autio, 2011; Shane, 2003; Short, Ketchen, Shook, & Ireland, 2010). Despite the validity of the assumption that both types of opportunities exist (Anokhin et al., 2011; Edelman & Yli-Renko, 2010), we naturally ascribe their recognition to migrant entrepreneurs, too, but subsequently focus on Kirzner's arbitrage opportunities as they are more prevalent in migrant entrepreneurship (Aldrich & Waldinger, 1990; Basu, 2006; Waldinger et al., 1990).

Opportunities are the result of the antecedent OR process (De Koning & Muzyka, 1999; Gaglio & Katz, 2001; Grégoire, Barr, & Shepherd, 2010; Short et al., 2010; Ward, 2004). Lumpkin & Lichtenstein (2005, 457) define OR as the "ability to identify a good idea and transform it into a business concept that adds value and generates revenue". While this definition already addresses the exploitation of an opportunity we hew to Baron's (2004, 1) definition who sees OR as a "cognitive process ... through which individuals conclude that they have identified an opportunity". OR is an iterative process (Lumpkin & Lichtenstein, 2005) based on psychological schemes, pattern recognition processes and cognitive heuristics that is triggered within an alert entrepreneur by the market environment, special market situations, or events (Baron, 2006; Gaglio, 2004; Gaglio & Katz, 2001). Migration may be considered as an event that triggers for OR processes, which we will discuss in the next section.

Effects of Migration on OR

Information Asymmetries Resulting From Migration

Basu (2006) proposes that OR plays a particular role for migrant entrepreneurs. Thereby, he takes on Dobbin's (2005) proposition that migrant entrepreneurs' involvement in different cultures generates dual or multiple identities in individuals. These individuals tend to be more creative, entrepreneurially alert and sensitive to their environment (Basu, 2006; Kirzner, 1979) because they possess distinct knowledge and experience of different cultures (Basu, 2006; Levie, 2007). This may be classified as an information advantage leading to information asymmetries, which is fundamental for the discovery of opportunities (Kirzner, 1979; Mathews & Zander, 2007; Shane, 2000; Shane & Venkataraman, 2000). Accordingly, individuals who possess better access to information and have the cognitive abilities to process this information, see more opportunities and engage more likely in entrepreneurship (Hayek, 1945; Kirzner, 1978; Shane & Venkataraman, 2000; Singh, Knox, & Crump, 2008; Venkataraman, 1997).

Due to the fact that culture "is thought to influence the way of perceiving, thinking, feeling and evaluating, it is expected to affect the process by which the environment is 'known' and responded to" (Schneider, 1989, 152), culture has also an impact on information availability and processing by the individual. As a consequence, the dual or multiple identities in individuals who migrated from one cultural environment to another, develop a second "mind set" and not only get access to different information but can also interpret information in a different way (market information, pricing etc.), both preconditions for recognizing opportunities (Kirzner, 1973). In short: migrants see the world differently than native people and as a consequence see a wider set of entrepre-

neurial opportunities (Levie, 2007; Min & Bozorgmehr, 2003). Levie (2007, p. 146) refers to this phenomenon as the “opportunity perception advantage” of migrants, which is particularly distinctive when strong ties remain with their home countries (Basu, 2006).

Consequently, we argue that culture and specifically cultural distance between home country and destination country positively impacts the OR ability of migrants. However, this mechanism is strongly dependent on the cultural distance between the migrant’s home country and the destination country. We, therefore, argue that the greater the cultural distance between home and destination country the more different information is available to the alert migrant entrepreneur and the larger the probability to see many different opportunities. In other words, if an individual migrates to a culturally distant country the cultural “mind set” will largely differ between migrant and indigenous entrepreneur, wherefore more opportunities will fall into an alert entrepreneur’s “field of view”. We depict this proposition in Figure 2.

Applicability of Prior Knowledge in Case of Migration

When migrating to an unfamiliar cultural territory the previously adopted cultural patterns of thinking, feeling, and behaving (Kluckhohn & Murray, 1961) and, thus, the individual’s affective and cognitive or sense-making processes are negatively effected (Gudykunst & Kim, 1992; Muzychenko, 2008). A migrant entrepreneur may, therefore, not be able to accurately perceive and interpret the alien cultural environment and is, thus, not able to (a) predict the behaviour of the indigenous people or (b) show appropriate behavioural responses (Gudykunst, 1993, 2004; Ruben, 1976; Ruben & Kealey, 1979). The idiosyncratic prior knowledge leading to the ability to understand local needs as prerequisites for OR in a different cultural environment (Birkinshaw, 1997; Mainela et al., 2014) is, therefore, of limited usability. This effect may gradually diminish over time as individuals adapt to their new environment (Ruben & Kealey, 1979), yet, the magnitude of the cultural distance may impact the time span. On this account, we reason that the ability to recognise opportunities with regards to prior knowledge is negatively influenced by cultural distance. This effect increases the larger the cultural distance. We display this thought in Figure 2.

Blocked Access to Local Social Networks

Another important factor giving access to information are good social networks (Ardichvili et al., 2003; De Koning & Muzyka, 1999; Mainela et al., 2014). Granovetter, (1973) argues that weak ties, thus, casual acquaintances, bridge information sources and provide valuable access to unique information. Entrepreneurs frequently use their networks to gather information, and is, therefore, an influential element to recognise opportunities (De Clercq, Danis, & Dakhli, 2010; De Koning & Muzyka, 1999; Hills, 1995). Those entrepreneurs highly utilizing their networks leverage wider knowledge and increase the number of opportunities perceived (Brüderl, Preisendörfer, & Ziegler, 2009; Ucbasaran, Westhead, & Wright, 2008).

The access to these important local networks may initially be blocked for migrants (Waldinger et al., 1990), as trust is necessary to reduce the uncertainty of a foreigner’s behaviour and to build relationships to locals (Gudykunst & Kim, 1992). To build trustful relationships, not only the knowledge of linguistic codes is important but also of cultural rules for forming acquaintances (ibid). Thereby, the development of cultural competence – the effective- and appropriateness of one’s behaviour in an new cultural context (Lustig & Koester, 1999) – as well as cultural intelligence – the competence to interpret the

behaviour of indigenous people the way their compatriots would (Earley & Mosakowski, 2004) – play a decisive role to countervail these initial drawbacks (Muzychenko, 2008).

Migrants try to overcome this shortcoming by building strong local migrant or ethnic networks (Light & Bonacich, 1988; Portes & Sensenbrenner, 1993; Waldinger et al., 1990). These networks provide, e.g., access to distinct knowledge or seed capital (Aldrich & Waldinger, 1990; Light & Bonacich, 1988). Yet, these migrant or ethnic networks do not allow access to the entire potential scope of available knowledge and, thus, only partially compensate for the drawback of (at least an initially) blocked access to local networks. Therefore, we assume in the context of networks that the number (and potentially the quality or types) of opportunities perceived is (at least partially) reduced with an increase in cultural distance (see Figure 2).

Trepidation of Entrepreneurial Personality Traits Due to Migration

Ardichvili et al. (2003) mention the impact of personality traits on OR and emphasize the importance of optimism in this context.² Optimism is related to entrepreneurial self-efficacy, which is an antecedent of OR (Krueger & Dickson, 1994; Krueger, 2000; Neck & Manz, 1996). Bandura (1997, 3) defines self-efficacy as “the belief in one’s capability to organize and execute the courses of action required to produce given attainments”. The belief in one’s capabilities, therefore, leads to the ability to achieve intended results. From this a significant construct for OR, namely entrepreneurial self-efficacy, evolved (Forbes, 2005). Entrepreneurial self-efficacy is “the strength of a person’s belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship” (Chen, Greene, & Crick, 1998, 295). Self-efficacy is task-related and positively impacts the effort exerted on a task (the ability), which successively improves the task performance and, thus, the outcome of the task (Eden, 1993; Muzychenko, 2008). As elaborated above, migration and the exposure to an alien culture shatters an individual’s affective and cognitive sense-making mechanism (Gudykunst, 1993; Gudykunst & Kim, 1992; Ruben & Kealey, 1979) which leads to a state of ‘culture shock’ (Moran, Harris, & Moran, 2007). As the individual’s affective and physiological states significantly impact the de- or increase of self-efficacy (Bandura, 1997), culture shock is expected to negatively impact (entrepreneurial) self-efficacy, and thus reduces the ability to recognize a large number of opportunities in the destination country (Muzychenko, 2008). We, therefore, conclude that this mechanism applies for cultural distance, wherefore, an increase in cultural distance reduces the number of opportunities perceived by migrant entrepreneurs.

Summarizing Remark and Hypothesis Deduction

Bringing these views together (see Figure 2) we derive an overall hypothesis of an inverted U-shaped relationship between cultural distance and OR of migrant entrepreneurs. For our study we therefore formulate the following hypothesis:

- H:** The relationship between cultural distance and OR is curvilinear (inverted U-shape) with the highest OR at a medium level of cultural distance.

² Ardichvili et al., 2003 also mention the importance of creativity in connection with OR. We exclude this aspect with regards to our elaboration of factors influencing OR as creativity is mainly associated with the recognition of Schumpeterian opportunities (Alvarez & Barney, 2007; Schumpeter, 1934), while our study focuses on Kirznerian opportunities.

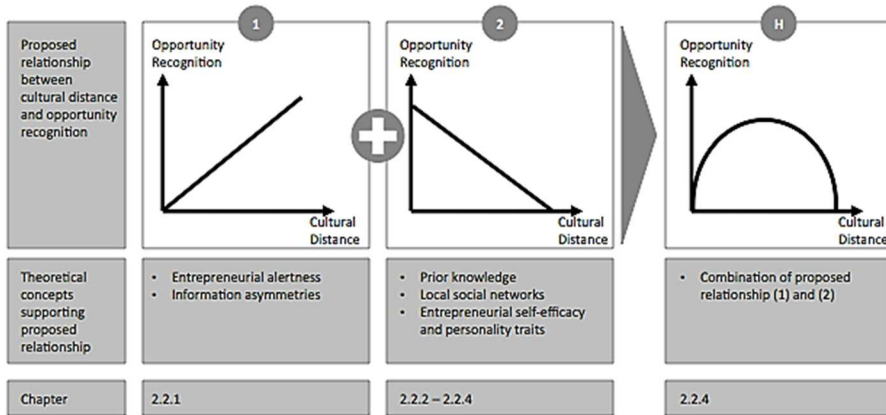


Figure 2. The theoretically proposed relationships between cultural distance and OR

Source: own illustration.

METHODS

To empirically investigate our hypothesis derived above, we decided to combine census data from the German Federal Statistical Office with Hofstede's dimensions of national culture. In the following, we will elaborate on our variable development as well as our research methods.

Dependent Variable

To measure OR, we use migrants' self-employment rates in Germany as a proxy. Self-employment of migrant entrepreneurs may be considered as less innovative (Basu, 2006; Waldinger et al., 1990) and is, therefore, in line with the Kirznerian view on opportunities, which we focused on above. These data are gathered from 2011 census data by the German Federal Statistical Office, which is providing individual level data with regards to the individual's country of origin and employment status. We aggregate these data by a two-step process to a country level. First, we sorted individual cases according to their country of origin (migration background). Second, we calculated the self-employment rate for every country of origin leading to 177 observations in total. To ensure robustness for the proposed relationship, we use migrant's self-employment rates as percentage of the total population as well as percentage of the employed population.

Independent Variable

Cultural distance is measured by using the four dimensions of national culture proposed by Hofstede (1980): 'Power Distance' (PDI), 'Individualism versus Collectivism' (IND), 'Masculinity versus Femininity' (MAS), and 'Uncertainty Avoidance' (UAI). Hofstede's cultural dimension indices are used as the country of origin measures for migrant entrepreneurs in Germany, while the cultural dimensions for Germany function as the destination country variables. We assume that Hofstede's dimensions are orthogonal and, thus, (at least to a large extent) independent of each other. On this basis, we make use of the Euclidean distance formula to calculate the cultural distance for each migratory group with respect to Germany. Hereby, we calculate the distance by taking the square root

out of the squared sums of the differences between the country of origin (migration background) value and the destination country (in this case Germany). The resulting Euclidean distance is described by the following formula (1):

$$D_o = \sqrt{\sum_{i=1}^n (o_i - d_i)^2} \quad (1)$$

where:

- D_o - is the cultural distance of country of origin o (migration background),
- o_i - is the hofstede dimension of the country of origin, with:
 - o_1 - is power distance (pdi) of the country of origin,
 - o_2 - is individualism versus collectivism (ind) of the country of origin,
 - o_3 - is masculinity versus femininity (mas) of the country of origin,
 - o_4 - is uncertainty avoidance (uai) of the country of origin,
- d_i - is the hofstede dimension of the destination country (in this case: germany), with
 - d_1 - is power distance (pdi) of the destination country,
 - d_2 - is individualism versus collectivism (ind) of the destination country,
 - d_3 - is masculinity versus femininity (mas) of the destination country,
 - d_4 - is uncertainty (uai) of the destination country

We received cultural distance measures for 80 countries. Combining this data set with the 2011 census data leads to an overlap of 78 countries. The syntax of our on-site selected data set was audited by the German Federal Statistical Office. Due to protection of data privacy, the German Federal Statistical Office reduced the sample to 57 countries, including Germany. It, thus, encompasses only countries with sufficiently many data points to prevent from identifying individuals, adding to sample consistency. We excluded Germany for our regression analysis, leaving 56 countries in our sample.

We furthermore control for gender and age by including the percentage of men in and average age of the total population in the respective migrant group.

RESULTS AND DISCUSSION

To test our hypothesis, we applied multiple curve linear regression analysis on four separate models.

Model 1 tests the direct effects of the relationship between cultural distance and OR of migrant entrepreneurs. It shows a slightly negative relationship between the z-standardised cultural distance variable and "self-employment in percent of total population" which is not significant though. Model 2, furthermore, tests the nonlinear effects, including the z-standardized and squared z-standardized cultural distance variable, of the proposed relationship. Again, we find a slightly negative relationship between cultural distance and OR, but with significant results at a $p < 0.1$ level. The second model explains 16 percent of the variance and verifies the initial hypothesis of an inverted U-shape relationship between cultural distance and OR. Testing the robustness of Models 1 and 2 with Models 3 and 4 verifies the above results. Model 3, again, shows a negative and non-significant relationship between cultural distance (based on the z-standardized Euclidean distance variable) and OR with regards to the direct effects.

Table 2. Results of multiple curve linear regression analysis

Variable / Measure	Self-employed as percentage of total population (OR)				Self-employed as percentage of employed people (OR)			
	Direct effects		Nonlinear effects		Direct effects		Nonlinear effects	
	Model 1		Model 2		Model 3		Model 4	
	Beta	VIF	Beta	VIF	Beta	VIF	Beta	VIF
<i>Control variables</i>								
Age	0.229.	1.240	0.261*	1.278	0.008	1.240	0.043	1.278
Sex	0.133	1.094	0.107	1.118	0.130	1.094	0.102	1.118
<i>Direct effects</i>								
Cultural distance	-0.150	1.334	-0.231^	1.570	-0.135	1.334	-0.224^	1.570
<i>Nonlinear effects</i>								
Cultural distance – squared (Hypothesis 1)	-	-	-0.193^	1.337	-	-	-0.212^	1.337
<i>Quality criteria</i>								
R	0.364		0.400		0.213		0.281	
R ²	0.132		0.160		0.046		0.079	
Adjusted-R ²	0.083		0.095		-0.009		0.008	
F-statistics	2.693		2.478		0.843		1.116	

Notes: N=56; significant codes: '***' p<0.001, '**' p<0.01, '*' p<0.05, '.' p<0.1, '^' p<1.

Variables are z- standardised

Source: own calculations in SPSS based on census data from the German Federal Statistical Office (2011) and Hofstede's dimensions of national culture.

The nonlinear effects are tested in Model 4 and show significant and slightly negative relationships at $p < 0.1$ between OR and cultural distance (based on the z-standardized and squared z-standardized Euclidean distance variable). Model 4 explains only roughly eight percent of the variance in comparison to Model 2. Overall, we may conclude that the results for Model 1 and 2 are robust as the robustness check with Model 3 and 4 leads to comparable results. Our underlying hypothesis is, thus, supported by our results, visualised in Figure 3.

Figure 5 shows the inverted U-shaped relationship between migrant's OR and cultural distance. The figure is based on the original Euclidean distance variable and not on its z-standardized version, as its scale is more intuitive and illustrative than the z-standardized one. Yet, the results when using the z-standardized variable remain the same.

Looking at cultural distance we can define a continuum between small and large cultural distance. The estimated curve firstly shows a low ascent until reaching its maximum level of OR at about one third (the so-called optimal cultural distance) which is followed by a comparably strong decline on OR. Migrant entrepreneurs being culturally close to the indigenous population of the destination country are able to see opportunities, but, yet, not at an optimal level. To reach an optimal level of OR, migrant entrepreneurs need a certain degree of cultural distance which on the one hand increases ones knowledge base but on the other hand leaves enough cultural proximity to spot the opportunity in the cultural context, i.e. in the destination country. Hence, a certain degree of cultural proximity as well as local knowledge seems to be necessary to assure the migrant entrepreneurs' interpretability of the cultural circumstances (e.g., understanding of local business and government procedures, etc.) to recognize opportunities. Migrant entrepreneurs at the

large distance end of the continuum enjoy the advantage of a wide knowledge base but without an understanding of the cultural rules of the game it seems to be less likely to see opportunities. In summary, the curvilinearity in Figure 5 shows that a wider knowledge base impacts migrant entrepreneur's OR to a lesser extent than cultural proximity.

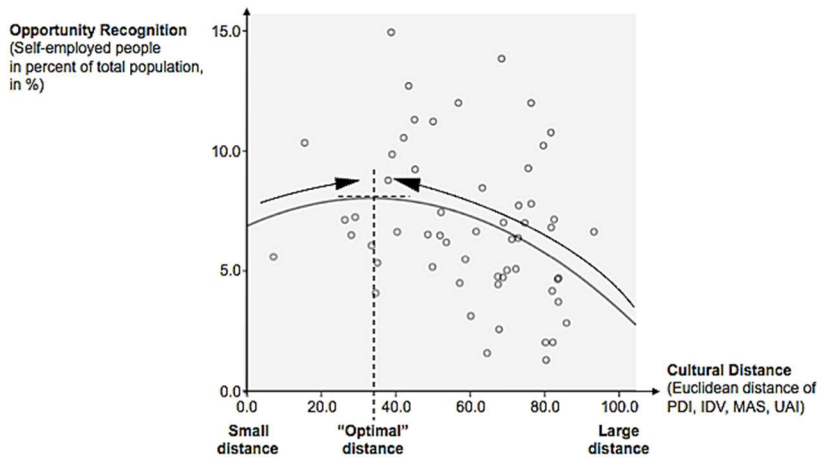


Figure 3. Results of Model 2 showing the inverted U-shaped relationship between OR and cultural distance

Source: Own illustration and own calculations based on census data from the German Federal Statistical Office (2011) and Hofstede's dimensions of national culture

CONCLUSIONS

This paper contributes to the existing research on migrant entrepreneurship on a theoretical, methodological and an empirical level. With regards to the first level, we respond to the call for research on OR of migrant entrepreneurs on a country level (Basu, 2006). We draw on entrepreneurship theory, focussing on OR factors, to theoretically investigate the impact of cultural distance on entrepreneurial action, namely on the OR ability of migrant entrepreneurs. This may be a basis for future research on migrant entrepreneurs' OR in different country settings.

Second, we contribute in methodological terms as we propose a novel way of operationalising cultural distance in order to empirically test its impact on entrepreneurship. This is done by using individual level census data, aggregating them on a country level and combining them with Hofstede's cultural dimensions. This provides a reasonably solid basis for defining cultural differences and measuring cultural distance between different countries and migration backgrounds in our case.

Finally, from an empirical point of view, we provide statistical evidence for the influence of cultural distance on OR. Our results show that social and global mobility help to increase OR. This finding also underlines the importance of understanding migration as a potential for fostering entrepreneurship and innovation and, thus, economic growth.

Our results confirm the importance of a certain degree of diverse and, yet, specific knowledge resulting from cultural distance. Looking at the continuum scale of cultural distance, we can subsume that migrant entrepreneurs with a small cultural distance with

regards to the destination country enjoy the advantage of a high degree of local integration, e.g. within networks, while lacking diverse knowledge as suggested by Kirzner (1973). Migrant entrepreneurs at the large cultural distance end of the continuum have access to a wide range of diverse knowledge but lack a minimum degree of cultural proximity, which reduces their ability to see opportunities in a certain cultural context. Both extremes face problems with OR. Only an optimal interplay of diverse knowledge as well as context-related interpretability of knowledge and cultural proximity including cultural adaptability increases OR – and entrepreneurial activities in the long term – as optimally distant migrant entrepreneurs are able to combine their distinct knowledge with the local cultural rules of the entrepreneurial game. At the same time, the cultural proximity advantage outweighs a wide cultural knowledge base according to the results found in the analysis. This might be a sign that factors which might be regarded as being related to knowledge (e.g. better access to information resulting from migration) are less important than more practical factors (applicability of prior knowledge; access to local networks; personal preconditions to act). This is not surprising as at the end of the day becoming self-employed is more about “doing” than “knowing”. However, the question remains whether this finding also holds in the case of highly innovative opportunities which come with their very own rules of the game but were neglected in our research.

Our results have furthermore important implications for policy makers. Our study shows that migrant entrepreneurship may be considered as a great potential to increase entrepreneurial action and, thus, economic growth. To do so, public entrepreneurial support programs need to create different options for migrant entrepreneurs to achieve OR advantages by moving towards an optimal cultural distance level. Those migrant entrepreneurs located at the small cultural distances end should, e.g., be engaged in entrepreneurial exchange programs to develop a diverse knowledge base. To unfold the potential of migrant entrepreneurs located at the large cultural distance end, their local integration needs to be supported in different ways ranging from access to local entrepreneurial networks to training in intercultural communication. At the same time, as migrant entrepreneurship literature often suggests, hurdles, as e.g., access to seed capital, need to be reduced continuously for migrant entrepreneurs (Aldrich & Waldinger, 1990; Kloosterman & Rath, 2001; Leicht et al., 2004) to create equal opportunities for a group of entrepreneurs, often underestimated.

Despite our theoretical, methodological and empirical contributions, we acknowledge that our research focuses on external factors influencing migrant entrepreneurs’ OR. Future research, therefore, needs to further investigate internal factors (e.g., cognitive capabilities, risk aversion, etc.) that shed light on migrant entrepreneurs’ distinct OR capabilities.

We acknowledge that the theory development above takes a static view on the relationships between cultural distance and OR. Time might certainly be a decisive factor balancing the impact of cultural distance on OR. This is certainly dependent on a migrant entrepreneur’s will to develop coping mechanisms, as e.g., cultural competences, in the alien environment (Muzychenko, 2008; Waldinger et al., 1990). Also, we cannot make a clear statement about the individual weights of each factor affected by cultural distance and influencing the amount of recognized opportunities.

Furthermore, our cultural distance measurement based on Hofstede's indices is certainly debatable. Notwithstanding this, we regard our research as a thought-provoking impulse combining aspects of culture, cultural distance and migrant entrepreneur's OR capabilities. Yet, we admit that the concept of culture – while not even having looked at sub-cultural effects – is too complex and multifaceted to be comprehended within a simplified measurement. Nevertheless, as of now, we are able to picture a simplified view of migrant entrepreneur's cultural distance towards their destination country which is applicable to all countries used by Hofstede given that corresponding census data would be available. However, future research needs to develop further comprehensive conceptual models and corresponding empirical investigations to understand the complex facets of migrant entrepreneurs' distinct ability to recognise opportunities.

Finally, our results are only significant at a $p < 0.1$ level. This is attributed to our sample size of 56 countries. However, similar research operates with equal significance levels. Additionally, we are presenting a cross-sectional cut with our research. Further longitudinal analysis would be beneficial to corroborate our results.

REFERENCES

- Aldrich, H. E., & Waldinger, R. (1990). Ethnicity and Entrepreneurship. *Annual Review of Sociology*, 16, 111-135.
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1), 11-26.
- Anokhin, S., Wincent, J., & Autio, E. (2011). Operationalizing Opportunities in Entrepreneurship Research: Use of Data envelopment Analysis. *Small Business Economics*, 37(1), 39-57.
- Ardichvili, A., Cordozo, R. N., & Ray, S. (2003). A Theory of Entrepreneurial Opportunity Identification and Development. *Journal of Business Venturing*, 18(1), 105-123.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman.
- Baron, R. A. (2004). OR: A Cognitive Perspective. In *Academy of Management Proceedings 2004*, A1-A6.
- Baron, R. A. (2006). OR as pattern recognition: How entrepreneurs "connect the dots" to identify new business opportunities. *The Academy of Management Perspectives*, 20(1), 104-119.
- Basu, A. (2006). Ethnic Minority Entrepreneurship. In M. Casson, B. Yeung, A. Basu, & N. Wadeson (Eds.), *The Oxford Handbook of Entrepreneurship* (pp. 580-600). New York: Oxford University Press.
- Bhide, A. (2000). *The Origin and Evolution of New Businesses*. New York: Oxford University Press.
- Birkinshaw, J. (1997). Entrepreneurship in Multinational Corporations: The Characteristics of Subsidiary Initiatives. *Strategic Management Journal*, 18(3), 207-229.
- Brüderl, J., Preisendörfer, P., & Ziegler, R. (2009). *Der Erfolg neugegründeter Betriebe: Eine empirische Studie zu den Chancen und Risiken von Unternehmensgründungen*. Duncker & Humblot GmbH.
- Casson, M. (1982). *The Entrepreneur: An Economic Theory*. Cheltenham, UK ; Northampton, MA: Edward Elgar.
- Chand, M., & Ghorbani, M. (2011). National Culture, Networks and Ethnic Entrepreneurship: A Comparison of the Indian and Chinese Immigrants in the US. *International Business Review*, 20(6), 593-606.
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- De Clercq, D., Danis, W. M., & Dakhli, M. (2010). The moderating effect of institutional context on the relationship between associational activity and new business activity in emerging econo-

- mies. *International Business Review*, 19(1), 85-101.
- De Koning, A., & Muzyka, D. (1999). Conceptualizing OR as a socio-cognitive process. Centre for Advanced Studies in Leadership, Stockholm.
- Dobbin, C. (2005). *Asian Entrepreneurial Minorities: Conjoint Communities in the Making of the World-Economy, 1570-1940* (reprint). Richmond: Curzon.
- Dorfman, P. W., & House, R. J. (2004). Cultural Influences on Organizational Leadership. Literature Review, Theoretical Rationale, and GLOBE Project Goals. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, Leadership, and Organizations. The GLOBE Study of 62 Societies* (pp. 51–73). Thousand Oaks, CA; London, New Delhi: Sage Publications.
- Dow, D., & Larimo, J. (2009). Challenging the Conceptualization and Measurement of Distance and International Experience in Entry Mode Choice Research. *Journal of International Marketing*, 17(2), 74-98.
- Drucker, P. F. (1985). *Innovation and Entrepreneurship: Practice and Principles*. New York, NY: HarperBusiness.
- Earley, P. C., & Mosakowski, E. (2004). Cultural Intelligence. *Harvard Business Review*, 82(10), 139-146.
- Eckhardt, J. T., & Shane, S. A. (2003). Opportunities and Entrepreneurship. *Journal of Management*, 29(3), 333-349.
- Edelman, L., & Yli-Renko, H. (2010). The Impact of Environment and Entrepreneurial Perceptions on Venture-Creation Efforts: Bridging the Discovery and Creation Views of Entrepreneurship. *Entrepreneurship Theory and Practice*, 34(5), 833-856.
- Eden, D. (1993). Leadership and Expectations: Pygmalion Effects and Other Self-Fulfilling Prophecies in Organizations. *The Leadership Quarterly*, 3(4), 271-305.
- Forbes, D. P. (2005). The Effects of Strategic Decision Making on Entrepreneurial Self-Efficacy. *Entrepreneurship Theory and Practice*, 29(5), 599-626.
- Gaglio, C. M. (2004). The Role of Mental Simulations and Counterfactual Thinking in the Opportunity Identification Process. *Entrepreneurship Theory and Practice*, 28(6), 533-552.
- Gaglio, C. M., & Katz, J. A. (2001). The psychological basis of opportunity identification: Entrepreneurial alertness. *Small Business Economics*, 16(2), 95-111.
- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 1360-1380.
- Grégoire, D. A., Barr, P. S., & Shepherd, D. A. (2010). Cognitive Processes of OR: The Role of Structural Alignment. *Organization Science*, 21(2), 413-431.
- Gudykunst, W. B. (1993). Toward a Theory of Effective Interpersonal and Intergroup Communication: An anxiety/uncertainty Management (AUM) Perspective. In R. L. Wiseman & J. Koester (Eds.), *Intercultural communication competence* (pp. 33-71). Newbury Park: Sage Publications.
- Gudykunst, W. B. (2004). *Bridging Differences: Effective Intergroup Communication* (4th ed). Thousand Oaks, Calif: Sage Publications.
- Gudykunst, W. B., & Kim, Y. Y. (1992). *Communicating with Strangers: An Approach to Intercultural Communication* (2nd ed). New York: McGraw-Hill.
- Hayek, F. (1945). The Use of Knowledge in Society. *The American Economic Review*, 35(4), 519-530.
- Hayton, J. C., George, G., & Zahra, S. A. (2002). National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship Theory and Practice*, 26(4), 33-52.
- Hills, G. E. (1995). OR by successful entrepreneurs: A pilot study. *Frontiers of Entrepreneurship Research*, 15, 105-117.
- Hofstede, G. (1991). *Cultures and Organization. Software of the Mind*. London: McGraw-Hill.
- Hofstede, G. (1998). *Attitudes, Values and Organizational Culture: Disentangling the Concepts*.

- Organization Studies, 19(3), 477-493.
- Hofstede, G. H. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills: Sage Publications.
- House, R. J., & Javidan, M. (2004). Overview of GLOBE. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, Leadership, and Organizations. The GLOBE Study of 62 Societies* (pp. 9–28). Thousand Oaks, CA; London, New Delhi: Sage Publications.
- Johanson, J., & Vahlne, J.-E. (1977). The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Foreign Commitments. *Journal of International Business Studies*, 8(1), 23-32.
- Kirzner, I. (1973). *Competition and Entrepreneurship*. Chicago, IL: University of Chicago Press.
- Kirzner, I. M. (1978). *Wettbewerb und Unternehmertum*. Tübingen: Mohr.
- Kirzner, I. M. (1979). *Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship*. Chicago: University of Chicago Press.
- Kloosterman, R., & Rath, J. (2001). Immigrant Entrepreneurs in Advanced Economies: Mixed Embeddedness Further Explored. *Journal of Ethnic and Migration Studies*, 27(2), 189-202.
- Kluckhohn, C., & Murray, H. A. (1961). Personality Formation: The Determinants. In *Personality in Nature, Society, and Culture* (2nd revised and enlarged, pp. 53-67). New York, NY: Alfred A. Knopf.
- Krueger, N., & Dickson, P. R. (1994). How Believing in Ourselves Increases Risk Taking: Perceived Self-Efficacy and OR. *Decision Sciences*, 25(3), 385-400.
- Krueger, N. F. (2000). The Cognitive Infrastructure of Opportunity Emergence. *Entrepreneurship Theory and Practice*, 24, 5-23.
- Leicht, R., Humpert, A., Leiss, M., Zimmer-Müller, M., Lauxen-Ulbrich, M., & Fehrenbach, S. (2004). Die Bedeutung der Ethnische Ökonomie für Deutschland. Push- und Pull-Faktoren für Unternehmensgründungen ausländischstämmiger Mitbürger. Institut für Mittelstandsforschung.
- Levie, J. (2007). Immigration, In-Migration, Ethnicity and Entrepreneurship in the United Kingdom. *Small Business Economics*, 28(2-3), 143-169.
- Light, I., & Bonacich, E. (1988). *Immigrant entrepreneurs: Koreans in Los Angeles 1965-1982*. Berkeley: Univ. of California Press.
- Light, I. H. (1973). *Ethnic Enterprise in America : Business and Welfare Among Chinese, Japanese, and Blacks*. Berkeley: University of California Press.
- Lumpkin, G. T., & Lichtenstein, B. B. (2005). The role of organizational learning in the opportunity-recognition process. *Entrepreneurship Theory and Practice*, 29(4), 451-472.
- Lustig, M. W., & Koester, J. (1999). *Intercultural Competence: Interpersonal Communication Across Cultures*. Longman.
- Mainela, T., Puhakka, V., & Servais, P. (2014). The Concept of International Opportunity in International Entrepreneurship: A Review and a Research Agenda: The Concept of International Opportunity. *International Journal of Management Reviews*, 16(1), 105-129.
- Mathews, J. A., & Zander, I. (2007). The international entrepreneurial dynamics of accelerated internationalisation. *Journal of International Business Studies*, 38(3), 387-403.
- McGrath, R. G., MacMillan, I. C., Yang, E. A.-Y., & Tsai, W. (1992). Does culture endure, or is it malleable? Issues for entrepreneurial economic development. *Journal of Business Venturing*, 7(6), 441-458.
- Min, P. G., & Bozorgmehr, M. (2003). United States: The Entrepreneurial Cutting Edge. In R. Kloosterman & J. Rath (Eds.), *Immigrant Entrepreneurs: Venturing Abroad in the Age of Globalization* (pp. 17–37). Oxford: Berg Publishers.
- Mitchell, R. K., Smith, B., Seawright, K. W., & Morse, E. A. (2000). Cross-Cultural Cognitions and the

- Venture Creation Decision. *Academy of Management Journal*, 43(5), 974-993.
- Moran, R. T., Harris, P. R., & Moran, S. V. (2007). *Managing cultural differences: global leadership strategies for the 21st century* (7th ed). Amsterdam ; Boston: Elsevier/Butterworth-Heinemann.
- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137-158.
- Mueller, S. L., & Thomas, A. S. (2001). Culture and Entrepreneurial Potential: A Nine Country Study of Locus of Control and Innovativeness. *Journal of Business Venturing*, 16(1), 51-75.
- Muzychenko, O. (2008). Cross-cultural entrepreneurial competence in identifying international business opportunities. *European Management Journal*, 26(6), 366-377.
- Neck, C. P., & Manz, C. C. (1996). Thought Self-Leadership: The Impact of Mental Strategies Training on Employee Cognition, Behavior, and Affect. *Journal of Organizational Behavior*, 17(5), 445-467.
- Nguyen, T. V., Bryant, S. E., Rose, J., Tseng, C., & Kapasuwan, S. (2009). Cultural Values, Market Institutions, and Entrepreneurship Potential: A Comparative Study of the United States, Taiwan, and Vietnam. *Journal of Developmental Entrepreneurship*, 14(1), 21-37.
- Phillips McDougall, P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9(6), 469-487.
- Pinillos, M.-J., & Reyes, L. (2011). Relationship Between Individualist–Collectivist Culture and Entrepreneurial Activity: Evidence From Global Entrepreneurship Monitor Data. *Small Business Economics*, 37(1), 23-37.
- Portes, A., & Sensenbrenner, J. (1993). Embeddedness and Immigration: Notes on the Social Determinants of Economic Action. *American Journal of Sociology*, 98(6), 1320-1350.
- Ray, S., & Cardozo, R. (1996). Sensitivity and Creativity in Entrepreneurial OR: A Framework for Empirical Investigation. Presented at the Sixth Global Entrepreneurship Research Conference, Imperial College, London.
- Ruben, B. D. (1976). Assessing Communication Competency for Intercultural Adaptation. *Group & Organization Management*, 1(3), 334-354.
- Ruben, B. D., & Kealey, D. J. (1979). Behavioral Assessment of Communication Competency and the Prediction of Cross-Cultural Adaptation. *International Journal of Intercultural Relations*, 3(1), 15-47.
- Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *Academy of Management Review*, 26(2), 243-263.
- Schneider, S. C. (1989). Strategy Formulation: The Impact of National Culture. *Organization Studies*, 10(2), 149-168.
- Schumpeter, J. A. (1934). *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*. New Brunswick, NJ, London: Transaction Publishers.
- Shane, S. (2000). Prior Knowledge and the Discovery of Entrepreneurial Opportunities. *Organization Science*, 11(4), 448-469.
- Shane, S. A. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Cheltenham: Elgar.
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *The Academy of Management Review*, 25(1), 217.
- Shenkar, O. (2015). Cultural Distance Revisited: Towards a More Rigorous Conceptualization and Measurement of Cultural Differences. *Journal of International Business Studies*, 32(3), 519-535.
- Shinnar, R. S., Giacomini, O., & Janssen, F. (2012). Entrepreneurial Perceptions and Intentions: The

- Role of Gender and Culture. *Entrepreneurship Theory and Practice*, 36(3), 465-493.
- Short, J. C., Ketchen, D. J., Shook, C. L., & Ireland, R. D. (2010). The Concept of "Opportunity" in Entrepreneurship Research: Past Accomplishments and Future Challenges. *Journal of Management*, 36(1), 40-65.
- Singh, R. P., Knox, E. L., & Crump, M. E. (2008). OR Differences Between Black and White Nascent Entrepreneurs: A Test of Bhavé's Model. *Journal of Developmental Entrepreneurship*, 13(01), 59-75.
- Sousa, C. M. P., & Bradley, F. (2008). Cultural Distance and Psychic Distance: Refinements in Conceptualisation and Measurement. *Journal of Marketing Management*, 24(5-6), 467-488.
- German Federal Statistical Office. (2015). Bevölkerung und Erwerbstätigkeit. Bevölkerung mit Migrationshintergrund – Ergebnisse des Mikrozensus – 2014 (Fachserie 1 No. Reihe 2.2). Wiesbaden: Statistisches Bundesamt. Retrieved from https://www.destatis.de/DE/Publikationen/Thematisch/Bevoelkerung/MigrationIntegration/Migrationshintergrund2010220147004.pdf;jsessionid=147C5AB10D43E3DC7248EEA85368757_0.cae3?__blob=publicationFile on December 18, 2015.
- Ucbasaran, D., Westhead, P., & Wright, M. (2008). Opportunity Identification and Pursuit: Does an Entrepreneur's Human Capital Matter? *Small Business Economics*, 30(2), 153-173.
- Urban, D., & Mayerl, J. (2006). *Regressionsanalyse: theorie, technik und anwendung* (4th ed.). Wiesbaden: VS-Verlag.
- Venkataraman, S. (1997). The Distinctive Domain of Entrepreneurship Research. *Advances in Entrepreneurship, Firm Emergence and Growth*, 3(1), 119-138.
- Waldinger, R. D., Aldrich, H., & Ward, R. (1990). *Ethnic Entrepreneurs: Immigrant Business in Industrial Societies*. Newbury Park, CA: Sage Publications.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173-188.
- Zahra, S. A., Korri, J. S., & Yu, J. (2005). Cognition and International Entrepreneurship: Implications for Research on International OR and Exploitation. *International Business Review*, 14(2), 129-146.

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Youth Entrepreneurship in Visegrad Countries

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Abstract

The aim of our paper is to analyse the entrepreneurial activity drivers of youth and young adults in Visegrad countries, considering the opportunity/necessity motivation dichotomy. We employ the Global Entrepreneurship Monitor data for young individuals (18 to 34 years) from V4 countries for years 2011 to 2013. We use the binomial logistic regression modelling with logit transformation. Separate models are constructed for youth and young adults, as well as for opportunity- and necessity-driven entrepreneurial activity. We found common drivers and distinctive attributes affecting involvement of young people in business start-up according to its motivation. Self-confidence and access to networks are universally important factors. In most examined cases, fear of failure and being a female reduces chance of business start-up. Especially among youth, being a student significantly inhibits involvement in enterprising efforts. In order to support youth entrepreneurship, emphasis should be put on education and training to build skills and knowledge required for business start-ups, together with capacity to spot opportunities, and reduce fear of failure. Based on empirical analysis, our findings point out the key drivers of entrepreneurial activity among young people in V4 countries.

Keywords: entrepreneurship; Visegrad countries (V4); youth; opportunity; necessity; drivers

JEL codes: L26

INTRODUCTION

The issue of youth entrepreneurship is, from the macroeconomic perspective, aimed mainly on economic and societal dimensions of this phenomenon (Holienka, 2014). En-

entrepreneurship is perceived as one of the potential solutions to youth unemployment, which has become a particularly hot topic throughout entire Europe. Its solution lies not only in self-employment, but also in potential for creation of other jobs. Especially regarding young individuals, the issue has also other important dimension. It is the age group in the beginning or in early stages of economic activity. If they decide for entrepreneurship as their career choice, they will hopefully become economically self-sufficient and will create their own jobs instead of looking for them, and potentially also create jobs for other people. Thus, such decision in early phases of economic activity is a good assumption (however, not a matter of course) that individuals will follow the self-sufficiency during the entire economic active age and contribute to the development of quantity as well as qualitative side of entrepreneurial activity in an economy.

Moreover, youth entrepreneurship is a highly important phenomenon also in the context of current development of economies. The immense growth of innovation brings trends such as constant dynamics and instability, rapid changes or increased cognitive complexity (Integral Assets Consulting, 2006). These lead to changing nature of labour, and to need for application of enterprising attributes not only for profit businesses, but also in the role of employee or in many other different social roles. Formation of such skills is therefore not only the way towards development of independent, profit-oriented entrepreneurship. On contrary, its role is to support creativity, innovativeness and ability to identify opportunities and bring ideas into life, thus equipping young people with “enterprising mindset” that can be utilized in many different activities.

To foster their involvement in entrepreneurship, policy makers need to understand the factors leading young individuals towards enterprising efforts. Former research has shown that, in relation to entrepreneurship, young people and mature people are different in several areas, including accumulation of resources and skills; psychological, cognitive and motivational attributes; and reaction to influences from the environment, culture and norms (Minola, Criaco & Cassia, 2014). However, generalising the drivers of youth entrepreneurship may be too oversimplifying. With this respect, at macro level, we need to consider at least two other dimensions – age cohorts and motivation. It is clear that the group referred to as young individuals is rather large and heterogeneous. One perspective on this divergence considers whether an individual is already economically active or still in the phase of preparation for future occupation. These two stages are substantially diverse, which implies their difference in relation to entrepreneurship. Regarding motivation, entrepreneurial activities may arise from wide variety of different motives. Generally, these motives can be well classified into two main categories – opportunity and necessity. By definition, these two types refer to different underlying life situations that may reflect potential drivers of business start-up in different way. Without specific preference to any of them, it is important to understand mechanism behind both these types of entrepreneurship.

The aim of our paper is to analyse the entrepreneurial activity drivers of youth and young adults in Visegrad countries, considering the opportunity/necessity motivation dichotomy. To do so, we employ the Global Entrepreneurship Monitor 2011 to 2013 individual-level data in a pooled sample from V4 countries and perform a binomial logistic regression analysis in search for drivers significantly affecting individual involvement of youth and young adults in early-stage entrepreneurial activity out of opportunity and necessity.

The structure of our paper is standard. In the following section we provide a review of literature on youth entrepreneurship, its drivers, as well as nature and role of necessity and opportunity motivation to start a business. Section 3 describes the materials and methods employed in our analysis, while Section 4 presents and discusses its results and main findings.

LITERATURE REVIEW

What Does It Mean “Youth” in Entrepreneurship Context?

The first question that needs to be clarified when dealing with youth entrepreneurship is the definition of “youth”. In fact, there is no universal definition of youth neither generally nor in this specific context. For example, United Nations understands youth as individuals in the age of 15 to 24, but it also accepts the existence of definitions used by other countries of entities (United Nations, 2014). One of such is the definition used in the EU, where Eurostat considers youth as individuals in the age of 15 to 29 years (European Commission, 2009).

Especially in relation to entrepreneurship, Chigunta (2002) introduced definition and classification of youth entrepreneurship from qualitative perspective through “transitional categorization” based on structural differences between entrepreneurial activities of young people in different age. It recognizes three main phases of youth entrepreneurship. It also stresses that the transitional process is not necessarily linear, and the age categorization is not strict either, because the transfer between phases may differ in particular economies or industries. The first “pre-entrepreneurship” phase (15 to 19 years) represents a forming phase or some trial period. Young people usually find themselves in this phase during the transfer from “family nest” or educational process to the position of economically active individuals. The second “budding entrepreneurship” phase (20 to 25 years) reflects a growth phase in which young individuals can already possess certain experience, skills or capital, enabling them to run their own business activities. Finally, the third phase of “emergent entrepreneurship” (26 to 29 years) is the main phase where young entrepreneurs are, thanks to experience acquired (not only) in entrepreneurship, more mature than younger individuals, thus increasing the chance that they can successfully manage a vital business activity.

However, for the purpose of our analysis based on GEM data, we need to follow clearly defined age criteria. Thus, we incline to the GEM perspective, where youth entrepreneurship includes individuals in the age from 18 to 34 years (Kew, Herrington, Litovsky & Gale, 2013). Due to heterogeneity in such broad category, we further distinguish between the youth (18 to 24) and young adults (25 to 34), which also corresponds with the GEM perspective (Pilková, Holienka, Kovačicová & Reháč, 2014). This distinction reflects the specifics of these two groups and their position in an economy. Youth usually find themselves at the doorstep of economic activity. There, some individuals still remain in the process of preparation for their occupation, while the others are fully involved among either workforce or self-employed, or they attempt to include into economically active life. On contrary, among young adults, the preparation to occupation has usually been completed, and an active participation in the economic activity within the society is anticipated.

Drivers of Youth Entrepreneurship

The research on youth entrepreneurship is mainly focused on factors influencing the entrepreneurial activity, both in its quantity as well as quality (Pilková *et al.*, 2014). The most frequently studied drivers of individual involvement in entrepreneurial activity are the individual entrepreneurship-related attributes, social capital and perception of societal attitudes, and individual demographic characteristics. Since former research indicates rather general validity than age-specific nature of these drivers, we will consider the full scope of these potential factors in our analysis.

Individual demographic characteristics studied for their influence on taking the entrepreneurial path are mainly gender, educational attainment and household income. Gender studies suggest that the entrepreneurial propensity of men and women may be influenced by differences attributed to gender-specific characteristics (Langowitz & Minniti, 2007). Most empirical studies found that, despite considerable recent growth in their inclusion, women still tend to be underrepresented in entrepreneur population (Davis, 2012; Bjerke, 2013). The assumptions about effect of educational attainment is related to the concept of human capital, representing a knowledge base determining the individual's capacity to recognize and pursue entrepreneurial opportunities (Ramos-Rodríguez, Medina-Garrido, Lorenzo-Gómez & Ruiz-Navarro, 2010). Previous empirical research proved human capital, partially operationalized through educational attainment, to be positively related to nascent entrepreneurship (Kim, Aldrich & Keister, 2006). Finally, the role of household income can be viewed through the financial resources perspective, especially with the opportunity costs of reducing this income. According to Kim *et al.* (2006), at lower income levels, individuals may consider the opportunity costs of starting business very low, while at higher income levels, individuals may perceive that the loss of their current income outweighs prospective (and still uncertain) gains from a new business (Kim *et al.*, 2006), thus abstaining from business start-up.

The most commonly investigated individual attributes related to the involvement in entrepreneurial activity are alertness to business opportunities, entrepreneurial self-confidence, and fear of failure. Alertness to business opportunities is related to individual subjective perception of good opportunities for starting up and running an enterprise. According to Kirzner (1979), such alertness is a key perceptual characteristic of entrepreneurial behaviour and a necessary precondition for entrepreneurial action. It has been proven as an important driver of engagement in enterprising efforts (Arenius & Minniti, 2005; Koellinger, Minniti & Schaded, 2007). Entrepreneurial self-confidence relates to the concept of self-efficacy, that represents one's judgement of own ability to execute an action and produce designated levels of performance (Bandura, 1994). Thus, it has been established as a reliable predictor of different goal-directed behaviours, including entrepreneurship. Self-efficacy is strongly related to perceived behavioural control and ability, which together with attitude toward behaviour and subjective norm influence the intention, that in turn affects the actual behaviour of an individual (Ajzen, 1991). In case of entrepreneurship, the context-specific self-efficacy represents the self-confidence of an individual in having the required skills, experience and abilities to successfully start-up and run a business. Previous empirical studies have proven the positive relationship between high levels of self-efficacy and individual entrepreneurial

activity (Arenius & Minniti, 2005; Lukeš, Zouhar, Jakl & Očko, 2013; Wong & Lee, 2005). Fear of failure represents a subjective perception regarding the risk of entrepreneurial failure and its possible consequences. Since the majority of individuals are supposed to be risk-averse by nature, increased fear of failure is expected to act as an inhibitor of entrepreneurial action (Arenius & Minniti, 2005). Empirical research has provided certain evidence supporting these assumptions considering entrepreneurial activity (Arenius & Minniti, 2005; Lukeš *et al.*, 2013; Wagner, 2007).

Social capital generally refers to social networks of an individual that enable to extract benefits from these social structures, networks and memberships through the social exchange (Portes, 1998). It represents an external knowledge provided by other people in the entrepreneur's environment (Ramos-Rodríguez *et al.*, 2010), which foster the discovery of opportunities, their exploitation as well as the identification, collection and allocation of scarce resources (Davidsson & Honig, 2003). One of the most relevant sources of social capital for early-stage entrepreneurs are other individuals with recent business start-up experience. Empirical research has already identified positive impact of knowing an entrepreneur on involvement in entrepreneurship (Lukeš *et al.*, 2013).

Perception of societal attitudes towards entrepreneurship represents an individual perception of social norms, values, beliefs and assumptions socially carried by individuals within the society and influencing their behaviour. In other words, we speak about institutions (North, 1990). They shape the entrepreneurial activity of individuals who try to adjust their actions to achieve conformity in the environment shaped by these institutions. One of them is the status of successful entrepreneurs in a society. If an individual believes successful entrepreneurs enjoy high levels of social status and respect, he will be generally more likely to find entrepreneurial activity desirable. He would perceive that by joining an entrepreneurial path he would achieve legitimacy by conforming to norms and values within society (Lonsbury & Glynn, 2001).

Opportunity and Necessity Motives and Entrepreneurship Drivers

There is a wide range of different motives behind the decision to start a business. Simply, within the GEM perspective, they are divided into the two main categories – opportunity and necessity motives (Reynolds, Camp, Bygrave, Autio & Hay, 2001). The question is, how these motives moderate the generally expected relationship between the above described factors and individual involvement in entrepreneurial activity. Verheul, Thurik, Hessels and van der Zwan (2010) argue that distinction between opportunity and necessity entrepreneurs is important for several reasons, one of them being the difference between determinants of opportunity and necessity entrepreneurship. In this respect, former empirical research provided some evidence, but it is rather ambiguous. For example, there are no consistent findings on effects of age or educational level (Bergmann & Sternberg, 2007; Giacomini, Janssen, Guyot & Lohest, 2011; Verheul *et al.*, 2010; Wagner, 2005). Also, while Giacomini *et al.* (2011) identified negative effect of having entrepreneurial relatives on necessity entrepreneurship, Verheul *et al.* (2010) and Wagner (2005) found positive effect of role models on opportunity entrepreneurs, and Morales-Gualdrón and Roig (2005) found positive influence of knowing an entrepreneur on both types. Finally, both Wagner (2005) and Morales-Gualdrón and Roig (2005) found fear of failure acting as inhibitor of necessity as well as opportunity entrepreneurial efforts, while Verheul *et al.* (2010) found no significant effect of this attribute at all.

MATERIAL AND METHODS

Data and Variables

The aim of our paper is to analyse the entrepreneurial activity drivers of youth and young adults in V4 countries, considering the opportunity/necessity motivation dichotomy.

Our analysis is based on Global Entrepreneurship Monitor (GEM) data. GEM is the largest academic study dealing with entrepreneurship in the world that annually monitors entrepreneurial attributes and activities (Singer, Amorós & Arreola, 2015). It uses two main primary data collection instruments – Adult Population Survey (APS) and National Expert Survey (NES). The APS is annually executed in all participating countries and collects individual-level data through a standardized survey instrument administered to representative samples from adult populations (18 to 64 years old). Due to its focus on individuals, representativeness by age and gender on country level, and specific focus on entrepreneurial activity and entrepreneurship-related attributes of individuals, GEM APS data are the most appropriate material to be used in our analysis.

We created a pooled sample using GEM APS individual level data for V4 countries from three consecutive years 2011 to 2013, with age of respondents between 18 to 34 years as the only selection criterion. This resulted to a sample of 9 290 young individuals: 2 473 (26.6%) from Czech Republic, 2 114 (22.8%) from Hungary, 2 388 (25.7%) from Slovakia and 2 315 (24.9%) from Poland. This sample contained 313 youth (18 to 24) early-stage entrepreneurs (out of them 231 opportunity-driven and 81 necessity-driven) and 781 young adult early-stage entrepreneurs (out of them 548 running their businesses based on opportunity, and 218 out of necessity). The main sample was further divided into four subsamples – two for analysing the opportunity-driven entrepreneurship (containing non-entrepreneurs and entrepreneurs out of opportunity) among youth and young adults, and other two for the analysis of necessity-driven activity (comprising of non-entrepreneurs and entrepreneurs starting out of necessity) among youth and young adult population.

We employed standard GEM variables in our analysis. The dependent variables indicated involvement of respondents in opportunity- or necessity-driven early-stage entrepreneurial activity. In GEM, total early-stage entrepreneurial activity (TEA) includes individuals actively involved in setting up a business (nascent entrepreneurs) or owning-managing new firms that are less than 3.5 years old (new entrepreneurs). TEA individuals are further classified according to the reported dominant reason for involvement in business start-up. Those who indicated having no better choices for work are considered as necessity-driven entrepreneurs, while those whose reason was mainly/partially to take advantage of business opportunity, or who were seeking for better opportunities than in their recent jobs, are classified as opportunity-based entrepreneurs.

The explanatory variables employed in our analysis include the following: (1) entrepreneurial self-confidence (belief in having knowledge, skill and experience required to start a new business; yes=1, no=0), (2) alertness to opportunities (belief in good opportunities for starting a business in the area where respondent lives in the close future; yes=1, no=0), (3) fear of failure (having a fear of failure that would prevent respondent from starting a new business; yes=1, no=0), (4) knowing an entrepreneur (knowing personally someone who started a business in recent two years;

yes=1, no=0), (5) perceived status of new entrepreneurs (indicated agreement with statement that in respondent's country, successful new entrepreneurs possess high levels of status and respect; yes=1, no=0), (6) gender (male=1, female=2), (7) education (highest educational attainment), (8) student ("student" indicated as employment status; yes=1, no=0), and (9) household income (total annual household income classified into lowest/middle/upper 33%-tile for each country). Finally, we also included age and proxies for country and year of survey as control variables.

Hypotheses

We propose the following hypotheses on entrepreneurial activity drivers among youth and young adults in V4 countries, considering the opportunity/necessity motivation dichotomy:

- H1:** Entrepreneurial self-confidence is positively related to involvement in both types of entrepreneurship.
- H2:** Alertness to opportunities is positively related with opportunity entrepreneurship, while it has no significant relation with necessity entrepreneurship.
- H3:** Fear of failure is negatively related to involvement in both types of entrepreneurship.
- H4:** Knowing an entrepreneur is positively related to involvement in both types of entrepreneurship.
- H5:** Perceiving high social status of successful new entrepreneurs is positively related to involvement in both types of entrepreneurship.
- H6:** Involvement in both opportunity and necessity entrepreneurship is domain of men, i.e. gender is significantly related to involvement in both types of entrepreneurship.
- H7:** Educational attainment is positively related to involvement in both types of entrepreneurship.
- H8:** Student status is negatively related to involvement in both types of entrepreneurship.
- H9:** Household income is negatively related to involvement in both types of entrepreneurship.

Methods

To identify the drivers of involvement in either opportunity- or necessity-based early-stage entrepreneurial activity among youth and young adults we used a binomial logistic regression modelling. This model estimates the probability of an event happening. In our case this event was owning-managing a business activity based on necessity or opportunity by youth or young adult individuals. Thus, we conducted four regression models with two different dependent variables (opportunity-driven and necessity-driven early-stage entrepreneurial activity) for each both age categories. To estimate the parameters of each model we used statistical software R, namely its build-in function for Generalized Linear Models (GLM) which was set on binomial family with logit transformation. The significance of parameters was tested using Wald z-statistics. Maximum likelihood estimations were used to calculate the logit coefficients denoting changes in the log odds of

the dependent variable. Correlations between independent variables were tested and proved not to be problematic. The selections of final models were conducted through a stepwise regression function drop1 using Chi-square goodness of fit test, log-likelihood ratio function and Akaike Information Criterion. The selected final models were then compared to the real observation using Hosmer and Lemeshow goodness of fit (GOF) test, which indicated that the models are well fitted.

RESULTS AND DISCUSSION

Drivers of Opportunity-based Entrepreneurship

The results of binomial logistic regression conducted to identify the drivers of opportunity-based early-stage entrepreneurial activity among youth and young adult population suggest that nine out of twelve analysed variables are significant (Table 1). Interestingly, except of only two out of the variables that proved significance, all remaining variables were significant in case of both youth as well as young adults.

The estimated coefficients in Table 1 describe the effect of a variable on the odds of engagement in opportunity-driven entrepreneurial activity relative to not being involved in early-stage business at all. If the coefficient value is positive, holding all other variables equal, an increase in a variable raises the likelihood of involvement in business out of opportunity. Therefore, as can be seen from the results, the odds of getting engaged in opportunity-driven early-stage entrepreneurial activity among both youth and young adults are positively related to self-confidence about having entrepreneurial skills (with the highest coefficient value in both models), alertness to good business opportunities, knowing an entrepreneur with recent start-up experience and income level (belonging to middle 33% tile in case of youth, and to upper 33% tile in both categories, compared to the lower 33% tile which was set as a base category). On contrary, in cases of both youth and young adults, having a fear of failure is negatively related to the odds of involvement in opportunity-based business start-up. Moreover, both age categories exhibit significant effect of gender, where being female is negatively related to odds of starting a business based on opportunity. In addition to the common drivers, we have identified also two factors that are specifically significant to individual age categories. In case of youth, student status was found to be significantly reducing the odds of getting engaged in starting an opportunity-based business (with the second strongest influence in the model). In case of young adults, we found significant positive relationship between the odds of starting an opportunity-based early-stage entrepreneurial activity and perception of high societal status of successful new entrepreneurs. As for our control variables, we found positive effect of country affiliation (with Hungary set as a base category) in two cases, with no specific pattern. Age and year of survey were not significant and they were dropped from the final model.

Table 1. Opportunity-driven entrepreneurial activity drivers (logistic regression results)

Variable / Measure	Model: Youth				Model: Young adults			
	Estimate	Std. Error	Z value	Pr(> z)	Estimate	Std. Error	Z value	Pr(> z)
(Intercept)	-3.4773	0.3417	-10.1770	< 2e-16	-4.3758	0.2823	-15.4990	< 2e-16
Self-confidence	1.6611	0.2158	7.6960	< 1e-14	1.6673	0.1758	9.4860	< 2e-16
Alertness to opportunities	0.6155	0.1874	3.2850	0.0010	0.4723	0.1225	3.8540	0.0001
Fear of failure	-0.7639	0.2019	-3.7840	0.0002	-0.6342	0.1267	-5.0040	< 5e-7
Knowing an entrepreneur	1.1392	0.1959	5.8160	< 6e-9	1.1829	0.1336	8.8550	< 2e-16
Gender	-0.7456	0.1984	-3.7580	0.0002	-0.6214	0.1290	-4.8170	< 1e-6
Student	-1.4296	0.3112	-4.5930	< 4e-6	–	–	–	–
Status of entrepreneur	–	–	–	–	0.2655	0.1253	2.1190	0.0341
Income: mid 33% tile	0.5669	0.2687	2.1100	0.0349	0.1935	0.1817	1.0650	0.2869
Income: up 33% tile	0.6838	0.2556	2.6760	0.0075	0.4982	0.1685	2.9560	0.0031
Poland	-1.2179	0.3024	-4.0270	0.0001	-0.0002	0.2000	-0.0010	0.9994
Czech Rep.	-0.2811	0.2675	-1.0510	0.2933	0.4628	0.1905	2.4290	0.0152
Slovakia	-0.4801	0.2647	-1.8140	0.0697	0.1841	0.1892	0.9730	0.3304
Res. dev.	865.1				1932.6			
df	2 040				3 632			
Akaike	889.1				1956.6			
Log-likelihood	< 1e-4				9.7050			
p (Chi-sq.)	0.9992				0.0018			
HL GOF	0.9747				0.6288			

“–” = variable dropped from the model

Source: own calculations in statistical software R.

Drivers of Necessity-based Entrepreneurship

As shown in Table 2 below, the results of binomial logistic regression analysis conducted to identify the drivers of youth and young adult involvement in early-stage entrepreneurial activity out of necessity prove significance of seven out of twelve variables. However, the two examined age cohorts have only two common significant drivers, while the remaining variables were found to be significant always for one of the categories only.

As can be seen from the results presented in Table 2, the odds of becoming engaged in necessity-driven entrepreneurial activity in both analysed age categories are positively related to entrepreneurial self-confidence (with strongest effect among all significant variables in both models) and knowing an individual with recent start-up experience. In addition to these two common drivers, we have identified several factors relevant specifically to one of the analysed cohorts. Regarding the youth, we have found that having a fear of failure and being a student significantly inhibit odds of involvement in early-stage business activity out of necessity. Also, we found a significant relationship between income category and odds of starting a business out of necessity (especially for belonging to middle 33% tile compared to lower 33% tile which was set as a base category). On contrary, regarding the young adults, we have identified the significant effect of gender, with being female exhibiting negative relationship to the odds of becoming involved in

necessity-driven entrepreneurial activity. As for the control variables, we have found significant effect of country affiliation (with Hungary set as a base category) in case of young adults, but with no specific pattern. Age and year of survey were found not significant and were dropped from the final model.

Table 2. Necessity-driven entrepreneurial activity drivers (logistic regression results)

Variable / Measure	Model: Youth				Model: Young adults			
	Estimate	Std. Error	Z value	Pr(> z)	Estimate	Std. Error	Z value	Pr(> z)
(Intercept)	-4.5885	0.4224	-10.8620	< 2e-16	-4.6854	0.3109	-15.0690	< 2e-16
Self-confidence	1.7457	0.3224	5.4140	0.0000	1.5000	0.2359	6.3600	< 2e-10
Fear of failure	-0.7863	0.2888	-2.7230	0.0065	–	–	–	–
Knowing an entrepreneur	0.6774	0.2701	2.5080	0.0121	0.8298	0.1845	4.4980	< 6e-6
Gender	–	–	–	–	-0.2474	0.1770	-1.3980	0.1621
Student	-1.5523	0.5254	-2.9550	0.0031	–	–	–	–
Income: mid 33% tile	0.9019	0.3608	2.4990	0.0124	–	–	–	–
Income: up 33% tile	0.0857	0.3899	0.2200	0.8261	–	–	–	–
Poland	–	–	–	–	0.4215	0.2730	1.5440	0.1226
Czech Rep.	–	–	–	–	-0.2114	0.3040	-0.6960	0.4867
Slovakia	–	–	–	–	0.5431	0.2677	2.0290	0.0425
Res. dev.				457.2				1 106.8
df				1 945				3 416
Akaike				489.2				1 120.8
Log-likelihood				1.8640				2.8200
p (Chi-sq.)				0.1722				0.0931
HLL GOF				0.5407				0.9033

“–” = variable dropped from the model

Source: own calculations in statistical software R.

Synthesis, Comparison and Discussion of Findings

Our findings on significant drivers of opportunity and necessity early-stage entrepreneurship among youth and young adult individuals in V4 countries identify several common drivers together with certain distinctive attributes. Summary of our findings on significance of the hypothesized drivers is provided in Table 3 below. It points out some interesting key findings. First, having the entrepreneurial self-confidence as well as an access to entrepreneurial network (through personally knowing someone who recently started a business) are significantly related to both types of entrepreneurship in both age categories. Moreover, self-confidence exhibits the strongest relation among explanatory variables with similar strength in all four models. On contrary, knowing an entrepreneur was found to have considerably higher strength in case of opportunity-driven entrepreneurial activity. Second, fear of failure significantly inhibits all examined types of entrepreneurship (with very similar strength of the relationship), except of the necessity-driven efforts among young adults. Third, being a female was found to be negatively associated with involvement in opportunity-driven activity in both age cohorts, as well as with involvement in necessity-driven efforts in young adult age category. Fourth, we found that being a student in youth age category significantly inhibits involvement in

early-stage entrepreneurial activity, irrespective its predominant motivation. Moreover, this factor had the second highest strength in both models. Finally, we found significant positive relationship between income category and all examined alternatives, except of entrepreneurship out of necessity among young adults.

Table 3. Significance of the hypothesized youth entrepreneurship drivers (summary)

Variable	Opportunity		Necessity	
	Youth	Young adults	Youth	Young adults
Self-confidence	Yes (+)	Yes (+)	Yes (+)	Yes (+)
Alertness to opportunities	Yes (+)	Yes (+)	No	No
Fear of failure	Yes (-)	Yes (-)	Yes (-)	No
Knowing an entrepreneur	Yes (+)	Yes (+)	Yes (+)	Yes (+)
Status of entrepreneur	No	Yes (+)	No	No
Gender	Yes	Yes	No	Yes
Education	No	No	No	No
Student	Yes (-)	No	Yes (-)	No
Income	Yes (+)	Yes (+)	Yes (+)	No

(+) = positive relationship; (-) = negative relationship

Source: own elaboration.

Self-confidence about having skills, knowledge and experience required to start a business was found the most important driver leading both youth and young adults towards engagement in business start-ups, irrespective the motivation in behind. Important role of self-confidence corresponds with the theory establishing it as a component affecting, together with opportunity recognition, the perceived feasibility of entrepreneurial act (Krueger, Reillyb & Carsrudc, 2000). Also, our findings are in line with empirical research among general entrepreneurial population (Arenius & Kovalainen, 2006; Koellinger, 2008). Especially related to youth entrepreneurship, our results correspond with findings by Ceptureanu (2015) who identified that almost 8 in 10 young entrepreneurs reported to have strong self-confidence. Moreover, universality of this driver is suggested also by very similar strength of relationship in all our models. Thus, we can conclude that this generally proven driver of entrepreneurial propensity is also valid for young individuals, whether they face opportunity or necessity start-up motivation.

Alertness to good business opportunities was identified as a factor significantly related only with opportunity-driven activity, but both among youth and young adults. In our opinion, this result is rather self-explanatory, since opportunity recognition is an important precondition for involvement in opportunity-based business start-up (e.g. Krueger *et al.*, 2000). Also, previous empirical research has proven the role of opportunity perception as significant business involvement driver (Ramos-Rodríguez, Medina-Garridoa & Ruiz-Navarro, 2012; Langowitz & Minniti, 2007). Regarding young entrepreneurs, study by Ceptureanu (2015) found three quarters of young entrepreneurs positively self-assessing their ability to identify opportunities.

Fear of failure that would prevent one from starting a business was found to be a significant inhibitor of involvement in entrepreneurial activity. The only exception are young adult necessity-driven businesses. To explain this finding, we assume that under the pressure of necessity, young adults (who are usually already economically active and have certain responsibilities to secure income for themselves and their families) are

more likely to overcome the existent fear of failure and make a step out of their comfort zone towards starting a business activity, than in case they would not be pushed and would consider starting a business based on recognized opportunity, or than their younger counterparts with (generally) no economic responsibilities are. Previous empirical findings related to fear of failure are quite ambiguous, showing significant (Ramos-Rodriguez *et al.*, 2012) as well as no effect (Driga, Lafuente & Vaillant, 2008), alongside with moderating effect of gender (Koellinger, Minniti & Schade, 2013; Wagner, 2007). Thus, our results that decompose population of entrepreneurs according to age category and start-up motivation may contribute to explaining the reason for such ambiguity.

Knowing personally an individual with recent start-up experience (our proxy for entrepreneurship-relevant social capital) was found to have significant positive relationship with propensity to both necessity- and opportunity-driven entrepreneurial activity among both youth and young adults, which corresponds with previous empirical findings (Lukes *et al.*, 2013; Ramos-Rodriguez *et al.*, 2012). Interestingly, this relationship is stronger in case of opportunity-driven entrepreneurship. Thus, in our opinion, the nature of this relationship may have different origins in the two types of motives. In case of opportunity, we assume that individuals benefit from their entrepreneurial network mainly in terms of broadening horizons for recognition and creation of business opportunities, and capacity to their exploitation. On contrary, when individuals face the necessity, entrepreneurial network may encourage them to pursue the business start-up path as one of the ways out of necessity, or help them to acquire required resources.

Perceived high societal status of entrepreneurs was found to be significant only in case of opportunity entrepreneurship among young adults, but with rather low strength (as the factor with the lowest strength in the model). Thus, we assume, unlike we hypothesized, that there is no general pattern in relationship between this particular societal attitudes perception, and involvement in business start-up efforts.

Gender was identified as factor significantly influencing the both types of young adults' entrepreneurial activity, as well as the opportunity-based activity of youth. In particular, being a female is negatively related to becoming an early-stage entrepreneur. This is in line with previous findings on uneven representation of women in business activities (Holiienka, Jančovičová & Kovačičová, 2016). However, the exception in case of youth necessity-driven activity suggests that female youth individuals consider entrepreneurship as way out of necessity in similar extent as their male counterparts.

Education was found not to be significantly related to business start-up in none of our models, irrespective the type of motive. Thus, we assume that formal educational attainment is not a relevant human capital component influencing the ability to recognize and exploit business opportunities (therefore fostering opportunity-driven activities), or providing other sufficient occupational options in the necessity situation (thus inhibiting necessity-based business start-ups) among young individuals. Similar findings have been presented by previous empirical studies (Lukeš *et al.*, 2013; Van Der Sluis, Van Praag & Vijverberg, 2008).

Student status was identified as significant inhibitor of youth involvement in early-stage entrepreneurial activity, irrespective its motivation. In our opinion, this result can be explained by the fact that, generally, youth individuals participating in the educational process do not consider opportunities around them to start a business, nor they are in

necessity situations, since they do not yet need to be economically active and self-sufficient, and can generally rely on support of their families.

Finally, regarding household income, we found its significant positive relationship to involvement in entrepreneurial activity of young individuals in all cases, except of necessity-driven young adult entrepreneurship. While opportunity-driven entrepreneurship exhibited stronger relationship with the upper income category, it was middle income category in case of necessity-based youth entrepreneurship. Generally, in our opinion, there might be a logical explanation for this situation. We suppose that this relationship does not mean causality from income to entrepreneurial activity, but rather in the opposite direction. In simple words, young individuals probably do not start businesses because of high income of their household, but, vice versa, they rather achieve higher income thanks to being involved in opportunity-based entrepreneurship.

CONCLUSIONS

Our findings suggest there are several similarities together with certain differences in opportunity- and necessity-driven entrepreneurship drivers among young individuals. According to our results, entrepreneurial self-confidence and access to entrepreneurial network are significantly related to both types of entrepreneurship in both age categories. While fear of failure significantly inhibits all examined types of entrepreneurship except of the necessity-driven efforts among young adults, being a female was found to be negatively associated with involvement in opportunity-driven activity in both age cohorts, as well as with involvement in necessity-driven efforts in young adult age category. Also, being a student was found to be significant inhibitor of enterprising effort of youth irrespective its motivation, and alertness to opportunities was identified as important driver of opportunity-based businesses in both age categories.

Regarding the limitations of our analysis, since all analysed items originate from the same survey, as well as due to the testing method employed, an argument that our findings cannot be unambiguously interpreted as causal relationships could occur (Bosma, 2013). However, the evidence coming from our data is rather strong and based on solid theoretical arguments, so we argue that qualitative nature of our results is correct. Also, due to the nature of our data, we were not able to inquire deeper into the nature of opportunity or necessity, or possibility of their combination. Thus, we recommend these directions to be followed by future entrepreneurship research devoted to the opportunity/necessity perspective. Also, further directions could expand research on youth entrepreneurship from individual to social and institutional levels, using multi-level analytical techniques.

From a policy perspective, our results identify the important factors in relation to support of entrepreneurial activities considering the motivation behind business start-up. We show directions for policy makers aiming to foster entrepreneurship within young generation as both a way to exploit available business opportunities, as well as reaction to necessity situations.

REFERENCES

- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Arenius, P., & Minniti, M. (2005). Perceptual Variables and Nascent Entrepreneurship. *Small Business Economics*, 24(3), 233-247.
- Arenius, P., & Kovalainen, A. (2006). Similarities and differences across the factors associated with women's self-employment preference in the Nordic countries. *International Small Business Journal*, 24(1), 31-59.
- Bandura, A. (1994). Self-efficacy. In V.S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (pp. 71-81). Vol. 4. New York: Academic Press.
- Bergmann, H., & Sternberg, R. (2007). The changing face of entrepreneurship in Germany. *Small Business Economics*, 28(2), 205-221.
- Bjerke, B. (2013). *About Entrepreneurship*. Cheltenham: Edward Elgar.
- Bosma, N. (2013). The Global Entrepreneurship Monitor (GEM) and its impact on entrepreneurship research. *Foundations and Trends in Entrepreneurship*, 9(2), 143-248.
- Ceptureanu, S.I. (2015). Romanian Young Entrepreneurs Features: An Empirical Survey. *The Annals of the University of Oradea - Economic Sciences*, 25(1), 1068-1078.
- Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.
- Davis, A.E. (2012). Women's Entrepreneurship. In M.R. Marvel (Ed.), *Encyclopedia of New Venture Management* (pp. 469-471). Thousand Oaks: Sage Publications.
- Driga, O., Lafuente, E., & Vaillant, Y. (2008). Reasons for the relatively lower entrepreneurial activity levels of rural women in Spain. *Sociologia Ruralis*, 49(1), 70-96.
- European Commission (2009). *Youth in Europe. A statistical portrait*. 2009 edition. Luxembourg: Publications Office of the EU.
- Giacomin, O., Janssen, F., Guyot, J., & Lohest, O. (2011). *Opportunity and/or necessity entrepreneurship? The impact of the socio-economic characteristics of entrepreneurs*. MPRA Paper No. 29506. Munich: MPRA.
- Holienka, M. (2014). Youth entrepreneurship in Slovakia: a GEM based perspective. *Comenius Management Review*, 8(2), 41-50.
- Holienka, M., Jančovičová, Z., & Kovačičová, Z. (2016). Drivers of women entrepreneurship in Visegrad countries: GEM evidence. *Procedia – Social and Behavioral Sciences*, 220, 124-133.
- Chigunta, F. (2002). *Youth Entrepreneurship: Meeting the Key Policy Challenges*. Oxford: Wolfson College, Oxford University.
- Integral Assets Consulting (2006). *Youth Entrepreneurship. Theory, Practice and Field Development*. A Background Paper prepared for the W. K. Kellogg Foundation. Retrieved on May 5, 2016 from <http://extension.missouri.edu/exceed/documents/YouthEntrepreneurshipKelloggFoundation2007.pdf>
- Kew, J., Herrington, M., Litovsky, Y., & Gale, H. (2013). *Generation Entrepreneur? The state of global youth entrepreneurship*. London: Youth Business International.
- Kim, P.H., Aldrich, H.E., & Keister, L.A. (2006). Access (Not) Denied: The Impact of Financial, Human, and Cultural Capital on Entrepreneurial Entry in the United States. *Small Business Economics*, 27(1), 5-22.
- Kirzner, I.M. (1979). *Perception, opportunity and profit*. Chicago: University of Chicago Press.

- Koellinger, P., Minniti, M., & Schaded, C. (2007). "I think I can, I think I can": Overconfidence and Entrepreneurial Behavior'. *Journal of Economic Psychology*, 28(8), 502-527.
- Koellinger, P. (2008). Why are some entrepreneurs more innovative than others? *Small Business Economics*, 31(1), 21-37.
- Koellinger, P., Minniti, M., & Schade, C. (2013). Gender Differences in Entrepreneurial Propensity. *Oxford Bulletin of Economics and Statistics*, 75(2), 213-234.
- Krueger, N.F., Reillyb, M.D., & Carsrudc, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Langowitz, N., & Minniti, M. (2007). The Entrepreneurial Propensity of Women. *Entrepreneurship Theory and Practice*, 31(3), 341-364.
- Lonsburry, M., & Glynn, M.A. (2001). Cultural entrepreneurship: stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, 22(6-7), 545-564.
- Lukeš, M., Zouhar, J., Jakl, M., & Očko, P. (2013). Faktory ovlivnující vstup do podnikání: Zacinající podnikatele v České republice. *Politická ekonomie*, 61(2), 229-247.
- Minola, T., Criaco, G., & Cassia, L. (2014). Are youth really different? New beliefs for old practices in entrepreneurship. *International Journal of Entrepreneurship and Innovation Management*, 18(2/3), 233-259.
- Morales-Gualdrón, S.T., & Roig, S. (2005). The new venture decision: an analysis based on the GEM project database. *International Entrepreneurship and Management Journal*, 1(4), 479-499.
- North, D.C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- Pilková, A., Holienka, M., Kovačicová, Z., & Rehák, J. (2014). *Podnikanie na Slovensku: aktivita, inkluzivita, prostredie*. Bratislava: Univerzita Komenského v Bratislave, Fakulta managementu.
- Portes, A. (1998). Social Capital: Its Origins and Application in Modern Sociology. *Annual Review of Sociology*, 18, 109-127.
- Ramos-Rodríguez, R.A., Medina-Garrido, J.-A., Lorenzo-Gómez, J.-D., & Ruiz-Navarro, J. (2010). What you know or who you know? The role of intellectual and social capital in opportunity recognition. *International Small Business Journal*, 28(6), 566-582.
- Ramos-Rodríguez, R.A., Medina-Garrido, J.A., & Ruiz-Navarro, J. (2012). Determinants of hotels and restaurants entrepreneurship: A study using GEM data. *International Journal of Hospitality Management*, 31(2), 579-587.
- Reynolds, P.D., Camp, S.M., Bygrave, W.D., Autio, E., & Hay, M. (2001). *Global Entrepreneurship Monitor, 2001 Executive Report*. Retrieved on January 10, 2016 from <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan002481.pdf>
- Singer, S., Amorós, J.E., & Arreola, D.M. (2015). *Global Entrepreneurship Monitor 2014 Global Report*. London: GERA.
- United Nations (2014). *Definition of Youth*. New York, NY: United Nations Department of Economic and Social Affairs.
- Van Der Sluis, J., Van Praag, M., & Vijverberg, M. (2008). Education and Entrepreneurship Selection and Performance: A Review of the Empirical Literature. *Journal of Economic Surveys*, 22(5), 795-841.
- Verheul, I., Thurik, R., Hessels, J., & van der Zwan, P. (2010). *Factors Influencing the Entrepreneurial Engagement of Opportunity and Necessity Entrepreneurs*. EIM Research Reports No. H201011. Zoetermeer: EIM.

- Wagner, J. (2005). *Der Noth gehorchend, nicht dem eignen Trieb – Nascent necessity and opportunity entrepreneurs in Germany: Evidence from the Regional Entrepreneurship Monitor*. IZA Discussion Paper No. 1608. Bonn: IZA.
- Wagner, J. (2007). What a Difference a Y makes – Female and Male Nascent Entrepreneurs in Germany. *Small Business Economics*, 28(1), 1-21.
- Wong, P.K., & Lee, L. (2005). *Antecedents for entrepreneurial propensity in Singapore*. NUS Entrepreneurship Centre working papers No. WP2005-12. Singapore: NUS.

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Relationships between Talent Management and Organizational Performance: The Role of Climate for Creativity

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Abstract

The objective of this paper is to explore the role of climate for creativity in mediating relationships between talent management and organizational performance. A model relating talent management, organizational performance and climate for creativity was tested using structural equation modelling Based and data from 326 large organizations in Poland. It allowed the verification of two formulated hypotheses. Research results reveal that talent management is a three-dimensional construct (dimensions are: strategic, structural and ideological) while climate for creativity and organizational performance are both unidimensional constructs. Results indicate that climate for creativity mediates the relationships between the dimensions of talent management and organizational performance. Research findings suggest that in order to enable organizations to achieve high performance through talent management it should focus on creating an appropriate climate supporting individual creativity of its employees. The originality of this work lies in studying unexplored relationships between talent management policies and organizational performance with the mediating role of climate for creativity. It is the first attempt to assess these relationships on the basis of empirical data in Poland.

Keywords: talent management; organizational performance; climate for creativity; empirical research; structural equation modelling

JEL codes: M540; O310

INTRODUCTION

Talent management has received significant research attention over recent years (Boudreau & Ramstad, 2005; Dries, 2013a). Despite numerous contradictions embedded

in the field researchers usually agree it is related to the way organizations capitalize on their most important assets –talented employees (Raman, Chadee, Roxas & Michailova, 2013). Numerous research studies focus on the relationships connecting talent management to organizational performance since this link justifies the significance of the issue for management scholars (Coulson-Thomas, 2012). Despite numerous calls for empirical studies (Boudreau, 2013) relationships between talent management and organizational performance still lack solid evidence. This lack of empirical studies related to links between talent management and organizational performance are partly explained by scarce theory about talent management (Dries, 2013a).

Using the dialectical perspective and strategic approach to talent management (Ingram, 2016a) this paper aims at exploring the relationship between talent management policies and organizational performance. As relationships between organizational variables rarely occur in isolation, climate for creativity was used as a contingent variable mediating the abovementioned relationships. Climate for creativity allows organizations to create valuable and novel organizational solutions supporting the innovativeness of a company (Hunter, Bedell & Mumford, 2007). The undertaken problem itself is strongly embedded in human resource management theory as well as entrepreneurship and innovation theory.

To explore the relationships empirical data gathered between October 2014 and January 2015 from 326 large companies located in Poland was used. The analysis was conducted using SPSS and MPlus software, and in particular confirmative factor analysis and structural equation modelling were employed.

In the first part of the paper I briefly review current trends in the field of talent management and outline the dialectical approach to these issues. Next, I conceptually relate talent management to organizational performance with the mediating role of climate for creativity. Further, the methodology presents the sample selection and research procedure as well as variables used in the research. In the following section research results are provided. The paper finishes with implications for theory and practice and conclude the paper with future research directions.

LITERATURE REVIEW

Talent Management as a Field of Research

Within recent years talent management has acquired much attention and has become important vein in the research on human resource management (Tansley, Kirk & Tietze, 2013). From poorly theorized phenomena it has converted into a recognized source of organizational performance and competitive advantage (Reilly, 2008). In the beginning, following calls from distinguished scholars, the research on talent management has mainly focused on the definition of talent (Tansley, 2011) and on the creation of a definition of the phenomenon (Iles, Chuai & Preece, 2010). Following the most prominent definition of talent management it is now conceptualized as “activities and processes that involve the systematic identification of key positions which differentially contribute to the organization’s sustainable competitive advantage” (Collings & Mellahi, 2009, p. 305) which is based on role definitions and the development of talent pools composed of high potentials and/or high performing employees who are responsible for filling these roles. It is also

related to the development of human resource architecture that would facilitate filling pivotal positions and guarantee commitment of key employees to organizational aims.

Studies on talent management are mainly concentrated on its strategic aspects (Harris, Craig & Egan, 2010), however research located in the best practice perspective is also identifiable in the literature (Goldsmith & Carter, 2010). Much attention, both theoretical and empirical, has been put to understand and theorize relationships between talent management and organizational performance, however researchers have not come to sound, empirically confirmed conclusions in this area (Azmi, 2011). Al Ariss, Cascio and Paauwe (2014) suggest that talent management may be discussed on several different levels of analysis – i.e. individual, organizational, institutional as well as national, international and sectoral level.

There is also growing debate on the nature of talent in the literature. Gallardo-Gallardo, Dries and González-Cruz (2013) argue that there are multiple equipollent views on the essence of talent, namely as the characteristics of people, natural ability, mastery in a field, commitment, fit to context, as all employees (inclusive approach) and chosen employees, in particular: high performers and high potentials. Dries (2013b) convincingly claims that there are numerous contradictions embedded in talent and talent management research which constitutes the central argument for approaching talent management from the dialectical perspective presented in this paper.

Talent Management by The Lens of The Dialectical Perspective

Dialectical approach to organizational phenomena stems from the assumption that strategic problems within organizations are complex and simple solutions are hard to find. The world of organization is composed of opposing forces – contradictions, dilemmas, tensions, paradoxes (Bratnicki, 2001; Poole & Van de Ven, 1989). Managers are responsible for the identification of contradictions and their reconciliation that allow the development of an organization by capitalizing on positive aspects of each opposing force.

Adopting dialectical perspective to talent management (TM) signifies searching for contradictions in the field and attempting to find a reconciliation and obtaining a balance that crosses the trade-off line between two contradictory forces so neither dominates over the other. Moreover, managers are responsible not only to identify and make attempts to reconcile these forces, but also accept colliding events rivaling for domination and control (Van de Ven, 1992). It also requires adopting a strategic approach accepting that talent management is infused with paradoxes and ambiguity (Sundaramurthy & Levis, 2003). There are numerous contradictions embedded in talent management, namely: individual vs. teamwork, individual effectiveness vs. potential, universality of solutions vs. its specificity, cultural specificity vs. unified global solutions, open vs. closed recruitment, egalitarian vs. elitist approach, formal vs. informal definition, identification, recruitment, selection and evaluation of talents, creating TM by separate departments vs. project teams, focus on individual vs. organizational development, managerial vs. entrepreneurial orientation of a TM program (Ingram, 2016a; Ingram, 2016b).

The theory behind the dialectical perspective convinces that conscious reconciliation of strategic contradictions should lead to improved organizational performance (Bratnicki, 2001), thus, contradictions reconciliations in the field of talent management should also help to obtain satisfactory outcomes. This leads to the first hypothesis:

- H1:** There is a positive relationship between the ability to reconcile strategic contradictions in the field of talent management and organizational performance.

Relationships Between Talent Management and Organizational Performance in The Context

Relationships between organizational phenomena do not occur in isolation. There are numerous variables that may determine, mediate or moderate relationships between constructs in organizational studies. The link between talent management and organizational performance is not an exception in this regard. According to diverse studies there are numerous contextual or contingent variables that affect, determine or influence the nature of the above-mentioned relationship. Among variables influencing talent management are, *inter alia*, organizational structure (Mohrman & Lawler, 1997), firm's strategy (Sparrow, Scullion & Tarique, 2014), organizational climate (Rogg, Schmidt, Shull & Schmitt, 2001) or organizational environment variables (Garavan, 2012).

Introduction of talent management, its shape, construction and relationship with organizational performance seems to be strongly dependent upon the climate existing within a company. While talent management is usually realized with the purpose of helping to create sustainable competitive advantage (Ashton & Morton, 2005), and the latter is strongly related to the ability to deliver novel and valuable solutions (innovations) for diverse groups of customers (George, 2007), climate supporting creativity – that affects innovative capability (Yeh-Yun Lin & Liu, 2012) seems to play important role in the relationship between talent management and organizational performance. In particular, following by analogy arguments of (Rogg *et al.*, 2001) I assume that climate for creativity intervenes the relationship between talent management and organizational performance. Therefore, the following hypothesis may be formulated:

- H2:** The climate for creativity mediates the relationship between talent management and organizational performance.

MATERIAL AND METHODS

Sample and Procedures

The paper aims to test the relationship between talent management policies and organizational performance. On the basis of literature studies I formulated two research hypotheses, namely:

- H1:** There is a positive relationship between the ability to reconcile strategic contradictions in the field of talent management and organizational performance.
- H2:** The climate for creativity mediates the relationship between talent management and organizational performance.

Units of observation for this study were randomly selected large companies operating in Poland. Each company in the sample employed more than 250 full time employees and the sample was cross sectional. Intended sample size was 500 large companies. In order to gather the empirical data, first two samples of 500 companies each were randomly selected from the database composed of 3217 large companies. In the second step companies from the first sample were contacted if they agree to partici-

pate in the research. If a company from the first sample refused to participate in the research the company from the second sample with the same identification number was contacted. In total, 332 companies agreed to participate in the research. Therefore, sample realization level equalled 66% (33% in respect to all randomly selected companies). To every company that agreed to participate in the research an interviewer was sent. Respondents in the research were human resource managers or managers responsible for talent management. The study was carried out in the end of 2014 and beginning of 2015 by the specialized market research company.

Variables

Talent management policies were assessed using self-created scale (Ingram, 2016a, in press). It is composed of 28 items, evaluated on a 7 point Likert scale, forming 14 strategic contradictions (Cronbach's $\alpha = 0.746$). The exploratory factor analysis revealed contradictions form three dimensions that were labelled strategic (Cronbach's $\alpha = 0.702$), structural (Cronbach's $\alpha = 0.823$), and ideological (Cronbach's $\alpha = 0.654$), one contradiction was dropped because of low loading level (below 0.4).

Organizational performance was measured with a modified 5-item scale elaborated by Antoncic and Hisrich (2001). The scale was used to measure subjective organizational performance in relation to competitors. Exploratory factor analysis shows it is a unidimensional construct (Cronbach's $\alpha = 0.887$). Climate for creativity was assessed using a previously prepared scale (Hunter *et al.*, 2007). It is composed of 7 items evaluated on a 7 point Likert scale. Exploratory factor analysis indicates it is a unidimensional construct with Cronbach's α equal to 0.848. All of the constructs are reflective which means constructs determine the level of observed variables rather than are determined by them. For exploratory factor analysis and Cronbach's α coefficients SPSS for Mac was used.

RESULTS AND DISCUSSION

In the first step of analysis confirmatory factor analysis was carried out for identified in EFA three dimensions of talent management. Root mean square error of approximation (RMSEA) as well as Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) were satisfactory accounting for 0.039, 0.957 and 0.967 respectively, which means the model is well fitted (see Ingram, 2016, in press).

In the next step relationships between talent management contradictions and organizational performance with the mediating role of climate for creativity was assessed using structural equation modelling in MPlus for Mac ver. 7.2 software. The model was well fitted (RMSEA = 0.049, TLI = 0.935, CFI = 0.943) indicating the relationship between talent management and organizational performance is moderately strong ($R^2 = 0.237$). That means that organizational performance changes are explained in nearly 24% by the independent variables. Model estimation results are presented in Figure 1.

Interpretation of Figure 1 leads to several observations. Firstly, all dimensions of talent management are interrelated. Secondly, relationships between structural and strategic dimensions of talent management and climate for creativity are significant. Also, relationship between climate for creativity and organizational performance is significant. Thirdly, none of talent management dimensions is significantly related to organizational performance. Thus, ability to reconcile strategic contradictions in talent management

dimensions does not affect, by itself, organizational performance. Hence, hypothesis H1, stating there is a positive relationship between talent management policies and organizational performance does not receive support.

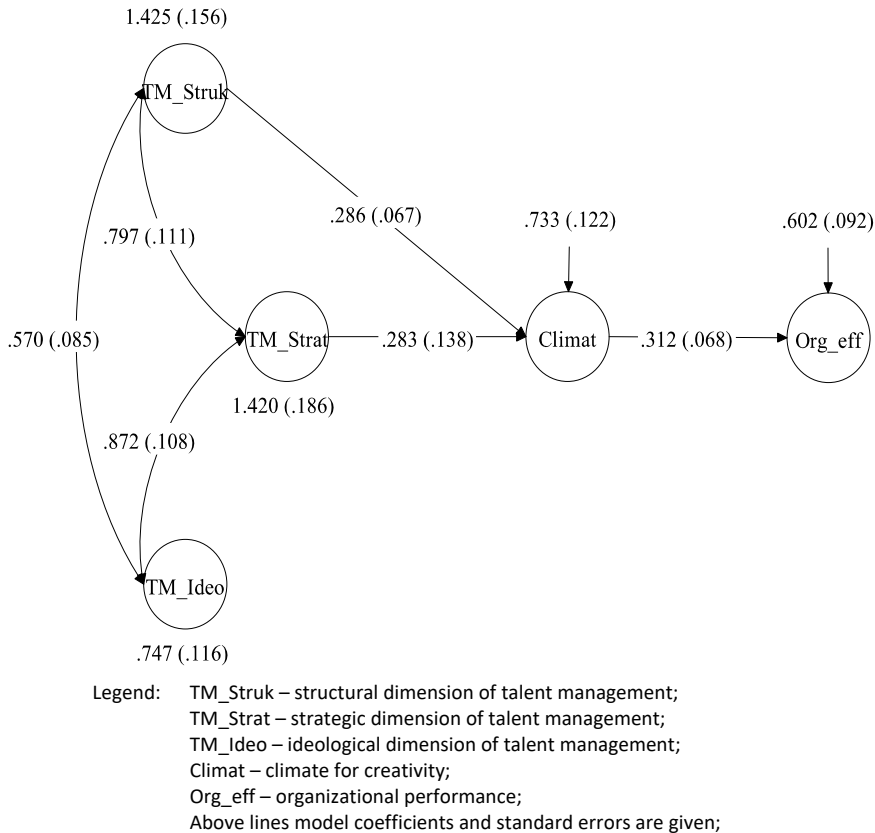


Figure 1. Model of relationships between talent management dimensions, climate for creativity and organizational performance

Source: own calculations in MPlus for Mac 7.2.

Fourthly, ideological dimension of talent management is unrelated to climate for creativity as well as to organizational performance, hence, it does not influence neither of these variables. Analyses of mediation effects are presented in Table 1.

Results presented in Table 1 prove climate for creativity is an important mediator of the relationships between strategic and structural dimensions of talent management and organizational performance. Especially important are relationships between strategic and structural dimensions of talent management, climate for creativity and organizational performance while these are significant and prove there are links not to be missed in interpretation of changes in the organizational performance levels. Thus, it brings support to hypothesis H2 stating that climate for creativity is an important mediator of the relationship between talent management and organizational performance.

Table 1. Mediation analysis: Total, total indirect, specific indirect, and direct effects of talent management strategic, structural and ideological dimension on organizational effectiveness through the climate for creativity

Effect	Coefficient B	Confidence intervals – 95%	Is the relationship significant
Direct effect of strategic dimension	0.139	(-0.098; 0.377)	No
Direct effect of structural dimension	0.043	(-0.072; 0.158)	No
Direct effect of ideological dimension	-0.052	(-0.387; 0.282)	No
Total direct effect	0.130	–	–
Concrete indirect effect of strategic dimension by climate for creativity	0.088	(0.001; 0.176)	Yes
Concrete indirect effect of structural dimension by climate for creativity	0.089	(0.036; 0.142)	Yes
Concrete indirect effect of ideological dimension by climate for creativity	-0.009	(-0.129; 0.111)	No
Total effect	0.298	–	–

Dependent variable: organizational performance

Source: own calculations in MPlus for Mac ver. 7.2.

Research results bring support to existing discussion related to links between talent management and organizational performance. It supports claims that the organizational ability in managing talents influences organizational performance (Levenson, 2012). However, research results prove that this relationship does not occur in isolation and contextual variables are important in explaining talent management effect on organizational outcomes (Thunnissen, Boselie & Fruytier, 2013). According to the research results, organizational climate for creativity is essential for understanding why talent management influences organizational performance. While the level of explanation of the dependent variable is relatively low it would be worthwhile to include further variables into the model. They might be organizational structure, strategy, leadership style, human resource management practices and others that might help to explain relationships in more detail (Van den Brink, Fruytier & Thunnissen, 2013). Therefore, future research should focus rather on explaining the reasons of talent management capabilities influence on organizational performance than providing the evidence of the relationship itself. This study addressed the issue from the strategic point of view (talent management policies were the key point of reference), yet other approaches seem valuable for explaining the effect on organizational performance (Tarique & Schuler, 2010).

Research results bring also important implications for organizational practice. They suggest that if organizations are willing to unveil the effect of talent management on organizational performance, managers should focus on creating the climate supporting creativity. A simple creation of talent management program does not guarantee improved organizational position in relation to competition. It is necessary to focus more strongly on creating conditions allowing for employment of the potential of talented employees. Managers should especially concentrate on conscious shaping of strategic and structural aspects of talent management programs, namely aspects of talent identification, recruitment and selection as well as evaluation procedures and processes. Managers should also focus on reconciling contradictions in the field of individual vs. teamworking, paying attention to both the effectiveness of candidates and their potential, balance universality and specificity of the program, focus on

development of individual and organization and search for equilibrium between managerial and entrepreneurial aspects of talent management programs.

CONCLUSIONS

Talent management, as an emerging field of interest in the organizational theory, still lacks answers to basic questions – about definitions, scope, relationships to organizational performance and contextual variables (Dries, 2013a). This study proves there is a relationship between talent management, in particular, the ability to reconcile strategic contradictions in TM dimensions, and organizational performance. Climate for creativity comprises of a mechanism that helps to unveil stated relationship. Therefore, it is necessary to create proper conditions for talent management that enable its influence on other organizational outcomes. Certainly, further studies on the issue and relationships between talent management and other organizational variables are necessary, especially important are studies helping to explain how and in what conditions talent management policies might be profitable for an organization. Therefore, both exploratory and explanatory studies are necessary to deepen the knowledge on talent management in organizations. Benefits of such studies are hard to overestimate, while the link between talent management and organizational well being are both theoretically (Ashton & Morton, 2005) and empirically evident.

The study brings also implications for the organizational practice. As the study proves, talent management can be conceptually and empirically linked to organizational performance helping to boost it. However, in order to facilitate improvement of organizational performance managers should focus on accepting contradictions embedded in talent management and focus on processes of their reconciliation. Secondly, talent management by itself does not explain organizational performance fully. In order to capitalize on abilities to reconcile TM contradictions managers should focus on creating the climate for creativity. According to the research results this climate serves as a trigger and creates conditions for transferring TM reconciliation abilities into organizational performance.

The paper has four main limitations. Firstly, the study was carried out in Poland, and that hinders the possibility to generalize research results. Secondly, due to space limitations, in the paper robustness of employed research procedure was not checked. Namely, there are strong premises to state that the relationship between talent management and organizational performance might, in fact, be of the different direction. The basic question here is if the ability to reconcile strategic contradictions in the TM field is not actually higher in high performing organizations. Thus, further analyses in this regard seem to be of a great importance. Thirdly, while organizational performance depends on numerous factors, it would be useful to include more contextual variables in the research procedure. This would help to explain variability of the organizational performance to a higher extent. Fourthly, although it is suggested to use strong data in SEM, and used scales are ordinal, researchers in the management field, also in the most prestigious journals, commonly use Likert-type scales in similar analyses (Rodell & Lynch, 2016). Being aware it might cause erroneous results and interpretations, the research design followed a commonly accepted practice in this regard.

REFERENCES

Al Ariss, A., Cascio, W.F., & Paauwe, J. (2014). Talent management: Current theories and future

- research directions. *Journal of World Business*, 49(2), 173–179.
- Ashton, C., & Morton, L. (2005). Managing talent for competitive advantage: Taking a systemic approach to talent management. *Strategic HR Review*, 4(5), 28–31.
- Azmi, F.T. (2011). Strategic human resource management and its linkage with HRM effectiveness and organizational performance: evidence from India. *International Journal of Human Resource Management*, 22(18), 3888–3912. <http://doi.org/10.1080/09585192.2011.561245>
- Boudreau, J.W. (2013). Appreciating and “retooling” diversity in talent management conceptual models: A commentary on “The psychology of talent management: A review and research agenda.” *Human Resource Management Review*, 23(4), 286–289.
- Boudreau, J.W., & Ramstad, P.M. (2005). *Talentship and the evolution of human resource management: from professional practices to strategic talent decision science*. University of Southern California, Center for Effective Organizations Working Paper. Retrieved on January 10, 2016 from <http://www-marshall.usc.edu/assets/047/9842.pdf>
- Bratnicki, M. (2001). *Dylematy i pułapki współczesnego zarządzania*. Katowice: Gnome.
- Collings, D.G., & Mellahi, K. (2009). Strategic Talent Management: A review and research agenda. *Human Resource Management Review*, 19, 304-313.
- Coulson-Thomas, C. (2012). Talent management and building high performance organisations. *Industrial and Commercial Training*, 44(7), 429–436. doi: 10.1016/j.hrmr.2009.04.001
- Dries, N. (2013a). Talent management, from phenomenon to theory: Introduction to the Special Issue. *Human Resource Management Review*, 23(4), 267–271.
- Dries, N. (2013b). The psychology of talent management: A review and research agenda. *Human Resource Management Review*, 23(4), 272–285. <http://doi.org/10.1016/j.hrmr.2013.05.001>
- Gallardo-Gallardo, E., Dries, N., & González-Cruz, T.F. (2013). What is the meaning of “talent” in the world of work? *Human Resource Management Review*, 23(4), 290–300.
- Garavan, T.N. (2012). Global talent management in science-based firms: an exploratory investigation of the pharmaceutical industry during the global downturn. *International Journal of Human Resource Management*, 23(12), 2428–2449.
- George, J.M. (2007). Creativity in Organizations. *The Academy of Management Annals*, 1(1), 439–477.
- Goldsmith, M., & Carter, L. (2010). *Best practices in talent management: how the world's leading corporations manage, develop, and retain top talent*. San Francisco: Pfeiffer; Best Practice Institute.
- Harris, J., Craig, E., & Egan, H. (2010). How successful organizations strategically manage their analytic talent. *Strategy & Leadership*, 38(3), 15–22.
- Hunter, S.T., Bedell, K.E., & Mumford, M.D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal*, 19(1), 69–90.
- Iles, P., Chuai, X., & Preece, D. (2010). Talent management and HRM in multinational companies in Beijing: Definitions, differences and drivers. *Journal of World Business*, 45(2), 179–189. <http://doi.org/10.1016/j.jwb.2009.09.014>
- Ingram, T. (2016a). *Towards the dialectical approach to organizational talent management: Empirical research results*. Paper presented at Australia and New Zealand International Business Academy Conference, Sydney.
- Ingram, T. (2016b). *Zarządzanie talentami i pracownikami w dojrzałym wieku w kontekście wpływu na wyniki przedsiębiorstwa*. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach.
- Levenson, A. (2012). Talent management: challenges of building cross-functional capability in high-performance work systems environments. *Asia Pacific Journal of Human Resources*, 50(2), 187–204. <http://doi.org/10.1111/j.1744-7941.2011.00022.x>

- Mohrman, S.A., & Lawler, E.E. (1997). Transforming the human resource function: Introduction. *Human Resource Management (1986-1998)*, 36(1), 157.
- Poole, M.S., & Van de Ven, A.H. (1989). Using paradox to build management and organization theories. *Academy of Management Review*, 14, 562-578.
- Raman, R., Chadee, D., Roxas, B., & Michailova, S. (2013). Effects of partnership quality, talent management, and global mindset on performance of offshore IT service providers in India. *Journal of International Management*, 19(4), 333–346.
- Reilly, P. (2008). Identifying the right course for talent management. *Public Personnel Management*, 37(4), 381–388.
- Rodell, J.B., & Lynch, J.W. (2016). Perceptions of employee volunteering: Is it “credited” or “stigmatized” by colleagues? *Academy of Management Journal*, 59(2), 611-635.
- Rogg, K.L., Schmidt, D.B., Shull, C., & Schmitt, N. (2001). Human resource practices, organizational climate, and customer satisfaction. *Journal of Management*, 27(4), 431–449.
- Sparrow, P., Scullion, H., & Tarique, I. (Eds.). (2014). *Strategic talent management: Contemporary issues in international context*. Cambridge: Cambridge University Press. Retrieved on January 10, 2016 from <http://ebooks.cambridge.org/ref/id/CBO9781139424585>
- Sundaramurthy, C., & Levis, M. (2003). Control and collaboration: Paradoxes of governance. *Academy of Management Review*, 28, 397-415.
- Tansley, C. (2011). What do we mean by the term “talent” in talent management? *Industrial and Commercial Training*, 43(5), 266–274.
- Tansley, C., Kirk, S., & Tietze, S. (2013). The currency of talent management—A reply to “talent management and the relevance of context: Towards a pluralistic approach.” *Human Resource Management Review*, 23(4), 337–340. <http://doi.org/10.1016/j.hrmr.2013.08.004>
- Tarique, I., & Schuler, R.S. (2010). Global talent management: Literature review, integrative framework, and suggestions for further research. *Journal of World Business*, 45(2), 122–133. <http://doi.org/10.1016/j.jwb.2009.09.019>
- Thunnissen, M., Boselie, P., & Fruytier, B. (2013). Talent management and the relevance of context: Towards a pluralistic approach. *Human Resource Management Review*, 23(4), 326–336. <http://doi.org/10.1016/j.hrmr.2013.05.004>
- Van de Ven, A.H. (1992). Suggestions for studying strategy process: A research note. *Strategic Management Journal*, 13, 169-188.
- Van den Brink, M., Fruytier, B., & Thunnissen, M. (2013). Talent management in academia: performance systems and HRM policies: Performance systems and HRM policies. *Human Resource Management Journal*, 23(2), 180–195. <http://doi.org/10.1111/j.1748-8583.2012.00196.x>
- Yeh-Yun Lin, C., & Liu, F. (2012). A cross-level analysis of organizational creativity climate and perceived innovation: The mediating effect of work motivation. *European Journal of Innovation Management*, 15(1), 55–76. <http://doi.org/10.1108/14601061211192834>

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Internationalisation of Banks: A Multi-level Analysis of Positive Effects in Regard to Competitiveness

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Abstract

The objective of this paper is to analyse the nature and characteristics of the relationship between internationalisation and competitiveness and to analyse the impact and potential limits of this relationship on the development of the banking system as a whole and on single banks in particular.

The study is based on secondary data derived from EU legislative acts, official state statistics of Ukraine, Germany and the European Union. The paper employs the following methods: critical analysis method, statistical analysis, the method of ratings and the case study method. Multi-level analysis has been conducted: on EU, country level (Ukraine and Germany) and firm-level (Deutsche Bank).

Internationalisation is an important factor that leads to the increase of the competitiveness level. The study results suggest that internationalisation increased competition which in turn influenced positively the activity of the banking system as a whole in both Ukraine and Germany.

The study suggests that internationalization processes contribute immensely to the rising of competitiveness level of banks. Yet it also identifies the problem of the limits of internationalisation, to which the said activity brings the company profit and after crossing of which, the company is overloaded with too many branches abroad or foreign markets segments, where it functions.

The originality of this work lies in studying the nature and relationship of competitiveness and internationalisation of banks and in comparing the impact of the mentioned concepts on the development of the banking system on three levels of analysis.

Keywords: Internationalisation; competitiveness; transnational company; banking system; market.

JEL codes: D22, F23

INTRODUCTION

In order to function successfully under the conditions of global competitiveness, every company regardless of its size and sector of activity should increase its competitiveness level. That's why an important objective nowadays is the creation and development of dynamic, flexible and efficient companies that would produce high quality goods and services while providing jobs. One of the ways to achieve the mentioned goals is the internationalisation of the company's activity which will lead to the increase of its competitiveness level and will allow expand the sphere of its activity entering new markets. Therefore the problem of a company's competitiveness, be it a transnational or a local company, is very important for the successful economic development of both domestic and international markets.

High level of competitiveness is a necessary condition of the successful functioning of any company both at the domestic and foreign markets. It is important not only to analyse the essence of the notion of competitiveness, but also to try to find the best ways to improve its level. An important way to increase the competitiveness level of a company is the internationalisation of its activity. This paper will examine this assumption by looking at the banking sector.

The objective of the article is to analyse the nature and characteristics of the relationship between internationalisation and competitiveness and to the impact of this relationship on the development of the banking system as a whole and on single banks in particular. The following general scientific and specific economic methods were used in the paper: the statistical analysis methods, the method of ratings, the information – computer methods, the critical analysis method, the monographic method, the case study method and the graphical method and others.

The article adapts a three level approach to the analysis of internationalization processes within the banking industry and starts with a short literature review focused on the core concept of the paper – competitiveness. Next, the indicators of banks activity in Ukraine in the dynamics of ten years are presented to identify the main problems of the banking sector of Ukraine. The analysis then turns to the European Union to observe the trends taking place in the banking system in recent years. The paper then looks at the dynamics of the banking sector development in Germany, to identify the main reasons of such a variant of the German banking sector development. Finally the study will analyse the market position and the dynamics and characteristics of Deutsche Bank development, as an example of a successful transnational bank, whose activity is constantly aimed at internationalisation.

LITERATURE REVIEW AND THEORY DEVELOPMENT

Any transnational company would have never been able to operate successfully at the markets of different countries without having a high level of competitiveness. The founder of the notion of competitiveness is considered to be a Michael Porter. Porter wrote that the competitiveness of a firm is largely determined with its economic environment, which depends on the basic conditions and competition within the cluster. He also developed a method of analysing the competitiveness, the five forces analysis (Porter, 2005, pp. 43-52).

The five forces include:

- the threat of substitute products or services,
- the threat of established rivals,
- the threat of new entrants,
- the bargaining power of suppliers,
- the bargaining power of customers.

Porter also pointed out that this method is better applied to the companies operating in the same branch. If the company has several activity directions, Porter's five forces analysis should be made on each activity direction (Porter, 2008).

Despite of the enormous Porter's contribution and the importance of his analysis of five forces, some scientists such as Stewart Neill believe that the method mentioned above has several significant drawbacks. Firstly, customers, competitors and suppliers are not connected with each other, they neither cooperate nor counsel. Secondly, the source of value is a structural advantage. Thirdly, the situation at some markets is so stable that it allows their participants plan and respond to the behaviour of their competitors (Porter, 2014).

Adam Brandenburger and Barry Nalebuff put forward the suggestion about the existence of the sixth strength. The scientists agree that this force is the government or the public competition (Ehrhardt, 2000, p.171). The enriched Porter's model is presented in Figure 1.

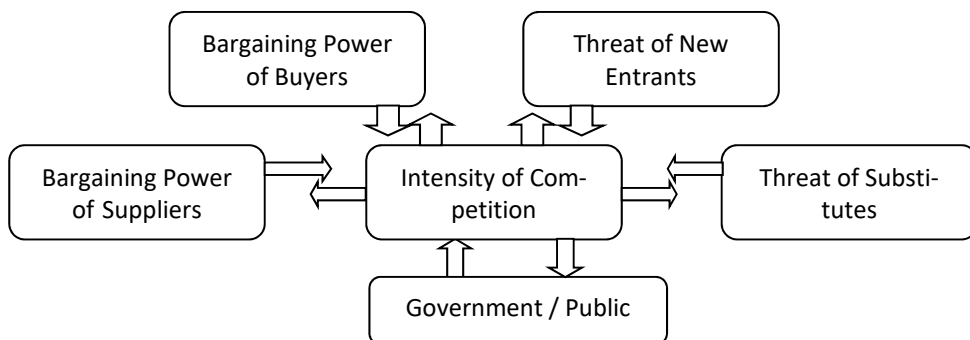


Figure 1. Six Forces Model

Source: made by the author on the basis of (Porter, 2008)

The main critic of the notions of competition and competitiveness, especially of the place these notions took in the life of today's society, is a Nobel laureate, Paul Krugman. According to Krugman, such a notion as "the competitiveness of a nation" is illusory all in all (Krugman, 2011). When we talk about the results of a company's activity, it is only the result of its activity. That is, if the company is not able to pay wages to its workers, pay its suppliers and shareholders, it simply ceases functioning. Thus, if we talk about a non-competitive company, we mean that its position at the market is unstable and it either improves the results of its activity or ceases its existence. As for the countries, they cannot just stop existing. Countries may be satisfied with the results of their economic activity or may be not but they do not have the so-called extreme limit. Some scientists consider its trade balance to be the extreme limit of a country's activity and thus its competitiveness can be measured with the ability of the country to sell more than it buys. In case of a company the main indicator of its successful functioning is the increase of its profits. And in case of a country the side effect of the profits increase is sometimes the increase of unemployment.

It is difficult to agree with Krugman taken that for some years now competitiveness is the keyword in the economy and politics of the European Union. In March 2000 the European Council adopted the so-called Lisbon strategy according to which it was planned to make the European Union the most dynamic and competitive economy in the world. The legal basis of the fact that the EU attaches such importance to the problem of competitiveness is Article 173 of the Consolidated Version of the Treaty on the Functioning of the European Union which states that “the Union and the Member States shall ensure that the conditions necessary for the competitiveness of the Union’s industry exist”¹. Also the World Economic Forum has been making the detailed assessment of the productive potential of nations worldwide over 30 years. According to the definition of the World Economic Forum “competitiveness is a set of institutions, policies and factors that determine the level of a country’s productiveness”².

Edmund Thompson, focuses strictly on the business orientation of the notion “competitiveness”, despite of its obvious economic component. He defines this notion as “... the complex of institutional and systemic factors related to the matters of policy and macroeconomics and the way they affect the activity of a firm on the microeconomic level within its competitive environment” (Thompson, 2004, p.198).

For the use of this study a competitive company is considered to be the one that has the ability to compete, grow and be profitable. The basis of a company’s competitiveness is its ability to consistently produce goods while getting profit, meanwhile the said goods should meet the requirements of an open market on price, quality and other features required by the market. Any company must meet the requirements mentioned above if it wants to continue functioning successfully. More than that, the more competitive the company is in relation to its competitors, the higher its ability to conquer new market segments will be. Correspondingly to everything said above, non-competitive companies will sooner or later cease functioning, with the exception of those provided with "artificial" support or protection.

The globalisation of the world economy and the increased competition connected with it raise new challenges in front of the modern enterprises, the ones that relate to both new threats and new possibilities of the economic activity. One of the major problems is the appropriate use of all the opportunities that functioning at the markets of different countries brings, in other words internationalisation, that is the turning of the economic activity into international. Very often the activity of internationalisation is absolutely necessary for the enterprise, because, as Porter rightly observed, the number of global and close to the global economic sectors is growing and will grow in the future, that in turn, requires the presence of the companies at the foreign markets and to compete on the global level (Porter, 2008).

This paper addresses the problem of challenges relating to the growing competition in the domestic banking system of Ukraine due to increased internationalization of the banking sector.

¹ Consolidated Version of the Treaty on the Functioning of the European Union [Electronic Resource] // Access mode : https://www.tirol.gv.at/fileadmin/buergerservice/e-government/eap/downloads/THE_TREATY_ON_THE_FUNCTIONING_OF_THE_EU.pdf

² Global Competitiveness World Economic Forum [Electronic Resource] // Access mode: www.weforum.org/issues/global-competitiveness

MATERIAL AND METHODS

The material for the study is derived from legislative acts of the European countries, the official statistics of the State Statistics Committee of Ukraine, Germany and the European Union, the analytical reviews of the World Economic Forum, the National Bank of Ukraine, Deutsche Bank, Ministry of Finance of Ukraine, Ministry of Economic Development and Trade of Ukraine, the scientific literature on the topic under research and the personal research and observations of the author.

The research methods used in the article are based on the systematic general theoretical approaches to the defining of the level and development dynamics of the competitiveness of the banking sector of Ukraine, Germany and Deutsche Bank as a separate unit. The following general scientific and specific economic methods were used in the paper: the statistical analysis methods – to disclose the specifics of the banking sector development and determine the level of its competitiveness as well as substantiate the structural changes in the said sphere; the method of ratings – to determine the level of the banking sector development and some of its components compared with the others; the information – computer methods – to analyse the state and development dynamics of the banking sector components; the critical analysis method – to study the influence of the internationalisation on the level of banks competitiveness; the monographic method – to synthesize of the scientists' viewpoints on the problems under research; the case study method – to study certain components of the banking sector development as a whole and some of its components in particular; the graphical method – to graphically represent the development dynamics of the categories under research and others.

RESULTS AND DISCUSSION

The internationalization of banking is an important factor of the competitiveness level increase of banking institutions. The presence of foreign banks is an important part of the banking sector in many countries. During the 1990s many developing countries reacted very favourably to the invasion of foreign banks into their banking sector. From 1995 to 2002 the average level of participation of foreign banks in the banking sector of developing countries increased from 18 % to 33 %. For example, in Latin America the presence of foreign capital in the banking sector of Peru is 95 % and in Mexico – 82 %. At the same time, the share of foreign ownership in the banking sector of Europe, Central Asia and Latin America is bigger than in East and South Asia. So, by 2002 the share of foreign banks in the banking sector of Estonia was 73 %, Lithuania – 91 %, Slovakia – 82 %. The share of foreign banks in the banking sector of Indonesia was 28 %, Kazakhstan – 24 %, Malaysia – 16 %, Pakistan – 23 %, the Philippines – 1 %, in Thailand – 5 % in 2006³.

Ukraine

Table 1 presents indicators of the banking sector activity of Ukraine, especially the change in the number of banks with foreign shares in the capital in recent years.

³ Internationalization of Banking: The Economic Benefits and Risks [Electronic Resource] // Access mode: <http://www.adbi.org>.

The data of the table given above point to the fact that the number of the registered banks in Ukraine is constantly changing. Till 2012 we observe an upward trend in the number of the registered banks. Since 2012 this trend has changed to the contrary one, showing the reduction of the number of the registered banks of 22 units or 11 % in 2012 if compared with the previous year. The year 2013 is characterized by the upward changes in the number of the registered banks, namely 6 units or 3 % if compared with the previous year. The next year didn't bring any changes in the number of the registered banks, but the sharp decline in the number of the operating banks was obvious, namely of 18 units or 10 % if compared with the previous year. Such changeability cannot be considered a positive indicator as it testifies to the instability of the banking sector activity of Ukraine.

The dynamics of the number of the registered banks in Ukraine is presented in Figure 2.

Table 1. Indicators of the banking sector activity of Ukraine from 2005 to 2014

Indicator	01.01. 2006	01.01. 2007	01.01. 2008	01.01. 2009	01.01. 2010	01.01. 2011	01.01. 2012	01.01. 2013	01.01. 2014	01.01. 2015
Number of registered banks	186	193	198	198	197	194	198	176	182	182
Number of operating banks	165	170	175	184	182	176	176	175	180	162
Out of which: - with foreign capital	23	35	47	53	51	55	53	53	49	51
- including the ones with 100 % foreign capital	9	13	17	17	18	20	22	22	19	19
Share of foreign capital in banks equity capital	19,5	27,6	35,0	36,7	35,8	40,6	41,9	39,5	34	44,7

Source: own calculations based on the data from the National Bank of Ukraine⁴

It is hard not to notice the similar trend about the number of the banks with foreign capital in Ukraine. By 2012 the number of the banks with foreign capital has steadily increased. This fact is extremely positive as it described Ukraine as a country attractive for the foreign investors. During the period 2012 – 2014 we can witness the absolute opposite tendency, namely in 2013 we observe the reduction in the number of the banks with foreign capital of 4 units or 8 % if compared with the previous year, which, in turn, is a negative indicator of the functioning of the banking sector in Ukraine. Not only economic but also politic factors lead to the situation mentioned above. But in 2014 this downward trend began to change and the number of the banks with foreign capital, operating in Ukraine, increased from 49 to 51, that is of 2 units or 4 %. Despite of the fact that the said number has not yet reached that of 2010, when the number of the banks with foreign capital was the biggest, this fact indicates the stabilization of the economic situation in the country and return of Ukraine's banking sector to the normal functioning.

Let's follow the dynamics of the number of the banks with foreign capital in Ukraine according to Figure 3.

By 2011 nothing interrupted the upward trend about the share of foreign capital in the equity capital of banks operating in Ukraine. In the following 2012 the percentage of foreign capital in the equity capital of Ukrainian banks decreased to almost 40 %, or approximately of 3 %. In the next year this downward trend continued and the percentage

⁴ National Bank of Ukraine [Electronic Resource] // Access mode: www.bank.gov.ua/doccatalog/document.

of foreign capital declined to 34 % or approximately of 6 %. The year 2014 has become a surprised one as the share of foreign capital in the banks has not only increased of 11 % but exceeded the number of 2011, which is a positive indicator of the functioning of the banking sector of Ukraine. Let's follow the dynamics of the share of foreign capital in the equity capital of banks operating on the territory of Ukraine according to Figure 4.



Figure 2. The dynamics of the number of the registered banks in Ukraine from 2005 to 2014

Source: author's own elaboration on the basis of the data from the National Bank of Ukraine⁵

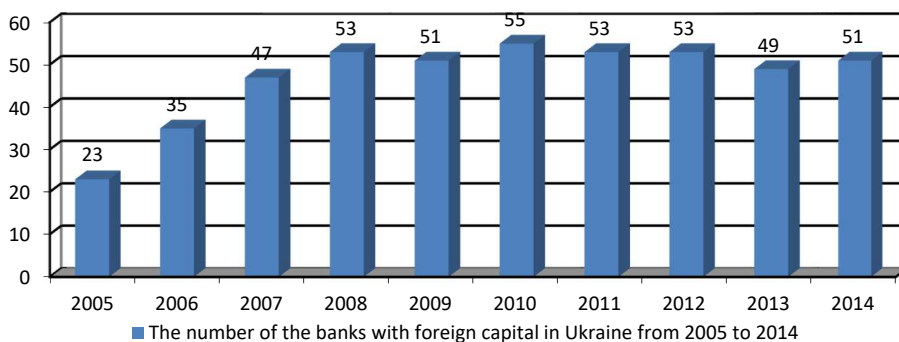


Figure 3. The dynamics of the number of the banks with foreign capital in Ukraine from 2005 to 2014

Source: author's own elaboration on the basis of the data from the National Bank of Ukraine

The analysis of the data in Table 1 and the figures presented above allows to make the conclusion that the main problems of the banking sector of Ukraine are as follows:

1. the significant outflow of resources from the banking sector,
2. the deterioration in the quality of loan portfolios of banks,
3. unprofitable activity of some banks,
4. the instability of the currency of the country,
5. the instability of the political situation in the country,
6. high inflation rate,
7. the instability of the foreign trade conditions,

⁵ National Bank of Ukraine [Electronic Resource] // Access mode: www.bank.gov.ua/doccatalog/document.

8. the instability of both domestic and foreign currency markets,
9. the untimely adjustment of the price and quantitative monetary instruments,
10. the sharp increase of foreign currency demand,
11. fluctuations in the deposit activity of depositors,
12. changes in the regulatory – legal base, which regulates the banks functioning,
13. insufficient flexibility and timeliness of the banking sector reaction to the changes at financial markets.

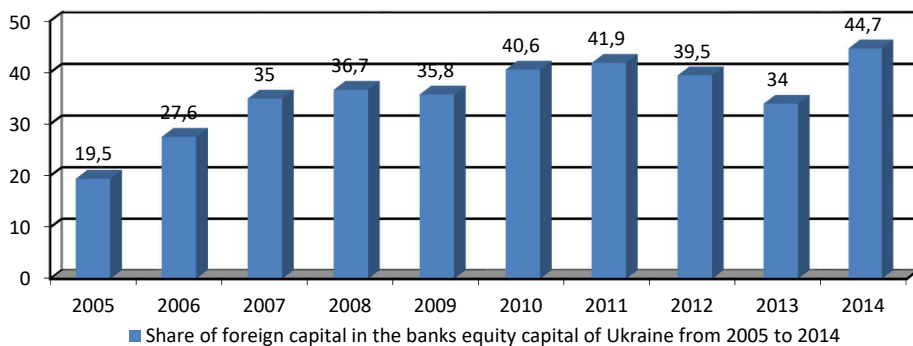


Figure 4. The dynamics of the share of foreign capital in the banks equity capital of Ukraine from 2005 to 2014, %

Source: author's own elaboration on the basis of the data from the National Bank of Ukraine

European Union

It is valuable to look at the situation in the banking sector of the European Union, for comparison. The number of the financial institutions in the euro area decreased of 3% in 2010. At the end of 2010, the European Central Bank counted 7865 financial institutions in the euro area that is 211 units less than in the previous year⁶. After Estonia became the Euro zone member, the number of the banks in the EU increased 37 units. At the end of 2010 there were 9921 financial institutions in the EU, that is 271 units less than in the previous year. The biggest percentage of the financial institutions decrease appeared to be in France – 7 % and in Greece – almost 7 %. In terms of the number of financial institutions, their number decreased France of 92 units, in Ireland – 31 units, in Luxembourg – 28 and in Italy – 25 units. If we look at Germany, then according to the European Central Bank on the 1st of January 2011 a quarter of all the euro area banks were located in that country, namely 1999 units. This is 19 units or approximately 1 % less than in the previous year⁷.

The subsequent course of events shows that the number of the financial institutions in Europe is constantly decreasing. In 2013 the number of the financial institutions in the euro area decreased of 6 % if compared with the previous year. It means that in 2013 there were 7059 financial institutions in the euro area, that is 474 units less than in the previous year⁸.

⁶ Eurozone und EU [Electronic Resource] // Access mode: <http://www.bankenverband.de>.

⁷ Anzahl der Banken und ihrer Zweigstellen [Electronic Resource] // Access mode: https://bankenverband.de/media/file/ge_banken-undzweigstellen2014.

⁸ Zahl der Banken sinkt weiter [Electronic Resource] // Access mode : <http://www.manager-magazin.de/unternehmen/banken/a-878850.html>

It should be noted however, that the reducing of the number of financial institutions, including banks, does not necessarily mean bankruptcy or closure of the said institutions. In most cases we are talking about merging. For example, in Germany there happened the merging of many Volksbanken and Raiffeisenbanken in order to increase the competitiveness of the said banks and their effectiveness to act at the market.

At the beginning of the International Monetary Fund functioning there were 3280 financial institutions all in all. But the tendency to the reduction of the number of financial institutions is quite significant and since 1999 it is 39 %. Thus, at the beginning of 2014 in 18 countries of the euro zone the number of banks decreased by approximately 4 %, that is to 6790 units. The biggest decrease of banks can be observed in the countries mostly affected by the crisis, namely in Cyprus (the number of banks decreased by 26 %) and Greece (the number of banks decreased by 17 %)⁹.

The type structure of the banking institutions in the Euro zone in 2015 can be followed according to Figure 5

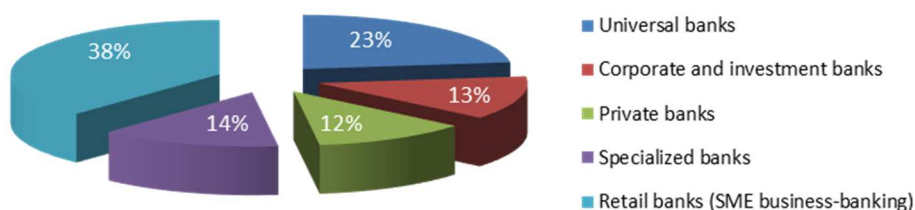


Figure 5. The type structure of the banking institutions in the Euro zone in 2015

Source: author's own elaboration on the basis of the data from Bankenverband¹⁰

As it can be seen in Figure 5, the largest share, namely 38 % of banks of the Euro zone, is occupied by the so-called retail banks, that is banks that specialize in providing banking services to small and medium businesses. The second place is occupied by the universal banks (23 %). The third place is occupied by the so-called specialized banks, that is banks that specialize in providing certain range of services, such as loans, deposits and others. The fourth place is taken by the corporate banks (13 %) and the fifth one – by the private banks, that is the banks that do business of one or some wealthy clients.

Germany

Nowadays, 630 branches of foreign banks make up 10 % of all the euro zone financial institutions, 18 % of which are situated in Germany¹¹. But even in this country, foreign financial institutions play an important role. The financial institutions with foreign capital that operate in Germany employ about 30000 Germans¹². The said institutions pay taxes to the

⁹ Bankstellenbericht 2014 [Electronic Resource] // Access mode: https://www.bundesbank.de/Redaktion/DE/Downloads/Aufgaben/Bankenaufsicht/Dokumentationen/bankstellenbericht_2014.pdf?__blob=publicationFile

¹⁰ Zahlen, Daten, Fakten der Kreditwirtschaft [Electronic Resource] // Access mode: https://bankenverband.de/media/publikationen/08122015_Zahlen_und_Fakten_V2.pdf

¹¹ Bankstellenbericht 2014 [Electronic Resource] // Access mode: https://www.bundesbank.de/Redaktion/DE/Downloads/Aufgaben/Bankenaufsicht/Dokumentationen/bankstellenbericht_2014.pdf?__blob=publicationFile

¹² Verband der Auslandsbanken in Deutschland [Electronic Resource] // Access mode: <http://www.vab.de/Deutsch/bedeutung/>

budgets of different levels of Germany, offer private clients and business entities access to a large number of products, banking and financial services. Thanks to, among others, the variety of business models and organizational forms that provide and use foreign financial institutions, Germany's financial sector takes one of the leading positions not only in Europe but in the whole world. In Germany, the country in which the number of banks per capita is one of the largest in the world, the competition in the banking sector is quite high if compared with the level of competition in the other countries. The prices for banking services of German banks are quite high. A possible reason for such a state of affairs in the sector mentioned above is a high banks concentration. Germans believe that there are too many banks in their country, that the country is overbanked and overbranched. In the early 1990s the reunification of Germany caused the increase of the number of banking institutions. But since the mid-1990s the number of banks and branches in the said country began to gradually decline. Let's consider the main trends in the banking system development of Germany according to the figures presented below. Using Figure 6 we can follow the dynamics of the number of banks in Germany in the period from 1995 to 2014.

The analysis of the figure given above allows us to state that in 2000 the number of banks has not changed if compared with that of 1995. The period from 2000 to 2005 is marked by a downward trend in the number of banks, as in 2005 it decreased of 1441 units or of 38 %. This trend also continued in the next period, namely in 2010 the number of banks in Germany decreased of 223 units or 10 %. The next period under research was not an exception and showed the following reduce in the number of banks in Germany, that is 131 units or 6 %. The ratio of the number of banks in 2014 if compared with that of 1995 is 1795 units or 48 % with a downward tendency.

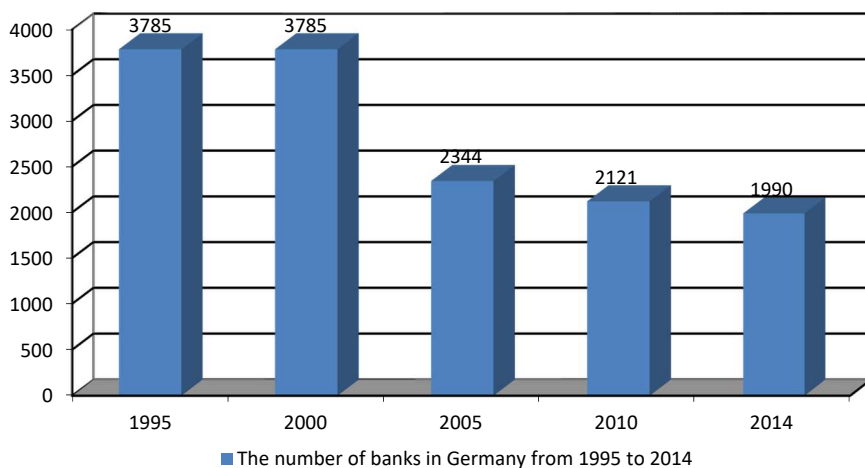


Figure 6. The number of banks in Germany from 1995 to 2014

Source: author's own elaboration based on the statistical data¹³

¹³ Statistik Daten [Electronic Resource] // Access mode: <http://de.statista.com/statistik/daten/studie/72095/umfrage/anzahl-der-bankstellen-in-deutschland>

Another indicator of the banking sector functioning in Germany, which we'll analyse according to Figure 7, will be the dynamics of the number of bank branches in Germany in the period from 1995 to 2014.

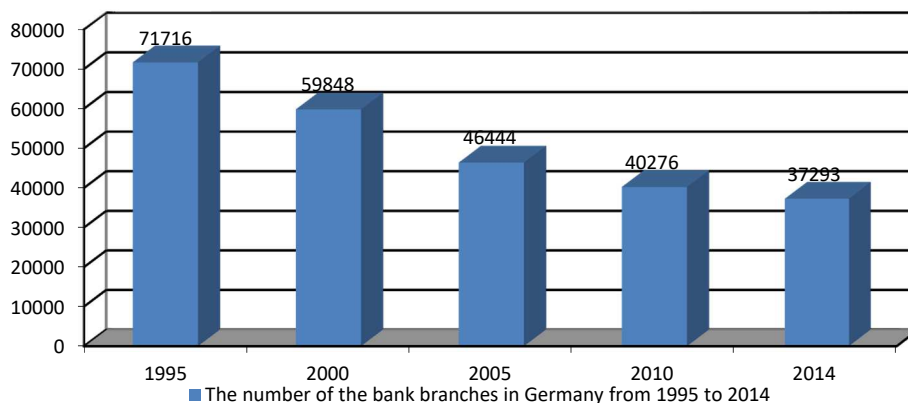


Figure 7. The dynamics of the bank branches number in Germany from 1995 to 2014

Source: author's own elaboration on the basis of the statistical data¹⁴

When the number of banks in Germany in 2000 remained at the same level as in 1995, the number of bank branches in the year 2000 decreased of 11868 units or of 17 %. The next period under research did not bring any surprises as in 2005 there was a decrease in the number of bank branches of 13404 units or 22 % if compared to that of the year 2000. In 2010 we see the further reduction in the number of bank branches, namely of 6168 units or 13 % if compared with the data of 2005. The downward trend in the change of the number of bank branches in Germany continued in 2014, namely of 2973 units or 7 % if compared with the year 2010. The change of the number of bank branches in Germany in 2014 is 34423 units or 48 % if compared with 1995 with a downward tendency.

The dynamics of the change of foreign banks in Germany will be analysed according to Figure 8.

Analyzing the data in the figure given above, we see a clear upward trend in the change of the number of foreign banks in Germany by 2000 as in 2000 the number of the said banks increased of 135 units or 23 %. But since 2000 the trend has changed to the opposite one, namely downward, that is in 2005 the number of foreign banks in Germany decreased of 29 units or 4 %. In 2010, this trend continued, showing decrease of the foreign banks number of 125 units or 18 % if compared with 2005. The year 2014 was not an exceptional one, as we see the decrease in the banks number in Germany of 52 units or 9 %. The ratio of foreign banks number in Germany in 2014 if compared with 1995 is 71 units or 12 % downward.

The main reasons for such a state of matters are:

- transparency of borders within the European Union,

¹⁴ Statistik Daten [Electronic Resource] // Access mode: <http://de.statista.com/statistik/daten/studie/72095/umfrage/anzahl-der-bankstellen-in-deutschland>

- merging of banks with local and foreign capital,
- the winning of new market sectors by large banks,
- the growing use of Internet banking by the customers.

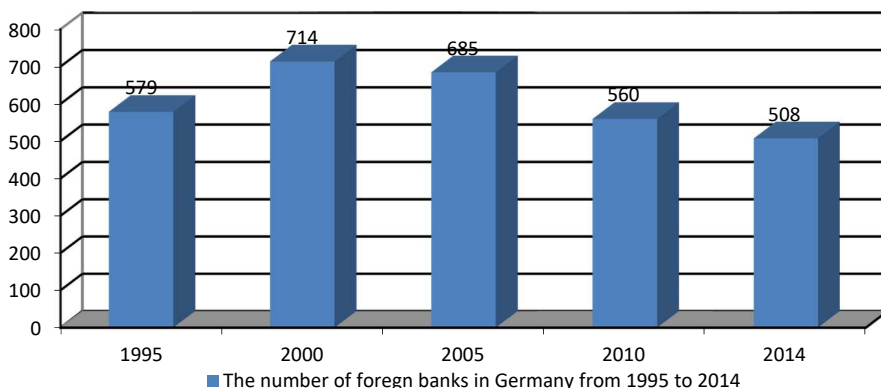


Figure 8. The dynamics of the change of foreign banks in Germany from 1995 to 2014

Source: author's own elaboration on the basis of statistical data¹⁵

Despite of such potential advantages of foreign banks entrance into the other country market as new technologies, access to the capital and better workforce, wide range of services and experience of international activity, the banking sector development towards internationalisation raises serious concern among many scientists and practitioners. Joseph Stiglitz, for example, believes that foreign banks are interested in providing banking services only to the largest (often multinational) companies and the richest representatives of the given country¹⁶. At the same time, prominent economists and politicians point to the fact that the internationalisation of the banking sector can have an important impact on the country's economic development and standard of living of its citizens. Taking into consideration the reasons given above as well as other important ones, German banks began not only to consider the matter of internationalisation very seriously but they acted very actively in this direction. In the early 60s, immediately after the industrial enterprises, German banks began to massively enter the markets of the other countries. Since that time the creation of the extensive international network in the banking sector has intensified dramatically and reached significant success despite periodic slowdown caused by changes in oil prices and the debt crisis in developing countries. What is worth paying attention at is the speed with which the German credit institutions have been entering the markets of other countries. When in 1963 German banks had three foreign branches, in 1994 they already had 418 branches and subsidiaries and 209 representative offices¹⁷.

¹⁵ Aussenwirtschaft [Electronic Resource] // Access mode: http://www.bundesbank.de/statistik/statistik_aussenwirtschaft

¹⁶ Foreign bank participation and outreach: Evidence from Mexico [Electronic Resource] // Access mode: <https://docs.google.com/viewer>.

¹⁷ Die Internationalisierung der deutschen Geschäftsbanken [Electronic Resource] // Access mode: <http://www.diplom.de/Internationalisierung-deutschen-Geschaeftsbanken>.

Internationalisation of Deutsche Bank

Deutsche Bank has always counted on development of its network of representative offices abroad. Even before World War II Deutsche Bank branch in London has played a significant role in the financial life of England. Because of the influence of many factors the said branch was closed and transformed into a representative office. In 1976 the branch of Deutsche Bank was opened in London again. German Overseas (American) Bank, a subsidiary of Deutsche Bank, has a similar scenario. It twice lost its position of the leading financial institution in Latin America during the world wars and had to start all over again after the wars to get it back. If we talk about Asia, before World War I there was established a consortium of seven banks, called the German-Asian Bank, in which Deutsche Bank played a leading role. The process of internationalisation of Deutsche Bank after World War II can be divided into three periods:

- mid-1960s – mid-1970s – Deutsche Bank cooperates with correspondent banks and create representative offices,
- since the mid-1970s Deutsche Bank began to actively create a network of branches and subsidiaries abroad,
- since the mid-1980s Deutsche Bank began to absorb banks in the other countries and thus gained some market sectors.

The next step of Deutsche Bank after the establishment of Banque BEC (European Bank for medium-term loans) in Brussels was the creation of a joint Consortium Bank in the US. So, it was taken control over the Belgium American Bank Corporation and Belgium American Trust Company, the result of which was the replacement of the word “Belgium” in the name of the said companies with the word “European”. In 1972 there were created branches in Los Angeles and San Francisco. In 1974 Deutsche Bank absorbed Franklin National Bank. As for Asia, here the process of internationalisation started in Hong Kong in 1958, followed by Karachi (1962), Kuala Lumpur (1968) and Jakarta (1969). After the absorption of former partner banks in 1972 there was created the Euro-Asian Bank, which quickly built up its own network of branches. The similar activity went on as on the territory of the Arab countries and in Canada and Australia. The other banks dominated the European markets at that time, so the only way for Deutsche Bank was to gain new market segments in the other countries by the absorption of the other banks. The first step of this strategy was the takeover of Bank of Italy (Italian. Banca d'Italia) by the Bank of America, as a result of which Deutsche Bank began to function firstly at the market of another European country. The next step of Deutsche Bank was complete or partial acquisitions of banks in the Netherlands, Australia, Lisbon, Austria and Canada. The activity of Deutsche Bank directed at the internationalisation on the territory of the USA was so successful that in 1989 Deutsche Bank moved into a huge building not far from Wall Street, which began to be called Deutsche Bank Building since that time. In 1998 Deutsche Bank succeeded in buying the Internet domain which included only two letters – DB.com. Thus Deutsche Bank has become one of seven banks in the world and the only bank in Germany to have such a domain. But the process has not stopped after that. In 1989 Deutsche Bank absorbed the British investment bank Morgan Grenfell in London. The 1990s were noted with the establishment of new branches and absorption of the existing banks in Eastern and Southern Europe. 1998 was marked by the fact that

Deutsche Bank absorbed the investment bank Bankers Trust in New York, which after some time was renamed into Deutsche Bank. With 12000 employees in the US alone, the bank plays a significant role in the investment banking not only on the American continent but in the whole world¹⁸.

Nowadays Deutsche Bank is the largest bank in Germany and ranks first among the banks in the country by the sum of total assets (Figure 9).

According to the figure given above, we see that the sum of Deutsche Bank total assets exceeds that of its biggest competitor in Germany Commerzbank in 1151 trillion Euro and of the bank which is on the tenth position, Postbank – in 1554 trillion Euro.

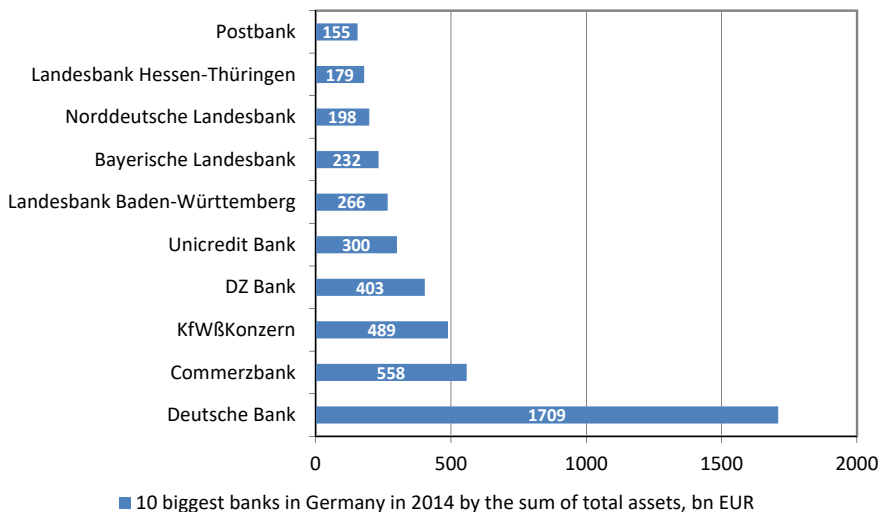


Figure 9. 10 biggest banks in Germany by the sum of total assets, bn EUR

Source: author's own elaboration on the basis of statistical data¹⁹.

Deutsche Bank also takes the first place among German banks by the number of branches (Figure 10).

Having analysed the figure given above, we see that Deutsche Bank 1714 branches more than its closest competitor, according to the ranking, Commerzbank and 2614 branches more than the bank that takes the tenth place in the ranking Hamburger Sparkasse. The ability to have so many branches describes Deutsche Bank as the one that disposes the largest financial opportunities in Germany for its successful operation. Such a large lead of Deutsche Bank from all its competitors indicates the skilfully chosen strategy of successful operation, maintaining a competitive market position and gain new market segments.

¹⁸ Zur Entwicklung der Niederlassungen der Deutschen Bank [Electronic Resource] // Access mode: <http://www.bankgeschichte.de/de/content/781.html>

¹⁹ Top 20 der deutschen Banken nach der Bilanzsumme im Jahr 2014 (in Milliarden Euro) Bank [Electronic Resource] // Access mode: <http://de.statista.com/statistik/daten/studie/157580/umfrage/bilanzsumme-der-groessten-banken-in-deutschland/>

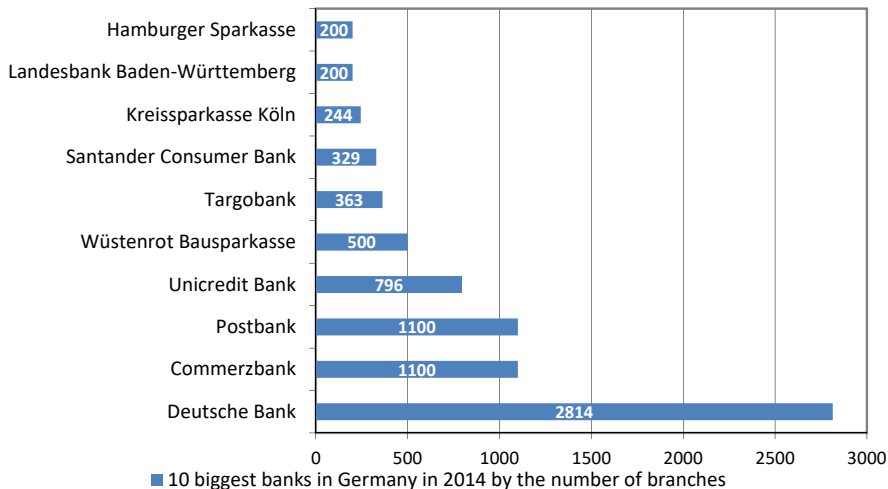


Figure 10. 10 biggest banks in Germany in 2014 by the number of branches

Source: author’s own elaboration based on statistical data²⁰.

If we take into account the number of employees in the banks of Germany, Deutsche Bank also takes the first place in this category (Figure 11).

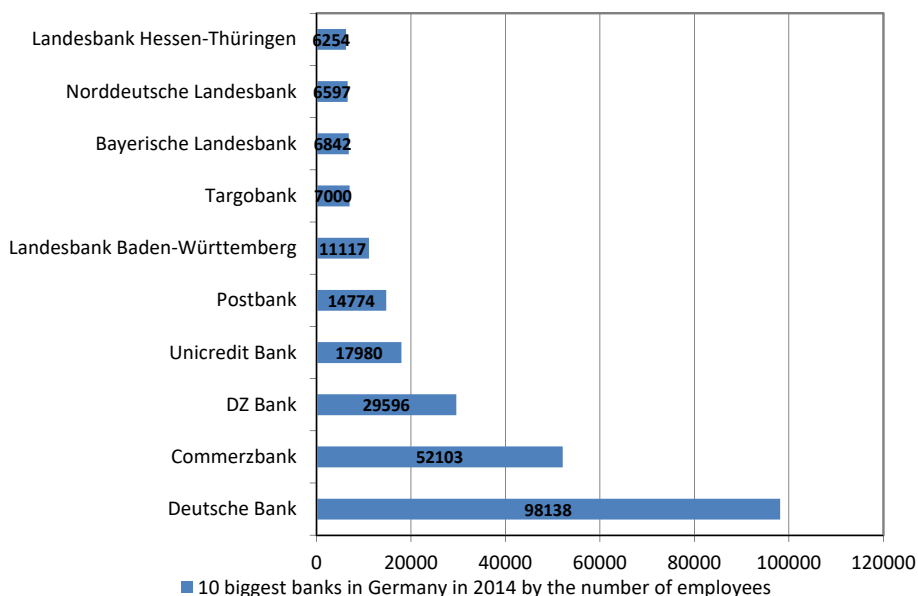


Figure 11. 10 biggest banks in Germany in 2014 by the number of employees

Source: author’s own elaboration based on statistical data²¹.

²⁰ Zahlen, Daten, Fakten der Kreditwirtschaft [Electronic Resource] // Access mode: https://bankenverband.de/media/publikationen/08122015_Zahlen_und_Fakten_V2.pdf

Analysing the ranking of the ten largest German banks by the number of employees, we see that Deutsche Bank employs 98138 people that of 46035 jobs more than its closest competitor Commerzbank and 97884 jobs more than the bank that takes the tenth position in the ranking, that is Landesbank Hessen – Thüringen. Thus, Deutsche Bank is extremely valuable enterprise as from the point of view of the people who work there and of Germany as a state considering how many people the said bank employs.

The analysis of the data given above allows us to state that Deutsche Bank is the largest bank in Germany by the sum of total assets, the number of branches, the number of employees and others. The correctly chosen strategy to internationalization led the said bank to the first positions in Germany, making it also one of the most powerful banks in Europe and in the world. But there appears the question whether there is the upper limit of the number of branches after which its increase will only overburden the bank and which will be difficult to handle. Is there a limit of the internationalisation to which the said kind of activity causes profit and influence spheres increase and its excess – to a completely opposite result? So, we see that the presented research has prospects to continue as there remained important questions to be answered for the banking sector in general and separate banks in particular to function successfully.

CONCLUSIONS

The conducted study allows us to draw the following general conclusion: an important factor that leads to the increase of competitiveness level in the banking sector is the internationalisation of banks' activity. Another conclusion of the study in regard to the country level is that the functioning of the banking system of Ukraine is unstable. The main reasons of such instability are the instability of the currency of the country, the instability of the political situation in the country, high inflation rate, the instability of both domestic and foreign currency markets, the sharp increase of foreign currency demand, the insufficient flexibility and timeliness of the banking sector reaction to the changes at financial markets and others. The functioning of the banking sector in the Euro zone is characterized by the reduction of the financial institutions number, the cause of which is, in most cases, merging not bankruptcy. The characteristic feature of the German banking system development over the period under research is also the reduction of the number of banking institutions. The main reasons for such a state of matters are, among others, transparency of borders within the European Union, merging of banks with local and foreign capital, the winning of new market sectors by large banks, the growing use of Internet banking by the customers.

The successful example of a transnational company, the chosen strategy for the internationalisation of which was considered in the article, is Deutsche Bank. This bank is the example of a company that focuses on the internationalisation of activity since its foundation, searching for markets to sale its products outside its home country. Internationalisation influences positively the activity of the banking system as a whole and separate banks in particular. Deutsche Bank holds the leading positions in major aspects of

²¹ Zahlen, Daten, Fakten der Kreditwirtschaft [Electronic Resource] // Access mode: https://bankenverband.de/media/publikationen/08122015_Zahlen_und_Fakten_V2.pdf.

the banks activity in Germany and is one of the most influential banks in Europe and in the whole world. What is necessary to study is the very limit of internationalisation, the limit to which the said activity brings the company profit and after crossing of which, the company is overloaded with too many branches abroad or foreign markets segments, where it functions. Those issues will be hopefully addressed by the future research.

REFERENCES

- Anzahl der Banken und ihrer Zweigstellen. (2014). [Electronic Resource] // Access mode: https://bankenverband.de/media/file/ge_banken-undzweigstellen2014.
- Aussenwirtschaft. (2014). [Electronic Resource] // Access mode: http://www.bundesbank.de/statistik/statistik_aussenwirtschaft.
- Bankstellenbericht 2014. (2014). [Electronic Resource] // Access mode: https://www.bundesbank.de/Redaktion/DE/Downloads/Aufgaben/Bankenaufsicht/Dokumentationen/bankstellenbericht_2014.pdf?__blob=publicationFile.
- Concentration and foreign penetration in Latin American banking sectors: Impact on competition and risk // *Journal of Banking & Finance* // Volume 31, Issue 6, June 2007, Pages 1633-1647.
- Consolidated Version of the Treaty on the Functioning of the European Union. (2008). [Electronic Resource] // Access mode: https://www.tirol.gv.at/fileadmin/buergerservice/e-government/eap/downloads/THE_TREATY_ON_the_FUNCTIONING_OF_THE_EU.pdf.
- Die Internationalisierung der deutschen Geschäftsbanken. (2010). [Electronic Resource] // Access mode: <http://www.diplom.de/Internationalisierung-deutschen-Geschaeftsbanken>.
- Do Banks Benefit from Internationalization? Revisiting the Market Power–Risk Nexus // Claudia M. Buch, Cathérine T. Koch and Michael Koetter // *Review of Finance* (2012) // [Electronic Resource] // Access mode: <http://rof.oxfordjournals.org/content/early/2012/11/20/rof.rfs033.short>.
- Eurozone und EU. (2014). [Electronic Resource] // Access mode: <http://www.bankenverband.de>.
- Foreign bank participation and outreach: Evidence from Mexico. (2010). [Electronic Resource] // Access mode: <https://docs.google.com/viewer>.
- Global Competitiveness World Economic Forum. (2014). [Electronic Resource] // Access mode: www.weforum.org/issues/global-competitiveness.
- Internationalization of Banking: The Economic Benefits and Risks. (2013). [Electronic Resource] // Access mode: <http://www.adbi.org>.
- Michael E. Porter Publications. (2008). [Electronic Resource] // Access mode: <http://www.isc.hbs.edu/firm-competitve>.
- Michael Porter, Nicholas Argyres, Anita M. McGahan An Interview with Michael Porter. (2005). – *The Academy of Management Executive* (1993-2005). – Vol. 16, No. 2, Theme: Achieving Competitive Advantage (May, 2002), pp. 43-52.
- National Bank of Ukraine. (2016). [Electronic Resource] // Access mode: www.bank.gov.ua/doccatalog/document.
- Netzwerkeffekte, Standardisierung und Wettbewerbsstrategie. (2000). – Marcus Ehrhardt. – Gabler Edition Wissenschaft. – Frankfurt am Main. – 2000. – p. 171.
- Paul Krugman Competitiveness. (2011). [Electronic Resource] // Access mode: http://krugman.blogs.nytimes.com/2011/01/22/competitiveness/?_r=0
- Porter five forces analysis. (2014). [Electronic Resource] // Access mode: <http://www.cleverism.com/porters-five-forces-model-strategy-framework/>

- Statistik Daten. (2016). [Electronic Resource] // Access mode: <http://de.statista.com/statistik/daten/studie/72095/umfrage/anzahl-der-bankstellen-in-deutschland>.
- Thompson E. R. 'National Competitiveness: A Question of Cost Conditions or Institutional Circumstances?' (2004). *British Journal of Management*, Vol. 15, 2004, p. 198.
- Top 20 der deutschen Banken nach der Bilanzsumme im Jahr 2014 (in Milliarden Euro). (2014). [Electronic Resource] // Access mode: <http://de.statista.com/statistik/daten/studie/157580/umfrage/bilanzsumme-der-groessten-banken-in-deutschland/>.
- Verband der Auslandsbanken in Deutschland. (2016). [Electronic Resource] // Access mode: <http://www.vab.de/Deutsch/bedeutung/>.
- Zahl der Banken sinkt weiter. (2013). [Electronic Resource] // Access mode: <http://www.managermagazin.de/unternehmen/banken/a-878850.html>.
- Zahlen, Daten, Fakten der Kreditwirtschaft. (2015). [Electronic Resource] // Access mode: https://bankenverband.de/media/publikationen/08122015_Zahlen_und_Fakten_V2.pdf.
- Zur Entwicklung der Niederlassungen der Deutschen Bank. (2016). [Electronic Resource] // Access mode: <http://www.bankgeschichte.de/de/content/781.html>.

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Health Resorts as a Social Enterprise in Ukraine's Economic Development

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Abstract

Modern economic development is highly dependent on sustainable community development. In Ukraine, the tourism sector is one of the driving forces of economic development. The main aim of the paper is to study health recovery tourism in Ukraine, on the case of creating social enterprises in a health resort network. The paper is oriented on the managerial and value creation issues. The aim is to describe the business idea of a health resort (Lviv region of Ukraine) as an innovative economic agent with social goals and value added to the local community in general and on the example of three existing spas. Taking into consideration the amount of tourists in Lviv region and the key indicators of small businesses in the sector, the social enterprise is an alternative to the for-profit entities. The study findings suggest that starting the social enterprise in health resort services may become a good practice for the local development strategies. The health resort social enterprise may add value to the Lviv region by supporting the employment of local population and social value provision to groups of the society. The main contribution of the paper is in applying the social entrepreneurship model in the sector of health resort services. As the current political and social issues and problems in Ukraine are concerned, the non-profit entity project has potential for implementation.

Keywords: tourism sector; social enterprise; local development; health resort services; non-profit entities; value creation; modelling

JEL codes: Z32, I19, O18

INTRODUCTION

Economic development in Ukraine is currently dependent on the regional policy. The national state authorities consider effective regional and local development policies as

an instrument for the short and the long-run welfare promotion. The regional differences among the administrative entities called oblast in Ukraine have proven to affect the economic and social well-being. New development strategies need to be integrated with local assets, competitive advantages and opportunities. Regional investment promotion and entrepreneurship development efforts must result from and help achieve national and regional economic and social development goals.

Strong regional disparities and resulting economic and social implications can hamper or delay the implementation of reforms and sector policies. Rapid restructuring can exacerbate traditional regional gaps (e.g. between urban and rural regions) and create new disparities. A design of a regional development policy should even out the regional unbalances in the transition, define policies and tools that tackle the different structural problems. There is high probability that interventions at a city or regional level can enhance the beneficial impacts of the macro changes and the higher tier policies. The capacity of cities and regions to develop and implement effective development strategies become vital to harnessing indigenous strengths, contributing to national growth and levelling regional disparities.

The tourism sector in Ukraine can become one of the significant drivers of regional development and social value creation in industrial and post-industrial countries in the 21st century. The potential challenges of this sector is the negative impact on the local environment of local identity. Thus, the tourism sector policy in terms of regional development has to be coordinated with the long-run regional development strategies. Pursuing sustainable regional development in the tourism sector will mean the search of an effective competitive advantages of the location and appropriate quality of the applied solutions.

Nowadays there is a high demand on the social issues of the communities. Often the members of society are expressing their need to balance commercial and social values. Private sector agents are expected to act more socially responsible towards society and the environment. Communities can now develop business ideas that answer local needs, help provide vital services and support vulnerable groups. This is a new way for communities themselves to provide goods and services in response to people's needs and to improve the quality of life for others (Angove, 2007). Innovative entities such as social enterprises not only provide employment, but also engage motivated workforce invaluable work to tackle real needs in the community. A Survey of Social Enterprises undertaken by the Small Business Service in 2005 reported that in 17 % of social enterprises' primary aim was to help the environment; 34% aimed to help both the environment and people by providing employment, goods or services and 49% aimed to specifically help people (Survey of Social Enterprise across the UK, 2005).

The main aim of the paper is to study health resorts activities in Ukraine and their role in the tourism sector. Three existing spas are described along with identification of existing opportunities for further growth. It positions social enterprises in the health resort network as a tool of the tourism product provision and as means of additional value creation for the local community. It aims to promote the business idea of a health resort in Lviv region of Ukraine as an innovative economic agent with social goals and value added to the local community.

SOCIAL ENTERPRISE AS AN INNOVATIVE BUSINESS MODEL

There are several models describing the social enterprise from different points of view. Current paper aim was to study the managerial and value creation issues. In the paper, the idea

was to develop more the possibilities of the social entrepreneurship on the regional level. The model PCDO is a central to describe the model of the health resort social enterprise.

The PCDO (people, context, deal and opportunity) is a management-focused model of the entrepreneurship presented by Sahlman (Teo & Tan, 2013). The model developed in 1996 explains the four interdependent components and their role for the management according to different situations (Figure 1).

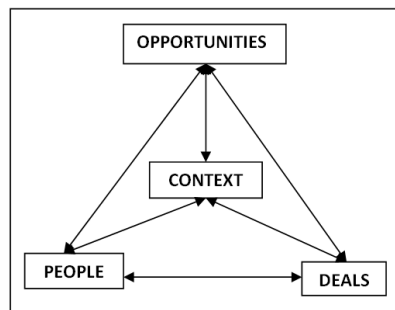


Figure 1. People, context, deal and opportunity (PCDO) framework

Source: Austin et al. (2006).

A group of authors (Austin *et al.*, 2006) has elaborated the application of PCDO framework for the social enterprises. The elaboration of the Sahlman's PCDO model was for the purpose to study the interdependency of the people, context, deal, and opportunity, which the entrepreneur must recognize and manage accordingly in different situations. In the PCDO model, the managerial ability of the entrepreneur is critical and is the key determining factor of success and progress of the entrepreneurial venture.

The opportunity and the context (Figure 1) together form the scope of the opportunities for the social entrepreneur. Opportunity is a desired future state that is different from the present and the belief that the achievement of that state is possible. Opportunities in the social sectors require the investment of scarce resources with the hope of future returns (Austin *et al.*, 2006).

The authors of the PCDO model consider as well the external context. They define it as factors affecting the nature and outcome of the opportunity, but are outside the control of management. There are several components of the external context which are the macro-economic, the tax and regulatory, and the socio-political environment (Austin *et al.*, 2006).

One should understand the role and goal of the human resources in the social enterprise building. The key suppliers, customers, competitors, and talent are required to create the organization. Others should also recognise the social entrepreneur for the reputation and capabilities to gain the trust from others who will be willing to work with and invest in them. Social entrepreneurs are seeking to attract resources for the social good, rather than for financial returns. Thus, they rely on a robust network of contacts that will provide them with access to funding, board members, and management and staff, among other resources. A social entrepreneur must be skilled at managing a wider diversity of relationships with funders, managers, and staff from a range of backgrounds, volunteers, board members, and other partners.

Deals are mutually beneficial contractual relationships between the entrepreneurial venture and all resource providers (Austin *et al.*, 2006). Social entrepreneurs are seeking investors to provide financial resources, as well as skills and talent to help them generate a return on their investments, whether financial or social. The sources of talent, contacts, capital, and amounts raised are of primary concern for both types of entrepreneurs.

Other models attempt to explain more in details the social enterprise and its features. Among such models, authors name the model of Guclu, Dees, and Anderson from the Centre for the Advancement of Social Entrepreneurship and the Social Entrepreneurship Framework of the three authors Austin, Stevenson and Wei-Skillern of Harvard University (the modification of the discussed model) (Kickull & Lyons, 2012).

Value chain creation is a model that helps to analyse specific activities through the firm's activities in creating value and the competitive advantages. The model may be a tool to identify or distinguish the traditional businesses and social enterprises, and with the framework, it can help in creating the value of social enterprise. It enables the identification of different values collected with the value chain creation model in contrasting these two business models.

The term 'social enterprise' came into use in the 1980s, as an attempt to differentiate traditional, purely non-profit, charitable organizations from socially-oriented organizations that venture into revenue-generating activities (Defourny & Nyssens, 2010). While scholars have advanced many definitions of social enterprise, social enterprises essentially refer to the range of organizations that operate for a social purpose. The difference between a social enterprise and a purely for-profit business enterprise, and in some cases, from a charity is often not obvious. There are social enterprises that behave like for-profit business enterprises, while others enclose qualities more of charities than business enterprises. Although the agreeable and widely accepted view that, there is a conceptual gap in establishing clear distinctions among the three organizational forms (Teo & Tan, 2013). Social entrepreneurs may share similar characteristics to the for-profit ones such as efficiency, dynamism, innovativeness, high performance and economic sustainability (Austin *et al.*, 2006).

Social entrepreneurs are innovators who use their ideas and different resources for troubleshooting in the social sector. The differences between the social enterprises charity organizations and traditional business are in the table 1.

Table 1. The key features differentiating social enterprise from charity organisations and traditional business

Social enterprises	Charity organisation	Traditional business
Social oriented structure	Social oriented structure	Commercial oriented structure
No dependence on the external financing; initial capital is needed only	Dependence on the external financing, donors, grants	No dependence on the external financing; initial capital is needed only
Revenue is gained from its activities, which are aimed at troubleshooting of some specific social problems	Receives grants, donations, which are aimed at troubleshooting of some specific social problems	Revenue is gained from its activities, which are aimed at maximising the profit
Profit is reinvested	No profit	Profit is distributed among the shareholders

Source: own elaboration.

Social enterprises are entities that solve social problems based on self-finance, innovations and sustainability. There are some main characteristics of this type of firms. They are the following:

1. Social influence as means solving or softening some specific social problem or need;
2. Innovation as new ways of solving old problems or new ones, new views on things;
3. Self-financing as a financial sustainability and independence from external financing or grants;
4. Replicability as the ability to apply the same model and approaches in different location and in other social environment.

The main principles of a social enterprise are:

1. Mutual ownership of the members and distribution of the shares with the enterprise;
2. Membership is according to the charter;
3. Democratic decision-making;
4. Revenues invested within the entity or in external social or ecological projects;
5. The entity is receiving both the revenues and the grants;
6. The commercial, social and ecological outcomes assessed by the financial and social audit;
7. The goal is the social welfare, not the private one.

According to the surveys, the share of the social enterprises in Europe is around 10%, representing nine million full-time jobs. The European policy towards this type of economic agents is loyal and the European Commission has established a Social Economy Unit in the Directorate General for Industry (IFF Research, 2005).

POTENTIAL OF LVIV REGION

The tourism sector of Ukraine is one of the sectors that possess potential for further economic development, employment and regional development (Figure 2). The number of foreign tourists in Lviv region was fluctuating considerably from 34591 in year 2003 to 19033 in year 2012 and to 2015 in year 2014. Thus, the region has prospects for becoming a tourist destination. The lack of appropriate promotion of tourism services results both in the low trends during last 10 years (Figure 2) and negative impact on local areas and communities' activities.

There is a small amount of businesses in tourism sector in Lviv region (Table 2). During the last 4 years the number of business decreases from 1038 in 2010 to 794 in 2014. The share of the payroll expenses is around one third to the total sales.

Recently, development of small scale entrepreneurship in the regions of Ukraine helps to revive business. It is an opportunity to encourage people to work and implement changes, to increase social resources of the region with the help of development of a small scale entrepreneurship, farming, cooperatives and different forms of self-organization.

According to data, there were 96 enterprises in tourism of Lviv region as self-employed forms (Table 3). There was a substantial increase in the number of the provided service to foreigners from 73 in 2011 to 1256 in 2013 and that is around 17 times more. The private businesses that may be in form of social enterprises are the entities that possess the opportunities for the employment in the region and the attraction of foreigners. For instance, the tourism services provided for the foreigners in 2013 is 10% or 7 million UAH.

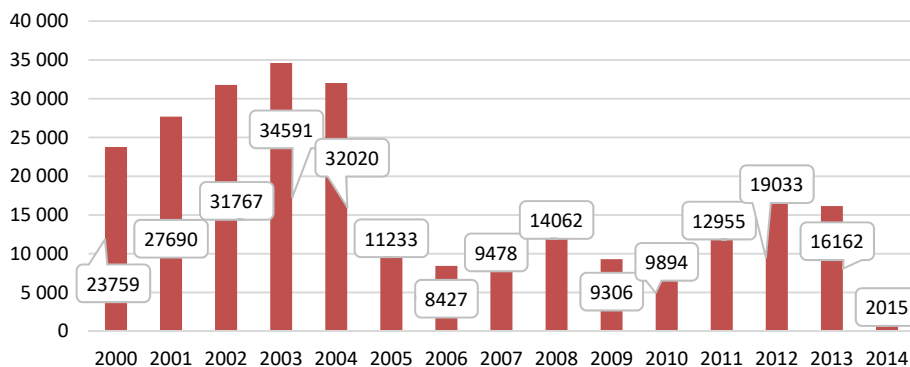


Figure 2. Number of Foreign Tourists in Lviv Region during last 14 years

Source: adapted from Regional Statistics Lviv.

Table 2. The key information about the small enterprises in sector of tourism in Lviv region

Year	Number of enterprises	Number of employed persons	Number of hired persons	Payroll expenses (mln UAH)	Total sales (mln UAH)
2010	1038	6574	6325	82.6	243.3
2011	854	6501	6267	102.3	268.1
2012	789	5390	5213	107.3	322.3
2013	825	4878	4577	99.5	288.2
2014	794	4500	4161	95.2	315.6

Source: adapted from Regional Statistics Lviv

Table 3. The key features of individual enterprises in Ukrainian tourism sector

Indicators	2011	2012	2013	2014
Total number	96	131	129	92
Average amount of employed persons	46	64	89	53
Revenue (mln UAH)	4.41	17.57	9.7	7.84
Number of provided tourism services:	5067	7051	12032	7980
including foreigners	73	537	1256	307
including foreigners (%)	1.44	7.62	10.44	3.85
Amount of provided tourism services (mln UAH):	29.39	42.99	79.71	75.96
including foreigners	0.69	2.84	7.44	1.13
including foreigners (%)	2.35	6.61	9.33	1.49

Source: adapted from State Statistics.

The total number of legal entities in Lviv tourism sector is higher respectively to the self-employed (Table 4). Such tourism entities provide the majority of the services and raise higher revenues. During the 2011-2014 years, the tourism business has faced a trend of decline. The number of foreign customers decreased significantly from 6500 persons in 2012 to 864 in 2014 or by 87%. Taking into consideration the previous years, there are available opportunities for the tourism services delivery including those aimed at foreign customers.

Table 4. The key features of legal entities (enterprises) in Ukrainian tourism sector

Indicators	2011	2012	2013	2014
Total number	134	148	143	143
Average amount of employed persons	627	679	757	654
Revenue (mln UAH)	109.65	159.15	219.00	166.91
Number of provided tourism services:	49170	58889	75060	52947
including foreigners	6332	6500	4334	864
including foreigners (%)	12.88	11.04	5.77	1.63
Amount of provided tourism services (mln UAH):	128.89	162.77	227.46	330.73
including foreigners	16.58	18.76	25.82	4.73
including foreigners (%)	12.86	11.53	11.35	1.43

Source: adapted from State Statistics.

The involvement of the tourism industry such as hotel accommodations, leisure services and health resorts, can also be a target for entrepreneur to create social enterprise cooperation while establishing and growing their businesses. Such innovative model in Lviv region of Ukraine may generate a new level of social economy adapting to the consumers' expectations and gaining social benefits for the local society.

The potential for tourism services is based on the location and efficient branding of Lviv as a cultural and European centre in Ukraine. Thus, health care services such as health resorts that provide rehabilitation and spa, in combination with the social goals may be a profitable business model. According to the current information, the available resources in the health resort entities are applied only per 50% (Table 5).

Table 5. The key information about the health resorts in Lviv region and Ukraine

Indicators	2011		2014	
	Lviv region	Ukraine	Lviv region	Ukraine
Applied health resorts potential (%)	0.53	0.25	0.49	0.46
Employed persons (thousands)	9.06	94.62	7.37	51.12
Employed doctors (thousands)	0.52	4.82	0.33	2.05
Customers (thousands)	231.03	2639.11	170.83	1463.84
Foreign customers (thousands)	37.77	355.90	9.00	22.77
Revenue from provided services (mln UAH)	749.04	6869.94	690.91	3084.87
Revenue from rooms (mln UAH)	15.42	981.70	15.57	168.48
Revenue from total tour (mln UAH)	697.37	5547.93	648.30	2739.84
Revenue from additional services (mln UAH)	36.25	340.30	27.05	176.55
Operational costs (mln UAH)	632.46	9298.05	541.36	2868.98
Costs of materials (mln UAH)	278.03	3469.18	240.20	1303.64
Payroll costs (mln UAH)	159.44	3145.81	151.77	742.81
Depreciation (mln UAH)	59.05	603.25	32.10	161.89
Total costs (mln UAH)	1128.98	16516.29	965.43	5077.32

Source: adapted from State Statistics.

HEALTH RESORTS AS SOCIAL ENTERPRISE: STUDY OF THREE SPAS

There is a growing demand for medical services tourism. The experts are assuming that around 50-70% of the health services are delivered to the foreign patients. There are a few Ukrainian health spas worth considering for tourists. The two most popular Ukraine health spas are Morshyn and Truskavets. Shidnytsia health resort is more local customers oriented. The infrastructure is not sufficient for the foreigners to arrive to Shidnytsia. Truskavets is the largest and the most international one. The three Ukrainian spas offer mud baths, natural springs, specialized diets, physical exercise, massages, Jacuzzis, etc. The visitors usually find that Ukraine's spas are high quality and affordable.

Health resort may become the entities that run a responsible business. Creating the social enterprise in sector of health resorts for a social purpose will generate social value while operating with the financial discipline, innovation and determination of a private sector business in the region. The motivation for health resort social entrepreneurs is the high demand in the sector of health tourism nowadays in Europe due to the ageing population and the need for medical treatment. There are several health resort areas in Western Ukraine, which may provide good price/quality recovery medical services.

The model of creation social enterprises in health resorts sector may be a part of the cooperation programs within the Carpathian Euro region. The approach was to model three different health resort social enterprises in main recovery health services regions-Truskavets, Morshyn and Shidnytsia (Figure 3).

Truskavets is among the most advanced health resorts in the country. Most of the services provided by the commercial hotels are pools, saunas, steam baths, massages and salt caves. The main advantage of this area are large reserves of underground mineral waters that are rich in hydrocarbons, magnesium, and calcium and petroleum carbons. Such a combination of the location and natural resources holds potential to attract a major hotel and medical development to the region where businesses enjoy special tax breaks. The region and town of Truskavets have been developing considerably during the Euro 2012 championship preparation period. The resort is located 100 km south from Lviv and 90 km from the western border.

Another popular spa resort, Morshyn is famous for its healing waters, which contain such minerals as iron, iodine, dissolved oxygen, bromine, and magnesium. However, Morshyn offers many of other treatments as well, including simple massages and mud baths to exercise routines and specialized diets.

Following the PODO model, the market failures in the Ukrainian regions are the external context of the social enterprises creation in Ukraine. There are several prerequisites for a social entrepreneurship as the following: 1) the state authorities are unable to solve all the social problems; 2) traditional business entities are not receiving good spurs to join the social programs; 3) traditional business and state representatives are searching for commercial and political benefits respectively. As the grant programs are decreasing, social entrepreneurship is a good option for the third sector of the economy. The social entrepreneur may be as a person able to compete with traditional businesses. Thus, there is a significant room for the social enterprises development in Ukraine.

Nowadays there is a tendency of the charitable funds to appear in many locations in Ukraine as reaction to the military conflict needs. There were 10 thousand of charitable funds in the end of October 2014 and 15 thousand in the February 2015.

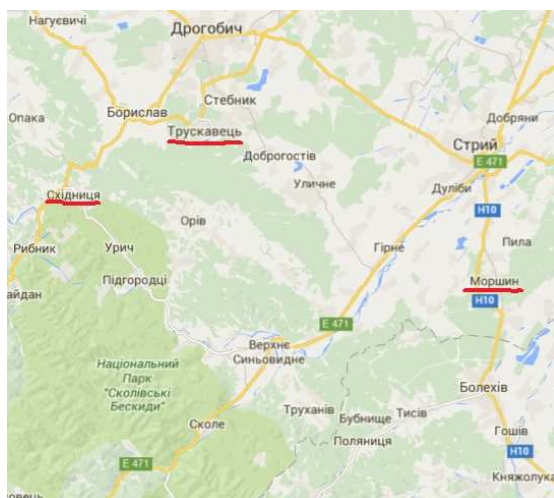


Figure 3. The location of the three towns Truskavets, Morshyn and Shidnytsia
Source: Google maps.

The problem of creating social enterprises in Ukraine is that the founders overestimate the role of grants as a form of funding compared to other resources. The fact of raising financing in other forms requires business profit-oriented approach that consequently will lead to efficient activities of social entrepreneur. The grant technique of investments results in a low level of motivation among the staff to implement the goals and social ideas of the entity.

The social entrepreneurship in tourism industry is a new phenomenon in Ukraine. The perception of tourism as a sector for receiving profit poses obstacles for the probability of creation of non-profit entities. In case of Ukraine, the innovative approach that is guaranteed by the social enterprise creates both monetary, well-being and social value. The latter one is discussed often in the context of regional policy.

Applying the PODO model for the case of health resorts in Lviv region requires understanding the market forces. The opportunities and the context elements of the model in case of Ukraine and Lviv region may be a good source of financing for the social enterprise and the demand for the social value from the society. Such source is the sector of the IT services. There is already voluntary project that is designed to provide free courses for the ex-military persons who are not able to find employment. The project is not yet formed as a social enterprise.

The social enterprises in Truskavets and in Morshyn are modelled as health resorts, rehabilitation and training centres for the participants of ATO (antiterrorist operation). The health services are designed for physical rehabilitation. The training services are the additional and voluntary activities for the new competencies of the soldiers for their future employment. The idea of the project is to run already proved type of business with some extra options like training courses.

The social enterprise in Shidnytsia is a model of the entities that makes profit for the infrastructure objects building in the area of the small town. The idea of the project is to run already proved type of business with extra option in terms of the profit allocation. The social enterprise uses the strategy of buying only local food for consumption in the health resorts, e.g. the distance has to be not more than 35 kilometres.

The data of the clients of the modelled social enterprises is taken based on the previous information about the amount of the persons who have travelled to the three locations in the years. Such information is provided in the table 3.

Table 6. The amount of customers at the spa resorts Truskavets, Morshyn and Shidnytsia

Years	Amount of clients of the spa resorts (in thousand)								
	2005	2006	2007	2008	2009	2010	2011	2016*	2017*
Boryslav (Shidnytsia area)	1.8	2.0	2.2	2.3	2.2	2.2	2.4	3.2	4.3
Morshyn	39.9	44.5	47.9	50.5	49.9	42.5	46.3	68.9	91.9
Truskavets	159.2	164.7	158.6	171.1	159.8	150.0	135.1	235.4	313.8
Total market force	2205.9	2217.2	2215.7	2231.8	2220.9	2204.7	2194.8	3319.5	4426.0

Source: adapted from Regional Statistics Lviv; * - estimated by author.

The findings show that the trend in the service consumption is relatively low. The stable small amount of tourists in the area of Shidnytsia health resorts is the result of the lower standards of both accommodation and staff. But the region has an attractive location near the mountains.

Following the PODO model the people is the main asset of the social enterprise. Any business is divided into three different spheres. It firstly exists for the product/service that it offers, then for the people who use the product/service, and finally for the employees. For the business to thrive, the three spheres must be coherent. Those three spheres then make a concept/entity that helps the product/service differentiate from other products. The combination of the coherence and the differentiation are the foundations of the business model (Lafeuille, 2009).

The motives in the case of health resorts must be mixed: it must appeal to both goodwill (preservation of the land) and self-interest (empowerment of the community). As for the key stakeholders, the enterprise will have to benefit the community as well as the visitors. The members of the community will represent 100% of the workforce, who will get a market-rate salary.

The common issues in the business model of social health resorts in the three towns is the marketing program which aims to promote the understanding among the customers the social idea and the benefit of their personal consumption of the services for the local community.

The application of the value creation approach is built on the customer side. There are benefits for the consumer while the product or service is delivered. The additional bonus is the awareness of the consumer that a share of the revenue supports social needs or ecological issues. The social entity is planned to be a profitable project and ecologically friendly with the aim of the social welfare. The effectiveness of the social enterprise is considered on the basis of the three results. The three results are the financial viability, the creation of public wealth and environmental responsibility. The details of the triple approach are the following (Spreckley, 2014):

1. Financial viability is the commercial success and independence in the decision-making and in control. Attaining it means the organization and management are efficient.
2. Creation of public wealth is the ability of the group of people mutually to reach their goals.
3. Environmental responsibility is the responsibility for the green gas emissions, the biodiversity, the balance between the commercial benefits and the ecology.

The analysis was conducted to show the new value which can be created in social enterprise, namely social benefit. The social benefits of the new tourism entities in towns of Truskavets, Morshyn and Shidnytsia are the following: (i) clients – IT employees and the persons participating in the antiterrorist operation in Ukraine, internally moved persons within Ukraine. The clients are both shareholders and main clients; (ii) products or services – health services, spa services, rehabilitation services, spa services for IT employees.

The interested parties in the social enterprise are local government (authorities), local citizens, local other business (transportation, restaurants, shops, malls, theatres, etc). The approach is to divide the interested sides in three categories: main ones, the secondary ones and the third ones. The main interested side is the target group of people or main clients. They are employees, the consumers, business partners, volunteers. The secondary interested sides are the suppliers, banks, other partners, private and non-governmental organisations, the competitors. The third interested side is the amount of people who communicate rarely with social entrepreneur, e.g. financial institutions, consultants, etc.

CONCLUSIONS

Ukraine's social problems are very crucial nowadays. Social benefits were in demand during the independence period of Ukrainian state. The modelling a social enterprise now in Ukraine means benefiting from local resources.

The tourism sector in Ukraine can become one of the significant drivers of regional development and social value creation. The opposite side of this sector functioning is the negative impact on the local environment and objects of local identity. Thus, the tourism sector policy in terms of regional development has to be coordinated with the long-run regional development strategies. Pursuing a sustainable regional development in the tourism sector will mean the search for an effective competitive advantages of the location studied and appropriate quality of the applied measures.

The steps for the establishment of a social enterprise in health resort regions are the following. The first step is the education issue. There should be a special program for the local owners and managers of tourism social enterprises. That program would include the tourism management training, the apprenticeships for the business skills. The regional tourism associations are an efficient tool for better understanding the industry (Fruchtman, 2013), for personal communications, the market information sharing, the problems discussions and decision-making. Such associations must develop and implement a market research program for social tourism entities, so that potential entrepreneurs can base themselves on reliable sources. A regional association, with a Board of Directors formed with experienced social tourism operators, could then provide a social tourism voice in the tourism industry strategic planning and policy development.

The realization of the modelled social enterprises is crucial for the Lviv region and the three towns analysed in the paper. There are several prerequisites which

should be mentioned as follows: building a strong linkage between business and research by modifying the academic curriculum at the appropriate universities and institutes according to the changing needs of the tourism sector of economy; further development of tourism cluster functioning in Lviv region such as active membership of all institutions involved in the sector of tourism services.

Preliminary conclusions of the study show the expected positive effects on the employment of the regional citizen labour market. The employment possibilities may lead to improved living standards, as they have resulted in each of the three studied cases. Thus, the innovative model of running business improved the managerial skills, decreased the level of governmental instruments of financing, increased the responsibility for the environmental issues of the region's community.

REFERENCES

- Angove, S. (2007). *Social enterprise in Cornwall: A guide*. Cornwall rural community council.
- A Survey of Social Enterprise across the UK (2005). *IFF Research Ltd*. Retrieved from: http://webarchive.nationalarchives.gov.uk/+/http://www.cabinetoffice.gov.uk/media/cabinetoffice/third_sector/assets/survey_social_enterprise_across_uk.pdf (10.01.2016).
- Austin, J.E., Stevenson H., & Wei-Skillern, J. (2006). Social and Commercial Entrepreneurship: Same, Different, or Both? *Entrepreneurship Theory and Practice*, 30(1), 1-22.
- Defourny, J., & Nyssens, M. (2010). Conceptions of social enterprise and social entrepreneurship in Europe and the United States: Convergences and divergences. *Journal of Social Entrepreneurship*, 1(1), 32-53.
- Fruchterman, J. (2011). For love or lucre. *Stanford Social Innovation Review*, Spring, 41-47.
- Kickul, J., & Lyons, S.T. (2012). *Understanding Social Entrepreneurship. The Restless Pursuit of Mission in an Ever Changing World*. New York: Routledge.
- Lafeuille, L-O. (2009). *Du Marketing et de la Comm. Décryptages n° 1*. Paris: ASITY Publications
- Spreckley, F. (2011). Posibnik z planuvannyasocialnogopidpriemstva. British Council Ukraine.
- Teo, A.C.-Y., & Tan, W-B. (2013). Developing a Model of Social Entrepreneurship: A Grounded Study Approach. *EMES-SOCENT Conference Selected Papers, no. LG13-36*, Retrieved from: http://emes.net/content/uploads/publications/teo__tan_ecsp-lg13-36.pdf (10.01.2016).

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Business Models of Start-ups in Cooperation with Mature Companies: Obtaining Orders and Building Leading Position on the Market

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Abstract

The article will be based on interviews with 15 entrepreneurs. The study was conducted from December 2014 to February 2015. The tested entities did not operate on the market for more than 5 years. The methodology of the study was based on in-depth and partly-structured interviews. The companies operate in Warsaw or in its vicinity. The article will also analyze the startups' business models. Selected case studies will be presented to help answer the following questions: What is the role of the business model in achieving success? Which models guarantee an increase in market share? How do relations between big companies look like and when cooperations become startups' clients?

Keywords: Startups; business models

JEL codes: L14, L22, L2

INTRODUCTION

The main issue analyzed in this article is the company's ability to build its position on the market. A few business models of startups have been presented. They help obtaining orders and building relations with other companies. The author has analyzed the way startups establish relationships with key clients and the profits and losses that may follow. In the next part of the article, the startups in different phases of development, aiming at getting a large share in the market and going global, have been presented. The key scientific problem is to identify reasons of such an approach. The article focuses on actions un-

dertaken in order to build a strong brand. The crucial questions that needs to be answered is when this image is crucially important and which types of startups it mainly refers to.

The article is based on interviews with 15 entrepreneurs. The research was conducted between December 2014 until February 2015. The entities in question could not have functioned on the market for more than 5 years. The methodology of the research were detailed interviews, partly structurized. Presented companies operate in Warsaw or its vicinity. The article analyzes business models of startups based on theories of A.Osterwalder and Y.Pigneur (2012). Some case studies, divided into three groups, will be presented:

- Stable startups – startups which achieved stable position but decided to limit their growth. Stable startups are the oldest companies among those subjected to examination, which generate incomes and make their owners proud of their level. These companies have stable market position. The preferred strategy is offering low costs with high quality of service. They operate on the market with a strong competition. Using W. Ch. Kim's and R.Mauborgne's terminology, companies operate in the red ocean: „In the red oceans, industry boundaries are defined and accepted, and the competitive rules of the game are known. Here, companies try to outperform their rivals to grab a greater share of existing demand. As the market space gets crowded, prospects for profits and growth are reduced. Products become commodities, and cutthroat competition turns the red ocean bloody” (W. Ch. Kim, R.Mauborgne, 2005, p. 4).
- Developing startups – companies that develop stable and operate on the markets with structures that aggravate instant growth (an initial size of the market is not large, however its value continues to grow. Emerging startups are young companies which generate profits and often operate in SaaS model. Their current profits allow them to develop and search for new markets. The brand is very important to these startup. Some of them build it through their expert status in the industry, additionally their hire outside experts. Their goal for the future is to become one of the market leaders.
- Startups aimed at achieving leading position – startups aimed at building leading market position right from their emergence. Startups aimed at becoming leaders are most diversified group. The article presented successful companies, emerging ones and those which ended up with a failure. The companies of this kind intend to enter the markets characterized as a blue ocean: “Blue oceans, in contrast, are defined by untapped market space, demand creation, and the opportunity for highly profitable growth. Although some blue oceans are created well beyond existing industry boundaries, most are created from within red oceans by expanding existing industry boundaries, as Cirque du Soleil did. In blue oceans, competition is irrelevant because the rules of the game are waiting to be set” (W. Ch. Kim, R.Mauborgne, 2005, p. 4-5) . They want to be pioneers in Poland or in the world.

The article refers to definition of S. Blank and B. Dorf which defines startup as „temporary organization established in order to find repetitious, and capable of being measured business model“ (Blank, Dorf, 2013, p. 648). The primary benchmark for selection of companies for this research was the time of the firm's existence and the owners' awareness that their entities are indeed startups.

Whenever a name of the company is mentioned in the article, the authors did so with the permission from its representatives.

The Definition of Business Model and Brand

The basic outlook of the concept of business models used in this analysis is the one presented by A. Osterwalder and Y. Pigneur in the book titled „Establishing of business models. The coursebook of a visionary”. They define business model in the following way: „In a sense, a business model is an outline of a strategy which is to be implemented within framework of structures, processes and organizational systems” (Osterwalder, Pigneur, 2012, p 18), as well as „Business model characterizes assumptions behind the way which organization creates value, provide and take profits from created worth” (Osterwalder, Pigneur, 2012). This is a definition which refers to startup functioning. Business model is composed of the following elements: segment of clients, channels, relations with clients, the proposal of a value, key actions, resources, key partners, costs and revenues.

Jan Brzóška (2009, p.18-21) presented an interesting outlook of the business models' evolution which refer to strategic management:

1. Business models based on economic factors (a concept of the model building based on generating profit. The aim is to achieve current and long-term profitability. The representatives are: A. Afuah, Ch. L. Tucci [2003]).
2. Business models presenting competitive advantage (a concept of the model building to gain a competitive advantage through innovative actions. The aim is to create, develop and maintain constant competitive advantage. The representative is K. Obłój [2002]).
3. Business models with unique combination of resources, creating value and competitiveness (a concept of business models building based on creation and development of resources, providing competitiveness. The aim is to increase the worth and competitiveness of the company. The representatives are: R. Boulton, B. Libert, S. Samek [2000]).
4. Business models taking advantage of innovations (a concept of building radically-working innovations to create new value for the client and generate income for the company. Considerable change in business model in existing organizations. The aims are: flexibility and development of the company through establishing untapped market space. The representatives are: W. Chan Kim and R. Mauborgne [2005]).

Summary of the definition of business models is also presented by Ch.Baden-Fuller and M.Morgan (2010, p. 158):

1. How a firm delivers value to customers and converts payment into profits (Tece).
2. A system of interdependent activities that transcends the focal firm and spans its boundaries (Zott & Amit).
3. Business model is a mechanism for turning ideas into revenue at reasonable cost (Gambardella & McGahan).
4. Cost innovation business model offers advantages in radically new ways meaning more for less (Williamson).

J. Kall presented such a definition of the brand: „combination of a physical product, its name, package, advertising plus actions in the area of distribution and prizes which distinguishes the offer of the particular company from actions taken by its competitors. It provides consumers with outstanding functional and/or symbolic assets, thanks to which it creates loyal group of buyers and enables achieving leading position on the market”(in M. Witek-Hajduk, 2011, p 30).

Marzanna Witek-Hajduk (2011, p 33-34), based on literature, demonstrates four most important functions of the brand:

- Distintvie – its main task is to distinguish a brand from a trademark.
- Warranty – it means that brand guaranties the constant level of quality.
- Promotional – a brand may be used in the process of communication between company and the market.
- Symbolic – a brand is a symbol of value of acquired products based on their ability to address certain messages to different groups.

Literature on business models and startups' brand building

While in English-speaking literature business models are very often a subject of research, in Poland they are not so popular. With relation to startups, different business models are examined mainly at industry portals, for instance <http://startupakademia.pl/>. In Poland, business models related to the market of energy has been analyzed by B. Matusiak (2013).

A. Sorescu R., Frambach, J. Singh, A. Rangaswamyd (2011), C. Bridges refered in their analysis of business models to retail maket. They propose six major ways in which retailers could innovate their business models to enhance value creation and appropriation beyond the levels afforded by traditional approaches to retailing (for example Self-service model, "Name your own price" model). Case studies has been used in the article as a research method.

Ch. Zott and R. Amit (2010, p.222-223) have presented analysis of adjustment of business model on the market: "To return to FriCSO, who had developed a world-class technology for friction reduction, and then had to decide on its future business model. As Loch et al report, the founders and their venture capital investors jointly decided to reject the choice of a machine manufacturing business model, as it would have been too capital-intensive and would have pitted the small start-up against powerful and entrenched competitors with similar activity systems and resource advantages that it would have found hard to beat. Instead, FriCSO adopted the business model of a machine tool manufacturer, positioning itself as a supplier to the powerful players, focusing on selling them products that had great value added through their intellectual property. (Another advantage was that automotive industry suppliers were used to buying tools, so this business model was familiar to them.) In fact, the choice of the business model was vitally important in this case: it did not simply determine future profit potential – rather, it was the key to the young firm's survival. If the founders had opted for a machine manufacturing model, they would probably not have received the equity capital they needed from their VC investors lacking funds to finance ongoing research and development efforts, the firm could well have gone out of business".

A. Osterwalder has described case studies of business models in "Business Model Generation: A Handbook For Visionaries, Game Changers, And Challengers." (with Y. Pigneur, 2012)) and "The business model ontology: A proposition in a design science approach." (2004). In the second publication he focused on case study of the Montreux Jazz Festival MJF.

Research of K.Mason and S. Leek (2008) was related to network supply. The basic method was the case study. Total of 49 interviews were carried out. The aim of their research was to go some way towards addressing this gap through the exploration of dynamic business models as an illustration of inter-firm knowledge transfer.

Similar methodology as in herewith article was used by B.Wirtz, O.Schilke and S. Ullrich (2010,p 287): "Our interviews with 22 managers from Web 2.0-related Internet companies had two objectives: first, to further confirm the relevance of the four factor model summarized in Figure 2; second, to gain more fine-grained insights into the most important implications of the Web 2.0 for established Internet businesses". The outcomes of the research are interesting: "This implies that the entire firm, and not just the top management, needs to be involved in constant environmental scanning. In fact, not only organization-internal resources can contribute to an improved understanding of technological changes, but the firm's customers are becoming an increasingly important source of information about these changes, as evidenced by the growing relevance of user-added value and interaction orientation identified in our study. Our findings thus lend further support to the concept of 'open innovation,' which emphasizes the benefits of openness as a means of expanding value creation for organizations."

THE RESULTS OF THE RESEACH – CASE STUDIES

Stable Startups

This category includes companies which have already established a stable market position and revenues. Although they often perceive themselves as local leaders, in fact they did not manage to spread their activity across the voivodeship, least of all across Warsaw. These enterprises are operational for more than three years while their primary recipients are small entities and those opening their own businesses. The category also involves companies with a stable position which decided themselves to either limit their growth and stopped searching for a new business model or to make minor adjustments in order to add new products for sale. Those companies do not spend much on brand-building and advertising.

The first company in question operates in the area of services and provides a wide range of trainings. The respondent is one of the leaders at the local market and enjoys very good reputation. As the key element of the company's competitive advantage he points out the high-level service plus well-developed personal training skills. The company's primary clients are representatives of the small and medium-size enterprises. Although it has not managed to establish wider cooperation with major corporations and, therefore, develop its clients portfolio in this segment, another effect has been achieved, as the company began contract work with the big players through another large firm of its area. Due to the high-quality of services offered, it has been recognized by those participating in the trainings. However, its business model contained wrong assumption that clients' satisfaction will lead to new contracts with the big firms. In fact, it turned out that the key element is establishing long-lasting relations with particular corporation, often on the international stage. The respondent explains that the companies cooperate with each other all across Europe and they sign contracts for providing services in a numerous countries. In this case, a primary thing are international affiliations. According to the respondent's opinion, the quality of the services does not play as important role as does the functioning in a certain network of partner companies, as well as the ability to serve a large number of clients. The important element of the business model is also a size of the entity. The respondent believes that the small firm is more likely to start

cooperating with the corporations operating in the areas of new technology and IT. That conclusion is also proved by the startups which – right from their emergence – are aimed at considerable access to the market. The respondent says:

“I used to have a few large clients but they were in minority. Fortunately, the Polish market of small and middle-size enterprises is big enough for every startup to function. But if you want to make your way in the world and to have a big fish in your clients portfolio and CV, an affiliation with a large corporation is a must. Of course, one may try, as there exist such startups that are very innovative and function smoothly, being able to offer out-of-the-box ideas. Eventually you may hear, for instance, about 3D print. There may be few startups of this kind at the moment but actually this is exactly what small companies did in the past.”

The second company in question is offering IT services to other firms. As its representative says, „there are a number of companies of this sort” but the one they run has very stable market position and its target are individual clients. The company was set up by a group of employees who collectively left their firm. At the beginning, the idea for the company's business model was based on the highest possible cost-cutting and outsourcing. The large part of the profits the startup allocated for investments. Nowadays, the firm has started hiring new staff. Thanks to high quality of the products, it managed to attain a stable position on the market, in the initial phase mainly due to recommendations and good networking. Later on, the company began to position itself and used advertising. The idea of the business model was to develop a direct contact and create a dialogue between the company and the clients. Another key element was building competitive advantage through quality and offering outstanding services on the market. Having cooperated with a large foreign client, the company started considering going international. It succeeded thanks to the cooperation with the Polish branch of an international company. It was followed by a meeting with an executive director from the United States and eventually the contract has been signed. The company's main advantages proved to be the cost of the service and its quality. According to the respondent, „in Poland the IT specialists are almost same cheap as in India, but they are qualitatively better.” While the company's model is very evolutionary and depends on the circumstances, the decisions to globalize the company's activity and to cooperate with the big firms were largely a coincidence.

Given the above, a model of “stable startups” is aimed at sustainable development and a risk averse approach. Specific features of this particular model include aiming at cost advantage with simultaneous high-quality service. These companies don't opt for acquiring considerable market share but assurance of safe and sustainable income. And this is what they manage to achieve. Therefore, an original and groundbreaking business model is not of the greatest importance in this sort of activity. This is because predominant strategy of such companies is fulfilling orders acquired from relatively stable group of employers.

The way of winning customers is based on advertisements and recommendations which are derivatives of high-quality services. These startups can develop (as in the second case) but while left alone they will not manage to search for new markets and niches. Naturally, those firms are influenced by markets with strong competition, where startups operate. It leads to risk averse approach. Corporations tend to be clients of such companies only by chance because they do not seek to network with them or there might be barriers which aggravate establishing cooperation. An interesting thing

is the attitude of leaders of the mentioned cases whose key objective becomes permanent income what eventually leads to functioning of entire companies. Leadership style and personal characteristics of the manager translate into choosing business model. These elements have remained out of A. Osetrwalder's and Y. Pigneur's analysis (2012). These findings will be confirmed in the further part of this article.

Developing Startups

In this category one will find the companies which achieve the position of strong firms in a regional dimension and search for alternate markets to keep on developing. They often use innovative business models and develop their own activity step by step. These companies do have definite source of income. Their owners build the company's image or make use of personal branding, in order to self-promote themselves as experts in particular areas.

The first company in question is a law firm. It was one of the first to start offering its products and services to startups. At the very beginning, the company built its image based on networking at the various industry events for startups. It managed to accumulate the first group of clients who were satisfied with the services offered and the relations they have developed with the firm's management. The problem that appeared was how to extend the scope of the activity and, consequently, how to generate higher income. The owners examined the situation and having consulted it with an expert on company's development, they came to a conclusion that the problem lies not in the product itself, but in customer acquisition. When analyzing business model, they focused on communication channels with the clients. In order to do the task they hired PR expert who was in charge of company's promotion. The company's owner gave a couple of interviews and based on them articles to industry magazines were prepared. The changes also touched upon a strategy of networking. Since they were made, the firm's representatives started attending conferences devoted only to certain groups of startups in the whole country. In the next phases, the company was aiming at increasing a quantity of services it offers, and to add consultancy. To sum up, the basic changes in the business model mainly dealt with conversion of the communication channels with the clients. Although the startup is currently in a growth phase, it is still unclear whether it will go nationwide with its activity. The company helps startups in their contacts with the large companies; it also supervises investment processes which increases its reliability in the eyes of new clients. At present, when the number of clients has increased, new elements have been added to the business model, namely adequate for startups relations with the clients and their handling, both based on quick reaction and flexibility.

The second company of the above mentioned category, Software Development Academy, recruits and train programmers for further hiring by companies. This startup takes advantage of the current situation on the labour market, in which huge demand on IT specialists is observed. In fact, very innovative business model has been used here: at first they get familiar with requirements and expectations of their clients, including the information about expected practical skills of the potential employee. The next phases are: selection process among the candidates, verification of their abilities and the job interviews. The final stage, with the presence of the employee's representatives, is about choosing 15 participants of the programme who will start the training, during which companies may monitor chosen candidates. The company makes the profit on training and recruiting candidates, at the same time, however, the candidates themselves must also cover their share.

Therefore, Software Development Academy actually has two sources of income. The candidates that have been trained by the company rarely leave the job within first year of their employment. This argument is precious for both employers and employees.

Initially, the company started developing in Pomerania, but at present it has moved its activity to Warsaw. This startup, due to its innovative model and taking advantage of the market developments, began providing services to large companies.

A very interesting conclusion was presented by one of the respondents whose company is providing IT services. The entrepreneur is driving his company to development thanks to continuously getting new orders. In the future he opts for basing his business model on license selling, so that it would enable using products that already exist:

„I believe that my strategy is exactly what I am doing now – which is to say I am accumulating the capital while providing services for my clients. I am aware that while processing the orders non-stop, I will be able to develop only to a certain level, right? The highest income you get when you dedicate your time on building one, two or three products, perhaps also on selling their copies. We make money on every license and its margin, we don't need to create a new product every time.”

At the later stage of the research, one of the respondents presented business model of a different company which to some degree may be perceived as an evolution of the above-mentioned strategy. The entrepreneur, operating in the SaaS model, accumulated the orders first, then his future clients provide him with money for the implementation and eventually he sells them license fee for using the product.

To sum up the category of developing startups, they are the firms which often interpret the market in a unique way. They try to build comparatively large share in the market while encountering low risk. That is why they often test their own initial activities and only after that they start calibrating business. This activity is in line with a 'lean startup' philosophy of Blank S, Dorf B. (2013). Considerable share is guaranteed by innovative business models which enable them to abstract a target group of clients which is determined and in need for a product or services. The clients are often ready to co-finance the solution to their problems. The key element is to approach the clients and to find among them those who are extremely determined (Blank S., Dorf B. call them 'early evangelists'). Direct competition is often small because the majority of firms on the market offer products of different kind. This is also why developing startups focus on initially little markets which rise. Large firms become clients of startups of this category because they do not have other providers. An interesting element of the model is building a strong brand. Developing startups choose to invest money in it and to position own managers as market experts.

Startups Aimed at Achieving Leading Position

This category consists of companies which business model assumed a wide-scale activity from the very beginning. These enterprises operate on those markets where competition is mainly international. One of interesting cases worth to be examined is a company called Scanye, a startup in the financial technologies (FinTech) industry. This is how website www.startupinsider.pl (2015) describes it: „Scanye is a tool which intelligently process electronic invoices. An algorithm, capable of stimulating human's perception, reads the invoice and interprets the data based on their features and relations between them. It instantly takes out the right figures and input them to bank transfer order or account-

ing system. With its help, accountants save time and avoid arduous paper work, whereas banks' clients may comfortably and quickly pay their bills". The company plans to start selling licence fees for its main product in the SaaS model, depending on the number of invoices. At the initial phase of the model, banks have been considered the key clients. The question was: how such undeveloped and little startup was able to achieve that? The founders have adopted their promotion strategy during startups' events. It is where they focused on networking and building relationships with the companies of the financial sector. The entrepreneurs attended Citi Mobile Challenge EMEA, IngoShare startup contest, International Hackathon by BNP Paribas, Fintech Fusion (they got there thanks to applying at f6s.com portal and successfully going through two-stage process – a skype interview). Now, they will be living in Geneva for a year to participate in accelerator. The respondent admits that if they were to start everything again, the main focus will be on the product and acquiring new clients. Although the company managed to get first agreements with the foreign banks, it turned out that the new market that previously has not been examined, are accounting offices. In conclusion, the two key elements of Scanye's model have proved to be the team (standing ready to work for a year and being unpaid) and relations established with the banks. Thanks to startups' events, Scanye's founders constantly kept enriching their business knowledge.

The company's problem was in fact the commercialization of their idea, as it could only start making profit once the final product was ready. However, thanks to market research and contacts with decision makers in the banks, the company managed to limit the risk of failure and assure future clients even before the product was ready for sale. Scanye primarily has foreign competition.

The similar strategy has been undertaken by Coinala with its application in the seed phase. One of the founders explained that it is based on 'economy of gratitude'. Its main idea is to build a community in which – thanks to the system of recommendations – the client will be able to find a person to fulfil their orders. In this process, those from client's circle recommend services and companies to their acquaintance. The assumption is that those individuals who recommend will eventually receive a small commission from the order's value. Coinala is similar to a multi-sided market type of the model (linking two groups of clients together) (Glinka, Pasieczny, 2015, p. 112). The Coinala team is consisted of three people, namely: an originator, highly experienced in marketing; a programmer and a person highly experienced in business. In addition, the company consults two experts in startup-building. The initial business model was similar to Scanye's and was based on the widest possible networking. The main founder of the company participated in a number of startup events and got to know with a PR-beginner, who eventually took charge of project promotion. Thanks to that, they managed to test tentative concept and begin works on MVP. This activity has attracted the attention of first investors. The next element of the business model was establishing relations with those who have wide contacts in startups' incubators, exp. in AiP. The aim was to explore the startup market and get to know all major programmes directed at emerging companies. Consequently, networking proved to be more strategically important and meaningful. Coinala focused on immediate internalization and making profits concurrently on the Polish and US markets. It is to help participating in one of the accelerator programmes that enable this process going. This startup keeps working on the way it can generate profits. Among the recommended clients there would

probably be smaller companies and freelancers. At the other end, among people searching for orders, there will mostly be residents of bigger cities. The company did not need to establish relations with large companies in order to make them their clients. However, as in the near future it will search for investors, the owners of large firms may come with a helping hand. The owners' vision, it is crucially important to achieve a leading position beyond national market as quickly as possible. They believe there is a risk that similar idea may be implemented in the United States. This, in a consequence, may give potential competitor significant supremacy, namely better investors or a bigger market. That is why Coinala is developing very quickly. To sum up, in Coinala, similarly to Scanye, the two key elements of the business model are well-built team plus good networking which is a tool that helps cutting costs and providing knowledge. The unique feature of this type of startup is that it rapidly develops, given the market it operates on.

„OncoArendi Therapeutics Ltd. (OAT) is an innovative biotechnological company specialized in searching and commercializing new medicines used in cancer's therapy and inflammatory disorders. Established in March 2012, OAT is a private firm, owners of which are founders as well as investors, both private and institutional” (<https://www.oncoarendi.com/about>, 2015). Its present scope of activity is totally different from the majority of those described in the article. Despite this fact, a respondent used a term 'startup' while referring to his company. It currently has a lot of features characterizing mature enterprise. It serves as an example of the company which managed to become one of the leaders of the Polish market in a very short time. The key element of the business model was the company's team. On one hand, highly experienced CEO, dr Marcin Szumowski (one of the founders of Medicalgorithmics), on the other – a group of Polish scientists who worked for many years in the United States. This company did not need to develop its networking as much as the previous two did. The group of its founders was composed of highly experienced individuals, known in the biotechnological industry. They performed detailed analysis of the costs and that has become an important element of their model. Thanks to highly skilled staff, they were able to limit some of expenses on research by acquiring grants, for instance from the National Centre for Research and Development. Since the company's competitors were global players, the important feature of their model became the low labour costs in Poland. As a consequence, the process of medicine making is considerably cheaper here than in highly developed countries. In that respect, the investment risk in this startup has become limited. However, the company operates on a high risk market (drug discovery) which limits its spendings having analyzed its costs. These arguments plus a good strategy of brand building made the company very attractive to investors. According to data available on its website, the company has already gained 16 million zloty from private donors and 30 million from the public means (<http://www.oncoarendi.com>, 2015). The current amount may already be higher. The company has become a very interesting project on the Polish market. The respondent says that the decision of starting operations in Poland proved to be very good given the possibility of money accumulation. OncoArendi differs much from other companies and quickly gains new investors. As has already been mentioned, the company did not need to focus on networking in the biotechnological industry, but it developed the relationships with investors and journalists. One of investors, Michał Sołowow, is one of the richest Poles. The company also managed to convince one of the

American universities to assign one of the research programmes to them. The company aims at selling or licence the rights to molecules, as the commercialization of medicines at one's own expense is still too costly for the company. That is why pharmaceutical corporations will serve as both initial clients of the company and supplier of the capital for further development. If the strategy proves to be effective, then OncoArendi will accumulate adequate funds to be able to commercialize medicines on its own.

Another interesting model, though opposed to the ones presented in this typology, is a company which accumulates money for another firms, including crowdfunding. It was one of the first companies which took advantage of this innovative form of financing in the world. A young and dynamic team with a charismatic leader has been created. It was decided that the company will apply for money from the Innovative Industry Programme, which eventually turned out to be unsuccessful. This is how the respondent explains the situation:

„When it comes to support from the state, there are also many obstacles. For instance, we made attempts to start operating already three years ago. We declared our idea to the Innovative Industry Programme. At those time it was the first company ever to handle crowdfunding in Poland but still our request for financing was rejected. The argument was that it is not innovative at all. The reality has proved how much the administrative officials were wrong when two years later crowdfunding became the major part of financing in the Internet.“

The company, although being one of the oldest out of all participating in the research, did not make any considerable progress in development. Its main strategy is promoting startups and expectancy for any of them to achieve real success. It did not manage to commercialize crowdfunding on a big scale, its present sales are based on company's own contacts. What distinguishes this company from other of the same category? Utterably important is a lack of searching for foreign capital at the early stage of the company's development plus lack of access to the international markets. Having compared this model with the one of Coinala, one could easily notice a lack of analyzed options of strong international competition. And this is exactly what happened in this case. The Polish companies and inventors started using the American crowdfunding platforms. The possibility of building relations with larger companies has not been the part of the business model, even though it could have been an interesting option for gaining new capital and orders. This startup has implemented a very defensive strategy of accumulating investors. Eventually, this approach turned out to be a mistake. The team itself reasonably quickly realized that they lack experience which eventually led to the leadership crisis. Despite young age of the company, it continuously operates on the market, even though there is much more space to act than it used to be in the past four years. It did not manage to build a strong brand. To sum up, it may be concluded that the company, despite very good idea, which turned out in an appropriate time, has achieved the limits of its possible growth. One of the biggest mistakes in the business model is a lack of internationalization and searching for those funds which did not come from the state. Perhaps we deal with situation erosion model unnoticed by the company's representatives and therefore the enterprise lost its time for success, stating R. McGrath (2010, p. 256): „Successful incumbents may even entirely miss the erosion of their model's ability to generate value until it is too late“.

Summing up the category of startups aimed at achieving leading position, a visible feature here turns to be a high tendency of their owners to take risks. In some cases the

leading role is played by the chief of the company whose own ambitions and personal characteristics decide about the selection of a business model. Startups of this type go for almost immediate internationalization. Business model established to operate on a big scale requires capital. It then becomes one of the most important factors that enable winning large share in the market. The companies of this type have problems with accomplishing quick viability, that is why investors are so important here. In order to endear them the company must be reliable what is possible with well-established team.

SUMMARY AND CONCLUSIONS

In this section we will present a summary of the types of startups. Our list includes the types of startups: stable, developing and aimed at achieving a leading position.

Table 1. A summary of the types of startups (author's own elaboration)

Type of company	Key elements of the model	Competitive advantage or another distinctive element	Strategy of brand building and positioning	Relations with large companies
Stable startups	Costs	Quality	Advertising and positioning with relations to competitors	Limited, based on low costs
Developing startups	Value for the client	Innovative way of market interpretation	Building deliberate networking and hiring PR Agency	Based on innovative solution
Startups aimed at achieving leading position	Staff	Diversification (in costs or innovation)	Internationalization and networking	Client or an attempt to acquire capital

Source: author's own production

In order to distinguish themselves from others, companies use advertising – most often online. If there is any form of relationship with large companies, it is likely to be outsourcing. Sometimes the companies are too small to provide services to corporations. While business model of firms of such kind is almost finalized, any changes are due to emerging market opportunities. They are not planned, it is rather a matter of coincidence. This type of business model provides stable income but it does not lead to increase in market share. The key element of such a situation is maximal limitation of risk which motivate the owners.

At first developing startups do not acquire considerable share in the market. It is caused by the market structure on which they operate. This hinders immediate actions at large scale. These startups develop in stages and avoid extreme risk. They often operate in marketing strategy building and take advantage of the help of the professionals who assist them in building the image of the expert of the business.

The clients receive the solution which is hardly accessible on the market. Moreover, it is often innovative and perfectly answer consumers' needs. Market vision itself also differs from the one the competitors have. They often specialize in one particular segment of the larger market. Large companies become the firm's clients, mainly because of product's uniqueness and competitive advantage which G. Lumpkin, G. Dess define as problem-solving, in relation to internet companies. "Problem-solving refers

to the process of identifying problems or needs and generating ideas and action plans to address those needs” (Lumpkin, Dess, 2004, p. 162). Business model of those companies changes in a sustainable way, having achieved successive phases. Thanks to it they acquire large share in the market without an extreme risk.

Enormously important element of startups aimed at achieving leading position is a team which is aimed at building credibility on the market. Since startups aimed at becoming leaders need capital to develop, they attempt to gather it by means of internationalization. Competitive advantages they used were very diversified. The most advanced model was based on the cost advantage, namely much lower labour costs. Some of the companies believe that innovative solution alone will prove to be their primary asset. However, given the example of one of the case studies, this approach may fail as the idea itself may be copied. Therefore, it is so important in these companies to build a strong brand and to present its unique features (for instance an outstanding team at OncoArendi). Startups aimed at becoming leaders spend their resources on advertising and try to be present in the media. They continuously change their business model. Large companies are crucially important to this type of startups as they can provide capital, both as investor and client.

Key element of the developing startups model that operate on not really valued markets (although quickly developing ones) which enables acquiring large share in the market is innovative model and a product which comforts the needs of the determined clients (who are also important element of the model).

On the other hand, for startups aimed at achieving leading position (operating on markets of high value), the key element to acquiring new markets is getting funding. This is because the actions on such a scale are too costly or it is required to finance some parts of the work on the product. That leads to a necessity of building a strong and efficient team. In this particular case the essential thing is a cooperation with big firms in order to acquire funding or to cooperate in order to accomplish a product.

REFERENCES

- Baden-Fuller, C., Morgan M.S. (2010), Business Models as Models, *Long Range Planning*, No. 43, pp. 156-171.
- Blank S, Dorf B. (2013), *Podręcznik Startupu. Budowa wielkiej firmy KROK PO KROKU*, Wydawnictwo Helion, Gliwice.
- Brzóska, J. (2009), Model biznesowy – współczesna forma modelu organizacyjnego zarządzania przedsiębiorstwem, *Organizacja i zarządzanie*, Vol. 6, No 2, pp. 5-24.
- Glinka B., Pasieczny J. (2015), *Tworzenie przedsiębiorstwa. Szanse, realizacja, rozwój*, Wydawnictwa Uniwersytetu Warszawskiego, Warszawa.
- Kim, W. Chan, Mauborgne R. (2005), *Blue Ocean Strategy*, Harvard Business School Press, Boston, Massachusetts.
- Lumpkin G.T., G.G. Dess (2004), E-Business Strategies and Internet. Business Models: How the Internet Adds Value, *Organizational Dynamics*, Vol. 33, No. 2, pp. 161–173.
- Mason K.J., Leek S. (2008), Learning to Build a Supply Network: An Exploration of Dynamic Business Models, *Journal of Management Studies*, Vol. 45, No.4, pp. 774-799.
- Matusiam B.E. (2013), *Modele biznesowe na nowym, zintegrowanym rynku energii*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.

- McGrath, R.G. (2010), Business Models: A Discovery Driven Approach, *Long Range Planning*, No. 43, pp. 247-261.
- Osterwalder A. (2004), *The business model ontology a proposition in a design science approach*, (thèse)
- Osterwalder A., Pigneur Y. (2012), *Tworzenie modeli biznesowych. Podręcznik wizjonera*, Wydawnictwo Helion.
- Sorescu A., Frambach R. T., Singh J., Rangaswamy A, Bridges C. (2011), Innovations in Retail Business Models, *Journal of Retailing*, Vol. 87S, No. 1, pp. S3-S16.
- Teece, D.J. (2010), Business Models, Business Strategy and Innovation, *Long Range Planning*, No. 43, pp. 172-194.
- Witek-Hajduk M.K. (2011)., Pojęcie i atrybuty silnej marki, in: M.K. Witek-Hajduk, (Ed), *Zarządzanie silną marką*, Wolters Kluwer Polska Sp. z o.o., Warszawa.
- Wirtz, B.W., Schilke O., Ullrich S. (2010), Strategic Development of Business Models Implications of the Web 2.0 for Creating Value on the Internet, *Long Range Planning*, No. 43, pp. 272-290.
- Zott, C., Amit. R. (2010), Business Model Design: An Activity System Perspective, *Long Range Planning*, No. 43, pp. 216-226.
- <http://startupakademia.pl/>
- <https://www.oncoarendi.com/about>
- <http://www.startupinsider.pl/blog/2015/09/14/scanye-inteligentne-narzedzie-ktore-przetwarza-elektroniczne-faktury/>

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The Changing Structure of Retail Industry: Case Studies on Competitive Advantage of Small Companies in Croatia

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Abstract

There are two key trends in retail industry since 1990s till nowadays: rapid internationalization and intensive retail concentration. In such a dynamic environment, small companies are striving to preserve their markets and to maintain their business activity. The objectives of the paper are twofold: (1) to explain trends of retail internationalization and concentration and (2) to highlight the possibilities for improving the competitive ability of small retailers. The paper is based on analysis of secondary data available in research papers, studies and official statistics. Firstly, the consequences of retail internationalization and concentration are described. Then, the literature on competitive advantage creation is systemized. In addition, the case study method is used to illustrate successful strategies of competitive advantage creation. In a changed retail market, small retailers seek the way to improve their competitiveness. As suitable competitiveness strategies, authors describe: (1) retail alliances and (2) differentiation by assortment. The key trends and their impact on small companies in retail industry are scrutinized.

Keywords: retail internationalization; market structure; competitiveness; small retailers

JEL codes: L81, F18, D40

INTRODUCTION

In their definition of retailing, Kent and Omar (2003, p. 8) emphasize that retail industry consists of business activities relating to selling goods and services to final consumers.

There are numerous forms, formats and organizational set-ups observed in retailing industry from a factory outlet and outdoor market sales, via convenience stores, supermarkets, chain stores and hypermarkets to the vending machines and electronic or mobile (virtual) retailing, including multichannel retailing as well.

Gilbert (2003, p. 2) pointed out that since 1960s retailing has become an important business activity in national economies that has an increasingly greater impact on the society due to its increasing role in employment and GDP creation.

In the EU retail industry is an important source of employment and influential factor of GDP creation. In addition, Knežević, Renko and Knego (2011) point out that almost a fifth of all companies registered in the EU operate in retail industry.

Tjordman (1995), Alexander (1996) and Dawson (2001; 2006) in their studies emphasize several trends that are influencing the overall retail industry and other industries as well. There are two dominant trends that influence the dynamics and structure of retail markets. First is internationalization, and the second is concentration of retail markets. Both trends have a detrimental influence on the position of small retailers.

In this paper, based on secondary data, we are going to explain both mentioned trends and their impact on small retailers. Then we will address possibilities of improvement of their competitive position. And, finally, we will describe good practices where application of the theory on competitive positioning brought small retailers to positive business results. For this purposes, the case study method is going to be applied on small, but successful, retailers' practices in Croatia.

LITERATURE REVIEW

Sources of Competitive Advantage

The key element of each firm is the pursuit of competitive advantage, especially today when firms are faced with increasing global competition and decreased growth (Vrdoljak Raguz, Jelenc & Podrug, 2013). Tipurić (1999) points out that the competitiveness is a function of at least two groups of variables: favorable local, national and industrial conditions in which firms originate and develop, and effort to achieve results better than the competition. What is more, Wach (2014b) concludes that the firm-level international competitiveness is a very important research topic in business studies because even an internationalized local firm can compete with foreign or global competitors.

Competitive advantage exists if the following conditions are accomplished (Tipurić, 1999):

1. Customers are firstly noticing a constant difference in the important characteristics of a product/service and product/service competition.
2. The difference between the important features of the firm's product/service and product/service competition is a direct consequence of the gap firm's capabilities and its rivals.
3. The difference between the important characteristics of the firms' product/service and products/services of competitors and skills gap between the firm and its competitors can be expected in the future.

Competitiveness of a firm in the world market is bound with its ability to respond to immediate changes of the market and to hold out the position of the enterprise in it. The idea of the competitive advantage starts from creation and distribution of value. A firm

has achieved competitive advantage when its influence predetermines economic changes in the market (Lazauskas, Bureika, Valiūnas, Pečeliūnas, Matijošius & Nagurnas, 2012).

In the last few decades in the literature of strategic management we differ industrial organization economics and resource based view (Kamasak, 2013). While the industrial organization economics theory states that performance variation of firms should be attributed to the structural characteristics of industries in which they operate, resource theory states that performance differences among firms are in relation with their internal resources.

Resource-based view (RBV) of the firm has been successfully used to explain long-run differences in firm performance that cannot be attributed to industry or economic conditions. RBV defines that firms are heterogeneous and that idiosyncratic, immobile, inimitable and intangible bundle of resources gives the firm an opportunity for competitive advantage (Habbershon & Williams, 1999). Firms' strategy and success is based on its resource profile (Coates, 2002). Resources that are forming the base of an existing firm's competitive advantage are rarely easy to identify from the outside, and even if identified, they are difficult to replicate (Lockett & Thompson, 2001). There are three reasons for imperfect imitability (Barney, 1991):

1. unique historical conditions,
2. casual ambiguity,
3. complex social phenomena.

Barney (1991) defines that firms obtain sustained competitive advantages by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weakness. A firm has achieved competitive advantage when it implements a value creating strategy not simultaneously being implemented by any other competitor (Barney, 2001). When competitive advantage can last for a longer period, then it is considered sustained competitive advantage. If firm's resources are valuable, rare, and imperfectly imitable and there are no strategically equivalent substitutes for them, then they hold potential for achieving sustained competitive advantage (Barney, 2001).

Competitive advantage is achieved through a combination of unique resources and capabilities that allow firms to establish nearly monopoly positions in their markets (Hamel & Prahalad, 1994). Competitive advantage is achieved through being ahead of your competition on price/cost, quality, delivery, product innovation and time to market dimensions (Li, Ragu-Nathan, Ragu-Nathan & Rao, 2006). With growing global competition it is difficult for companies to differentiate themselves solely on the traditional aspects of product and price. Therefore companies are forced to search for innovative ways to do business and adding value to their products (Pan & Nagi, 2009).

The central question in competitive strategy is the relative position of the firm within the industry. Positioning determines whether the firm's profitability is above or below the industry average. Therefore, a firm that is well positioned can earn higher rates of return, even if the industrial structure is unfavorable (Porter, 2008). Firms must choose a strategy in order to create a unique and defendable position in the industry. Porter (2008) distinguishes two basic types of competitive advantage a firm can have: low cost or differentiation. The two basic types of competitive advantage combined with the scope of activities for which a firm seeks to achieve them, lead to three generic strategies for achieving above average performance in the industry: cost leadership, differenti-

ation and focus (Porter, 1985). In addition to Porter, Miles, Snow, Meyer and Coleman (1978) identified three types of strategic direction that may be effective for a small business, referred to by the authors as the defender, the prospector, and the analyser. The defender-type involves the developing of a narrow product/market niche and the erection of barriers to protect it. Unlike the defender, the prospector is constantly scanning the environment for new opportunities, be their new products, services or markets. Finally, the analyser is a combination of the defender and prospector in that it simultaneously defends its niche while scanning for new opportunities.

While the strategy of cost leadership and differentiation refer to finding competitive advantage in a wide range of industrial segments, the focus strategy is based on a competitive advantage within a narrow industry segment (Porter, 2008).

If a firm wants pursue cost leadership, it must find and exploit all sources of cost advantage. Low prices cannot be sustained unless a firm maximizes its operational efficiency. Firm has to perform similar activities better than rivals and one way of doing so is to pursue a rigorous and relentless policy of cost cutting. The opening up of Eastern European markets and the integration process for Balkan countries has brought radical changes in service industry. In such a dynamic market in service sector, the low cost models in retail are changing from year to year due to changes in costs (rise and fall of oil price), regulatory laws from the EU to domestic countries and increase in competition (Rexhepi & Stringa, 2010). Murray (1988) stated that the client demand for products and services need to be price sensitive. The high cost of investment will act as barrier of entry and it will prevent small companies to follow cost leadership strategy (Wright, 1987). In the service sector, the low cost advantages could come from new process innovations, better learning curve, new service design, less time, less costs and fully reengineering activities based on economics of scale (Allen & Helms, 2004).

Rexhepi and Stringa (2010) defines that firms that follow cost leadership strategy in service sector should analyse the environment, target mass market, target price sensitive clients, then use control and coordination tools amongst leadership and middle managers combined with new information technology facilities to standardize services and then gradually expand.

Based on the above analysed theoretical concepts from the literature, we are going to discuss which strategies turned out to be successful for small retailers in Croatia, as Wach (2014a, pp. 42-43) concludes that strategies and strategic thinking is very important not only for big players, but also for small business.

MATERIAL AND METHODS

The analytical part of this study is divided into two parts. Firstly, we will explore the basic trends of the retail industry in Europe by using the quantitative approach based on secondary data. Secondly, we will identify strategies used by small retailers in Croatia by using the quantitative approach based on the case study method. Therefore, the objectives of the paper are twofold:

1. to explain trends of retail internationalization and concentration,
2. to highlight the possibilities for improving the competitive ability of small retailers.

Industry Analysis

As mentioned earlier, there are two rapid trends in contemporary retailing. One is retail internationalization and another is retail concentration. Those two trends bring many issues in front of small retailers who are trying to survive and to success in the market. In this paper we will give some definitions and data on those trends and we will explain key challenges for small retailers in given market conditions.

We will use the secondary data. The first source of data will be the websites of the selected retailers, where we will collect the info on their revenue, number of stores as well as mission and vision of the company. The other source of data will be direct observation in the retailers' stores, their product mix and how they are in line with their company's mission and vision.

Case Study

In the quest for recommendation to small retailers, in this part of the paper we will analyse the sources of competitive advantage. Furthermore we will discuss and explain two basic strategies of achieving competitive advantage successfully implemented in operation of small retailers in Croatia. The analysis will be conducted through case study research method. The case study research method is an empirical inquiry that investigates a contemporary phenomenon in its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 2013).

The advantage of the case study method is the understanding of a complex issue or object through detailed contextual analysis of a limited number of events or conditions and their relationships. The critics of the method regard the small number of cases as a problem when establishing a generality of findings, while some regard it useful only as an exploratory tool. On the other hand, a key strength of the case study method is the usage of multiple sources and techniques in the data gathering process. Researchers from many disciplines use the case study method to build upon theory, to produce new theory, to dispute or challenge theory, to explain a situation, to provide a basis to apply solutions to situations, to explore, or to describe an object or phenomenon. The advantages of the case study method are its applicability to real-life, contemporary, human situations and its public accessibility through written reports (Soy, 1997). For this case study evidence will be taken from the websites of small retailers and small retailers' associations and through direct observation in the small retailers stores.

RESULTS AND DISCUSSION

Changes in Retail Industry and their Impact on Small Retailers

Retail Internationalization

Retail internationalization is a process that can be observed in two dimensions (Knežević & Szarucki, 2012): (1) internationalization of retail activities such as sourcing and logistics, and (2) internationalization of retail formats or outlets in order to approach customers at non-domestic markets.

Despite the long history of retail internationalization in sourcing and logistics, since relatively recent times the European retail sector has seen substantial expansion of international operations towards consumers at foreign markets. The rapid increase in international activity of European retailers and the expansion in European of non-

European retailers is one of several structural changes that have taken place since the late 1980s. In this period large firms have grown at a substantially faster rate than the sector as a whole (for more details refer to Knežević, Delić & Knego, 2014).

Knežević, Delić and Knego (2014) analyse data on Top 250 European retailers and discuss the present situation and trends at selected Central Eastern European markets. Upon given analysis, they claim that till 2000 at Visegrad markets (Poland, Czech Republic, Slovakia and Hungary) there were more than 10 large foreign retailers present per each country, while in Croatia the number of 10 large foreign retailers is exceeded with the delay of 5 years. In addition, they found that the number of large foreign retailers at given markets has grown since 2006 (Figure 1).

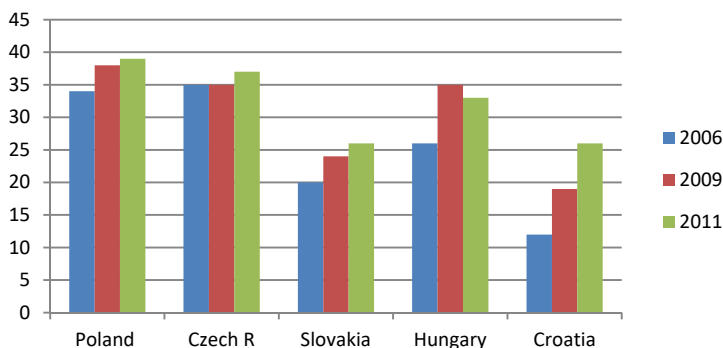


Figure 1. Total number of Top 250 global retailers present at selected Central and Eastern European countries

Source: adapted according to data at (Knežević, Delić & Knego, 2014, p. 119).

Retail Concentration

Concentration takes a place if one or a couple of leading companies grow above average growth rates within the industry. As Dawson (2006) points, leading retailers in the EU are growing above average comparing to other market players in this industry. According to the analysis of Knežević, Renko and Knego (2011), in the newest EU members retail concentration is one of key market trends taking a place in last two decades.

Knežević, Knego and Delić (2014) explain that concentration can be the outcome of the (a) rapid organic growth of one or several companies in the given market, or (b) mergers and acquisition taking place in a given market. Throughout the process of concentration one or several companies acquire larger and larger market share. This way they are getting better negotiation position towards suppliers and customers, better market position in comparison to competitors, their productivity per employee and per outlet grows, they have increased possibility to implement innovations and new technologies etc.

Concentration of a certain market can be measured. In EU literature, usually concentration CR_n ratio is used to highlight how large market share is held by a certain number of companies (n). For instance CR_5 concentration ratio indicates the market share held by the five largest companies at the market.

Several studies show that larger and larger proportion of the retail market is controlled by a small number of companies. For instance, Data given by the European Com-

mission (2014, pp. 51-52) show that from 2000 till 2011 concentration ratios of EU grocery market grew significantly (Figure 2). Nonetheless, EU countries differ in the level of concentration of retailing market; the trend of the concentration growth is obvious in all countries with no exception (European Commission 2014, p. 50).

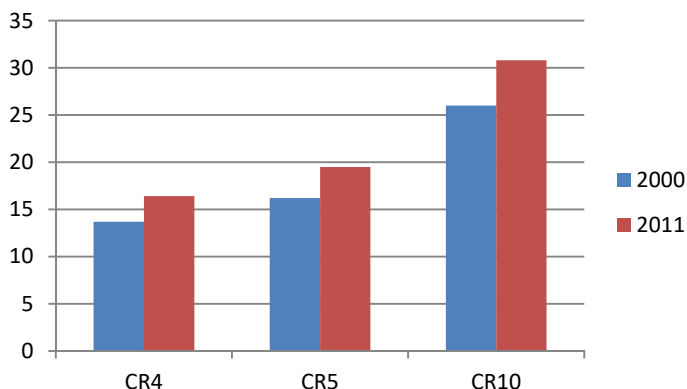


Figure 2. EU grocery retailing concentration ratios – comparison year: 2000 and 2011

Source: own calculation according to data available in (European Commission, 2014, pp. 51-52).

In Croatia, one of the newest members of the EU, the trend of retail concentration is expressed even more. Figure 3 shows concentration ratios for Croatian grocery retail market.

Not only large retailers are taking more and more retail market, but also, there is a change in the structure of retail formats. Smaller formats such as convenience stores are losing market proportion comparing to supermarkets and hypermarkets. This trend is observed around the EU (for more details refer to European Commission, 2014). For an illustration in Figure 4 we show data for Croatia grocery retail comparing years 2006 and 2012.

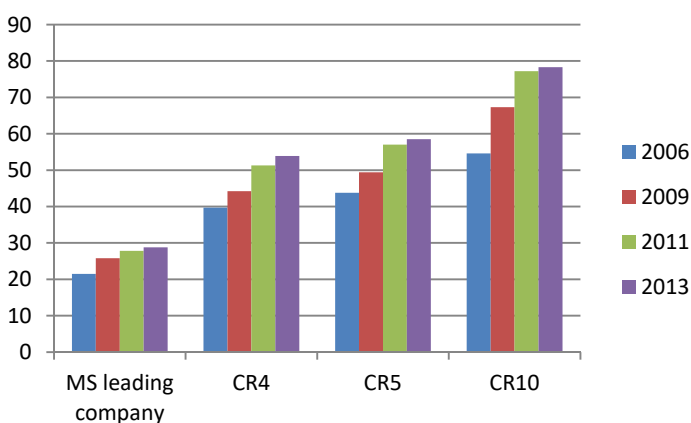


Figure 3. Grocery market shares in Croatia from 2006 to 2013

Source: adapted from (Knežević, Knego & Delić, 2014, p. 42).

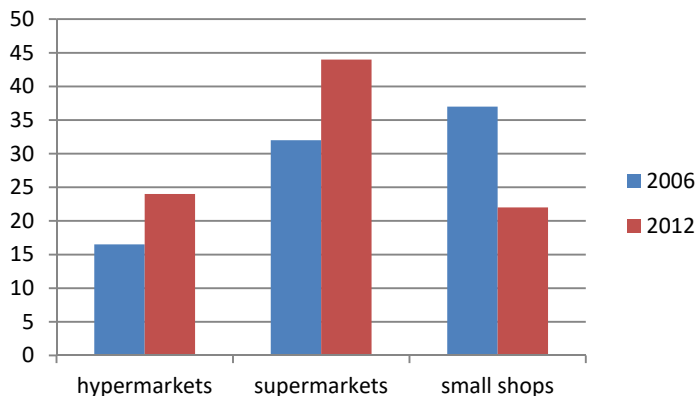


Figure 4. Market shares of grocery retail formats in Croatia (%)

Source: adapted from (Knežević, Knego & Delić, 2014, p. 45).

Key Challenges for Small Retailers

In the previously described market conditions where international retailers control larger and larger proportion of the market and where leading companies are taking larger and larger market shares, the average size of companies measured by the number of employees per a company is growing respectively in all EU countries, especially in newer EU members (Knežević, Knego & Renko, 2011). In addition, the number of small and medium retailing companies diminishes. Knežević, Knego and Renko (2011) analyse the situation in Croatia and draw a conclusion that, according to the number of enterprises classified by their size, the retail structure is becoming polarized. Namely, in Croatia out of all enterprises in retailing industry 42% are micro companies (less than 10 employees), 35% are large companies (more than 250 employees); there are 16% of small companies (10 to 50 employees) and only 7% medium companies.

While overall productivity in retailing industry grows, in terms of revenues per employee for large retailers, small retailers are experiencing various issues in their operation and are forced to seek for survival strategies and policies. Knego and Knežević (2011) point to following issues faced by small retailers (Figure 5): (a) unfavorable procurement conditions, (b) lower turnover rate, (c) lower labor productivity, (d) lower gross margins and (e) higher sales prices.

The unfavorable procurement condition of small companies is the result of their low negotiation power because of small quantities being purchased. Therefore, comparing to the large retailers they cannot negotiate with suppliers well and the consequences are higher input prices of goods and services and higher transport and warehousing costs comparing to large retailers. In addition, their negotiating skills are lower due to the fact of lower knowledge capacities of their employees because the majority of retailers cannot afford highly educated managers and employees. Moreover, small retailers often cannot approach the producer directly because of the existing relationships and contractual arrangements within supply chains, and they are forced use intermediate companies to purchase product and services which increases input prices even more.

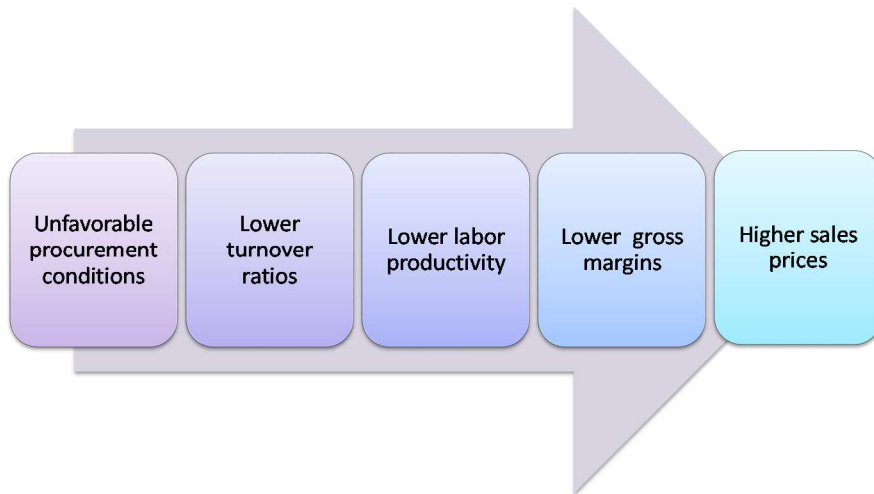


Figure 5. Problems of Small Retailers

Source: adapted from (Knego & Knežević, 2011, p. 3).

On the other hand, lower turnover ratio is the result of lower capacities on their position towards consumers. Usually small retailers serve to the narrow geographic location and the number of potential customers is lower in comparison to large retailers' formats. To achieve quantity discounts from their suppliers, they are motivated to buy bulk quantities and usually, due to their lack of management knowledge and skills, they do not apply methods and techniques of inventory planning and management. Knego and Knežević (2011) analysed tradesmen (organized as small crafts) and retailers as legal entities (retailing enterprises) and draw a conclusion that inventory turnover of tradesmen had never reached more than 60% of those in legal entities (retailing enterprises).

Lower labor productivity (measured by revenues per employee, see Knego and Knežević, 2011) is the direct output of lower revenues generated by small retailers in comparison to large companies which is the result of their limited market approach, limited knowledge and skills and limited resources available for technological improvement and innovation (in terms of processes, outlet and shop design, promotion, information technology implementation and utilization etc).

As a consequence of all above mentioned, the gross margin as the difference of revenues and cost of sold goods is significantly lower for small retailers. This forces small retailers to apply additional cost cutting policies which usually has detrimental influence on wages, shop and outlet design, lowering marketing activities, cutting the number of employees and lowering service offered, cutting investment in knowledge and skills development and information technology etc. In the longer run, such policies have damaging impact on their competition position and therefore, they should seek some other solutions for their survival. In the next chapters we will give some suggestions and examples of a different approach.

Due to higher input prices and higher operating costs, in comparison to large retailers, small retailers have higher sales prices. In Croatia, based on price study of 10 standard grocery products, in small shops owned by small retailers, on the average prices are

23,47% higher compared to the lowest available price offered by large retailer (note: own calculation based on data available in Knego & Knežević, 2011).

Retailers Associations as a Source of Competitive Advantage for Small Retailers

As a source for gaining competitive advantage by increasing the efficiency of procurement, in developed European countries for a longer time multi-firm associations of retailers are known (sourcing alliances) with buying groups in a special subform. In addition there are newer forms with developed service in purchasing and supplier marketing at European and global level (sourcing offices).

Multi-firm associations are communities of economically independent companies formed for the purpose of cooperation in purchasing, sales, investment and financing, and usually are established as separate companies (Tietz, 1993, p. 321). In retailing industry in Germany, they emerged at the turn of the 1960s and 1970s, when the medium-sized companies joined at the national level in order to achieve better performance in the market (Liebmann & Zentes, 2001, p. 281). Today they are not focused exclusively on the national market, but are oriented to cover a region, the continent and even global level. Buying groups, as a narrower form of sourcing associations, are associations of retailers which are formed in order to organize joint procurement of goods and services with the main goal to gain a better negotiating position among suppliers.

In the EU there are several large retailers sourcing associations, and they can be classified according to the type of goods in focus. For groceries and fast moving consumer products examples are: EMD, AMS, Rewe and Edeka; textile: Garant; furniture: Atlas, Begros and VME, building supplies: Hagebau; electronics and household appliances: Euronics (according to Dawson & Mukoyama, 2006; Wortmann, 2002), etc.

In Croatia mentioned sourcing associations are present indirectly, through operation of their members, for example, EMD is present through Müller, Kaufland and dm-drogerie markt. In addition, we can observe increased association processes between small and medium retailers and good examples are NTL and Ultra Gros, Table 1 shows a brief profile and the strength of buying groups in Croatia measured by revenues, number of employees and the number of stores within the buying group.

Table 1. Buying Groups in Croatia

Name of the group	Established	Revenues (in bil. HRK)	Number of Employees Involved	Number of Stores Involved
NTL (Narodni trgovački lanac)	March 2005	4.4	6578	1229
	Members (8): Bakmaz, Studenac, Boso, Metss, Pemo, Trgovina Krk, Trgostil Donja Stubica, Gavranović Zagreb			
Ultra gros	End of 2001	4.1	6464	947
	Members (21): Dinova Diona, Djelo, Duravit, Jadranka trgovina, Jeruzalem, Kvarner Punat trgovine, La-vor trade, Lonia, Mlin i pekare, PPK, Prehrana, Ribola, Sonik, Strahinjčica, TP Varaždin, Trgočentar, Trgonom, Union, Valalta, Victa, Vratak			

Source: Poslovna Hrvatska (2015).

Gaining Competitive Advantage through Differentiation and Focusing on a Market Niche

The focus strategy implicit that firm selects a segment or group of segments in the focused industry (Porter, 1985). Focus strategy involves concentrating on a specific, market, group of customers, product or service. Firms pursuing a focus strategy create competitive advantage in a narrow and well-defined niche to avoid head-on collisions with large competitors (Ibrahim, 2015).

Prior research suggests that focus (niche) is by far the most effective strategy for small business. Previous research by Ibrahim and Goodwin (1986) supports this conclusion. A small firm pursuing a niche strategy creates a competitive advantage in a narrow and well-defined niche to avoid direct rivalry with large competitors. Areas of distinctive competence identified by Stoner (1987) include quality of product or service, location, know-how, uniqueness of product or service and pricing. The defender and prospector-type strategies are highly pursued by small business owners and managers. This seems to confirm some earlier studies. Small firms pursuing either defender or prospector types achieved better performance than those employing an analyser-type strategy. Rugman and Verbeke (1988) reported that prospector-type strategy is the most pursued strategic direction followed by the defender-type. The researchers concluded that Miles *et al.* (1978) typology is more appropriate for small business than Porter's generic-type strategies.

If a firm uses a product differentiation strategy then it seeks to be unique in its industry along some dimensions that have value for the buyers. It selects one or more attributes that buyers perceive as important (Porter, 1985). As with price, retailers are interested in offering the best, or optimal, assortment of goods and services to attract customers. Retailers can choose to differentiate their assortments by providing items unique to the market, which can increase the number of stores needed to make a price comparison on an item and, at the extreme, make price comparisons impossible (Stassen, Mittelstaedt & Mittelstaedt, 1999). Product assortment can play a key role, not only in satisfying wants, but also in influencing buyer wants and preferences (Simonson, 1999). Product assortment is a very important factor in achieving differentiation and satisfying the wants of target shoppers better than the competition (Kotler, 1997).

As good and successful examples of implementation of the differentiation strategy in food retailing in Croatia we can describe the Biovega company and company "Domaće I fino" Ltd. Biovega is a Croatian retail company founded in 1990. Bio Bio is a retail chain owned by Biovega specialized in selling ecological products, mostly food, beverages, cosmetics and household products. The company currently has 17 stores located in major Croatian cities, mostly in Zagreb with a yearly turnover of 14 million EUR in 2014 compared to 10.2 million in 2012 and 11.5 million in 2013 respectively.

The company's suppliers are required to have an ecological certificate that guarantees the sourcing and quality of their products as well as a good public image and experience on the Eco products market. Assortment of products in Bio Bio stores tends to be almost 100% ecological. The company also aims to offer products that are processed in the least possible manner. Assortment sustainability and responsible sourcing is another important issue. The company tends to cooperate with the Croatian eco farmers and encourage them to produce food in a manner that is responsible both for the environment and the society.

Biovega also has its own eco farmstead “Zrno” as well as a vegetarian restaurant also called “Zrno”. The company does not offer any meat products due to ethical reasons. In 2014 the company received an corporate social responsibility reward in the category of employee care from the Croatian Employers Association. Biovega quality control department, that controls health safety and registration of products consists of experts in regulatory affairs, controlling, certification, check-in system monitoring (for dietary supplements, foods with health claims, food with special properties and baby food), as well as professional sanitary engineer, a pharmacist and a representative of the Management Board.

Another source of the company’s competitive advantage is highly specialized employees. Since Biovega was one of the companies that established the eco food retail nice in Croatia it can be said that the company’s management possesses a better knowledge of the business processes than the competitors in this niche. The sale persons are required to be working professionals with experience in food sector or nutritionists. Ethical and transparent communication is also important for the company image, therefore the public relation sector employees are experts in the fields of social sciences: sociology, philosophy, linguistics, and visual design. Employees at all work processes have specialized knowledge that their workflow requires. The greatest attention is paid to education of employees in stores who undergo a program of lifelong learning and continuous education about the products from the company’s portfolio and the upcoming trends to provide quality services.

In order to upgrade the quality, the company implements ISO 9001 and HACCP systems. The purpose of the introduction of ISO 9001 system is the improvement of business planning and development of quality awareness within the organization, providing an appropriate level of communication with customers and suppliers (partners) on mutual benefit, customer-orientation, reduction of losses (non-conforming goods or services), and process control. While the goal of the HACCP system is to protect the health of consumers in food industry and distribution, and it takes place in six areas: Space Requirements, Storage requirements, Equipment and maintenance, Staff Training, Hygiene Program, SSOP Sanitation Standard Operating Procedures, the return of goods.

Some small retailers choose even narrower niche than Biovega. For instance, ‘Domaće i fino’ applies even more rigorous differentiation strategy and is focusing towards even narrower market niche by assortment differentiation policy based on the presumption of consumer ethnocentrism. The mentioned company is oriented on selling “so called” domestic food manufactured strictly by the Croatian farmers. Moreover, the company is basing its market strategy on virtual sales channel as the basis for communication with consumers. Actually, ‘Domaće i fino’ company started as the first Croatian online domestic food shop in 2010. Today it also has a physical shop in Zagreb. The company’s turnover was 30 000 EUR in 2012 and 200 000 EUR in 2013.

Another example that supports the theory of differentiation and focusing is ‘Greencajg’ as very successful highly specialized online retailer. With its assortment policy based on organic food of own brands, ‘Greencajg’ is targeting even narrower niche because it is oriented mainly to narrow geographic area around Zagreb city. Therefore, we can conclude that there is a space for other small retailers to develop by applying differentiation and focusing generic strategies suggested by Porter.

CONCLUSIONS

Retail internationalization and retail concentration are two key trends in the European retailing industry. Their consequence is increasingly difficult position of small retailers which do not have enough resources and knowledge to compete with large international retail chains. In such conditions small retailers, in comparison to large retailers, face various issues such as low negotiation power towards suppliers, low turnover ratios low productivity rates, low margins, and consequently higher sales prices.

According to the literature on competitive advantage creation, small retailers can seize some opportunities offered by new market conditions. In this paper we suggested that retailers associations can improve their negotiation power towards suppliers. In addition, we described the implementation of differentiation by assortment as another strategy of market survival. For both cases we provided practical examples from Croatia. Also, it should be stated that the resource based view theory deals with the problems of choosing the directions for business diversification and it can't be applied for small companies. All of these findings can be a good starting point for further research into strategies that can be applied by small retailers as an answer to new trends in the retail industry, as well as useful information for managers in the retail sector.

Nonetheless, we have to point out that this paper was mainly based on secondary data which was a limitation of the research and this topic should be further developed by in-depth analysis of other good practices and examples from retailing industry.

REFERENCES

- Alexander, N. (1996). International Retail Expansion within the EU and NAFTA. *European Business Review*, 95(3), 23-35.
- Allen, R.S., & Helms, M.M. (2006). Linking strategic practices and organizational performance to Porter's generic strategies. *Business Process Management Journal*, 12(4), 433-454.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J.B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-base view. *Journal of Management*, 27(6), 643-650.
- Coates, T.T., & McDermott M.C. (2002). An exploratory analysis of new competencies: a resource based view perspective. *Journal of Operation Management*, 20(5), 435-450.
- Dawson, J. (2001). Strategy and Opportunism in European Retail Internationalization. *British Journal of Management*, (12), 253-266.
- Dawson, J. (2006). Retail Trends in Europe. In M. Kraft & M.K. Mantrala (Eds.), *Retailing in the 21st Century* (pp. 41-58). Berlin: Springer.
- Dawson, J., & Mukoyama, M. (2006). The increase of international activity by retailers. In J. Dawson, R. Larke & M. Mukoyama (Eds.), *Strategic issues in International Retailing* (pp. 1-30). Abingdon: Routledge.
- European Commission (2014). *The Economic impact of modern retail on choice and innovation in the EU food sector*. Retrieved on December 8, 2015 from <http://ec.europa.eu/competition/publications/KD0214955ENN.pdf>
- Gilbert, D. (2003). *Retail Marketing Management*. Glasgow: Pearson Education Limited.

- Habbershon, T.G., & Williams, M.L. (1999). A Resource-Based Framework for Assessing the Strategic Advantages of Family Firms. *Family Business Review*, 12(1), 1-25.
- Hamel, G., & Prahalad, C.K. (1994). *Competing for the future: breakthrough strategies for seizing control of your industry and creating markets for tomorrow*. Boston, MA: Harvard Business School Press.
- Ibrahim, A.B. (2015). Strategy Types and Small Firms' Performance An Empirical Investigation. *Journal of Small Business Strategy*, 4(1), 13-22.
- Ibrahim, A.B., & Goodwin, J.R. (1986). Perceived causes of success in small business. *American Journal of Small Business*, 11(2), 41-50.
- Kamasak, R. (2013). *Resource-Based View (RBV) in all its aspects. Why some firms outperform others?*. Germany: Scholar's Press.
- Kent, T., & Omar, O. (2003). *Retailing*. New York: Palgrave Macmillan.
- Knego, N., & Knežević, B. (2011). The Position of Small Retailers in Croatia on the Verge of Entering the European Union. In *Proceedings of 8th International Conference "Economic Integration, Competition and Cooperation"*, 6-9 April, Opatija, University of Rijeka – Faculty of Economics. Retrieved on December 8, 2015 from <http://ssrn.com/abstract=2232657>
- Knežević, B., & Szarucki, M. (2013). Internationalization of Retail in Poland and Croatia. In S. Renko & B. Knežević (Eds.), *Challenges for the Trade of Central and Southeast Europe* (pp. 1-18). Bingley, UK: Emerald Publishing.
- Knežević, B., Delić, M., & Knego, N. (2014). The Retail Internationalization in Visegrad Countries and Croatia. In K. Wach & B. Knežević (Eds.), *International Business from the Central European Perspective* (pp. 113-128). Zagreb: University of Zagreb.
- Knežević, B., Knego, N., & Delić, M. (2014). The Retail Concentration and Changes of the Grocery Retail Structure. *InterEULawEast*, 1(2), 37-51.
- Knežević, B., Renko, S., & Knego, N. (2011). Changes in Retail industry in EU. *Business, Management and Education*, 9(1), 34-49.
- Kotler, P. (1997). *Marketing Management: Analysis, Planning, Implementation, and Control*. Englewood Cliffs, NJ: Prentice Hall.
- Lazauskas, J., Bureika, G., Valiūnas, V., Pečeliūnas, R., Matijošius, J., & Nagurnas, S. (2012). The research on competitiveness of road transport enterprises: Lithuanian case. *Transport and Telecommunication*, 13(2), 138-147.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T.S., & Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107-124.
- Liebmann, H-P., & Zentes, J. (2001). *Handelsmanagement*. München: Verlag Franz Vahlen.
- Lockett, A., Thompson, S., & Morgenstern, U. (2009). The development of the resource-based view of the firm: A critical appraisal. *International Journal of Management Reviews*, 11(1), 9-28.
- Miles, R.E., Snow, C.C., Meyer, A.D., & Coleman, H.J. (1978). Organizational strategy, structure, and process. *Academy of Management Review*, 3(3), 546-562.
- Murray, A.I. (1988). A contingency view of Porter's "generic strategies". *The Academy of Management Review*, 13(3), 390-400.
- Pan, F., & Nagi, R. (2009). Robust supply chain design under uncertain demand in agile manufacturing. *Computers & operations research*, 37(4), 668-683.
- Porter, M.E. (1985). *Competitive Advantage*. New York: Free Press.
- Porter, M.E. (2008). *Konkurentaska prednost, Postizanje i održavanje vrhunskog poslovanja*. Zagreb: Masmedia.

- Poslovna Hrvatska (2015). *Annual financial statements of the selected companies for 2014*. Retrieved on December 22, 2015 from <http://www.poslovna.hr>
- Rexhepi, P., & Stringa, O. (2010). *How Multinational Companies (MNCs) Implement Cost Strategies at airline and Retail Supermarket Industry in Albania*. Retrieved on 29 January 2016 from <http://www.lse.ac.uk/europeanInstitute/research/LSEE/PDFs/PhD%20Symposium/Papers%202010/Rexhepi.pdf>
- Rugman, A.M., & Verbeke, A. (1988). Does competitive strategy work for small business? *Journal of Small Business & Entrepreneurship*, 5(3), 45-50.
- Simonson, I. (1999). The effect of product assortment on buyer preferences. *Journal of Retailing*, 75(3), 347-370.
- Soy, S. (1997). *The case study as a research method*. Retrieved on May 12, 2016 from <http://elibrary.wats.edu.ng/handle/123456789/11244>
- Stassen, R.E., Mittelstaedt, J.D., & Mittelstaedt, R.A. (1999). Assortment overlap: its effect on shopping patterns in a retail market when the distributions of prices and goods are known. *Journal of Retailing*, 75(3), 371-386.
- Stoner, C.R. (1987). Distinctive competence and competitive advantage. *Journal of Small Business Management*, 25(2), 33.
- Tietz, B. (1993). *Der Handelsbetrieb. Grundlagen der Unternehmenspolitik*. München: Verlag Franz Vahlen.
- Tipurić, D. (1999). *Konkurentska sposobnost poduzeća*. Zagreb: Sinergija nakladništvo d.o.o.
- Tordjman, A. (1995). European Retailing: convergences, differences and perspectives. In P.J. McGoldrick & G. Davies (Eds.), *International Retailing* (pp. 17-42). London: Pitman Publishing.
- Vrdoljak Raguž, I., Jelenc, L., & Podrug, N. (2013). *Izvori konkurentске prednosti u XXI. stoljeću*. Dubrovnik: Sveučilište u Dubrovniku.
- Wach, K. (2014a). International Strategies of Businesses: Some Evidence from Internationalised Polish Firms (Chapter 3). In A.S. Gubik & K. Wach (Eds.), *International Entrepreneurship and Corporate Growth in Visegrad Countries* (pp. 101-124). Miskolc: University of Miskolc.
- Wach, K. (2014b). The Theoretical Modelling of the Firm-Level International Competitiveness in Business Studies (Chapter 5) In D. Kiendl-Wendner & K. Wach (Eds.), *International Competitiveness in Visegrad Countries: Macro and Micro Perspectives* (pp. 41-56). Graz: Fachhochschule Joanneum.
- Wortmann, M. (2003). *Strukturwandel und Globalisierung des deutschen Einzelhandel*. WZB Discussion Paper. Berlin: WZB – Wissenschaftszentrum Berlin für Sozialforschung.
- Wright, P. (1987). A refinement of Porter's strategies. *Strategic Management Journal*, 8(1), 93-101.
- Yin, R.K. (2013). *Case study research: Design and methods*. London: Sage Publications.

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Trends, Methods and Tools in the Field of Entrepreneurship Education in the Academic Environment in Poland

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Abstract

This article aims to analyze trends, methods and tools in the field of entrepreneurship education in the academic environment. The main problem of this article is quantitative and qualitative analysis of trends as well as the methods and tools used in the field of entrepreneurship education in higher education, which are preferred by students. The article uses the analysis of the available literature as well as the results of empirical research obtained using a survey questionnaire. The article consists of three main parts. The first part refers to the issue of entrepreneurship education and its importance in modern conditions and to emerging trends regarding the use of specific methods and tools. The second part refers to the presentation of the results of research undertaken subject. In the literature, the problem of entrepreneurship education is relatively often taken and the study relate to many areas, including the role of entrepreneurship in the modern world, the objectives of entrepreneurship education, teaching curriculum, learning entrepreneurial behavior at different levels of education. In the course of the survey we found that students consider entrepreneurship as a matter needed for graduation. In addition, young people need confrontation with the practice which could mean the inclusion of entrepreneurs in the teaching process. Students also have the need to develop entrepreneurial behaviour, demonstrating at the same time the average level of involvement in additional activities requiring initiative, additional work and time.

Keywords: Entrepreneurship; education; entrepreneurship education; higher education

JEL codes: L26, A222, A23

INTRODUCTION

Entrepreneurship education is playing a more and more important role in the world. It is caused by the high dynamics of changes in the environment and therefore, the education of young people for the functioning in the future in unforeseeable conditions in the present time. By paying attention to the capability of taking opportunities brought by the environment, the implementation of ventures on a higher level of effectiveness in the conditions of calculated and acceptable risk, building entrepreneurial attitudes and behaviours, the issues of entrepreneurship are an answer to the challenges of the contemporary world.

In the centre of attention there is a problem of efficient and effective entrepreneurship education via the proper choice of didactic offer, applied methods and the tools used in the education process, particularly in the face of a new generation of the youth, namely Generation Y – the generation brought up in the omnipresent information and communications technology (mobile phones, the Internet, instant messengers, applications).

The aim of the paper is to analyse trends, methods and tools in entrepreneurship education in the academic environment.

Entrepreneurship – the Role, Methods, Tools – a Literature Overview

Entrepreneurship education in the world characterised by high dynamics of changes, is becoming one of the key elements enabling to face the occurring challenges of the contemporary times. Entrepreneurship is understood as a specific feature, releasing a specific way of acting, which allows the effective implementation of ventures (Kosała 2014, 317-340).¹ The uniqueness consists in skilful and effective undertaking of activities, even in the conditions encumbered with high risk arising from uncertainty, the ability to minimise the risk and achieving results on a higher level of effectiveness.

In the literature of the subject entrepreneurship is discussed in the dimension of an economic, social phenomenon and in terms of management (Glinka and Gudkova 2011, p. 18), and definitions of entrepreneurship refer to (Piasecki 1997, p. 33, Wach 2013, pp. 246-257, Wach 2014b, pp. 14-15) the function of entrepreneurial activities in economy (e.g. Cantillon, Say, Schumpeter), especially in the context of small and medium-sized enterprises (Ubrežiová, Wach & Horváthová, 2008), personal features of entrepreneurs and a specific manner of management (managerial functions). Therefore, entrepreneurship is a field of science considering the role of an entrepreneur (a person conducting economic activity) characterised by certain personal qualities (initiative, an ability to take decisions, an ability to solve problems, moderate proneness to take risks, flexibility, imagination, resourcefulness, creativity, an ability to predict, independence, a positive attitude to criticism, optimism, a need to achieve, persistence, optimism, observation, leadership, communicativeness) (Gibb 1990, Piasecki 1997, p. 32, Drucker 1992, p. 29, Domurat 2011, pp. 93-100, Kosała 2014, p. 321), implementing ventures (a specific way of management, focused on exploiting market opportunities and introducing innovations) in the firm (Kosała 2014, pp. 317-340). As one can easily conclude, entrepreneurship becomes a desired attitude in society, however, a question arises whether it can be learnt it and how to shape it.

¹ For more see: Kosała (2014).

At first, the prevailing views were that entrepreneurial qualities or an inclination to be entrepreneurial are conditioned genetically, however, at the beginning of 1980s the views were abolished. One of the first researchers who referred to a possibility of effective entrepreneurship education was Albert Shapero who claimed that *“Entrepreneurs are not born... they become (...) The discovered traits distinguishing entrepreneurs from others are not determined genetically or fixed for ever in the early childhood. They are taken through experiences of their lives. They are happily instilled in the course of education and through personal choice and decisions.”* (as cited in Piasecki, 1997, p.36).

The views concerning entrepreneurship education possibilities were taking on importance, as for example through Shefsky's opinions (1994, p. 191):

“You can become an entrepreneur regardless of your intelligence quotient, genetic pattern, physical capabilities or their lack, sequence in which you were born, or your gender. Without a doubt, entrepreneurs are a special type of people but before they became ones, they were average people (...). Entrepreneurs are made, not born. Everything you need is the wish and the readiness to learn” (as cited in Piasecki, 1997, p.37).

Entrepreneurship is rather work requiring knowledge, diligence, perseverance and commitment, and if any of these elements is missing, no talent or resourcefulness will be sufficient. It is connected with some traits and behaviours (Targalski, Kosała, Pichur, 2008, p. 427) which can be shaped but the essence of entrepreneurship consists not in risk but in an opportunity (Drucker, 1992 pp. 152-154). Explanations for entrepreneurial behaviours are also provided by Ajzen's theory of planned behaviour (1991, pp. 179-211), according to which behavioural intentions depend on the attitude towards behaviour, subjective norms and perceived behavioural control, the stronger intention, the stronger influence on involvement in action (Wach and Wojciechowski, 2016; Rachwał and Wach, 2016; Rantanen, Pawlak and Toikko, 2015).

Requirements of the contemporary world in combination with the views that entrepreneurship cannot be learnt influenced the growth of interest in this area of education. For example, in 1970 in the USA, 16 academic centres conducted entrepreneurship classes, whereas in 2005 the number exceeded 1,600 universities among which there were not only business schools but also technical schools or schools of agriculture (Cieślak, Matusiak, Guliński and Skala-Poźniak 2011, p. 41). The trend should not be a surprise, as the intensive changeability of the environment causes that by teaching young people now we are trying to prepare them to function in the future which is becoming more and more difficult to foresee, prepare them to perform jobs or use tools which most probably do not exist yet. Therefore, education should prepare to function in unknown, hard to predict future.

In a sense, entrepreneurship is becoming an answer to the challenges of the contemporary world. By creating specific attitudes characterised, among others, by an ability to take initiative, activeness, creativity, resourcefulness, an ability to function in the conditions encumbered with high uncertainty and the acceptance of risk enables better preparation of young people to function in their adult life, find their place in newly emerging socio-economic conditions and accept changes more easily. Finally, entrepreneurship also prepares to increase one's own independence via flexible shaping of one's career or preparing to start and run own business (Kosała, Pichur 2008 p. 347; Sadowska, 2016).

Entrepreneurship education is perceived as the main challenge for the contemporary education (Wach 2014a, pp. 11-32), and shaping entrepreneurial attitudes among

young people as an important issue on all levels of education (Kurek, Rachwał 2010, pp. 472-485, Rachwał 2006, pp. 427-434, Wach 2007, pp. 120-127). The shaping of entrepreneurial attitudes is a complex and comprehensive process basing on entrepreneurship education, stimulating entrepreneurial intentions and promoting desired social norms (Moreno and Wach 2014, pp. 11-32). When discussing entrepreneurship education, it is worth paying attention to a new generation of the youth which is subject to the process of education. It is Generation Y which was raised in the conditions of omnipresent informatisation and thus a widespread access to knowledge. A phenomenon of connectivism is forming, in which the tool of acquiring knowledge, the ability to process and use it is becoming superior. The necessity to assimilate and consolidate knowledge is becoming secondary. We may discuss whether it is a positive phenomenon or not, what its long-term effects are but now, considering the changes and trends, the model of education should be adjusted to the new conditions.

Among didactic methods and tools applied in entrepreneurship education, we can distinguish: (Cieślik, Matusiak, Guliński, Skala-Poźniak 2011, p.48):

- a two-path method – the aspects of launching and conducting a business are discussed by students during workshops under the supervision of the lecturer, students prepare their own business projects, classes are not intended to launch business activity;
- the holistic approach – a discussion on the ability of a venture to succeed, the analysis of cause and effect relationships, the analysis of the situation and taking decisions, defined as entrepreneurial management style;
- integrated package of tools and methods – using varied didactic tools, publications, websites with materials for students and lecturers (methodological guidelines, proposed tools);
- the use of the Internet – e-learning tools, educational platforms using network technologies (Internet messengers)²;
- including practitioners in didactics – lectures of entrepreneurs sharing their own experiences (members of didactic teams – pragmatists; or as a full time entrepreneur – resident whose role is to participate in workshops and individual consultation of business projects);
- linking education to pre-incubation and incubation of students' entrepreneurship – extending the scope of activity of didactic units and the transition from the formula of a department to the Entrepreneurship and Innovation Centre.

The identification of the expectations of young people as for the content, applied methods and tools is becoming an interesting research problem and at the same time a challenge in entrepreneurship education.

Research Methodology

The conducted research (2016) aimed at the analysis of students' expectations about the need for entrepreneurship education, preferred forms of the organisation of classes, methods and techniques used in the subject of entrepreneurship, as well as the readiness to get involved in the classes. It comprised the group of students of the first year of

² A completed pilot programme of the Małopolska Educational Cloud, in which "Entrepreneurship" panel also took place, may be an example of the practical application of such methods and tools in entrepreneurship education – for more see: Buła, Kosała, Guja (2015, pp. 25-32).

BSc studies in Economics. The research was carried out with the survey method by means of a survey questionnaire. The questionnaire consisted of both closed and open-ended questions, with the use of Likert scale. The total of 140 questionnaires were handed out, 102 of which were returned, 99 of which were classified for further analysis. The empirical research findings can be the basis for actions undertaken to adjust the educational offer at the higher education level.

The Characteristics of the Research Sample

The research group included students of the first year of BSc studies in Economics. The surveyed students had not had their Entrepreneurship course yet since it appears at the third term. All respondents participated in entrepreneurship classes in their secondary school and on that basis we can assume that they are familiar with the issue of entrepreneurship and they can have their expectations concerning the education in that field.

Among respondents, 52 people were women and 47 were men, which constituted, respectively, 52.5% and 47.5%, aged 18 to 23, of whom the most numerous group constituted people aged 19 – 29.3% and 20 – 49.5%, which made up 79.8% in total. Respondents finished secondary schools in which they attended classes with extended curriculum in Mathematics – 46%, general education classes – 32%, classes with extended curriculum in humanities and languages – 11%, others finished technical schools – 5%, economic schools – 3% and classes with extended curriculum in Biology and Chemistry or Biology and Geography – 3%. A vast majority of respondents (72.6%) finished secondary school with final grade above 4 (good), out of whom 4.2% obtained the grade above 5 (very good).

Respondents came from places with various population (from the country – 22.5%, from towns below 20 thousand inhabitants – 22.5%, from towns with the population of 20 thousand – 100 thousand inhabitants – 20.4%, from cities with the population from 100 thousand – 200 thousand – 7.1%, from cities with the population from 200 thousand to 500 thousand – 8.1 %, and from cities with the population above 500 thousand inhabitants -19.4%). As the place of work after graduation from university they indicated (the results do not make 100% as respondents could mark more than one answer): own business (56.5%), corporation (32.3%), leaving abroad (17.2%), a job in a small enterprise (16.2%), state administration (5%), and for 1% it was not important where they would work. Entrepreneurs are associated by students positively (91%), 67.5% of them had very positive associations (5 and 4 in the 5-point scale). Only 1% of indications referred to negative perception of entrepreneurs, and 8% had an indifferent attitude. 52.5% come from families which have never run own firms, and 14% come from families in which both parents run their own businesses. Respondents were also asked about the membership in any organisation which could prove the willingness to undertake additional activities in acquiring knowledge, experiences and development. Unfortunately, it turned out that only 25% of the students showed any initiative within that scope (students' parliament, AISEC, Academic Sports Association, scientific clubs – these are students' organisations).

The Analysis of Trends, Methods and Tools in Teaching Entrepreneurship at Universities – Study Results

Majority of students were satisfied with entrepreneurship classes in secondary school (66.7%), including 15.1 % who were very satisfied. 9% were indifferent about the classes, unfortunately, for 24.3% the classes were conducted badly, including 11.1% who

were very dissatisfied. When asked about the reason for their dissatisfaction with entrepreneurship classes in secondary school, most often students indicated: the lack of practical application (19%), the manner of conducting the classes (23%), conducting them in a boring way (15%), no valuable information (12%) or the lack of the teacher's knowledge (10%). The positive perception of the lessons was influenced by, among others: useful knowledge – CV, Business Plan (21%), practical information (13%), practical classes (11%), discussed topics (11%), group work (9%), the teacher (9%), presentations (8%). This is quite valuable information which can be used to improve the didactic process, both in secondary education and on further stages of education because secondary school students were of similar opinion in the study carried out in 2014 (Kosała, 2014, pp. 336-337). It means a continuous pattern requiring a change in accordance with new trends in entrepreneurship education.

When analysing the preferences of young people concerning entrepreneurship at university, the questions were divided into three areas:

1. Reference to the problem of entrepreneurship education at universities – in this area the problem of the general demand for entrepreneurship classes, their obligatory character, as well as due to the type, year, cycle of studies or the major was tackled;
2. Involvement of students within the course of entrepreneurship – in this area students' willingness to involve in active forms of participation and the realisation of classes going beyond standard solutions is referred to, it meant, among others, study visits to firms, institutions, following formal and legal changes in business, execution of additional projects, organising meetings with entrepreneurs, winning sponsors for away classes, contacts with students from other universities or students of more senior years in order to complete a project, participation in a business plan competition, participation in optional classes, conducting market research, organising events at the university.
3. Forms of organising entrepreneurship classes – the issue discussed in the research referred to the place of conducting classes, people conducting them, the form, objective and result of the classes.

Entrepreneurship Education at University

When undertaking the problem of teaching entrepreneurship at university, it is important to obtain information from the most interested party, namely students. The research conducted shows that young people are interested in entrepreneurship education at university. More than a half – 52% of respondents assigned 5 to the need for entrepreneurship education in the applied 5-point scale (Table 1.), whereas as many as 80% regarded it important and very important.

Entrepreneurship should be rather taught at BA/BSc studies – 38% indications in the highest score, namely 5 points, and 68% in total with the emphasis on a high and very high degree, whereas MA/MSc studies obtained 53% of indications above the medium degree of significance. Students do not feel the necessity to continue entrepreneurship education throughout all years of studies – 50% (assessing it as very insignificant – 33% and insignificant -17%). As for the obligatory character of the classes, opinions are divided, and thus 22% of respondents indicate that the voluntary character of the choice of the classes should be possible to a very small extent, 27% of respondents indicate a me-

dium and very high degree of voluntariness each. Therefore, the total assessment obtained an averaged result of 3.1 points.

Table 1. The need for entrepreneurship education at universities in students' opinion (score in the 5-point scale)

Entrepreneurship education at university:	total	1	2	3	4	5	value
Is needed							4.23
% of indications	100	2	4	14	28	52	
Should be conducted at BA/BSc studies							3.84
% of indications	100	6	8	18	30	38	
Should be conducted at MA/MSc studies							3.45
% of indications	100	9	14	23	29	24	
Should be conducted at all majors							3.14
% of indications	100	15	17	29	18	21	
Should be conducted at all higher schools							3.00
% of indications	100	20	18	27	10	24	
Should be conducted every year							2.51
% of indications	100	33	17	29	6	14	
Should be voluntary							3.10
% of indications		22	11	27	13	27	

Source: own study.

To capture students' preferences in terms of the need for entrepreneurship education at universities, averaged indicators were developed in the studied ranges. We can read from them that students are strongly interested in a subject related to entrepreneurship – 4.23 points. Moreover, indications which concerned conducting this subject at BA/BSc studies obtained above the average assessment, namely 3 points, 3.84 points, however, it does not discredit a possibility to conduct it at MA/MSc studies (3.45 points). Slightly above the average students indicate that all majors should be covered by this subject (3.14 points) and the optional character of the subject (3.1 points). The average result – 3 points, was obtained by a need to educate in that at all universities. The need for entrepreneurship education throughout all years of studies is felt below the average – 2.51 points.

In the further part of the questionnaire, respondents were asked to refer to undertaking additional activity, involving within a subject related to entrepreneurship (Table 2). The greatest number of indications for involvement to a high degree concerned a visit to a firm – 38%, planning a meeting with an entrepreneur – 28%, and visiting an institution – 23%, which in combination with the score for a high degree gave 68%, 55% and 59%, respectively. The least number of highest scores was obtained by the possibility to organise a happening – 9% and independent involvement of students of higher years in the implementation of projects – 10%. It may prove great resistance to exposure and exposing oneself to public assessment, as well as considerable barriers in establishing contacts. It may also indicate too low integration of students' environment.

Averaged assessments indicated little willingness for involvement which would be a result of some effort and devotion of time. All scores are below 4 points and in most cases (eight out of thirteen proposals) they fluctuate at the level of 3.01-3.38 points.

What is surprising is the moderate level of interest in participation in competitions, executing projects with students from other universities or higher years, just as following

formal and legal changes in business or executing additional projects, especially when clashed with the fact that the study was carried out at the economic university.

Table 2. The proneness of students to involve within entrepreneurship course (the score in the 5-point scale)

In entrepreneurship education I am willing to	total	1	2	3	4	5	value
Go to a firm to have a class							3.87
% of indications	100	6	6	20	30	38	
Visit institutions							3.48
% of indications	100	9	14	18	36	23	
Follow formal and legal changes in business							3.24
% of indications	100	6	19	34	27	14	
Execute additional projects							3.29
% of indications	100	7	18	27	34	14	
Plan a meeting with an entrepreneur							3.64
% of indications	100	4	11	30	27	28	
Contact students from other universities to complete a project							3.15
% of indications	100	9	23	29	22	17	
Participate in a business plan competition							3.15
% of indications	100	9	23	29	22	17	
Participate in optional classes							3.38
% of indications	100	8	14	29	30	19	
Carry out market research							3.37
% of indications	100	7	9	41	26	17	
Organise an event at the university							3.20
% of indications	100	14	13	27	30	16	
Organise a happening							2.90
% of indications	100	19	15	33	24	9	
Independently involve in the project of students of higher years							3.01
% of indications	100	12	22	28	28	10	
Win sponsors for away classes							3.43
% of indications	100	9	17	21	30	23	

Source: own study.

The expectations concerning the form of classes and the manner of conducting them are formulated differently (Table 3). The biggest number of indications to a very high degree referred to conducting classes by practitioners – 48%, workshop form – 46%, or learning to complete "forms" – 44%, which in combination with the score for a high degree gave 80%, 87% and 65%, respectively.

Owing to averaged assessments, we can observe that young people expect the introduction of practitioners in the entrepreneurship education process (4.16 points) and the shift of the centre of gravity from lectures (2.97 points) to workshops (4.03 points).

In the light of the acquired information we can say that students expect to have activity and initiative released in them, which is proven by responses concerning the development of entrepreneurship, which were scored quite high (3.98), prompting to activity out-

side the university (3.94) or requiring practical additional involvement (3.86). With reference to the part of the study concerning independent involvement of students we can have an impression that students expect that they will be taught initiative and active attitude.

Table 3. Students' preferences as for conducting entrepreneurship classes (the score in the 5-point scale)

conducting entrepreneurship classes should:	total	1	2	3	4	5	value
take place at the university							3.78
% of indications		2	14	21	29	33	
be conducted by entrepreneurs							4.16
% of indications		3	5	12	32	48	
be conducted by lecturers							3.17
% of indications		7	18	35	29	10	
have the form of workshops							4.03
% of indications		2	7	13	41	46	
have the form of lectures							2.97
% of indications		11	22	35	21	10	
lead to starting a firm							3.42
% of indications		4	15	34	27	19	
develop entrepreneurial attitudes							3.98
% of indications		3	6	17	37	36	
teach completing official forms							3.91
% of indications		2	15	17	21	44	
incline to activities outside university							3.94
% of indications		3	7	20	32	38	
require practical, additional involvement of students							3.86
% of indications		3	7	18	44	27	
engage a professional external firm							3.89
% of indications		3	12	15	32	37	

Source: own study.

CONCLUSIONS AND RECOMMENDATIONS

An analysis of the literature of the subject on entrepreneurship education indicates considerable interest in the undertaken research problem.

As a result of the conducted study, it has been established that students:

- definitely consider entrepreneurship as the subject needed in the course of their studies (4.23 points);
- need confrontation with practice (e.g. participation of entrepreneurs in classes, participation in classes organised in firms, visiting institutions or completing documents) – the average score of responses given for the majority of answers was in the range from 3.8 to 4.16;
- expect the shift of the centre of gravity from lectures to workshops;
- only on a moderate level do they show the willingness to involve independently in extra activities requiring initiative, additional work and time (2.9-3.3);

– expect the development of entrepreneurial behaviours, to be taught initiative and an active attitude, encouraging to undertake activity outside the university.

In the course of the conducted research, attention was paid to high resistance of students in establishing contacts, exposing themselves and their possible exposure to public assessment in the students' environment, which may indicate too little integration of the students' environment.

In the light of the information obtained and the analysis conducted, being aware of the research limitations, we may assume that the conducted study may be the basis for undertaking further research works, for example among students of other than economic universities, as well as innovative implementations in the improvement of the didactic process corresponding with students' expectations and new trends, such as inclusion of practitioners in the education process.

REFERENCES

- Ajzen, I. (1991). *The theory of planned behavior*. Organizational Behaviour and Human Decision Processes. Vol. 50. s. 179-211.
- Buła, P., Kosała, M., Guja, D. (2015). Organizacja i przebieg zajęć on-line przy wykorzystaniu nowoczesnych technik informacyjno-komunikacyjnych w oparciu o badania – panel przedsiębiorczość. W: M. Pamuła-Behrens (red.), *Małopolska Chmura Edukacyjna – nowe trendy i dobre praktyki nauczania*. Kraków: Urząd Marszałkowski Województwa Małopolskiego, s. 25-32
- Cieślik, J., Matusiak, K. B., Guliński, J., Skala-Poźniak, A. (2011). *Edukacja dla przedsiębiorczości akademickiej*, Warszawa: Polska Agencja Rozwoju Przedsiębiorczości.
- Domurat, A. (2011). Przedsiębiorczość a kreatywność i innowacyjność. w: A. Strzałecki (red.), *Innowacyjna przedsiębiorczość. Teorie. Badania. Zastosowania praktyczne. Perspektywa psychologiczna*. Warszawa: Wydawnictwo Szkoły Wyższej Psychologii Społecznej Academica, s. 93-100.
- Drucker, P. (1992). *Innowacja i przedsiębiorczość – praktyka i zasady*. Warszawa: PWE, s. 29.
- Gibb, A.A. (1990). Enterpreneurship and Intrapreneurship – Exploring the differences. w: R. Donckels, A. Miettinen (red.), *New findings and perspectives in Entrepreneurship*, Avebary,
- Glinka, B., Gudkova, S. (2011). *Przedsiębiorczość*. Warszaw: Wolters Kluwer Polska Sp. z o.o., s. 18.
- Kosała, M. (2014). Badanie postaw przedsiębiorczych wśród młodzieży jako fundament kształtowania postawy odpowiadającej wyzwaniom współczesnego świata. *Horyzonty Wychowania*, vol. 13, No. 28, s. 317-340.
- Kosała, M., Pichur, A. (2008). Analiza działań przedsiębiorczych i postrzeganie prowadzenia działalności gospodarczej wśród młodego pokolenia – wybrane aspekty. W: Z. Ziółto, T. Rachwał (red.), *Przedsiębiorczość – Edukacja* (4), s. 347-354.
- Kurek, S., Rachwał, T. (2010). Założenia i wstępne wyniki europejskiego projektu badawczego FIFBI w zakresie kształtowania kompetencji uczniów gimnazjum do prowadzenia działalności gospodarczej, *Przedsiębiorczość – Edukacja* 2010/6, s. 472-485.
- Moreno, J.J., Wach, K. (2014). The Entrepreneurial Profile of Students Participating in the Academic Entrepreneurship Course: Pilot Study Results. *Horyzonty Wychowania*, vol. 13, nr 26, s. 11-32.
- Piasecki, B. (1997). *Przedsiębiorczość i mała firma – teoria i praktyka*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego, s. 33.
- Rachwał, T. (2010). Kształtowanie postaw przedsiębiorczych w edukacji szkolnej, w: B. Muchacka (red.), *Szkoła w nauce i praktyce edukacyjnej*, t. II, Kraków 2006, s. 427-434.

- Rachwał, T., Kurek, S., Boguś, M. (2016). Entrepreneurship Education at Secondary Level in Transition Economies: A Case of Poland. *Entrepreneurial Business and Economics Review*, 4(1), 61-81. doi: <http://dx.doi.org/10.15678/EBER.2016.040105>
- Rachwał, T., Wach, K. (2016). Badanie intencji przedsiębiorczych młodego pokolenia: wyniki ankietyzacji wśród studentów kierunków nieekonomicznych. *Przedsiębiorczość – Edukacja*, 12.
- Rantanen, T., Pawlak A. & Toikko, T. (2015). The Significance of Social Welfare Attitudes in Young People's Entrepreneurial Intentions. *Entrepreneurial Business and Economics Review*, 3(1).
- Sadowska, M. (2016). Edukacja w zakresie przedsiębiorczości w polskim systemie kształcenia oraz w państwach europejskich. *Przedsiębiorczość Międzynarodowa*, 2(1), 149-164.
- Shefski, L.E. (1994), *Entrepreneurs are Made not Born*. New York: McGraw-Hill, Inc., s.191.
- Targalski, J., Kosała, M., Pichur, A., (2008). Entrepreneurial attitudes among students of economics At the Cracow University of Economics. Analysis of research findings. W: R. Borowiecki, A. Jaki (red.), *Enterprises in the Face of 21st Century Challenges. Development – Management – Entrepreneurship*. Kraków: Uniwersytet Ekonomiczny w Krakowie, s. 427-436.
- Ubrežiová, I., Wach, K., & Horváthová, J. (2008). Entrepreneurship in small and medium-sized enterprises: Comparative study between Slovakia and Poland for the years 2001–2007. *Agricultural Economics - Czech*, 54(8): 358-366.
- Wach, K. (2007). Kształtowanie postaw przedsiębiorczych w programach nauczania: Stan obecny i proponowane kierunki zmian (s. 120-127). W: P. Wachowiak, M. Dąbrowski, B. Majewski (red.), *Kształtowanie postaw przedsiębiorczych a edukacja ekonomiczna*. Warszawa: Fundacja Promocji i Akredytacji Kierunków Ekonomicznych.
- Wach, K. (2013). Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych. *Przedsiębiorczość – Edukacja*, 9, 246-257.
- Wach, K. (2014a). Edukacja dla przedsiębiorczości: pomiędzy przedsiębiorczą pedagogiką a edukacją ekonomiczną i biznesową. *Horyzonty Wychowania*, 13(28), 11-31.
- Wach, K. (2014b). Paradygmat gospodarki przedsiębiorczej a polityka wspierania przedsiębiorczości (rozdział 1). W: K. Zieliński (red.), *Formy i przejawy współczesnej przedsiębiorczości w Polsce*, Warszawa: Difin, s. 14-15.
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 4(1), 83-94. doi: <http://dx.doi.org/10.15678/EBER.2016.040106>

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Additionality of State Aid for Research, Development and Innovation

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Abstract

The aim of this paper is to investigate how EU state aid policy addresses the problem of the additionality of state aid for research, development and innovation. The methods used include a literature review of both theoretical and practical studies and document analysis.

The formalistic approach taken in the majority of cases in the ex-ante state aid control requires further studies on the actual effects of implemented state aid measures. A variety of methods have been developed to identify the causal impact of aid and to address the problem of selection bias properly. Recent studies largely apply propensity score matching and strive to identify different types of additionality as well as the relationships between them, acknowledging that behavioural additionality plays a critical role in understanding the long-term impact of public interventions.

Keywords: state aid; incentive effect; proportionality of state aid; additionality; research; development and innovation

JEL codes: H25, L52, O38

INTRODUCTION

Promoting research, development and innovation (RDI) is high on the political agenda at both national and the EU level. The Europe 2020 Strategy identifies research and development as a key contribution towards objectives of smart, sustainable and inclusive growth. Gross domestic expenditure on R&D (% of GDP) is a headline Europe 2020 Strategy indicator. The target level is 3% of GDP to be invested in the research and development activity by the year 2020. The most challenging task consists however in stimulating business R&D investment (both individual and cooperative) in the wake of public intervention and improving the contribution of R&D investment to the final

output – new products or processes that improve competitiveness and foster growth. The major concern is about the effective use of public resources. Therefore, policy makers need to understand the very nature of the innovation process so that they are capable of formulating relevant policies to achieve economic and social benefit and choose the appropriate policy tools to that end. They must adapt to new advances in innovation theory, grasp a broad set of assumptions regarding the factors that influence the sources, rate and direction of innovation, that, in turn, must be based on credible evidence of effects of the implementation of various public policy instruments to foster RDI, or in simple words, evidence of ‘what works’.

The paper addresses the problem of so-called ‘additionality’ of public support to business RDI confined to the form of state aid. Its objective is to ascertain whether the EU state aid control places enough emphasis on the added value of aid. The issue is all the more crucial since the EU state aid policy was in recent years subject to significant modernisation to encourage more focused and better quality aid. This implies, *inter alia*, that state aid must have a real incentive effect and therefore foster growth; it should not crowd out private investment, keep inefficient and nonviable companies on indefinite life support and generally waste tax payer’s money (Almunia, 2012).

The article follows four lines of inquiry. First, it deals with state aid as a public policy tool to foster innovation, explains its rationale and admissibility criteria. Secondly, it analyses the relevant EU rules and practice, in particular, concerning the requirements for the demonstration of the incentive effect and the proportionality of aid in order to identify the EU preconditions for state aid for research, development and innovation. These, in turn, impose relevant evaluation questions in assessments carried out at the EU and national level. The need for *ex post* impact evaluation, the methodological problems with measuring the added value of the public intervention constitute third line of inquiry. Finally, the paper reviews evaluation studies on additionality effect of state aid for research, development and innovation, in order to find evidence of different types of additionality and possible links between them. The methods used are: a literature review of both theoretical and practical studies, document analysis, in particular the EU regulations and working papers, and critical review of methods used for evaluation of state aid for research, development and innovation.

MATERIAL AND METHODS

The methods used are qualitative research methods. A document analysis is carried out to investigate the methodological approach used to assess state aid for research, development and innovation with a particular focus on the so-called additionality effect of this type of public intervention. The analysed documents are: the EU legal acts, guidelines and working papers on the basis of which state aid for research, development and innovation can be granted in the EU. An emphasis is placed on the requirement of incentive effect and the proportionality of aid. Furthermore, a literature review on innovation process theories is carried out to investigate whether this approach to assess state aid for research, development and innovation takes into account the latest advancements in innovations theory. Finally, the critical review of evaluation studies of public support for RDI is conducted to find out: how to identify the additional effect of public intervention, what are the methods suitable to this end, what are

the common pitfalls to be avoided and are there any good examples of evaluation of state aid for research, development and innovation that can be demonstrated and emulated, and ultimately serve as valuable insights for policymakers.

LITERATURE REVIEW AND THEORY DEVELOPMENT

State Aid as a Public Policy Tool to Foster Innovation

The linear approach to innovation, viewing the innovation as a one-way process, starting with the discovery of new knowledge (research), moving through various development steps (development) and emerging in a final viable form (innovation) has been abandoned, in favour for the systemic approach, where interactions among many actors, (including companies, universities and research institutes) as well as the relevant knowledge flows, finance and power play a critical role. In essence, innovation is a lot more than R&D, it is not merely the result of science and technology. The innovation process involves continuous feedback loops between the different stages, the interplay between supply sources of science and the demand forces of the market place [Grupp 2000]. There is a large body of literature regarding the relationship between R&D and innovation which may lead to the conclusion that although these two variables are interrelated, the relationship between them is not as strong as might have been expected [see: e.g. Harris and Moffat 2011]. Innovations do not always require being engaged in R&D activity and on the other hand, R&D efforts do not always lead to innovation [Harris and Trainor 1995; Mairesse and Mohnen 2002].

Recognising the systemic character of the innovation process, with its feedback loops, interrelations, and inherent complexity implies the need for a wider portfolio of public initiatives to address the performance of innovation system at different levels. Governments are involved not only through the funding of R&D activity to compensate for market failures leading undertakings to underinvestment in R&D (first generation policies), but also more widely in ensuring that innovation system functions well as a whole, addressing systemic failures, such as, for instance, problems in interaction among various actors in the innovation system or deficiencies in regulatory framework (second generation policies). It may be argued that market failure concept justifies public intervention for R&D and innovation at the level of target groups and leads to more specific types of intervention such as state aid, while the systemic failure concept usually involves more generic types of intervention such as improving framework conditions, especially in the field of intellectual property rights or public innovation platforms.

As mentioned above, state aid is one of the public policy tools used to foster innovation. According to article 107 (1) of the Treaty on the Functioning of the European Union (TFEU), state aid is a transfer of state resources which constitutes an economic advantage that the undertaking would not have received in the normal course of business. The advantage is conferred on a selective basis, (as opposed to general public measures) and thereby affects competition and trade in the EU internal market. Therefore, granting state aid is generally prohibited unless it is justified by reasons of general economic development, stipulated in article 107 (2) and (3) TFEU. A set of admissibility criteria must be fulfilled. First, a planned state aid measure must contribute to a well-defined objective of common interest. State aid may be targeted towards a situation where aid can bring about

a material improvement that the market cannot deliver itself, (correcting a market failure, e.g. externalities, imperfect information, coordination problems). The Europe 2020 Strategy notes that: 'State aid policy can also actively and positively contribute (...) by prompting and supporting initiatives for more innovative, efficient and greener technologies, while facilitating access to public support for investment, risk capital and funding for research and development' [p.21]. Importantly, under the new Framework for state aid for research and development and innovation (2014) there is a legal presumption of the necessity of state intervention for projects or activities that are also EU co-financed (recital 54).

Secondly, state aid must be an appropriate policy instrument to address the defined objective. It should be borne in mind, that state aid is a selective instrument and should be referred to as a last resort option where there are no other less distortive, general instruments, such as regulation, public procurement or standardisation, an increase in funding of public research and education or general fiscal measures which may achieve the same results. Moreover, state aid must have an incentive effect. It means that for state aid to be admissible it must be capable of inducing undertakings to do things which they would not otherwise do without public support and not subsidise activities it would have carried out anyway; (the incentive effect will be discussed in the next section). Finally, state aid must be proportional. State aid measure does not fulfil this criterion when the same effect may be obtained with less aid. In other words, aid must not exceed the minimum amount required to undertake the said project or activity. To this end, the amount of admissible aid (so called 'aid intensity') is determined in connection with a predefined set of eligible costs and are limited to a certain proportion of those costs. The intensity of state aid for research and development and innovation depends on the following factors:

- the closeness of the aid to the market (e.g. higher aid intensity is stipulated for fundamental research than applied research),
- the size of the beneficiary (higher aid intensity is stipulated for smaller enterprises than larger enterprises) and
- the acuteness of the market failure (such as the expected externalities with regard to dissemination of knowledge).

Although the recent modernisation of the EU rules on state aid for research, development and innovation, (which took place in the year 2014), it can be concluded that to determine the admissible aid intensities for research and development projects, the EU rules rather correspond to a linear model than a systemic model, since they feature separated, sequential stages. On the other hand, under the new EU rules it is easier to transfer from the development to the production stage due to the significantly higher aid level for prototypes and pilot lines and the possibility to grant aid not only in the experimental stage but also at the stage of industrial research. Under the previous legal regime, no state aid was allowed for the activity that pertains to validation and user interaction as a prototype or product development, what was in fact discouraging for undertakings to strive for converting their publicly funded research and development efforts into successful innovation.

Lastly, the expected positive effects of state aid are always juxtaposed against its potential negative effects in terms of distortion of competition. State aid for RDI may, for instance, distort the competitive entry and exit processes, distort the dynamic incentives of market players to invest, create or maintain positions of market

power. Therefore, they should be limited and outweighed by positive effects concerning contribution to the objectives of common interest.

**Ex Ante Assessment of State Aid for Research, Development and Innovation.
Verification of the Incentive Effect as a Part of the Balancing Test**

All of the criteria discussed above are verified in the balancing test, which is an assessment method used by the European Commission in order to decide upon approval of a state aid measure, (state aid control falls within the exclusive competence of the EU to ensure a level playing field for all undertakings operating in the common market). However, it is an *ex ante* assessment and moreover not every state aid case is subject to a specific, in-depth scrutiny. Only about 10-15 per cent of all state aid measures every year have been subject to the full balancing test [Nicolaidis, 2014].

State aid for research, development and innovation may be granted on the basis of one of the two complementary EU acts: the Commission Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (the so-called General block exemption Regulation) and the Framework for State aid for research, development and innovation (RDI Framework 2014). The General block exemption Regulation provides for some categories of state aid which are transparent and at least questionable from the point of view of the proper functioning of the common market. Based on the sufficient relevant Commission case experience, they are deemed to bring positive outcome in the balancing test, (i.e. to bring benefits to society that outweigh the possible distortions of competition), without the need for prior specific Commission scrutiny. In these cases, member states may grant state aid without prior notification and approval by the Commission, provided that certain conditions, stipulated in the said Regulation, are met. In terms of the incentive effect, the General block exemption Regulation adopts the simple criterion, which favours a purely formalistic approach to verify the presence of the incentive effect of a state aid measure. It requires that the application for state aid must be submitted before work on the investment project commences. It is enough for the Commission to presume that an aid measure has incentive effect. However, this simplification is not applicable to ad hoc aid for large enterprises. In their case as well any other notifiable cases, an evidence must be provided that the planned aid has a positive impact on the decision of an undertaking and results in additional activities by an undertaking, which it would not carry out at all or it would carry out but in a different, restricted manner. It may be manifested, in particular, by a material increase in size or scope of the project or activity, a material increase in the total amount spent by the undertaking on the subsidised project or activity or a material increase in the speed of completion of the project or activity concerned. This is verified on the basis of a counterfactual scenario comparing a situation with aid and without aid. Various investment scenarios may be described in internal business plans, risk assessments or in documents submitted to investors. The elements which are typically taken into account while assessing the incentive effect of state aid for RDI are: changes in RDI spending, changes in the number of people assigned to RDI activities, changes in RDI spending as a proportion of total turnover and other relevant quantitative factors. Cases with the biggest impact on the internal market are subject to a more rigorous examination on the part of the Commission. The RDI Framework outlines the Commission approach to the issue. If a project would not, in itself, be profitable for an undertaking to

carry out, but would generate significant benefits for society, there is a good chance for the aid to have an incentive effect. The same refers to a high start-up investment, a low level of appropriable cash flows and where a significant fraction of the cash flow is to arise in the very far future or in a very uncertain manner. These elements are indicative for the incentive effects. The level of risk involved is also of importance. The assessment of risk takes into account, in particular, the irreversibility of the investment, the probability of commercial failure, the risk that the project will be less productive than expected, the risk that the project undermines other activities of the beneficiary and the risk that the project costs undermine its financial viability (recital 67 of the RDI Framework).

The substantive analysis of the incentive effect takes into account, on one hand, company-specific elements, for instance, its financial choices concerning maintenance of a certain liquidity buffer or limited exposure to high-risk R&D investments, and on the other hand, sector-specific elements, to ensure that the existence of an incentive effect is established on an objective basis (see: European Commission 2012).

***Ex Post* Assessment of State Aid for Research, Development and Innovation. Verification of the Additionality Effect in Evaluation Studies**

In order to ensure that specific policy instruments that government is applying are well designed for a problem, an interactive system of evaluation, constantly supporting the policy formulation and implementation should be developed. Monitoring and evaluation of public interventions provide feedback on actual effects of public policy instruments. No wonder that a favourable view is taken regarding state aid measures, for which an *ex post* impact assessment is available. Besides, in some instances such analysis is required by the EU law. It refers to aid schemes which are: large, novel or face the possibility of significant market, technological or regulatory change in a short-time perspective which may require a review of the assessment of the scheme, e.g. aid for undertakings which operate on fast-developing markets.

As mentioned above, the requirements for the demonstration of the incentive effect in the *ex ante* assessment vary greatly and depend, in particular, on the amount of aid to be granted and the size of the beneficiary. In many instances the requirement is rather formal in nature. All the more so as the policy makers seek to stimulate business R&D investment, they are keen on measuring the actual changes in the ways firms conduct R&D in the wake of public policy intervention. In particular they are interested in additional effect of public intervention.

Buisseret et al (1995) defines additionality as the change in business R&D spending, undertaking's behaviour or performance that would not have occurred without the public program or subsidy. These three situations correspond respectively to (1) input additionality, (2) behavioural additionality and (3) output additionality.

Input additionality occurs when an undertaking due to public support increases its level of R&D expenditure. It is when public resources supplement private funds and do not substitute them. The latter case is called the 'crowding-out effect'. So input additionality refers, in essence, to the problem of the complementary versus substitute character of public and private funding for R&D. Although it is a central evaluation question in reference to state aid measures, a rejection of the crowding-out effect of public support does not automatically translate into product or process innovations since the linear

approach to innovation process has been abandoned for being oversimplified and insufficient to explain the complete phenomena of innovation (as discussed above).

Therefore, there is a strong case for evaluation of the output of publicly funded projects or activities. Output additionality of public R&D support can be described as the proportion of outputs of an undertaking that would not have been achieved without public intervention. In other words, due to public support an undertaking achieves more when compared to the output that would result without public support. This additional output can be confined to the introduction of new products or production processes or patenting activity of an undertaking (e.g. a number of patented inventions), or more frequently, be affiliated with productivity growth and such factors as growth in turnover and export, in employment, value of an undertaking etc.

It is argued that examining the input and output side of the innovation process is for policy makers not sufficient. In order to understand the long term effects of public support for R&D, factors concerning the change in behaviour of the recipient undertaking should be taken into account [Madsen, Clausen and Ljunggren 2008, Aerts et al, 2006; Georghiou, 2003]. Steurs et al (2006) state: 'The impact has typically been approached in terms of input or output measures only, treating the firm as a black box and not adequately capturing the impact of public intervention on the innovation process, the company rationale and attitude itself.' To fill this gap, the concept of 'behavioural additionality' has been developed which refers to 'the change in a company's way of undertaking R&D, which can be attributed to policy action' [Buisseret et al., 1995]. It concerns especially collaborative strategy of an undertaking. Undertakings seldom innovate alone. Being more specialised and focused on their core competencies, for complementary knowledge, know-how they increasingly rely on interactions with others. Empirical studies showed that collaborating undertakings are more innovative than non-collaborating ones [OECD 2001]. For this reason the impact of public support on the collaborative strategy of the recipient undertaking is of the importance. In the *ex ante* assessment of state aid for RDI, the fact that the project involves collaborative interactions, in particular, among a larger number of partners, or organisations of different sectors, or undertakings of different sizes is regarded as a general positive indicator (recital 20 (e) of the RDI Framework).

The most challenging task, however, in estimating additionality of public interventions consist in constructing the counterfactual situation – what would have happen if no intervention had taken place, and more precisely: how much the undertaking would have spent on RDI without receiving the public support, what outputs of the RDI activity would have been achieved without being subsidised, how the aid beneficiary would have behaved when it had not received state aid for RDI? It is crucial to compare the outcome with the aid and the outcome in the absence of the aid and capture the difference between these two situations. It is not sufficient to analyse only the outcome, confined to the beneficiary itself. A positive change, for instance in the performance of the aid beneficiary can be the result of other than public support factors, such as general macroeconomic conditions. Public interventions are not carried out in a proverbial vacuum and the changes observed in socio-economic reality are, for a most part, affected by many various factors. It is a problem directly linked to the identification of a causal relationship between aid measures and their effects. Only then evaluation provides proper feedback on effectiveness of the public intervention. On the other

hand, just comparing subsidized undertakings with non-subsidized ones, even operating in the same sector or of the same size, to calculate the average effect of state aid is not sufficient either. It is argued that public authorities may follow a 'picking-the winner' strategy, what means that the undertakings which are already more engaged in RDI activity are also more likely to receive state aid for RDI [Aerts and Czarnitzki, 2006]. Undertakings who decide to apply for state aid are those who have an idea, a project, who are not lacking interest or creativity, what may well be the case in the reference to non-beneficiaries. Evaluation studies must take this sample selection bias into account.

The European Commission, in order to provide guidance to member states' authorities, adopted the document: Common methodology for State aid evaluation (2014), where it presents the relevant methods to identify the casual impact of state aid measures. None of the method is free from its limitations and is only valid when certain assumptions hold. They are presented one by one, but they can be, and usually are, combined (Table 1).

Empirical Studies on Additional Effect of State Aid for Research, Development and Innovation – Insights for Policymakers

There has been a number of studies conducted to ascertain whether research and development subsidies stimulate and thus are "additional" to private R&D spending or substitute (crowd out) private R&D spending. David et al. (2000) surveyed the body of evaluation studies accumulated over the period of 35 years prior to the year 2000. The conclusion is that the empirical evidence of the input additionality of public R&D funding is mixed. At the same time the authors criticize that most of that time studies do not take into account the problem of sample selection bias. More recent studies tend to reject the full crowding out effect, however, the findings differ depending on the firm's size, its characteristics or the type and value of the aid (see e.g. Lach 2000, Streicher et al. 2004, Gonzales et al. 2005, Görg 2007, Alecke et al. 2012).

Lach (2002) found significant additionality effects in small Israeli manufacturing firms, but none for large firms. Streicher et al. (2004) estimated the effect of subsidies granted by the Austrian Industrial Research Promotion Fund on firms' R&D expenditure by panel regression. A leverage of about 40 percent has been identified for the sample of 495 firms, i.e. one additional euro of public funding induced firms to contribute additional 40 cents of their own resources. All firm sizes exhibited complementarity but to a differing degree. Both very small and large firms exhibited the highest leverage, while small and medium-sized firms smaller leverage. Moreover, the leverage estimates for firms that perform R&D only occasionally were higher than for those which performed R&D on a regular basis. Görg (2007) investigated the impact of government support for R&D on firms from manufacturing sector in the Republic of Ireland. He found that in the case of domestic plants small grants increased private R&D spending, while too large a grant might crowd out private financing of R&D. However, in the case of foreign establishments grant provision caused neither additionality nor crowding out effects of private R&D financing, regardless of the value of the aid.

Table 1. List of methods to identify the casual impact of state aid measures

Methods	Assumptions and limitations
<p>Linear regression – makes use of mathematical models to describe the relationship between observed characteristics of undertakings and the outcomes; on this basis, the impact of characteristics on the outcomes are examined.</p>	<p>All significant differences in characteristics between aid beneficiaries and non-aid beneficiaries are observable and are taken into account, as well as there is a linear relationship between the outcome (e.g. R&D expenditure) and other characteristics of an undertaking, its size, age, sector of operation, the granting of the aid etc.; however, in practice, it may be difficult to exclude the existence of unobserved differences between the two groups: beneficiaries and non-beneficiaries that may lead to a persistent difference in outcomes even in the absence of the aid; the method is only valid under the so-called conditional independence assumption (CIA), according to which treatment participation and treatment outcomes are independent conditional on a set of (observable) characteristics.</p>
<p>Matching techniques – treatment effects are constructed by matching each beneficiary with another similar undertaking that did not receive aid and comparing their outcomes; in the process of matching, characteristics of undertakings are taken into account or the estimated probability to receive aid (propensity score matching).</p>	<p>Similar to linear regression, all characteristics of undertakings that influence the outcome and reasons explaining eligibility or attribution of aid must be captured by observable variables. the method is only valid under the so-called conditional; independence assumption, described above; heavy data requirements</p>
<p>Difference-in-difference - compares the difference in the performance between beneficiaries and non-beneficiaries before granting the aid to the first group as well as after the aid; pre-existing differences between these two groups are attributed to other factors than aid and the change in these differences is attributed to the aid; from a technical point of view, this approach can be implemented either within a linear regression model or with matching; (It is also possible to implement a triple difference estimator (DDD), where more control groups are formed).</p>	<p>The differences between beneficiaries and non-beneficiaries are stable over time and that both groups are affected by other than aid factors in the same way during the period under review; although the method controls for some aspects of unobserved differences between beneficiaries and non-beneficiaries, the proper choice of a control group is essential for the validity of the method; therefore, in most cases difference-in-difference approach is taken to complement matching techniques; the control group as well as the group of beneficiaries should not be too homogeneous, otherwise the interference will be biased; it will be hard to separate the effects of the macroeconomic shocks shared within each group and the effects of the aid; it should be taken into account that in the case of panel data, characteristics of undertakings are usually auto-correlated, what may lead, far more often than justified, to the conclusion that the aid has had no effect.</p>
<p>Instrumental variables – are used to deal with endogeneity of explanatory variables, i.e. variables which are correlated with an unobserved element which at the same time influences the outcome; for instance more able persons may choose to benefit from training aid as well as enjoy higher wages. The impact of training aid on the wage is confounded by the variable that is unobserved and cannot be directly accounted for in the analysis. Therefore such a variable is transformed into an instrumental variable, i.e. a variable that explain the fact of receiving the aid (participating in the training program) but have no direct impact on the other unobserved determinants of the outcome that has to be measured.</p>	<p>In practice, it might be very difficult to find a plausible instrument, a variable that determinates the participation in an aid scheme but does not influence the outcome of such participation. Even relaying on the lagged values is questionable, since lags are often highly correlated with future values of the variable.</p>
<p>Regression discontinuity design – attracts researcher’s attention to the variables which have a discontinuous impact on the probability to be affected by a state aid measure, such as: geographical borders (aid may be addressed only to some regions) or conditions that must be fulfilled by undertakings to receive aid; for instance, impact of a given state aid measure is assessed by comparing outcomes of undertakings which received aid and those who applied for aid and fulfilled all of the criteria but due to small budget of an aid scheme did not receive aid.</p>	<p>The probability to receive aid is discontinuous while all the other variables are continuous; The degree to which generalisations can be made to those undertakings that are away from the threshold is limited.</p>

Source: own elaboration based on (European Commission, 2014).

Evaluation studies also strive to identify the additional effect not only restricted to input but also output additionality. Alecke et al. (2012) analysed the input and output additionality of subsidies on R&D activity for East German firms using propensity score matching. They found out that subsidised firms showed a higher level of R&D intensity (on average the R&D intensity increased from 1.5% to 3.9%) as well as showed a higher probability for patent application in comparison with non-subsidised firms, (the probability raised from 20% to 40%). Moreover, similar to Streicher et al. (2004) while taking a closer look at SMEs, the highest input additionality has been reported in the case of very small firms, microbusinesses. Catozella and Vivarelli (2011), combine the two dimensions: input and output, by estimating the impact of public funding on the ratio between innovative sales and innovative expenditures (innovative productivity) to “explore whether supported innovative firms are really doing better, not just more, than their non-supported counterparts”. The research proved, however, the lower efficiency of externally-funded innovative expenditures compared to privately-funded expenditures.

More recently, behavioural additionality is of interest to researchers and policy makers alike. These studies aim to capture the impact of public intervention on the way the firm conduct RDI activity, for instance, whether subsidised firms strive for more cooperation while pursuing RDI activity or develop competencies and expertise. They confirm the general conclusion that behavioural additionality plays a critical role in understanding the long-term impact of public interventions. Busom and Fernández-Ribas (2008) explored the effects of R&D subsidies on the way the firms organise their innovation process. Their main findings are that public support significantly increases the chances that a subsidised undertaking will cooperate with a public research organisation and to a smaller extent also with other undertakings. Madsen et al. (2015) found that input additionality, output additionality as well as behavioural additionality are interrelated. Moreover, behavioural additionality is a prerequisite to gain indirect input additionality and output additionality. The concept of indirect input additionality refers to the relationship between the subsidised project and other undertaking's projects and activities, (i.e. a subsidy for one RDI project enhances the ability of a given undertaking to initiate new RDI project). They also found a direct link between direct and indirect input additionality and output additionality.

CONCLUSIONS

The paper explains the main aspects of the EU current regulations and guidelines which are applicable to state aid for research, development and innovation. An emphasis is placed on two state aid admissibility criteria: the incentive effect and proportionality of aid which should translate into aid effectiveness. The reason for it is that state aid control lies within the EU exclusive competences and secondly, the changing paradigm of the EU state aid control means moving beyond the problem of ensuring fair competition on the European single market towards promoting better quality aid. It has been demonstrated that in the majority of cases in the *ex ante* state aid control a purely formalistic approach is taken to verify the incentive effect of aid. Similarly, the proportionality criterion is assessed to a great extent against the set of presumptions created by the EU regulations and guidelines. Therefore it is crucial to develop an interactive system of evaluation to provide feedback on actual effects of state aid measures. The most challenging problem in this field is to identify the casual impact of aid and to address the selection

bias properly, since state aid as a selective measure is not randomly granted. In the literature a variety of methods have been developed to correct estimations of the so-called treatment effect of such endogeneity, for instance, selection models, matching, instrumental variable estimations or difference-in-difference estimations. It can be argued that in recent studies a propensity score matching is largely applied and impact assessments strive to identify the additional effect not only restricted to input or output additionality, but also different types of behavioural additionality acknowledging that the latter one plays a critical role in understanding the long-term impact of public interventions.

REFERENCES

- Speech of Vice-President Almunia on 8 October 2012 (see SPEECH/12/701) at the European Parliament. Presenting the Competition Policy Work Programme for 2013/14. Available at: http://europa.eu/rapid/press-release_SPEECH-12-701_en.htm
- David P., Hall and Tool A. (2000). *Is Public R&D a Complement or Substitute for Private R&D? A Review of the Econometric Evidence*. *Research Policy* 29, 497-529
- Lach S. (2002). *Do R&D Subsidies Stimulate or Displace Private R&D? Evidence from Israel*, *Journal of Industrial Economics*, 50, 369-390
- González X., Jaumandreu J., Pazó C. (2005). *Barriers to Innovation and Subsidy Effectiveness*, *RAND Journal of Economics*, 36, 930-949.
- Görg H.(2007). *The Effect of R&D Subsidies on Private R&D*. *Economica* 74(274), 215-234
- Catozzella, A. and Vivarelli, M. (2011). *Beyond Additionality: Are Innovation Subsidies Counterproductive?*, IZA Discussion Paper No. 5746.
- Busom I. and Fernández-Ribas A. (2008). The impact of firm participation in R&D programmes on R&D partnerships. *Research Policy* 37(2), 240-257
- Radica D., Pugh G., and Douglas D., (2015) *Additionality effects of public support programmes on cooperation for innovation: evidence from European manufacturing SMEs*,
- Streicher G.; Gretzmacher N.; Schibany A.; Österreichisches Institut für Wirtschaftsforschung (2004). *Input additionality effects of R&D subsidies in Austria : empirical evidence from firm-level panel data*. Wien Österr. Inst. für Wirtschaftsforschung
- Alecke B., Mitze T., Reinkowski J., Untiedt G. (2012). *Does firm size make a difference? Analysing the effectiveness of R&D subsidies in Germany*. *German Economic Review* 13(2), 174-195
- Madsen E., Clausen T., Ljunggren E. (2008). *Input, output and behavioural additionality: concepts and relationships*. *Entrepreneurship and innovation – organizations, institutions, systems and regions*. Druid Conference Paper, Copenhagen, CBS, Denmark, June 17-20, 2008
- Grupp, H. (2000). *R&D evaluation*. *Research Evaluation*, 8(1), 87-99.
- Harris R. and Moffat J. (2011). *R&D, Innovation and Exporting*, SERC Discussion Paper No 73
- Harris, R. & Trainor, M. (1995) *Innovations and R&D in Northern Ireland Manufacturing: A Schumpeterian Approach*, *Regional Studies*, 29, 593-604
- Mairesse, J. & Mohnen, P. (2002) *Accounting for Innovation and Measuring Innovativeness: An Illustrative Framework and an Application*, *The American Economic Review*, 92, 226-230.
- Nicolaides P (2014). *In search of economically rational environmental state aid: the case of exemption from environmental taxes*. *European Competition Journal* vol.10 no 1, 155-165
- European Commission (2012) *Revision of the state aid rules for research and development and innovation*. Issues paper. Brussels, 12.12.2012

- Vogel I. (2012) *Review of the use of 'Theory of Change' in international development*. The UK Department of International Development
- Funnell, S.C. and Rogers, P. J. (2011) *Purposeful program theory: effective use of theories of change and logic models*. San Francisco: Jossey-Bass/Wiley.
- Buisseret T., Cameron H. and Georghiou L. (1995), *What difference does it make? Additionality in the public support of R&D in large firms*, International Journal of Technology Management, Vol.10, Nos 4/5/6 , 587-600
- Aerts, K. and Czarnitzki D. (2006), *The impact of public R&D-funding in Flanders*, IWT report no.54
- Georghiou L. (2003), "Evaluation of behavioural additionality", Concept Paper, OECD Directorate for Science, Technology and Industry, Committee for Scientific and Technological Policy, Working Party on Innovation and Technology Policy
- Steurs, G., A. Verbeek, H. Vermeulen, B. Clarysse (2006), *A look into the black box: what difference do IWT R&D grants make for their clients?*, IWT report no.56.
- European Commission (2014). Common methodology for State aid evaluation. SWD(2014) 179 final

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Measuring Entrepreneurial Orientation in the Social Context

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Abstract

The objective of this paper is to identify differences between measurement of organisational entrepreneurship in for-profit and non-profit context and to propose the measures aligned to non-profit organisations. The main research question is whether the scales designed to measure entrepreneurial orientation can be used in non-profit organisations and under which conditions. Research methodology is based on review of research tools and measurement scales related to organisational entrepreneurship and comparison of for-profit and non-profit organisations, as well as their characteristics in the context of entrepreneurial orientation. Entrepreneurial orientation can be measured in non-profit organisations using existing scales that have been designed for business organisations, however they have to be modified, mostly in the dimension of competitive aggressiveness and autonomy. Additionally, the scale should be enriched with items related to cooperation with other organisations. It is necessary to develop methods and tools that enable the measurement of entrepreneurial orientation in non-profit organisation as well as comparative research on entrepreneurial orientation in for-profit and non-profit organisations. Some suggestions were formulated relating to the utilisation of entrepreneurial orientation scales (originally designed for business enterprises) in non-profit organisations.

Keywords: social entrepreneurship; entrepreneurial orientation; autonomy; inter-organisational cooperation

JEL codes: L26, L31

INTRODUCTION

Entrepreneurship is perceived as one of the sources of success for economies, organisations and human beings. Bhargava notes that “companies which treated entrepreneurship as an integral part of their business strategy succeeded in maintaining top ranks for years” (Bhargava, 2008, p. 31). Entrepreneurship is assigned both to for-profit and non-profit activities. In the case of the latter type of activity, the concept of social entrepreneurship has been developing over the last few decades.

Non-profit organisations (NPO), including many types of social enterprises that use business activities to provide social needs, play a significant role in modern societies. We have observed an increase in their numbers in many countries as well as an increase in the scale and scope of their activity. Many non-profit organisations face similar problems as for-profit enterprises; for example, limited resources, increasing expectations, or changes in the external environment. Many of them behave in similar ways; for example, they compete for resources, innovate to offer better services, or look for new opportunities to serve new social groups. Accordingly, we can compare them from several points of view. One such view is the level of entrepreneurial activity of the organisations.

The theory of organisational entrepreneurship and its related research methodology have been developing dynamically over the last few decades. However, they mostly focus on business activity. The challenge faced by researchers is to conceptualise and operationalise the organisational entrepreneurship in a social context. One of the concepts that could be applied to this context is entrepreneurial orientation (EO).

The objective of this paper is to investigate whether the scales designed to measure entrepreneurial orientation can be used in non-profit organisations (and under which conditions). Firstly, the concepts of entrepreneurship related to the organisational level are presented. Then, the methodologies dedicated to measuring organisational entrepreneurship are reviewed, with a focus on those scales used to measure the entrepreneurial orientation of organisations. Afterwards, the differences between for-profit and non-profit organisations are analysed (in the context of organisational entrepreneurship). Finally, some modification of the present scales of EO that have been employed by research will be suggested. To achieve the objective, the literature will be reviewed; and based on the results of the review, solutions enabling the measurement of entrepreneurial orientation in the social context will be recommended.

MATERIAL AND METHODS

The research problem behind this paper is measuring entrepreneurial activity in a non-profit organisation. The paper is a conceptual one, and its aim is to suggest some related measures adequate to the characteristics of these types of organisations.

To achieve the goal, the following sub-objectives will be achieved: (1) identification of organization-level entrepreneurship concepts; (2) defining specific traits of non-profit activity and their consequences for entrepreneurial activity; (3) recommending measures adequate to the entrepreneurship of non-profit organisations, including verification, if some measures used in for-profit entrepreneurship research could be used. The first and

second sub-objectives will be pursued by literature studies. Literature from the following fields will be reviewed and analysed:

- the general theory of entrepreneurship,
- organisational entrepreneurship and entrepreneurial orientation,
- social entrepreneurship and non-profit sector.

The relevant materials will be selected mostly from scientific journals focused on the above-mentioned fields. A number of sources will be limited to the most-cited publications; however, some new ones will also be included. Firstly, the materials from each field will be analysed separately, with a focus on issues related to other areas. Then, the propositions resulting from the previous analysis will be suggested and developed. Afterwards, the third sub-objective will be achieved through the critical analysis of present measures and inference based on previous literature studies.

LITERATURE REVIEW

General Theory of Entrepreneurship

Entrepreneurship is a multidimensional construct that can be analysed from different perspectives. One of the most-cited contemporary definitions was proposed by Shane and Venkatraman, who define entrepreneurship as a “scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated and exploited” (Shane & Venkatraman, 2000, p. 218). Stevenson, Roberts, and Grousbeck defined entrepreneurship as “a process by which individuals – either on their own or inside organisations – pursue opportunities without regard to the resources they currently control” (Stevenson *et al.*, 1989) quoted in (Stevenson & Jarillo, 1990, p. 23). Hisrich, Peters and Sheperd (2005) quoted in (Leutner *et al.*, 2014, p. 58) identify entrepreneurship with “behaviours that are related to the creation of value through the exploitation of opportunities in novel and innovative ways”. McGrath and MacMillan (2000) quoted in (Ma & Tan, 2006, p. 714) perceive entrepreneurship as “the relentless pursuit of opportunities as well as resources”.

In the above definitions, entrepreneurship is connected with opportunities. Casson (1982) quoted in (Shane & Venkatraman, 2000, p. 220) defined opportunities as “those situations in which new goods, services, raw materials, and organising methods can be introduced and sold at greater than their cost of production”. Opportunity is also defined as a “future situation which is deemed desirable and feasible” (Stevenson & Jarillo, 1990, p. 23). Shane and Venkatraman (2000, p. 220) acknowledge that opportunities themselves are objective phenomena that are not known to all parties at all times, but the recognition of entrepreneurial opportunities is a subjective process. Kirzner (1997) quoted in (Shane & Venkatraman, 2000, p. 220) mentions that entrepreneurial opportunities require the discovery of new means-ends relationships, whereas the other for-profit opportunities involve optimisation within existing means-ends frameworks.

Gartner (1989) identifies entrepreneurship with creating organisations. For him, this is an activity that differentiates entrepreneurs from non-entrepreneurs: “entrepreneurs create organisations, while non-entrepreneurs do not” (Gartner, 1989, p. 47).

Entrepreneurship is also perceived as a process that “involves all the functions, activities, and actions associated with the perceiving of opportunities and the creation of

organisations to pursue them” (Bygrave & Hofer, 1991, p. 14). Hisrich, Peters and Shepherd (2005) argue that the entrepreneurial process involves the identification and evaluation of opportunity, development of the business plan, determination of the required resources, and management of the resulting enterprise.

Entrepreneurship is also perceived as a set of attitudes, such as the desire to achieve, the passion to create, the yearning for freedom, the drive for independence, and the embodiment of entrepreneurial visions and dreams through tireless hard work, calculated risk-taking, continuous innovation, and undying perseverance (Ma & Tan, 2006, p. 704).

Organisational Entrepreneurship and Entrepreneurial Orientation

Entrepreneurship can be treated as a trait of an organisation. It reflects the entrepreneurial behaviours in existing organisations. These “formal or informal activities aimed at creating new businesses in established companies through product and process innovations and market developments” are called corporate entrepreneurship (Zahra, 1991, p. 261) quoted in (Morris & Kuratko, 2002, p. 31). Corporate entrepreneurship is also perceived as a way of “renewal or innovation within current organization” (Sharma & Chrisman, 1999, p. 13) quoted in (Morris & Kuratko, 2002, p. 31). Such a concept shows that the entrepreneurial process does not end when the organisation is founded, but it is continued within that organisation. The entrepreneurial process could be described as a cyclical one, and it could be connected with organisational development. It could be presented on the model of a spiral of the entrepreneurial development of an organisation (Kusa, 2015, p. 705). Kuratko and Audretsch stated that “the major impetus underlying corporate entrepreneurship is to revitalize innovation, creativity, and leadership in corporations. Corporate entrepreneurship may possess the critical components needed for the future productivity of global organizations” (Kuratko & Audretsch, 2013, p. 332).

Organisations vary in terms of entrepreneurship. Researchers and practitioners strive to measure the level of entrepreneurship in organisations. Morris (1998, p. 18) states that “entrepreneurship occurs in varying degrees and amounts” and suggests the concept of “entrepreneurial intensity”. Lumpkin and Dess (1996, p. 137) developed a concept of entrepreneurial orientation (EO). This concept is based on the definition of an entrepreneurial firm, which was proposed by Miller (1983). He stated that “an entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is first to come up with ‘proactive’ innovations, beating competitors to the punch” (Miller, 1983, p. 771). Covin and Slevin (1989, p. 75) have built a scale to measure the EO, which is comprised of three dimensions: risk-taking, innovativeness, and proactiveness, and Lumpkin and Dees (1996, p. 137) augmented it by adding two more dimensions: autonomy and competitive aggressiveness. Some modifications of this scale were proposed. One of them is the scale of Hughes and Morgan, who used 18 items to measure the dimensions of entrepreneurial orientation and 5 items to estimate the business performance of firms at the embryonic stage of development. They have found that uniform effort in all EO dimensions does not generate consistent gains in business performance, and organising activities around proactiveness and, to some extent, innovativeness is essential to securing improved performance for such firms (Hughes & Morgan, 2007, pp. 657-658).

Covin and Wales (2012, p. 677) analysed a different measurement approach towards entrepreneurial orientations and stated that “unidimensional versus multidimensional

mensional EO measurement models are consistent with fundamentally different conceptualisations of the EO construct". Schillo (2011, p. 24) suggests that entrepreneurial orientation could be useful for practitioners as a source of managerial recommendations. However, entrepreneurial orientation is not an effective concept under all environmental conditions. For example, Frank, Kessler and Fink (2010, p. 194) concluded from their empirical analyses that it "might preferably be pursued in rapidly changing environments that offer new opportunities, and in which the firm has sufficient financial resources at its disposal to take advantage of those opportunities using a portfolio of innovation activities", but it is not advisable using it when "a dynamic environment is combined with low access to financial capital".

Social Entrepreneurship

Entrepreneurial activities can be observed in non-profit organisations. They are linked with the tendency of becoming 'business-like' of non-profit organisations (Maier, Meyer & Steinbereithner, 2014, p. 1). Verreynne, Miles and Harris (2013, p. 113) have observed that "these 'profit for purpose' organisations use market transactions to generate social benefits directly (for example by providing employment opportunities for the disabled in sheltered workshops) and/or indirectly (by creating revenues that support social initiatives) for their beneficiaries". Such activities are analysed in the frame of the social entrepreneurship concept, which offers a theoretical basis for such analysis.

Yunus (2011) defines social entrepreneurship as an "initiative of social consequences, taken by an entrepreneur with a social vision, where the initiative may be both non-economic, associated with a charity or business initiative oriented towards personal profit or without such an option". Mair and Marti (2006, p. 37) perceive social entrepreneurship as "a process involving the innovative use and combination of resources to pursue opportunities to catalyse social change and/or address social needs". They argue that social entrepreneurship can occur in both new organisations and established ones.

Researchers of the European Research Network identify social entrepreneurship with social economy. They define social enterprises as "organisations with an explicit aim to benefit the community, initiated by a group of citizens and in which the material interest of capital investors is subject to limits. Social enterprises also place a high value on their autonomy and on economic risk-taking related to ongoing socio-economic activity" (Defourny & Nyssens, 2006, p. 5). The model proposed by the European Research Network distinguishes three sets of criteria (three economic and entrepreneurial, three social, and three related to the participatory governance) according to which entities and initiatives are classified as parts of a social economy. The economic criteria comprise a continuous activity, producing goods and/or selling services, a significant level of economic risk, and a minimum amount of paid work. The social criteria include the explicit aim to benefit the community, an initiative launched by a group of citizens or civil society organisations, and a limited profit distribution. Finally, the dimension of participatory governance is described by a high degree of autonomy, a decision-making power not based on capital ownership, and a participatory nature, which involves various parties affected by the activity (Defourny & Nyssens, 2012, pp. 12-15).

In the EU's documents, the term 'social enterprise' is used to cover the following types of business (European Commission, 2011, p. 2):

- those for which the social or societal objective of the common good is the reason for the commercial activity, often in the form of a high level of social innovation,
- those where profits are mainly reinvested with a view to achieving this social objective,
- those where the method of organisation or ownership system reflects their mission, using democratic or participatory principles or focusing on social justice.

Because of many approaches to social enterprises as well as different definitions and legal forms dedicated to this kind of activity in different countries, it is not precise to identify social enterprises with non-profit organisations (although many social enterprises could be classified as non-profits). There is an increasing number of publications describing social initiatives (e.g., pioneering social enterprises in Bangladesh (Yunus, 2011) or activities of Ashoka leaders (Bornstein, 2009), as well as reports. One of the examples of statistical research is an examination of social entrepreneurship in 49 countries based on the Global Entrepreneurship Monitor methodology. The results of this research show that in widely defined social entrepreneurship there is a significant part of the population involved: 4.1% of the population in Belgium, 7.5% in Finland, 3.1% in France, 3.3% in Italy, 5.4% in Slovenia, and 5.7% in the United Kingdom (Terjesen, Lepoutre, Justo & Bosma, 2011). Other statistics show that European social enterprises operate within a wide range of areas, including work integration of disadvantaged groups and social services of general interest such as long-term care for the elderly and for people with disabilities, early education and childcare, employment and training services, social housing, social integration of disadvantaged such as ex-offenders, migrants, drug addicts, etc., and health care and medical services (European Commission, 2014, p. 2).

Applying Entrepreneurial Orientation to Social Entrepreneurship

Scholars researching non-profit organisations compare them and their management practices with their business counterparts. Austin, Stevenson and Wei-Skillern (2006, pp. 3-4) suggest focussing on the following variables to conduct a comparative analysis:

- market failure, when those needing the services are not able to pay for them, which is perceived as a problem by the commercial entrepreneurs and an opportunity by social ones,
- mission, which is focused on creating social value in the case of social entrepreneurship and on creating profitable operations resulting in private gain in the case of commercial entrepreneurship,
- resource mobilisation, both financial (which are acquired from different sources) and human (staff in non-profit organisations is often not compensated as competitively as in commercial enterprises),
- performance measurement, which relies on relatively tangible and quantifiable measures of performance, such as financial indicators, market share, customer satisfaction, and quality in the case of commercial organisations and a much more challenging measurement of social impact, which will remain a fundamental differentiator, complicating accountability, and stakeholder relations.

Lumpkin, Moss, Gras, Kato and Amezcua (2013, p. 763) analysed entrepreneurial processes within social contexts and the antecedents and outcomes that make social entrepreneurship unique. They pointed to the presence of a social mission and/or moti-

vation to pursue a social purpose, multiple stakeholders linked to the purpose or mission, and a perspective that opportunity-identification processes may be different when directed toward social problems. They stated that many entrepreneurial processes change very little in the presence of antecedents and outcomes that are related to social context. However, these processes are likely to be challenged by the presence of multiple stakeholders and how autonomy and competitive aggressiveness function in a social context (Lumpkin *et al.*, 2013, p. 780). This is in line with Žur's conclusion that "non-financial performance outcomes have not been addressed enough" and suggests spreading the research across different entrepreneurship contexts (such as social and non-profit) and adjusting relevant scales and measures (Žur, 2015, p. 22).

Morris, Webb and Franklin (2011) relate non-profit organisations directly to entrepreneurial orientation, conceptualised in a three-dimensional scale built by Covin and Slevin (1989). Morris *et al.* (2011, p. 956) observed that "the meaning of innovativeness, proactiveness, and risk taking are more complex and multifaceted in the non-profit context", and they proposed an alternative conceptualisation, with sub-dimensions emerging for all three dimensions, which are meant to capture the meaning of entrepreneurship and EO more accurately in the non-profit context.

We could find some examples of using EO scales in the non-profit sector. Davis, Marino, Aaron and Tolbert (2011) explored the differences in entrepreneurial orientation by profit status. They surveyed 134 nursing home administrators, and they have found that "there was no significant difference in the EO between non-profits and for-profits, but that non-profits were significantly more likely to engage in environmental scanning activities such as gathering information from trade magazines and suppliers and that they remained abreast of economic and technological trends more than their for-profit counterparts" (Davis *et al.*, 2011, p. 197). Pearce, Fritz and Davis (2009) surveyed 250 religious congregations using a modified Covin and Slevin (1989) EO scale. They observed that entrepreneurial orientation is positively associated with organisational performance (Pearce *et al.*, 2009, p. 219).

DISCUSSION

The results of the literature review suggest that (1) the theory of entrepreneurship offers different concepts of organisational entrepreneurship, (2) some of these concepts are operationalised, (3) there were some surveys conducted based on these conceptualisations, and (4) some attempts to measure the level of entrepreneurial activity in non-profit organisations were made. Based on these observations, we can assume that it is possible to measure the level of entrepreneurial activity of non-profit organisations. However, there are still some questions as well as challenges faced by researchers when designing the survey on entrepreneurial orientation in the non-profit sector.

The present experience in measuring organisational entrepreneurship suggests using scales aligned with the concept of entrepreneurial orientation. According to the Covin and Slevin (1989) measure, EO frames innovativeness, proactiveness, and risk-taking. In the Hughes and Morgan (2007) scale, competitive aggressiveness and autonomy is also included. The statements related to competitive autonomy, as "In general, our business takes a bold or aggressive approach when competing" or "We try to undo and out-manoeuvre the competition as best as we can" (Hughes & Morgan,

2007, p. 659) could be non-relevant to behaviours of non-profit organisations. These organisations tend to focus on their social mission and unmet social needs, and they strive to solve some social problems and maximise social value rather than get a better competitive position and maximise their financial value. On the other hand, NPOs are more willing to cooperate with other organisations working with the same target groups, which is not typical in the case of business enterprises¹. If we interpret cooperation as a way of pursuing an opportunity to satisfy social needs, we can treat it as a specific dimension of social entrepreneurship. It leads us to the proposition that, in the case of research comparing for-profit and non-profit entrepreneurship, the Hughes and Morgan (2007) scale is more adequate, and it should be expanded to the item or items related to cooperation with other organisations focussed on the same goals. It could be hypothesised that this dimension mostly distinguishes both types of organisations and entrepreneurship (for-profit and non-profit).

The next attributes that could differentiate both types of organisation are autonomy and independency, which are perceived by Lumpkin and Dees (1996, p. 140) as key components of entrepreneurial orientation. It could be also expected that social entrepreneurs have different attitudes to risk and are led by different motivations to take risk. These differentiating dimensions require special attention during the design of measures and analysis of results.

Some suggested changes in the items in the EO scale are presented in Table 1: original indicators are presented in column A, while the suggested indicators aligned with non-profit context are in column B.

Some terminological modifications are required when implementing the scales to social context; e.g., instead of the term “business”, the term “organisation” can be used. In the case of tools dedicated to a particular group of organisations, some more changes could be desirable as done by Pearce, Fritz, and Davis (2009), who used the scale of Covin and Slevin (1989) to survey EO in religious congregations – they asked about “new ministries and worship services” instead of “new products and services” (Pearce *et al.*, 2009, p. 219).

Additionally, in the case of comparative research focussed simultaneously on for-profit and non-profit organisations, it is necessary to decide whether one universal measuring tool is to be used or many tools adjusted to particular groups of organisations in parallel. The universal tool could be inadequate for every type of organisation. In the latter case, all of these tools have to be compatible with each other to enable a comparison of results. It could be required to scale the measured dimensions differently in the case of for-profit and non-profit organisations (Morris *et al.*, 2011, p. 966).

¹ This does not mean that for-profit enterprises are not able or not willing to cooperate – they do so in many ways, but there are different motivations and expectations behind such activity, as they focus on economic goals (e.g., cooperating with one group of enterprises to compete with another).

Table 1. Examples of indicators of entrepreneurial orientation designed for for-profit and non-profit organisations

Original content of items (designed for for-profit organisations)	Modified content of items (designed for non-profit organisations)
In general, the top managers of my firm favour a strong emphasis on R&D, technological leadership, and innovations*	In general, the leaders of my organisation favour a strong emphasis on scientific analysis and predictions, pioneering solutions, and innovations
In dealing with its competitors, my firm typically adopts a very competitive, “undo-the-competitors” posture*	In dealing with other organisations, my organisation typically focus on the maximisation of social value, including cooperation with other organisations
In general, the top managers of my firm have a strong proclivity for high-risk projects (with chances of very high returns)*	In general, the leaders and top managers of my organisation have a strong proclivity for high-risk projects (with chances of solving the most difficult social problems)
We always try to take the initiative in every situation (e.g., against competitors, in projects when working with others)**	We always try to take the initiative in every situation (e.g., against groups of opponents or sceptics, in projects when working with others)
In general, our business takes a bold or aggressive approach when competing**	In general, our organisation takes a bold or aggressive approach in the face of total inability
We try to undo and out-manuever the competition as best as we can**	We try to convince other organisation to cooperate with us or to support our aims as best as we can

* items from the Covin and Slevin EO scale, ** items from the Hughes and Morgan EO scale

Source: own elaboration based on (Hughes & Morgan, 2007, p. 659; Covin & Wales, 2012, p. 692).

CONCLUSIONS

Measuring entrepreneurial activity in non-profit organisations is one of the challenges faced by researchers and practitioners. Literature studies show that there are some methodologies that enable the measurement of such activities in business organisations. The entrepreneurial orientation scales (designed originally for for-profit organisations) can be used in non-profit organisations. However, they require some modification. These modifications refer especially to those dimensions that differentiate both types of organisation. According to the results of the literature study, these areas include relations with other organisations as well as the autonomy of the employees and members. Taking into account the findings above, modifications of some items of the EO scales were suggested in the paper.

It should be noted that, as entrepreneurship is a multidimensional phenomenon that occurs in many types of activities, the suggested modifications could be irrelevant to each organisation. Moreover, the EO scales simplify the phenomenon of entrepreneurship, which may result in skipping or not fully reflecting some attributes of the entrepreneurship. Relying on experiences from business organisations may lead to omitting some aspects of entrepreneurship that are important within non-profit organisations but not relevant to business organisations (and not reflected in the original scales). To minimise these limits, it is necessary to explore the specific characteristics of the surveyed organisations and their environment. Creating new scales dedicated solely for non-profit organisations emerges as an alternative solution. However, such a new scale needs to be statistically tested, while

the existing ones have already been verified. The next limitation is connected with the geographical context. The analysed literature reflects the characteristics of entrepreneurial practice in the non-profit sector in the European Union and the United States. The findings and recommendations might not be applicable to non-profit organisations operating in other regions. This limitation is connected partly with the methods applied in the paper, and it could be recommended to extend the scope of future research to other areas as well as include other research methods to verify the propositions.

The literature study and (especially) the published results of existing research suggest that it is desirable to support entrepreneurial behaviours in non-profit organisations. Practical prompts for practitioners are needed; for example, which solutions from for-profit organisations could be implemented in non-profit ones (and vice-versa) or how can entrepreneurship in non-profit organisations be supported?

Parallel to developing practical knowledge, the theoretical base should be expanded. To understand the nature of entrepreneurship as a universal phenomenon existing in different kinds of activities, it is recommended to conduct comparative studies covering both social and business organisations. One of the questions to be answered is: In which dimensions are social and business entrepreneurship similar, and in which ones are they different? To understand the nature of social entrepreneurship, it is important to compare entrepreneurial behaviours in social enterprises and other types of non-profit organisation (e.g., charities, associations) and to explore which organisational or legal forms of non-profit organisations are more eligible for using business activities to strengthen the achievement of their social goals. Comparing entrepreneurship in non-profit and for-profit organisations, or traditional non-profits with social enterprises, requires the development of research methodology, including the design of a questionnaire or methods of collecting data.

Taking into account the role of the non-profit sector, researching entrepreneurial orientation in a social context is reasonable objective, as it could support the future development of non-profit organisations and (furthermore) their effectiveness in solving social problems.

REFERENCES

- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both?. *Entrepreneurship Theory and Practice*, 30(1), 1–22. doi: 10.1111/j.1540-6520.2006.00107.x
- Bhargava, S. (2008). Entrepreneurial Management: Emergence of a New Field. In S. Bhargava (Ed.), *Entrepreneurial Management* (pp. 1-41). Los Angeles: SAGE Publications.
- Bornstein, D. (2009). *Jak zmienić świat. Przedsiębiorcy społeczni – wizjonerzy naszych czasów*. Gdańsk: AnWero Wydawnictwo.
- Bygrave, W.D., & Hofer, C.W. (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16(2), 13-22.
- Casson, M. (1982). *The entrepreneur*. Totowa, NJ: Barnes & Noble Books.
- Covin, J.G., & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10, 75-87. doi: 10.1002/smj.4250100107
- Covin, J.G., & Wales, W.J. (2012). The Measurement of Entrepreneurial Orientation. *Entrepreneurship Theory and Practice*, 36(4), 677-702. doi: 10.1111/j.1540-6520.2010.00432.x

- Davis, J.A., Marino, L.D., Aaron, J.R., & Tolbert, C.L. (2011). An Examination of Entrepreneurial Orientation, Environmental Scanning, and Market Strategies of Nonprofit and For-Profit Nursing Home Administrators. *Nonprofit and Voluntary Sector Quarterly*, 40, 197-211. doi: 10.1111/10.1177/0899764009351112
- Defourny, J., & Nyssens, M. (2006). Defining social enterprise. In M. Nyssens (Ed.), *Social Enterprise. At the crossroads of market, public policies and civil society* (pp. 3-26). London and New York: Routledge.
- Defourny, J., & Nyssens, M. (2012). The EMES approach of social enterprise in a comparative perspective. *EMES Working Papers Series*, 12(3). Retrieved on April 30, 2016 from <http://www.emes.net>
- European Commission (2011). *Social Business Initiative: Creating a favorable climate for social enterprises, key stakeholders in the social economy and innovation*. COM (2011) 682 final, Brussels.
- European Commission. (2014). *A map of social enterprises and their ecosystems in Europe. Executive Summary*. London: ICF Consulting Service.
- Frank, H., Kessler, A., & Fink, M. (2010). Entrepreneurial Orientation and Business Performance – a Replication Study. *Schmalenbach Business Review*, 62, 175-198.
- Gartner, W.B. (1989). „Who is an entrepreneur?” Is the wrong question. *Entrepreneurship Theory and Practice*, Summer, 47-67.
- Hisrich, R.D., Peters, M.P., & Shepherd, D.A. (2005). *Entrepreneurship (6th Edition)*. New York, USA: McGraw-Hill Irwin.
- Hughes, M., & Morgan, R.E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36,651-661. doi: 10.1016/j.indmarman.2006.04.003
- Kirzner, I. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of Economic Literature*, 35, 60-85.
- Kuratko, D.F., & Audretsch, D.B. (2013). Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship Management Journal*, 9, 323-335. doi: 10.1007/s11365-013-0257-4
- Kusa, R. (2015). Rozwój organizacji i proces przedsiębiorczości. *Marketing i Rynek*, 5, 696-707.
- Leutner, F., Ahmetoglu, G., Akhtar, R., & Chamorro-Premuzic, T., (2014). The relationship between the entrepreneurial personality and the Big Five personality traits. *Personality and Individual Differences*, 63, 58-63. doi: 10.1016/j.paid.2014.01.042
- Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21, 135-172.
- Lumpkin, G.T., Moss, T.W., Gras, D.M., Kato, S., & Amezcua, A.S. (2013). Entrepreneurial processes in social contexts: how are they different, if at all? *Small Business Economics*, 40, 761-783. doi:10.1007/s11187-011-9399-3
- Ma, H., & Tan J., (2006). Key components and implications of entrepreneurship: A 4-P framework. *Journal of Business Venturing*, 21, 704-725. doi: 10.2139/ssrn.1552136
- Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business*, 41, 36-44.
- Maier, F., Meyer, M., & Steinbereithner, M. (2014). Nonprofit Organizations Becoming Business-Like: A Systematic Review. *Nonprofit and Voluntary Sector Quarterly*, 1-23. doi:10.1177/0899764014561796

- McGrath, R.G., & MacMillan, I.C. (2000). *The Entrepreneurial Mindset: Strategies for Continuously Creating Opportunity in the Age of Uncertainty*. Boston, MA: Harvard Business School Press.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770-791.
- Morris, M.H. (1998). *Entrepreneurial Intensity: sustainable advantages for individuals, organizations and societies*. Westport CT: Quorum Books.
- Morris, M.H., & Kuratko D.F. (2002). *Corporate Entrepreneurship. Entrepreneurial Development within Organizations*. Thomson South-Western.
- Morris, M.H., Webb, J.W., & Franklin, R.J. (2011). Understanding the Manifestation of Entrepreneurial Orientation in the Nonprofit Context. *Entrepreneurship Theory and Practice*, 35(5), 947-971. doi: 10.1111/j.1540-6520.2011.00453.x
- Pearce, J.A.II, Fritz, D.A., & Davis, P.S. (2009). Entrepreneurial Orientation and the Performance of Religious Congregations as Predicted by Rational Choice Theory. *Entrepreneurship Theory and Practice*, 34(1), 219-248. doi: 10.1111/j.1540-6520.2009.00315.x
- Schillo, S. (2011). Entrepreneurial Orientation and Company Performance: Can the Academic Literature Guide Managers? *Technology Innovation Management Review*, November, 20-25.
- Shane, S., & Venkatraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217-226.
- Sharma, P., & Chrisman, J.J. (1999). Toward a Reconciliation of the Definitional Issues in the Field of Corporate Entrepreneurship. *Entrepreneurship Theory and Practice*, 23(3), 11-28.
- Stevenson, H.H., Roberts M.J., & Grousbeck H.I. (1989). *New Business Ventures and the Entrepreneur*. Homewood, IL: Irwin.
- Stevenson, H.H., & Jarillo J.C. (1990). A Paradigm of Entrepreneurship: Entrepreneurial Management. *Strategic Management Journal*, 11(4), 17-27.
- Terjesen, S., Lepoutre, J., Justo, R., & Bosma, N. (2011). *Global Entrepreneurship Monitor Report on Social Entrepreneurship. GEM: Global Entrepreneurship Monitor*. Global Entrepreneurship Research Association.
- Verreynne, M.L., Miles, M.P., & Harris, C. (2013). A short note on entrepreneurship as method: a social enterprise perspective. *International Entrepreneurship Management Journal*, 9, 113-128. doi: 10.1007/s11365-012-0239-y
- Yunus, M. (2011). *Przedsiębiorstwo społeczne. Kapitalizm dla ludzi*. Warszawa: ConCorda.
- Zahra, S.A. (1991). Predictors and Financial Outcomes of Corporate Entrepreneurship: An Exploratory Study. *Journal of Business Venturing*, 6(4), 259-286. doi: 10.1016/0883-9026(91)90019-A
- Żur, A. (2013). Entrepreneurial Orientation and Firm Performance – Challenges for Research and Practice. *Entrepreneurial Business and Economics Review*, 1(2), 7-27. doi: <http://dx.doi.org/10.15678/EBER.2013.010202>

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The Impact of Taxation on Entrepreneurship in the Tourism Sector

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Abstract

The objective of this paper is to assess the impact that these legal changes have had on decisions taken by new entrepreneurs in the tourism sector in Spain. Our aim is to determine how entrepreneurs' decisions to start a business have been affected by the existing tax incentives. To conduct this research we selected the sample and designed an online survey in order to determine both: the entrepreneurs' perception of the taxation in force and whether they had taken advantage of the incentives provided for in the Law on Support for Entrepreneurs. Our empirical study clarifies the fiscal reality confronting entrepreneurs involved in the tourism sector. Essentially, the most distinctive feature is that, although they can benefit from the incentives, they operate in an economic sector submitted to a high level of fiscal pressure. This means that if the enterprise is not a start-up, it will be submitted to high taxation, which has an impact on profitability. It is undeniable that incentives to entrepreneurship are designed precisely to stimulate the creation of new companies, but it is illogical not to support the continued existence of these companies once the initial benefits are no longer applicable. This situation is the result of the elevated fiscal pressure implemented in a number of countries, including Spain, in an attempt to solve their budgetary deficit problems. This issue does not exclusively affect the tourism industry. However, due to the specific characteristics of the sector, it is an attractive area for all public administrations at national, regional and local level. This is not only because of the economic importance of the sector and the potential revenue involved.

Keywords: Entrepreneurship, Rural Tourism, Taxation

JEL codes: L26, L83, E62

INTRODUCTION

This study focuses on tourism as a source of income for the tax authorities. The scenario highlights the attractive nature of this thriving business for the tax authorities, since it guarantees considerable income with minimum regulatory effort. In contrast, the risk over-taxation disincentives the activity and reducing the potential resources, as well as negatively affecting enterprises' profitability and labour costs. In sum, the problem is how to obtain resources from tourism sector without making seem less attractive the business opportunities. Our academic interest focuses specifically on assessing the impact on the tourism sector of tax measures to encourage entrepreneurship, bearing in mind that it is one of sectors with most opportunities for success in the Spanish economy.

From a fiscal perspective, there are two different aspects affecting tourism entrepreneurship. On one hand, entrepreneurs in this sector are subject to the same legislation as all entrepreneurs: the tax burden is the same as that for any entrepreneur. On the other hand, this is a thriving sector with considerable tax revenue potential. Our interest, then, is to identify the impact of recent reforms on the tax burden borne by entrepreneurs in the industry. This is something of a grey area, in which there is a taxpayer who is not legally differentiated but is, however, subject to specific tax treatment as an entrepreneur and as an operator in a specific activity. The underlying aim of this work is to contrast the tax measures designed to encourage entrepreneurship and the tax provisions for the industry so as to assess their compatibility.

The study begins by outlining the general characteristics of the tourism sector in Spain, highlighting the impact of rural tourism on entrepreneurship in the industry. Data demonstrate the maturity of so-called "sun and beach" tourism as opposed to the emerging formats which deviate from this traditional tourist product and offer opportunities for new entrepreneurial activity.

The second section systematically describes the tax incentives for entrepreneurs, their legal framework and the origin of their implementation in Spanish legislation. The wide-ranging nature of these incentives across different tax regimes complicates logical presentation, hence we have opted to approach them from the perspective of their origin: recommendations of the European Commission, provisions consolidated in the recent history of each particular tax, and the provisions of the 2013 Law on Support for Entrepreneurs and its later amendments. This chronological perspective allows us to appreciate the evolution of the tax treatment of entrepreneurship in Spain and to associate it with the recent economic environment.

In order to provide an overall scenario of the taxation of the entrepreneur in the tourism sector, we must define the specific characteristics of the entrepreneur, especially the tax challenges they face. Rather than differences in the payment of taxes, what we find are taxes which although not directly taxing the activity, do have an impact on it. We are referring here to decentralised environmental taxes, which have a major impact on the tax burden supported by these enterprises. However, we will also analyse the fiscal impact of undeclared activities on the tourism sector. This is an important issue, as witnessed by its inclusion among the objectives for the present tax year of Spain's National Tax Administration Agency (AEAT).

Finally, we will propose the next step in this research, which is the administration of a questionnaire directed at the entrepreneurs in the sector, so as to determine their evaluation of the applicable taxes and the incentives they bring to their entrepreneurial activities.

Given that this is an ongoing study, the capacity to draw conclusions is limited to the theoretical foundations presented in the work. Nevertheless, we can outline some of the consequences of tax regulations on entrepreneurs in the sector, which we expect to be confirmed by the results of the fieldwork.

TAXATION OF ENTREPRENEURS IN THE TOURISM SECTOR

Taxation of Entrepreneurs

In recent years entrepreneurship has been promoted as the perfect solution to overcome the effects of the recession suffered by Europe since 2008. The public policies designed to incentivize this activity have triggered the publication of numerous regulations aimed at fostering entrepreneurship, both at national and regional level. However, without a doubt, the most direct intervention is Law 14/2013 of 28 September on the Support of Entrepreneurs and Internationalisation. Following this national law, several Autonomous Communities passed their own laws in the same regard.

The problem with entrepreneurs is that they are not taxable persons submittable to an integrated tax intervention. As a result, the effectiveness of tax measures depends on the legal status they choose for their enterprise and the sector it belongs to. Bearing in mind, furthermore, that economic activities are subject to different taxes, the impact of this policy of incentives to entrepreneurship should be extended to all areas of tax law, including both direct and indirect taxes. This policy should be uniform, despite involving different tax administration agencies, as previously mentioned. The complexity of this situation makes it easy to underline the difficulty to unify the incentives to entrepreneurship implemented by the different tax agencies and applied to varying tax entities. It is evident that coordination of tax measures is a priority if entrepreneurship is to be given effective, favourable tax treatment.

However, the difficulty of the context cannot hinder the design and administration of an effective policy. The need to take action is clear from the recommendations made by national and international organisations regarding guidelines for the policy to be implemented by the public authorities. The Lisbon European Council of 2000, which aimed to make Europe a more competitive and dynamic economy, included among its measures the creation of a friendly environment for starting up and developing innovative businesses, especially SMEs. One of the requirements to meet this goal is to lower the costs of doing business – including taxes – and remove unnecessary red tape.

Research on entrepreneurial activity suggests that the proliferation of administrative, legal and fiscal red tape and the notable complexity of certain procedures act as a deterrent to starting up enterprises. This has a considerable impact on the process of starting up a business and the consequences of the decisions taken during this process influence the start-up and development of business activity. The Eurobarometer (2012) showed that during the onset and the development of the economic recession the proportion of citizens wanting to be their own boss had fallen considerably from 45% to 37%. At the same time, it was demonstrated that the implementation of business creation programmes in secondary

schools led to between 15 and 20% of participants becoming entrepreneurs. Despite the importance given to the knowledge economy in EU development policies, the intention is to act in other areas which permit greater implementation of new enterprises.

Priority Areas for Incentivising Entrepreneurship, as Considered by the European Commission

In 2013 the European Commission presented an action plan to support entrepreneurs and *revolutionise entrepreneurial culture in Europe*. The plan highlights the key role of education and training to nurture entrepreneurship and includes specific measures to help young people, women, seniors, migrants and the unemployed to become entrepreneurs. The commission states that the high level of EU unemployment leaves untapped resources, especially amongst women and young people. The plan identifies obstacles to entrepreneurship which it aims to tackle by actions to support emerging enterprises and facilitate start-ups. It specifically aims to *make transfers of business ownership more successful, improve access to finance and give honest entrepreneurs a second chance*.

The Figure 1 summarises the obstacles to entrepreneurship detected by the EC and the measures to be taken, on the premise that entrepreneurship is a key driver of economic activity to create more employment, more innovation and more competitiveness in the economies of the EU Member States.

Obstacles to entrepreneurship
<ul style="list-style-type: none"> • Access to finance • Support during the crucial phases of the business lifecycle • Unleashing of new business opportunities of the digital age • Easier transfer of business ownership • Second chances for honest entrepreneurs after bankruptcy • Administrative simplification

Figure 1. Key areas for entrepreneurship in the EU

Source: Compiled by authors using the Eurobarometer (2012).

Most of the ideas proposed by the Commission refer to tax measures which each member state has attempted to implement within their respective legislations. In the case of Spain, the Table 1 shows the progress towards the EU recommendations.

The information in the table above shows the efforts made by the Spanish administration to adapt its tax regulations to the EC recommendations. However, each measure should be studied separately so as to calculate its effectiveness and its impact on entrepreneurship.

- The deduction in the total tax liability established in article 68 of the Income Tax Law provides for a 20% reduction in contributions for the acquisition of shares or participations in the social capital of new or recently created enterprises, with a limit of €50,000 in the basis for calculation. This incentive cannot be interpreted as direct stimulus to entrepreneurship since to be applied it requires that the shareholder – and spouse and relatives, either direct or collateral, by blood or affinity, up to the second degree, own no more than 40% of the voting rights in the organisation. There is no parallel to this

- regulation in direct company taxation. This limited tax incentive with considerable legal requirements, is restricted to capital contributions made by individuals.
- Unrestricted depreciation for investment in tangible and intangible fixed assets and property is restricted to the types of businesses referred to above, it is not a general incentive to entrepreneurship, but a formula traditionally used in Spanish corporate income tax to encourage the continued existence of organisations where shareholders only contribute their labour.
 - The application of the VAT rates of the member state of destination is the aim proposed for the harmonisation of the principal indirect tax in the EU member states. It has been in force since January 1, 2015. Until that date the VAT of the state of origin was applicable. It is a somewhat complex matter since previously a difference was made in the tax treatment between operations conducted over the Internet, between goods and services and goods provided in digital format were classified as intangible assets¹. This difference in treatment has disappeared with the coming into force across the EU of the destination-based VAT rate regulations. The result is that any business will be responsible for paying the VAT corresponding to the end consumer of the product sold in accordance with the legislation of the buyer's member state. They will have to adjust to the formal requirements and, most importantly, will have to apply the tax rate of the buyers' member state.
 - Another of the classic incentives in the Spanish tax regulations is the omission of capital gains on the transfer of corporate assets or shares in the same. In this situation the requirements provided for in Article 20 of the Law on Inheritance and Donations are applicable. This provision is valid in the case of transfer of ownership to a descendent once the previous owner is no longer working and has ceased managerial activity. If these conditions are met, the transfer is subject to lower taxation, with a reduction of up to 99%, depending on the autonomous community². Strictly speaking, this is not an incentive for entrepreneurship, but is more directed at family businesses.
 - The recent Royal Decree 1/2015 of 27 February includes what has come to be known as the second chance mechanism. This law provides for a mechanism by which a taxpayer who has suffered a business failure is free to undertake a similar initiative. The law provides that in certain circumstances a debtor is exonerated of his or her responsibility to meet debts. Provided that the debtor is acting in good faith, in other words, it is not a case of strategic insolvency aimed at avoiding the liquidation of debts to creditors, the insolvent person may have his or her pending debts cancelled following the insolvency proceedings. This initiative is designed to

¹ As a result of this difference in treatment, digital assets were taxed as services, at the tax rate applied in the Member State where the provider was domiciled. For this reason, the largest multinational enterprises in the sector, such as Amazon, had their tax residence fixed in countries with low indirect taxation by VAT. Amazon's digital product service was subject to the rate in Luxembourg, 3%, as compared to 21%, which is the rate applied to eBooks in Spain. This gives an idea of the loss in revenue this represents for some states.

² The tax on inheritance and donations is now administered by the autonomous communities. Each community has established its own percentages and requirements for the application of this incentive. Coinciding with the economic recession, this tax reduction was uniformly applied to the transfer to a third party, with no family relationship, who had held a management post at the company during a period ranging from 5 to 10 years. The aim was to promote the continued existence of the enterprise rather than the family nature of the business. A more debatable issue is the requirement that the recipient of the company be a resident of the autonomous community in question. In fact, the Supreme Court has declared this condition null and void in the Autonomous Community of Valencia.

bring the civil liability regime into line with the limitation of liability provided for in corporate legislation. The justification for this measure expressly mentions entrepreneurship and the facilities the public sector should provide to foster it.

- An important aspect for the promotion of entrepreneurship is the reduction of the associated administrative procedures. In recent years, the administration has expanded its Internet services and a growing number of procedures may be completed online. Local administrations have played a key role here by reducing or eliminating a number of the procedures involved in starting up a business³.

This review of the EC recommendations for incentivizing entrepreneurship, does not include all the measures taken by the Spanish authorities in this respect.

Table 1. Tax regulations for entrepreneurship. Spain 2015

Area	Tax incentive provided for in Spanish legislation
Access to private finance	Deduction for investment in new or recently created businesses. Art. 68 LIRPF
Support during crucial phases of business	Unrestricted depreciation during first five years for Workforce-Owned Limited and Public Companies and priority agricultural associations. Art. 12.2 a) and d) LIS
Digital enterprises	Application of VAT rates of destination member states for services provided European directive 2008/08/EC
Transfer of business ownership	Not subject to increase in value derived from transfer of ownership Art. 33.3 c) Income Tax Law Exemption from property tax. Tax incentives in the tax on inheritance and donations (Art. 20.6 LSD and Autonomous Community Regulations CC.AA.)
Second opportunity	Unpaid liabilities waived after bankruptcy in the case of an entrepreneur acting in good faith Art. 178 and 178 bis of the Bankruptcy Law
Simplification of administrative procedures	Electronic tax administration

Source: Prepared by the authors.

Other Measures to Promote Entrepreneurship

In this section we will address the actions taken by the central government in various areas, especially in taxation, prior to passing the Law on the Support of Entrepreneurs. In order to conduct a brief review of these tax measures and their impact, it is necessary to define the legal form they have taken. These decisions are not limited only to taxation. What we wish to highlight here is how they affect direct taxes, in other words, the difference in taxation on the income they generate.

A large number of the incentives previously mentioned, are applicable to individual entrepreneurs or natural persons, also known as self-employed workers. In this case, the business person will be taxed within the regime of income from business activities provided for in the Income Tax Law (IRPF). If the entrepreneur decides to register as a trading company, he or she will be taxed under the Law for Corporation Tax (IS). The Figure 2

³ For example, many municipalities permit the establishment to be opened without the entrepreneur being in receipt of the opening licence (...)

summarises the tax options available to an entrepreneur depending on the legal form he or she adopts for the business and the amount of revenue or operations declared.

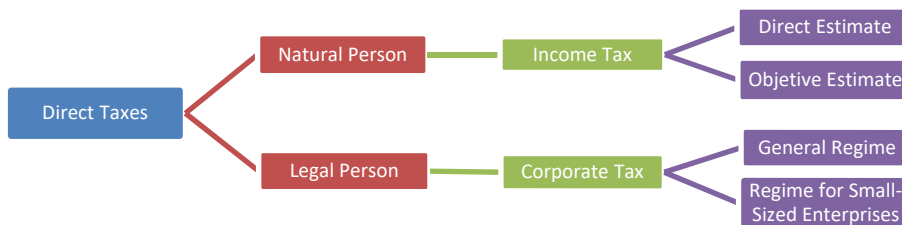


Figure 2. Taxation and legal forms

Source: Prepared by the authors

Three additional measures have also been included in the personal income tax regulations to promote the creation of new business activities (Figure 3).

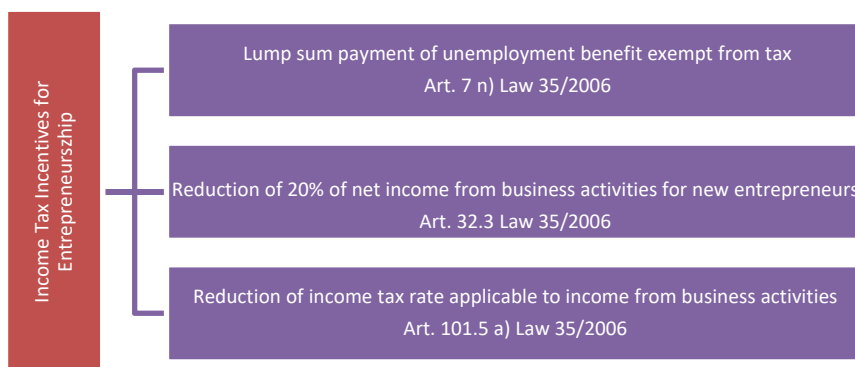


Figure 3. Income tax incentives for entrepreneurship in Spain

Source: Prepared by the authors.

A brief analysis of each of these incentives is required to appreciate their actual impact on entrepreneurship:

- The aim of tax exemption on unemployment benefit payments is to provide an initiative for the unemployed to start up in self-employment, either by registering as self-employed or by becoming a partner in a workers' cooperatives or employee-owned companies, or as a stakeholder in a business corporation. This incentive already existed in the income tax law, as shown by the reference to compliance with the provisions of Royal Decree 1044/1985 of 19 June. Application is dependent on the amount received being dedicated to the declared ends and the recipient is obliged to register a business activity within a month of receipt of the amount. The recipient is also obliged to keep up the activity or stake holding during a period of five years, in the case of a taxpayer entering a workers' cooperative or employee-owned company or having made a contribution to a firm's social capital. A self-employed worker is equally obliged to maintain his or her business activity during the same period. The tax treatment of redundancy payments is

established in article 7 e), which permits greater capitalisation. Amounts up to a total of €180 000 are tax-exempt according to the regulations currently in force.

- According to 32.3, tax-payers starting a business activity and declaring net income in compliance with the direct estimate method, will be entitled to a 20% reduction in the net deducted income declared in the first tax period in which the result is positive and also in the following one. The aim of this regulation is to provide tax incentives for entrepreneurs when they start to obtain profit from their business by reducing their income tax obligations. This can be regarded as an incentive for entrepreneurship since, although the application of the regulation requires that the taxpayer has not undertaken any economic activity during the twelve months prior to starting up the new business, this does not include activities which were terminated without ever having obtained positive net income, that is to say undertakings which resulted in business failures. The maximum amount of reduction is fixed at €100 000 per year. In order to avoid this being used for new activities stemming from previous working relationships, it is not applicable in a tax period in which more than 50% of income proceeds from a person or organisation from which the taxpayer has obtained earnings during the twelve months prior to the starting date of the new activity.
- The regulation stipulates the reduced income tax rate on professional earnings for the first year and the next two years after start-up. The tax rate is lowered from the general rate of 19% to a reduced rate of 9%.

With regard to corporate tax, we have already mentioned a number of incentives motivated by the EU proposals. Furthermore, it must be remembered that the tax regime applicable to small-sized enterprises, those whose turnover does not exceed €10 000 000 in the financial year, is significantly more favourable than the general regime. Since start-ups qualify for this regime, they benefit from its conditions. However, apart from this lower tax rate dependent on the amount of turnover, there is also a specific incentive applicable to new or recently created enterprises. Law 27/2014 establishes the application of a reduced tax rate for new business activities in corporate form, which will be taxed at 15% in the first financial year the enterprise generates profit and the following year, too⁴. This represents a reduction of 10% on the rate established in the general regime, which results in a lower tax burden for new enterprises. To be eligible for application, the business must not previously have been conducted by other persons or entities related to the new enterprise, or have been carried out during the twelve months prior to constitution, by any natural person with a direct or indirect stake of more than 50%, in the capital or equity of the new undertaking.

Another measure prior to the Law on Support for Entrepreneurs was the introduction of reduced social security contributions for entrepreneurs, consisting of reduced rates for new self-employed workers under the age of 30⁵. Any entrepreneur registering in the Special Regime for Self-Employed Workers is permitted to pay a minimum standard contribution during the first sixth months of activity. In the first six months directly following registration an 80% reduction in the minimum contribution is applicable. The contribution payable by new self-employed workers under the age of 30 is approximately €50 during the

⁴ This tax reduction for start-ups was introduced in the 2013 financial year and the new regime marks a substantial change to previous years, in which 15% was applicable to the taxable income between €0 and €300 000, after which the rate was 20%.

⁵ Royal Decree-Law of 22 February on measures to support entrepreneurs and to stimulate growth and job creation.

first six months. In the following six months, the reduction on the minimum contribution is set at 50%. After this period and during the next 18 months a 30% reduction is provided for in the case of male workers under 30 years and female workers under 35.

The only drawback to this incentive to entrepreneurial activity is that it penalises self-employed workers who hire personnel, since the regulations exclude those with salaried staff.

Attempts have also been made to extend financial support to entrepreneurs by widening the network of the Official Credit Institute and facilitating access to credit lines. Organisations supporting the internationalisation of enterprises have also been reformed in an attempt to step up business abroad.

The Law on Support for Entrepreneurs

As highlighted in the above, current Spanish legislation has received institutional backing in the support of entrepreneurship, impacting on many areas, especially taxation. Law 14/2013, of 27 September on Support for Entrepreneurs and Internationalisation, overhauls the tax treatment of entrepreneurs, complementing previous measures designed to encourage entrepreneurial activity.

The following is a summary of the new measures introduced:

- The regulation introduces the concept of the *limited liability entrepreneur*. This entrepreneur has the legal status of a natural person – self-employed. Liability from business debts will not affect the primary residence provided its value does not exceed €300 000. This amount is multipliable by 1.5 in the case of residence in cities of more than 1 000 000 inhabitants.
- The *Limited Liability Capital Growth Company*. This new regime allows private limited companies to be incorporated without paying the minimum share capital required⁶. Companies unable to provide the minimum amount required by law, will be subject to a number of restrictions: not less than 20% of the year's profit must be allocated to legal reserve; the sum total of payments to shareholders and directors must not exceed 20% of the company's corporate equity; and, dividends may only be distributed if the corporate equity value is not less than 60% of the legal minimum capital.

As well as measures to facilitate the creation of enterprises, changes are also introduced in the three main state taxes:

- Value added tax: A new VAT cash accounting regime has been established, by which self-employed entrepreneurs and SMEs are able to defer payment of VAT until when the invoice is collected. This deferment of payment of VAT allows enterprises to adjust tax burden to their real income. The drawback of this system is that it obliges both parties to agree to adopt the measure, so it cannot be applied to transactions conducted with entrepreneurs and enterprises who continue to operate on an accrual basis.
- Corporate income tax: Companies with a turnover of less than €10 000 000 may deduct up to 10% of profits obtained in the tax year in which they reinvest in economic activity. This regime also applies to the self-employed.
- Income tax: The figure of the *Business Angel* (already mentioned in a previous section) is fostered in the form of tax benefits for individual investors that temporarily participate in new and recently incorporated companies, with a 20% deduction in the state

⁶ Fixed at €3 000 for limited liability companies and €60 000 for limited companies.

personal income tax quota for investment made in a company. The maximum base for deduction is of €20 000 per annum. It also establishes full capital gains exemption, provided reinvestment is made in another new or recently incorporated company.

Taxation of Tourist Companies

Firstly we should note that tax obligations for tourist companies are the same as those for all taxpayers. Depending on their legal identity, they will be liable to pay corporate tax or personal income tax and in both cases they are liable to the obligations of value added tax.

Spanish tax regulations provide for no special tax regimes for these companies, which coincides with our observations in the introduction to this work regarding the revenue potential of the tourist industry in Spain. Indeed certain tax benefits have been excluded which were especially applicable to these companies. We are referring to deductions established in the previous legislation and which are presented in Table 2.

Table 2. Tax benefits of special relevance for tourist enterprises removed from the corporate tax regulations

Deduction	Incentive	Date Abolished
For promotion of information and communication technologies	15% of amounts invested for this purpose	1 January 2011
Export activities	25% of amounts spent on advertising and publicity, market research and visits to trade fairs	1 January 2011
For investment in navigation and localisation systems	12% of the investment, limited to a percentage of the value of the asset.	1 January 2011
Environmental investments	10% of amounts invested.	1 January 2011

Source: Prepared by the authors.

In personal income tax, it is worth noting that tourist services are included in the regulations for the modules of the objective estimate system, with no general or specific limits established by law.

Although the disappearance of these incentives increases the taxation on tourist companies, the main challenges faced by tourist enterprises are related to three different areas:

- Pressure of indirect taxation.
- Impact of rises in local taxes.
- Ecological tax on activities which damage the environment.

One of the most frequently voiced concerns of the sector is the introduction of a VAT rate favourable to the competitiveness of the Spanish tourism industry in the neighbouring markets. There was concern in 2012 when the VAT rate for hotels and restaurants was raised from 8% to the current 10%. This was increased to 21% in the case of other services related to tourism, such as shows and discotheques. The impact is greatest on *sea and beach* tourism, where differences in costs in similar countries such as Greece and Croatia, negatively impact on tourist bookings, especially those made by foreign tourists.

Local taxes have also increased consistently in the form of property tax or service-related taxes such as those on waste water treatment or refuse collection. The most relevant milestone here is the binding ruling on the 30% reduction applicable to economic activity, which permits the inclusion of property assets, which is not permitted in local authority regulations.

Finally, note must be made of the fiscal impact of the taxes established by autonomous communities and cities to cover the expenses generated by damage to the environment. The Autonomous Community of the Balearic Islands led the way in this regard by introducing, in 2001, a tax on stays in tourist establishments, known as the “eco-tax”. The amount of revenue was destined to funds for the improvement of tourist activity business and preservation of the environment. This was based on the principle of “who pollutes, pays”, on the premise that it is tourists that damage the environment. However, not all tourists: only those who stay in tourist establishments. The incongruity of this definition, together with criticism from the industry, led to the repeal of the act a year after being passed. Since then, green taxation has been focused on taxing CO2 emissions and energy production⁷, which, while it may impact on the tourist sector through its effect on passenger transport, for example, it is not directly aimed at tourist accommodation or restaurant services.

EMPIRICAL APPROACH

In our view, tax issues do not have an influence on decisions taken by entrepreneurs in the tourist industry, despite the significance of the weight of the taxation. In order to verify this hypothesis, we designed a questionnaire comprising 18 questions, which requests information on the identity of the company, the year of creation, its location, the business activity conducted (accommodation, restaurant services, other services), size and legal status. This is followed by three close-ended questions, assessed on a 7-point Likert scale, regarding tax burden, the effect on the early years of the enterprise and the decision on the legal status of the company. Next, there is a 5-item question (financial responsibility, taxation, administrative procedures, aid, capital) regarding factors taken into account when deciding the legal status. These items are rated on a 5-point Likert scale. This is followed by another 5-item question on the effect of recent tax reforms (VAT cash accounting, limited liability regarding the residence, reduction of income tax payments, reduced corporate tax and exemption from declaration) to be answered on a 5-point Likert scale. The last question is an open-ended one requesting ideas for proposed tax measures. The questionnaire finishes with personal details regarding age and gender of the respondent.

The questionnaire is designed for start-ups, typified in accordance with the National Classification of Economic Activities (NCEA), 2009: 55. Accommodation services, 56. Food and beverage services, 79. Travel agency, tour operator and other reservation services and related activities, and 93. Sports activities and amusement and recreation activities.

The Spanish Central Business Directory for the 2014 financial year lists a total of 47,909 new companies under these activities: 1768 in 55. Accommodation services (3.69%); 39,596 in 56. Food and beverage services (82.65%); 1,422 in 79. Travel agency, tour operator and other reservation services and related activities (2.97%); and 5,123 in 93. Sports activities and amusement and recreation activities (10.69%).

The Table 3 provides statistics regarding size and legal status of these enterprises.

⁷ The recent ruling of the Constitutional Tribunal, 22/2015, of 16 February, declared unconstitutional a part of the regulations governing the tax in the Autonomous Community of Extremadura on establishments impacting the environment.

Table 3. Number of new companies by legal status and employee level 2014

NCEA-2009	Total	None	1 to 5	6 to 9	10 to 19	20+
55 Accommodation services	1 768	1 201	424	76	34	33
56 Food and beverage activities	39 596	19 863	18 281	1 085	269	98
79 Travel agency, tour operators	1 422	1 150	257	9	4	2
93 Sports activities, ...	5 123	3 179	1 598	191	129	26
Physical persons						
55 Accommodation services	664	523	132	8	0	1
56 Food and beverage activities	26 130	14 412	11 440	252	22	4
79 Travel agency, tour operators	720	661	59	0	0	0
93 Sports activities, ...	1 966	1 487	454	20	5	0
Public limited companies						
55 Accommodation services	22	12	6	0	0	4
56 Food and beverage activities	19	7	7	3	1	1
79 Travel agency, tour operators	12	5	6	1	0	0
93 Sports activities, ...	5	1	1	1	1	1
Limited liability companies						
55 Accommodation services	834	473	238	62	33	28
56 Food and beverage activities	7 814	2 427	4 346	721	236	84
79 Travel agency, tour operators	573	385	175	7	4	2
93 Sports activities, ...	1 701	925	563	112	84	17
Other legal statuses						
55 Accommodation services	248	193	48	6	1	0
56 Food and beverage activities	5 633	3 017	2 488	109	10	9
79 Travel agency, tour operators	117	99	17	1	0	0
93 Sports activities, ...	1 451	766	580	58	39	8

Source: Spanish Central Business Directory (2014).

In order to limit the field work, we decided to carry it out in the Autonomous Community of Castilla-La Mancha. This is an inland region of Spain, with a surface area of 79 463 Km² (15.70% of the national territory), the third largest in Spain. It has a population of 2,078,611⁸, the ninth-largest in Spain, with a population density of 26.16 inhab/km², which is similar to that of other inland regions – Castilla and León (26.8 inhab/km²), Aragón (27.2 inhab/km²), Extremadura (26.2 inhab/km²)-, compared to the mean national average of 79.9 inhab/km². The population is distributed across 5 provinces and 919 municipalities, of which only 40 have more than 10 000 inhabitants⁹. The per capita GDP is €17 780 which situates it ninth in the national ranking. Given its location in the centre of mainland Spain, it has a good transport (road and rail) and communications network, which are mostly radial, connecting the centre with the outlying areas of Spain. It is rich in historic¹⁰, artistic, cultural and natural heritage¹¹. It is a major tourist destination for residents of the bordering regions: Community of Madrid (46.14%), Community of Valencia (15.23%), Region of Murcia (6.27%), and Andalusia (4.20%). With its 1 419 tourist

⁸ Castilla-La Mancha Statistical Office <http://www.ies.jccm.es/> (consulted 04/05/2015).

⁹ According to data from the Spanish Statistical Office 2014: <http://www.ine.es/> (consulted 04/05/2015).

¹⁰ The historic centres of (1986) and Cuenca (1996) and the Mercury Mines of Almadén (2012) have been declared World Heritage sites. There are many towns with important historical heritage, for example: Alcaraz, Almagro, Atienza, Belmonte, Budia, Chinchilla de Monteargón, Huete, Mora, Tembleque or Villanueva de los Infantes.

¹¹ 45% of the regional territory comprises forest and mountains in which are located 2 national parks, 6 natural parks, 22 nature reserves, 6 river reserves, 24 natural monuments, 48 micro-reserves and one protected landscape.

accommodations with 12 166 beds, it attracts 6.16% of the domestic tourism and 0.15% of foreign tourism 0.15%¹². These data give it a suitable profile for a study of new enterprises in the tourism sector. Furthermore, the Community of Castilla-La Mancha enacted a pioneering Law on Support for Entrepreneurs¹³, so entrepreneurs in the region have had time to judge the possible impact of the incentives. To identify the population and sample, we used the Iberian Balance Sheet Analysis System¹⁴ and we contacted the various regional, provincial and local rural tourism business associations and federations, in order to reach undertakings not registered as trading companies, but which are also start-ups included in the field of interest. We sent a link with access to the online questionnaire to the representatives of these organisations in order for them to refer it to any members who had started business in the last year. The process is ongoing.

CONCLUSIONS

Our empirical study clarifies the fiscal reality confronting entrepreneurs involved in the tourism sector. In essence, the most distinctive feature is that although they can benefit from the incentives, they operate in an economic sector submitted to a high level of fiscal pressure. This means that if the enterprise is not a start-up, it will be submitted to high taxation, which impacts on profitability.

It is undeniable that incentives to entrepreneurship are designed precisely to stimulate the creation of new companies, but it is illogical not to support the continued existence of these companies once the initial benefits are no longer applicable. This situation is rightly seen as a result of the elevated fiscal pressure implemented in a number of countries, including Spain, in an attempt to resolve their budgetary deficit problems. This issue does not exclusively affect the tourism industry. However, due to the specific characteristics of the sector, it is an attractive area for all public administrations at national, regional and local level. This is not only as a result of the economic importance as a potential source of revenue. Rather, it is due to the fact that a part of this tax burden falls on the end consumers, who, to a large extent, are not Spanish residents and, therefore, do not vote in the country. Consequently, the direct political impact of the introduction of these taxes is diluted. The concept of tax exportation partly explains the successive attempts to levy taxes on tourist establishments, regardless of whether or not the pretext is preservation of the environment.

REFERENCES

Boletín Oficial del Estado, Gobierno de España (2004). Real Decreto- Legislativo 4/ 2004, de 5 de marzo, por el que se aprueba el texto refundido de la Ley del Impuesto sobre Sociedades. BOE-A-2004-4456, nº 61. Retrieved on December 10, 2015, <https://www.boe.es/boe/dias/2004/03/11/pdfs/A10951-11014.pdf>

¹² Tourist Accommodation Occupation Survey (Rural tourism accommodations), 2014, Spanish Statistical Office, <http://www.ine.es/> (consulted 04/05/2015).

¹³ Law 15/2011, of 15 December on Entrepreneurs, Self-Employed Workers and SMEs, BOE 27 March 2012.

¹⁴ A total of 60 new companies are registered as trading companies, which meet the conditions regarding activity and longevity (compiled as of 01/01/2012).

- Boletín Oficial del Estado, Gobierno de España (2006). Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las Leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio. BOE-A-2006-20764, nº 285. Retrieved on December 10, 2015, <https://www.boe.es/boe/dias/2006/11/29/pdfs/A41734-41810.pdf>
- Boletín Oficial del Estado, Gobierno de España (2011). Ley 15/2011, de 15 de diciembre, de Emprendedores, Autónomos y Pymes, BOE Nº 74, de 27 de marzo de 2012. Retrieved on December 10, 2015, <https://www.boe.es/boe/dias/2012/03/27/pdfs/BOE-A-2012-4187.pdf>
- Boletín Oficial del Estado, Gobierno de España (2013). Ley 14/2013, de 27 de septiembre, de apoyo a los emprendedores y su internacionalización. Retrieved on December 10, 2015, BOE-A-2013-10074, nº 233. <https://www.boe.es/boe/dias/2013/09/28/pdfs/BOE-A-2013-10074.pdf>
- Boletín Oficial del Estado, Gobierno de España (2014). Ley 27/2014, de 27 de noviembre, del Impuesto sobre Sociedades. Retrieved on December 10, 2015, BOE-A-2014-12328, nº 288. <https://www.boe.es/boe/dias/2014/11/28/pdfs/BOE-A-2014-12328.pdf>
- Boletín Oficial del Estado, Gobierno de España (2015). Real Decreto-ley 1/2015, de 27 de febrero, de mecanismo de segunda oportunidad, reducción de carga financiera y otras medidas de carácter social. BOE-A-2015-2109, nº 51. Retrieved on December 10, 2015, <https://www.boe.es/boe/dias/2015/02/28/pdfs/BOE-A-2015-2109.pdf>
- European Commission (2012). *Eurobarometer on Entrepreneurship*. Retrieved on December 4, 2015, from http://europa.eu/rapid/press-release_MEMO-13-7_en.htm
- European Commission (2015). *EU Tourism Policy*. Retrieved on December 10, 2015, <http://ec.europa.eu/growth/sectors/tourism/>
- Gago, A.; Labandeira, X.; Rodríguez, M. (2004). La imposición del turismo. En nº 5 de *Colección Mediterráneo económico, Las nuevas formas del turismo* (pp. 105- 117). Almería: Instituto de Estudios Socioeconómicos de Cajamar.
- Hercowitz, M.; Puig, I. (2003). Fiscalidad ambiental y turismo-tres casos de estudio. Impuestos. Revista de Orientación Tributaria, Mayo-Junio 2003 (117), 10-15.
- Instituto Nacional de Estadística (2015). Encuesta de ocupación en alojamientos turísticos (Alojamientos de turismo rural). Retrieved on December 15, 2015, <http://www.ine.es/>
- Servicio de Estadística de Castilla-La Mancha (2015). Sectores económicos, Turismo. Retrieved on December 15, 2015, <http://www.ies.jccm.es/estadisticas/por-tema/sectores-economicos/servicios/>
- World Tourism Organization (UNWTO) (2015). Spain: Country-specific: Basic indicators (Compendium) 2010-2014. Retrieved on December 15, 2015, <http://www2.unwto.org/es>.

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Innovation Policies and SMEs Development

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Abstract

Small and medium-sized enterprises are the backbone of the European economy, states create policies to foster research. These mentioned policies changed in the time and it is possible to observe that the national policies of the European Union (EU) member states are interconnected at an EU level. In the science field, the European Union is generally moving towards a multilevel governance. The central issue of this paper is to show the systematic importance of an effective government policies and institutional interaction in the field of R&D. The article will show that a well framed policy is essential and furthermore it fosters a better cooperation between the private and public sector.

Keywords: internationalisation; EU; innovation; innovation policy

JEL codes: O3, K33

INTRODUCTION

This paper will show the importance of public policies and institutional interaction in the field of R&D public finance. Such policies are also significant for the small and medium-sized enterprises (SMEs).

This article takes into consideration three countries: France, Spain and Italy. They have similar legal systems based on almost identical civil codes and constitutions, clearly influenced by the French one. About the constitutional aspects, the main characteristics in common are: a strong central power and regional entities which are gaining in the time a stronger position in the state structures.

The European Union is heading to a multilevel-governance which has repercussion in the R&D field as well. The study aims to demonstrate that even in the presence of a strong regionalisation of R&D public funding, it is still crucial an effective national coordination. I will argue that the relation between state and regional R&D

funding policies can be expressed in the Latin phrase *divide et impera*. The process of weakening state's direct control of the R&D activities (*divide*) needs to be followed by a stronger coordination (*et impera*), in order to control the R&D by other means, so as to avoid the effects of an uncontrolled "law anomie".

The article's main criteria is to examine the macro-law aspects connected with public innovation policies; i.e. why and how a given government has enacted a specific policy and the macro-effects produced by such policies on the main G.E.R.D. statistics; in the belief that political choices strongly influence the R&D environment. For the above mentioned reasons the methodology contains the analysis of the main pieces of institutions/legislation of France, Spain and Italy and observation of the main consequences on the fundamental G.E.R.D. statistics.

The paper is so divided: it is given to every state a section of the paper. The analysis of the countries systems starts with France, being France the country with the strongest state control; then Spain and Italy. Spain presents the most interesting approach to R&D considered the percent of GDP dedicated to R&D and the obtained results. Spain deserves the main part of the paper because thanks to the Inter ministerial Commission on Science and Technology, in the opinion of the author, Spain is an example of good practice in an R&D environment characterized by means deficiency. Italy instead lacks of any comparable system dedicated to R&D. This does not mean that there is a total absence of a national strategy, but it means that the Italian system lacks of unity and strong coordination as in France or Spain. In such a sense the Italian experience can be used as *litmus test*. In fact it shows that the absence of an effective state coordination gravely influences R&D macro results; because the *Distretti Produttivi* system produced excellent results in some R&D sectors, but the national R&D results stayed below expectations. The time lapse object of this research is the same for the three countries. The analysis is focused on the R&D policies between the 90's and 2000's, except for some aspects of the French experience.

LITERATURE REVIEW AND METHODOLOGICAL APPROACH

Historically, R&D projects were a direct emanation of governments' projects or policies. The state directly decided which project to implement or carry out. For example the nuclear projects or the concorde project in France (Laredo & Mustar, 2001). This demonstrates that the general theory of law defines the "state supreme power"(Kelsen, 1991) or "state imperium". The state used its unconditioned power (imperium) to determine the most profitable decisions in the R&D field. Currently, states tend less to directly exercising this sort of supreme decisional power and leave more "self-determination" to R&D players. A collateral effects of uncontrolled freedom of choice in the R&D field poses a threat. For example a proliferation of similar projects which subsequently risk being under financed (in such a case I would use the aforementioned Latin word *divide*).

The state may find a remedy to this perilous proliferation through the implementation of its "coercive power". The state's authority determines R&D policies in a more subtle way. For this reason the phrase *divide et impera* is still a valid description of the state's coercive power. The state cedes power of choice to individual institutional actors. At the same time, the coercive power allows the state to balance the proliferation and preserve its authority over the R&D field.

This paper will focus on the analysis of French, Spanish and Italian experiences in the R&D field. More specifically this article will focus on the Spanish experience because in the opinion of the author, the evolution of the Spanish R&D system is an example of positive achievements produced by an excellent capacity of adaptation.

It is common knowledge that the European Union is gradually implementing a certain kind of multilevel governance. Although this concept mainly concerns political-administrative aspects, nevertheless it influences a vast amount of different fields, among them the R&D field. Multi-level governance is a concept with more than two decades of history (Draetta, 2015), it is a notion very popular in many fields. To better understand this specific concept and its relevance in the R&D field, a short discussion of its major components is needed.

The idea of multilevel governance was created in regard to the European integration process (Adam, 2014). It starts from the consideration that the “state imperium” i.e. authority is shifting not only from states up to the European Union, but also down to sub-national authorities. Multilevel theory is strongly connected to polycentrism, as a way to stay closer to the real need of the society (Piattoni, 2009). Multilevel governance is generally understood as sharing responsibilities and cooperating between the various levels of governance and it is often associated with the principle of subsidiarity (Draetta, 2015). It is not possible to completely understand multilevel governance without introducing the subsidiarity concept.

Subsidiarity is based on the belief that the decision chain should be as short as possible in the meaning that the decision making process should be as close as possible to the citizens, so that the implementation of the decision process could be the utmost effective, and related to the real needs of citizens. For example, if a given social policy is to be implemented, it should be decided, thought and implemented from a decisional entity as close as possible to the beneficiaries (i.e. a construction of a school should be decided by a regional government and not by a ministerial meeting). In practice, multi-level governance is based on the idea that the best policies are chosen and implemented when decisions are taken with the participation of the final beneficiaries of such a policy.

An effective multi-level governance has to contain a quantity of subsidiarity, but at the same time coordination cannot be missing. In fact, the policy results depend on good coordination between all levels of government, both in the decision making process and in the implementation process. In such a sense, *mutatis mudandis* an efficient plan for financing R&D has to be based on a previous deep knowledge of the current condition of R&D sector in a particular state.

France, Italy and Spain have dealt with developing an R&D public funding system. All three of those states had a slightly different approach which hugely effected the characteristic of public policies implemented in their respective countries. The analysis is concentrated on these three states because they share a very similar constitutional/administrative systems and civil codes all based on the French one. Moreover these three states have similar social structures, languages and a shared history.

History influences the future, hence Spain and France had a system definable as very centralistic. Both countries have been, for a period, the centre of vast empires; those empires were characterized by a strong centralisation and control over possessions. Phrases as *L'État c'est moi* allegedly mentioned by king Luis XIV or the phrase, *el imperio en el que*

nunca se pone el sol related to the vast amount of the dominions of the Spanish empire. Those phrases are much more than simple expressions; these phrases are a representation of an immaterial concept which transcend the words and explain what kind of political and administrative systems they represent. These systems were mainly hierarchical, i.e. decisions came from the political centre and were implemented by local authorities. Therefore, taking into account all the aforementioned, it is true (as we will see) that French and Spanish system shifted from a state centric system to a more “shared system”. Nevertheless in this new system there are visible traces of “centralised control” (Reppy, 2000).

An efficient plan for financing R&D has to be based on a previous deep knowledge of the R&D situation in the State. Taking inspiration from architectural jargon, it is possible to affirm that architectural and components knowledge are key elements for understanding the organisational capabilities of the system to create.

The article is based on the analysis of the pieces of legislation and the analysis of the main R&D institutions in France Italy and Spain, in the belief that political choices directly influence the R&D field and not vice-versa. The research results will show that French and Spain, except of Italy, had and have a better R&D system. This superiority is given by the stronger supervision and control that France and Spain have on R&D policies. Nowadays this control consists in a soft control, but nevertheless it is still a mechanism crafted to direct R&D efforts. Italy in this paper is used as *litmus test a contrario*. In fact Italy is missing a comparable R&D national control system. The Italian R&D financing system is based on two main pillars: *Distretti Produttivi* and an irregular funding based on historical data disconnected from any analysis of efficiency. This divergence in managing R&D funding affects the quality of the R&D efforts and results. Italy has less important results than France and Spain on the R&D field, even if Spain has a lower GDP than Italy. Hence this disproportion of results demonstrate that state control on R&D truly matters and it is a *condicio sine qua non*, whose the comparison between Italy and Spain is an example. The article is based on examination of the main pieces of legislation and comparison with economic results obtained.

ANALYSIS OF THE MAIN INSTITUTIONAL ASPECTS OF R&D SYSTEM IN SELECTED COUNTRIES

France

France with “Colbertism” was the first state to codify state intervention in the economy. “Colbertism” was an economic and political doctrine of the seventeenth century, created by Jean-Baptiste Colbert¹. Colbert's central principle was that the wealth and the economy of France should serve the state. Hence today France with other European countries is an example in the field of state intervention in crucial national fields (Rich & Cole, 1964).

In France, during the 1960's a new vogue for “Colbertism” started in every field of economic activities. This “neo Colbertinism” did not remained without pronounced effects on the French R&D sector too² (Laredo & Mustar, 2001). The French government often directed public policies to promote R&D among the so called “champion nation-

¹ French Minister of Finance under Louis XIV.

² In such a sense it is possible to use the term “technological Colbertism” (Laredo & Mustar, 2001).

al”³. Moreover it is worth noting that the national defense and military sector is still today considered a key field in R&D policy and the national defense expenses are used as a lever for growth (Guichard, 2005). In other words, the French R&D system is based on strong state coordination, which is expressed by the construction of the French national innovation system (NIS). This concept emerged over the past decades as a response to the recognition that innovation within a national economy needs a plan so to increase positive R&D outcomes (Piette, 1986).

Traditionally, French technology and innovation relied on the targets of the central state, performed and implemented in the framework of grand programmes (Piette, 1986)⁴. The main industrial actors have been the national champions⁵. However, this general pattern has changed over the last years. Technology transfer nowadays focuses on the validation and transfer of research results generated in universities, public scientific and technological research organisations, and research organisations. A national innovation system is based on the assumption that the better planned the system is, the better results will be reached (OECD, 1997). R&D stakeholders, are part of the same system, and as part of a same system they are equally needed altogether as no part of the body can live separated. In such a sense it is the French national innovation system, which has to connect the R&D stakeholders so to underline the interdependence between the national R&D stakeholders; moreover the stakeholders play the main role thanks to their linkage, mutual commitment and their own interactions. France had set a national R&D intensity in 2012 of about 2.29⁶ percent of gross domestic product, which conferred a top position within the EU states.

As expressed above French technology and innovation relied on the targets of the central state, performed and implemented in the framework of “grands programmes”. These programs were mainly concentrated in and implemented by the national champions (Laredo & Mustar, 2001). The state created a mechanism which had to support the national champions in an effort to maintain or gain an international leadership role in the given field of activity⁷. During the last decades of the 20th century the aimed result was to some extent reached. In fact France has always had a gross domestic product intensity proportionally higher than other direct competitors (European Commission, 2014a), and the fields on which French R&D sector was the utmost significant were those fields whose national champions companies were operating in (European Commission, 2014c)⁸.

France reached such positive results during the last two decades of the 20th century thanks to the fact that two main changes occurred: the political side created new agencies, entities devoted to fostering an increment in R&D⁹ (Figure 1). France, keeping

³ A national champion is a firm chosen by the state to become the dominant producer or service provider on the national market and overtake or hinder foreign competitors in this market.

⁴ It is admissible to consider that the grand programmes spirit is still present in the nowadays in the so called “La stratégie nationale de la recherche”.

⁵ In French: “champions nationaux”.

⁶ Research and Innovation performance in the EU Innovation Union progress at country level 2014 edited by Directorate-General for Research and Innovation.

⁷ The Government set special legislative and financial aid in order to defend the national champions against the international concurrence.

⁸ E.g.: Aeronautics, energy ,transport and defence.

⁹ E.g.: Agence Nationale de la Recherche, Agence d’Evaluation de la Recherche et de l’Enseignement Supérieur, Pôles de Recherche et d’Enseignement Supérieur.

a centralised form of power, opened the way to a feeble regionalisation¹⁰ (Boudon, 2014).

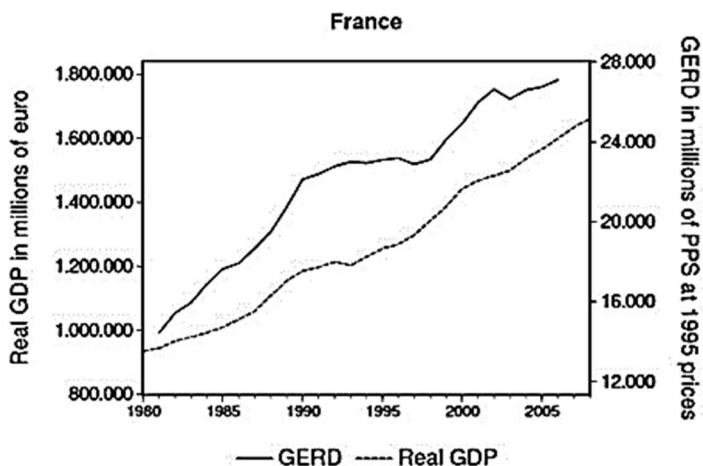


Figure 1. The real GDP and GERD in France

Source: National Institute of Statistics and Economic Studies (INSEE).

The second occurrence which significantly changed French R&D “modus operandi” was the importance the regional level acquired in the French political system, the so called “regionalisation”¹¹. The 26 French regions (which do not have legislative power), receive part of the national tax income and have a budget to bestow in their priority areas. Regions negotiate their priority fields with representatives of the state and they have an elected council (*conseil régional*) which is responsible for the regional administration. Regions are competent for social questions, transport, education, culture, local development, for this reason, to a certain extent Regions have competence for R&D (Office of the Prime Minister, 2012)¹².

Nowadays French R&D is characterised by an unequal dichotomy between central government and regional government. France passed from a *dirigiste* form of R&D to a new form of governance where the function of the state is to facilitate¹³ the R&D development. In this cooperation between central and regional authority the so called “*contrat de plan État-région*” (CPER) has a salient importance. CPER is in a state-region plan contract, a document in which the state and region are committed to a multi-year programming and funding major projects (among which R&D projects as well)¹⁴.

¹⁰ Please notice that regionalisation doesn’t have to be understood as a federalisation of the state.

¹¹ It is important to clearly express that regionalisation is something different from the so called devolution federalisation or power devolution. Federalisation has never been in the French political agenda.

¹² It may be of some interest that in 2014, the French Parliament passed a law that will reduce the number of regions in Metropolitan France from 22 to 13. The new regions will take effect on 1 January 2016.

¹³ Also known as *Etat facilitateur* “State facilitator”. In such a sense it is possible to affirm that from the 70’s definition *l’Etat entrepreneur* we passed to *l’Etat facilitateur*.

¹⁴ Along with the CPER are there other different project where regions have a key role in the R&D implementation, nevertheless due to unity matters this paper concentrates on the CPER importance.

In this path of regionalisation via state-region plan contract, many centers for scientific research¹⁵ were created. The fundamental idea of such a policy was to create over the country a fertile soil for R&D, so those centres were established not in a single city or in the capital, but in different cities of the country. It is quite interesting that although these national centres had to spread R&D over the state so to foster a diffused pro R&D environment.

The obtained results of this regionalisation were not adequate to the central government's expectations; important differences in results within regions were observed (Beatson, 2007). In 2005 a shift in French R&D *modus agendi* occurred. Previously there was the so called principle of regional equality (it consisted in sharing the same quantity of funds to all the regions). Nevertheless this drive for equality brought extreme differences in results. Therefore, the central government shifted towards rewarding networks and clusters of scientific excellence. It was set as an R&D System, which had as common base the fact that to the regions were given an equality of opportunity to compete for scientific resources, and not a simple equality in resources. The regions were given the possibility to compete for obtaining higher financial means. This reflected a more gradual evolution in French policy towards equity rather than equality as a precondition for competitiveness. In such a sense the system drifted towards the so called "Pôle de compétitivité" technology clusters characterised by the presence of a given zone of highly qualified R&D players (i.e. research centres, universities, highly specialised factories).

Spain

Despite the low gross domestic product percentage on R&D, Spain concentrated its financial means on specific technological fields, obtaining among others important results in the field of new sustainable sources of energy. The Spanish R&D's incentive system is composed of two major elements:

- national plan (which changed consistently in time);
- incentives tools which we may define as a group of combined law provisions.

The national plan is a direct expression of the government's guidelines, instead the group of combined provisions of law, is an instrument orientated forward creating a common ground which is created to foster R&D financing, beyond the limits set by government guidelines. In Such a sense Spain created two parallel systems for financing R&D, which under different paths had to provide the same result; augmenting R&D quality and quantity (Muñoz, 2006). The 1986 science act set the base for a very important institutional reform aimed at modernising the Spanish Science and Technology system: the creation of the Inter-ministerial Commission for Science and Technology (CICYT), with a mandate to define national plans for research and technological development, and a redefinition of public research bodies looking at strengthening their scientific competitiveness and bonds (Muñoz, 2006).

The "Plan Nacional de Investigación Científica y Desarrollo Tecnológico (National Plan of Scientific Research and Technological Development) has to be considered as the main instrument used by the Spanish government to coordinate and encourage scientific and technical research.

¹⁵ In French: Centre National de la Recherche Scientifique.

The 1986 science act, created a better coordination among the different R&D players. The Spanish government, developed science and technology policies; these policies were and still are carried out in accordance with the national scientific research plan. In order to reach the desired results many important administrative bodies were set out by the Science Act. The inter-ministerial commission on science and technology (CICYT) is the leading national agency for scientific and technological policy and the angular stone on which the national plan system is based. The CICYT is responsible for planning, drafting, coordination and follow-up. The CICYT is presided by the office of the prime minister and includes the ministries¹⁶ involved in scientific and technological policy (Muñoz, 2006). The CICYT is assisted by the following bodies:

- a general council for science and technology, which is the CICYT's consultative body devoted to promote coordination among the different Autonomous Communities and the central administration;
- a support and monitoring committee which is led by the prime minister's Economic Office and it is responsible body for inter-ministerial coordination in planning the follow-up policy on R&D;
- the Spanish Foundation for Science and Technology (FECYT), which part of the ministry of science and innovation, it is the responsible body for providing technical support to the scientific and technological decision-making bodies in Spain.

The 1990's mark a turning point in the R&D System in Spain. The pursued idea by the Spanish government was to strength a set of laws to promote R&D activities outside the National Plan. It is possible to affirm that with this reform the Spanish government tried to implement in Spain what in France is defined as *etat facilitateur*¹⁷ in the meaning that the state had to maintain a role, but this role had to be less evident. The state had to prepare fertile conditions allowing an independent but at the same time controlled "R&D blossom". The main idea was that the state showed the path to succeed but at the same time the state left more freedom on how to implement R&D activities.

The Spanish system during the 1990s appeared well framed, with pieces of legislation, providing a system on research more reliable; this system was based on a strong legal basis (Gutiérrez Lousa, 2008).

It is worthy of attention the combined provision of Law 43/1995 after modified with the law 55/1999 on corporate tax.

It is extremely significant that Spain shifted to a science financing system characterised by vigorous tax incentives; in such a sense the Spanish government tried to limit its direct "imperium", desisting from imposing government central will as occurred before. It is possible to affirm that the choice carried by the Spanish government was to leave more decisional space to the R&D player and to the market (Navarro, 2009).

The reform was based on the principle that the state had mainly to set the R&D framework but the national plan tool had to be to some extent less invasive; for this reason R&D tax incentives were implemented as well through a broadening of fiscal

¹⁶ Minister of Economic Affairs and Competitiveness; Minister of the Treasury and Public Administrations; Minister of Foreign Affairs and Cooperation; Minister of Defense; Minister of Public Works; Minister of Education and Culture; Minister of Employment and Social Security; Minister of Agriculture, Food and Environmental Affairs; Minister of Industry, Energy and Tourism; Minister of Health, Social Services and Equality.

¹⁷ State with a "facilitating role".

incentives in accordance with the mentioned laws (Gutiérrez Lousa, 2008). The base principles applied to this regulation, deserve to be mentioned:

- the deduction application had to be neutral, it could not radically modify the conditions of the company subject to incentive, unless it contributed to overtake market inefficiencies;
- tax deduction had the main intent to increase the competitiveness of the Spanish Economic System;
- the main fiscal ease concerning the R&D consisted in what was generally known as “Amortization freedom” (Libertad de Amortización).

The difference between tax reduction and amortisation freedom lies in the slight distinction that tax reduction reduces tax debt settlement. Instead amortisation affects tax base, allowing a “tax deferral”, but not a reduction. It entails that it was possible to amortise the R&D expenses qualified as intangible assets; but it is important to notice that it was not possible to extent such ease to expenses relating to innovation matters. Tax reduction had a very large extent, depending on the investigation activity set. According to corporate law, development may be defined as follows: application of the research results in order to produce new materials or commodities.

It is important to underline the words “application of the research results”. This affirmation implicates a strong connection with the research result, which had to be classifiable as positive. Hence it was obligatory that the antecedent research, gained a positive result so that the new product or material could be defined as a direct consequence of research. Because it was not clearly defined, if a development process consisted in something that could be defined as new; a closer contact was set between the research institution and the ministry for research and the tax administration (Muñoz, 2006).

The Law 55/1999 set a change in the Spanish R&D panorama, it surly represented a turnaround compared to the Law 43/1995. Before 1999, technological development was quite peculiarly not considered a part of R&D activities. It was connected to industrial activities more than R&D activities. In this regard, only from the beginning of this century, the words *investigación* (research), *desarrollo* (development) y *innovación* (innovation) were used together to express the Spanish R&D policy, earlier the words *Investigación*, *desarrollo* were used and the so called *innovación tecnológica* was a concept treated separately.

It is possible to define technological innovation as the activities whose result is a step forward in the technological field, which help in obtaining new products, new productive procedure or consistent improvements in the existing ones.

Discerning simple R&D activities from activities involving technological innovation is not always possible; it may occur that technological innovation is a positive final step of an R&D process.

Under the earlier Spanish law provision, research activities, were not conditioned by the result reached. This means the research could even not reach a positive result but still the activity carried out would be qualified as “research”.

Instead technological innovation required new products or innovative procedures or consistent improvements in the existing ones, and reaching a positive result was obligatory (Muñoz, 2006).

The R&D activities, producing a positive result, can be defined as an objective innovation, instead the TI (technological innovation) activities may produce a result which

may be defined as a “subjective Innovation”. The innovation has to be new in regard to the subject which has promoted and supported the TI research. Incentives on technological innovation activities are a further implementation of what was already set throughout the R&D legislation. Technological innovation activities are now compared to all other R&D activities with no additional distinction provided, reaching a positive result is not anymore a *condicio sine qua non*.

The Parliamentary strongly believing in the *État facilitateur*¹⁸ against the concept of *État dirigiste* characterised by a strong economic planning (Miguel & Galindo, 2003), increased the size of the tax deduction percentage. However this decision did not produce the expected results. It did not reached a concrete improvement in the Spanish gross domestic product percent dedicated to R&D (Figure 2). Unfortunately the expectations before set, were not entirely met.

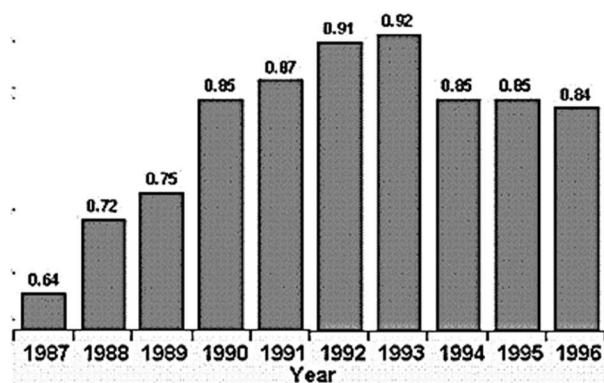


Figure 2. Evolution of R&D expenditure (% GERD) in Spain
Source: National Institute of Statistics and Economic Studies (INSEE).

In 2006, the Spanish government started to make relevant change on Spanish R&D policies. The change was as vast that it is possible to define it as revolutionary. It was decided to leave the deduction system, which was characterised by large freedom given to the R&D players. The government created a new R&D policy once again based on National Programs set by the government itself. The emanation of this new Law 35/2006 represents a fundamental change in the R&D field. This is very well explained in the law preamble which in few words explain the limits of the previous R&D policy. Citing the exact words is due to the semantic significance of the text *“en muchos casos, los estímulos fiscales a la inversión son poco eficaces, presentan un elevado coste recaudatorio, complican la liquidación y generan una falta de neutralidad en el tratamiento fiscal de distintos proyectos de inversión”* (BOE, 2015), which says *“In many cases the fiscal stimulus to investments is not cost effective; high collecting costs complicate settlements and generate a lack of neutrality in the fiscal treatment of different investment projects”*.

This new policy consisted in leaving “the incentives era”. The government focused on developing a system based again on national and regional programs (Buesa, 2006). There are great differences between the two approaches. The incentives form is more market

¹⁸ Please see the note above.

respectful, creating new national and regional programs allows the government to address the efforts in financing R&D activities. In such a sense the government decided, through national plans, which R&D fields were worth to be financed. This new policy was generated by the government belief that a R&D system, more based on national plans, is capable of reaching far better results. Through this new national plan the government set the goals to be achieved and the priorities to be followed in the R&D field.

The 2008/2011 R&D National Plan introduced a new structure and new way in managing the R&D issue. It was decided to create a new version of the Comisión Interministerial de Ciencia y Tecnología (CICYT), which is possible to define as a reinforced CICYT. This new version of CICYT entered into service in 2006. The pyramidal structure of the commission, formed by the R&D key actors, allowed to set a better performing national plan, the commission was formed as follows: a chairing body responsible for the elaboration processing of the plan. This sub commission had the key role to supervise all the procedure, and a group responsible about the concrete elaboration of the plan. The first group is a group formed by experts of administration having the main task of policy coordination. The second group formed by science and technology experts.

- three consulting sub commission designed to analyze specific problems;
- a commission for institutional and budgetary matters;
- a commission on financial instruments.

This commission is responsible for finding the financial means to be used in order to implement the national plan. That group has a core function; it is designed to discover and analyze if what set in the previous 20 years in Spain was successful and to which extent a commission on key topics, devoted to determine the main topics to be discussed.

The purposes of the National R&D&I Plan (2008-2011), which was set up in line with the provisions of the National Strategy for Science and Technology, were: placing Spain at the European cutting edge of knowledge, and creating a favourable environment for investment in R&D&I (European Commission, 2013). This new form of national plan for R&D has a structure based on three areas directly related to the plan's general objectives and linked to instrumental programs which pursue specific objectives:

- generating knowledge;
- fostering cooperation in R&D;
- strategic actions.

Italy

Although Italy is trespassing a period of economic austerity, the Country is still among the ten most developed Countries in the world for gross domestic product and it is the third market for magnitude in the Euro Area, this makes it possible for Italy to have a discreet R&D national system which needs to be improved (European Commission, 2014b).

The Italian R&D legal system is based on two main pillars, the national research plan (Piano Nazionale per la Ricerca now on PNR) and productive clusters (distretti produttivi) (Italian government, 2014). The PNR is set by the Parliament and the Council of Ministries. Its coordination within the government is under the responsibility of inter-ministerial committee for economic planning. The Ministry for Education, University and Research (MIUR) coordinate national and international scientific activities, distributes funding to universities and research agencies, and establishes the means for supporting

R&D. The Ministry of Economic Development supports and manages industrial innovation (Italian government, 2014).

The PNR¹⁹ defines the objectives and modes of implementation of specific interventions in priority areas, disciplinary sectors, actors involved, and projects which qualify for funding. The goal is to ensure the coordination of research with other national policies, bringing Italian research into alignment with the strategic vision defined at European level and creating the conditions necessary for a progressive integration of public and private research. The PNR is formulated by the Ministry of Education, Universities and Research (MIUR), after extensive consultation with the actors of the innovation systems (e.g. scientific and academic communities, economic powers and competent administrations). It is implemented after approval by the Inter-ministerial Committee for Economic Planning. The first PNR was formulated during the period 2001-2003. Assessments have indicated that in order to obtain tangible effects on the country's R&D environment, simultaneous action on several levels were necessary. To achieve its objectives, the first PNR proposed a set of integrated actions, each of which involves various initiatives over the short, medium and long term. The main objective was to simplify funding mechanisms, rationalise the administration *modus operandi*, and identify forms of monitoring to ensure that funding is efficiently applied in pursuit of the stated objectives²⁰.

A weakness of the first Italian PNR was a lack of a permanent scheme or structure comparable to the Spanish or French ones, meaning for that, a general lack of a steady plan and continued in the time (Belussi, 2004). This fact does not mean that Italy was gravely lacking on R&D, but it means that Italian R&D was different in the approach, not based as much as French and Spanish on a national R&D plan²¹. For many years the PNR hugely changed in scopes and terms, moreover before 2014 The Italian national PNR was an instrument through which the government substantially performed a very light and inconsistent activity of fund distribution. Based on historical data the Government was distributing "R&D" funds for generic projects or studies²². Those funds quite often were used for covering personnel costs, which had very little in common with R&D.

Beside the national plan, the Italian R&D system is strongly based on the so called "Distretti Produttivi" productive districts (Bertamino, 2016). These Districts are characterised by a virtuous circle formed by the elements learning, linkage and investment. These districts are sort of self-sufficient system where, leading R&D players have a direct linkage within universities and schools established in the mentioned district. This represents a sort of virtuous linkage that fosters positive cooperation. Companies need research activities which are performed by universities/research centres in the districts with which the mentioned companies have a "trust linkage". At the same time companies take specialised labour work force from the territorial schools.

The so called productive districts for all intents and purposes are to be considered as public policy instruments to foster innovation (Coletti, 2007). Based on the theory "the closer it better" it implements competitiveness of local production systems by creating syner-

¹⁹ The new PNR: http://www.istruzione.it/allegati/2014/PNR_online_21feb14.pdf.

²⁰ PNR aims too at encouraging technology transfer between the actors in the innovation system.

²¹ The Italian PNR structure highly changed during the years, not allowing a consistence in the long run.

²² Projects which often coincided with regular Universities programs and funds were used to support the universities.

gies between companies, universities, research centres and “local authorities”²³ located within limited territorial boundaries. A quite important characteristic is that often these districts are “self-created”, in the meaning that R&D players located in the given zone, start a stronger cooperation and the local authority recognising such stronger cooperation try to assist through a better administrative cooperation (Italian Government, 2014)²⁴.

CONCLUSIONS

This article examined the main institutional aspects of the R&D systems in France, Spain and Italy, which determine R&D policies. It showed as in France and Spain, except of Italy, state control is present in a higher degree. This state control has nowadays a different form than in the past; some decades ago the state control was more direct, and to some extent absolute. Nowadays the mentioned control has the aspect of a soft power, in the meaning that it is more subtle and less evident.

An initial analysis could produce in the reader the sensation that the R&D French system is characterised by a multilevel governance, where R&D actors have to play in a multilevel system without a state control but under a more prudent analysis, it is perceptible how the central government’s hand is still strong and powerful. In terms of forms of public interventionism; new modes of steering and management are noticeable. In such a direction the French government is creating frameworks leading to more selective action and leading to a resources concentration. In other words the central government still uses its steering, power (*Imperium*); this power is now put into use in a less *dirigiste* way, but still is visible a quite strong hint of *neo Colbertinism*. At the same time both in Spain and in Italy even if to a less degree than France, are going into the same path of a modern “Etat facilitator” where the state while letting freedom to the R&D players at the same time create a framework where is the state who directs the main line of the R&D policy through a “moral suasion” given by the national plan; because it is the national plan which encourages the R&D players to follow a determined path.

The evolution of the Spanish R&D system is remarkable. Even if exiting from a dictatorship, the Iberian country started a very interesting implementation of national plans which had as main function augmenting the R&D activity. No doubt the result was to some extent achieved. Afterwards the Spanish government in the 1990’s, tried without the expected results, to swift to a system characterised by incentives. This incentives were planned to be sort of a neutral tool in the meaning that the market had, in the idea of the legislator, to determine the path on which proceed. At the beginning of the century Spain came back to a stronger implementation of the national plan demonstrating in this way that the state cannot completely dismiss its leadership in the R&D field.

Italy with its R&D financing system is an example a contrario. The Italian R&D polices lacked of consistency, hence the soft state power was and is still missing,

²³ To be interpreted in *lato sensu*. Territorial administration is divided between, Regioni, Province and Comuni, and often they have a concurrent competence on R&D matters.

²⁴ Other times are regions that a priori propose the creation of productive districts so to foster investments in the territory.

especially when compared with the French and Spanish experiences. Italy has a quite interesting system based on the “Distretti Produttivi” idea; nevertheless this cluster system is not enough to foster R&D policies on the entire country and it shows how in absence of a strong state coordination R&D is far less efficient. It may take different name or forms but state soft power is still very needed to better allocate the R&D efforts.

In conclusion, if a given state trespasses a period with limited R&D funds, this given state should craft a system similar to the Spanish one. In fact the Spanish system has two characteristics “information and direction” which are indeed useful and produce a better efficiency in the R&D system. The inter-ministerial commission on science and technology (CICYT) has the power and competence to obtain and process the data on the ongoing and future research in the country, this amount of information are then used by the Spanish government to better direct and concentrate the R&D financial efforts. This would be a good approach for Italy, because the Italian R&D system is missing a central entity with a true power of coordination. Every region or national institute in Italy is formally disconnected from the other R&D players; R&D cooperation works thanks to personal contacts instead of a formalized info-system as in Spain. This situation has implication on the lower R&D results of Italy.

The limitations to the research which may had a potential impact were represented by the difficulties in finding the relevant pieces of legislation. The legislation often changed quite rapidly without leaving lasting traces. This problem created some jeopardy in the time frame analysed. Nevertheless the article examines the most important pieces of legislation which definitely influenced R&D activities. In fact when the pieces of legislation were not easily reachable, the research was based on articles covering the relevant topics written by national authors. The next step of the research would be to extend the comparative analysis to the regional level in order to analyse the R&D regional policies and the R&D cooperation between regions of the same state and other states so to observe the main differences in the results and policies.

REFERENCES

- Adam, R., & Tizzano, A. (2014). *Manuale di Diritto dell'Unione Europea*. Torino: Giappichelli.
- Beatson, M. (2007). *CREST 3% OMC Third Cycle Policy Mix Peer Review*. Country Report France. Retrieved from: http://ec.europa.eu/invest-in-research/pdf/download_en/omc_fr_review_report.pdf (10.01.2016).
- Belussi, F. (2004). *The Italian system of innovation: the gradual transition from a weak “mission-oriented” system to a regionalised learning system*. Padua: University of Padua.
- Bertamino, F., Bronzini, R., De Maggio, M., & Revelli, D. (2016). *Local Policies for Innovation: the Case of Technology Districts in Italy*. Bank of Italy, Questioni di Economia e Finanza (Occasional Papers), No 313.
- BOE (2015). *Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio*. Texto consolidado, Última modificación: 30 de octubre de 2015. Retrieved from: <https://www.boe.es/buscar/pdf/2006/BOE-A-2006-20764-consolidado.pdf> (10.01.2016).

- Boudon, J. (2014). *Manuel de droit constitutionnel: La Vème République*. Tome II. Presses Universitaires de France.
- Buesa, M., Heijs, J., Pellitero, M.M., & Baumert, T. (2006). Regional System of Innovation and the knowledge production function: the Spanish case. *Technovation*, 26 (4), 463-472.
- Coletti, R. (2007). *Italy and Innovation: Organisational Structure and Public Policies*. Rome: Centro Studi di Politica Internazionale.
- Draetta, U. (2015). Elementi di diritto dell'Unione Europea. Parte istituzionale. Ordinamento e struttura dell'Unione Europea. Milano: Giuffrè.
- European Commission (2010). *Expert Evaluation Network Delivering Policy Analysis on the Performance of Cohesion Policy 2007-2013*. Task 1: Policy Paper on Innovation. Directorate-General Regional Policy.
- European Commission (2013). Erawatch country reports 2011: SPAIN. Luxembourg: Publications Office of the European Union.
- European Commission (2014a). *Research and Innovation performance in Country Profile France*. Retrieved from: <https://rio.jrc.ec.europa.eu/en/country-analysis/France> (10.01.2016).
- European Commission (2014b). *Country Report Italy: regional aspects of KETs deployment*. Directorate-General Enterprise & Industry.
- European Commission (2014c). *Innovation Union Scoreboard 2015*. Retrieved from: http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/?nl_id=104 1 (10.01.2016).
- European Parliament (2015). *The Principle of Subsidiarity*. Retrieved from: http://www.europarl.europa.eu/atyourservice/en/displayFtu.html?ftuId=FTU_1.2.2.html (10.30.2015).
- French Ministry for External Affairs (2010). *MAE Stratégie innovation v anglaise.indd*. Paris.
- Guichard, R. (2005). Suggested repositioning of defence R&D within the French system of innovation. *Technovation*, 25 (3), 195-201. doi:10.1016/S0166-4972(03)00131-7.
- Italian Government (2014). *Programma Nazionale per la Ricerca 2014-2020*. Roma.
- Kelsen, H. (1991). *General Theory of Norms*. Oxford: Clarendon Press.
- Laredo, P., & Mustar, P. (2001). *Research and Innovation Policies in the New Global Economy*. Cheltenham: Edward Elgar.
- Miguel, A., & Galindo M.M. (2003). Algunas consideraciones sobre el crecimiento económico. *Cim. economía Revista económica de Castilla – La Mancha*, 2, 129-158.
- Muñoz, E. (2006). *The Spanish system of research Research and innovation in Spain*. Working Paper 98-15. Madrid: Instituto de Estudios Sociales Avanzados (CSIC).
- Navarro, M., & Gibaja J.J. (2009). *Typologies of Innovation based on Statistical analysis for European and Spanish Regions*. Working Papers INNOVA 2009-4. San Sebastian: Basque Institute of Competitiveness.
- OECD (1997). *National Innovation Systems*. Paris.
- Office of the Prime Minister (2012). *Summary of French regions' regional innovation strategies*. DATAR – Europe Department.
- Piattoni, S. (2009). Multi-Level Governance in the EU. Does it Work? In: *Globalization and Politics: A Conference in Honor of Suzanne Berger*, 8-9 May 2009, MIT. Retrieved from: <http://www.princeton.edu/~smeunier/Piattoni> (04.01.2016).
- Pietre, A. (1986). Colbertisme et dirigisme. *Revue des Deux Mondes*, Octobre 1986.

- Reppy, J. (Ed.) (2000). *The Place of the Defense Industry in National Systems of Innovation*. Occasional Paper 25. Cornell: Cornell University Peace Studies Program.
- Rich, E.E., & Cole, C.W. (1964). Colbert and a Century of French Mercantilism. *The Economic History Review* 10, 164. doi:10.2307/2590799.

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Main and Ancillary Proceedings in the Light of the EU Insolvency Regulation 1346/2000 on International Insolvency Law and Innovative Companies

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Abstract

The activity of advancing research in entrepreneurship in the global context cannot disregard insolvency law. Insolvency and entrepreneurship are different sides of the same coin. For this reason the objective of this paper is to draft the main features of the EU regulation 1346/2000 on international insolvency law. The European Union attempts on insolvency situation deeply changed during the last decades. Nowadays insolvency is considered as a possible event which may occur, and it is not considered anymore as the unfortunate end of an entrepreneurship experience, consequently the EU regulated the cases when an insolvent company has creditors or assets across the European Union. The author drafts the main problematic concerning the coordination concerning international insolvency cases within the EU and shows which is the road map that the EU commission is tracing, demonstrating that entrepreneurship is too an important value not to be sufficiently protected.

Keywords: internationalisation; EU; insolvency; innovation

JEL codes: K33, G33

INTRODUCTION

Nowadays we are witnessing vast changes in the insolvency contest. It is impossible not to notice that an insolvency procedure may not just focus on the creditors satisfaction. In other words an insolvency procedure shall not be just considered as a procedure for assets liquidation. When circumstances make it possible, Insolvency must aim as well at the company's restructuring in order to protect company's intrinsic value. Periodic economic downturns may often result in creditors chasing the assets of their distressed

debtors. The insolvency's aggressive function shall not be sublimated. It may occur that at certain conditions the company's survival is crucial as well.

The common market is a pillar of the European Union (EU). Nevertheless the EU is not yet a federal country but is a group of countries which tenaciously try to keep intact their spheres of competences and jurisdiction. For this reason the article main goal is to describe how the EU legal system deals with international insolvency cases within the EU borders itself (Wessels, 2010).

The article's main goal is to examine the characteristics of the ancillary procedures and the changes occurred due to the new recast of the regulation. In order to reach such result the two versions of the regulation will be compared. In addition, the analysis refers to some of the most interesting sentences of the European Court of Justice, which anticipated the recast, and prepared the path to the recast itself.

Sometimes an insolvency procedure may trespass country's border, sometimes an insolvency procedure's relevance may reach such an international extent to suddenly become sort of modern Hydra. The Hydra in Greek mythology, was a very famous monster resembling a serpent that possessed many heads so powerful that could only be defeated by Hercules. When an insolvency procedure has an international extent usually produces a plurality of insolvencies procedures. Trying to coordinate all of them sometimes may resemble the famous second labour of Hercules.

The article is divided in three sections: it starts with a general part on the main issues arising from international insolvency cases, then it proceeds with an analysis of the European regulation on Insolvency (reg. 1346/2000). Finally in the conclusion of the article I draft recommendations for the future.

LITERATURE REVIEW

The concept of entrepreneurship in the global context needs to be supported by a knowledge of international insolvency law. Insolvency and entrepreneurship are sides of the same coin. we may compare a company to a ship and the market to the ocean. As a ship crossing the ocean, and the ocean's water are not always calm and perils may appear at every moment. Market's waters as the ocean's waters which the ship and the company have to go across maybe not always calm and quite. A financial crisis as a sea storm may expose the company to huge perils and threats. A company may overstep just a momentary lack of liquidity.

For example if an healthy company is the main supplier to a public hospital, whose financial provisions represents more than 50% company's introits; and let's imagine what would happen if the Health Ministry postpones *ex iure* all the payments of all the hospitals for six months or more, due to an international financial crisis.

The mentioned company is not *in decotio* and does not seem to deserve an insolvency procedure. *Decotio/onis* is a Latin word expressing the state of company whose destiny is irremediably signed.

Nowadays market confidence is vital, restructuring mediation, can be a good solution toward preserving company's reputation. In fierce times like those we are living, companies have the utmost interest in keeping firm their reliability in the market; it is evident as the discretion assured by mediation is crucial when the moment for choice comes. Restructuring mediation proves itself to be efficient and satisfactory. It does not

need a tribunal or public moments, mediation may be conducted with the maximum degree of confidentiality, speed and agility (Lai, 2012).

A problematic approach arises from the confrontation of two main insolvency theories the universalistic theory and the territorial theory. The universalistic theory affirms that there is only one procedure and only one *massa activa* and *massa passiva*. This theory tries to concentrate all the disputes under the knowledge of one single authority independently if the bankrupt assets are spread among Europe; in such a sense all creditors will have to make a legal claim in front of the same authority. The universalistic theory believes in a form equality between all creditors. A relevant question mark is if the Universalistic approach truly guarantees an equal treatment among all the creditors or if *a contrario* fosters the creditors from the Country where the claim has been filled (Daniele, 2004).

The territorial theory instead starts from the belief that only a national procedure may truly guarantee an equal treatment among creditors. For this reason under this theory a plurality of insolvency procedures are possible, each of them independent from the other. A negative effect of such a theory is the different treatment of creditors living in countries where the bankrupt company has a smaller subsidiary. Often such subsidiaries are undercapitalized and for this reason they represent an obstacle to a true equal treatment of creditors (Daniele, 2004).

The entry into force of Regulation No. 1346/2000 on 31 May 2002 marked the end of a prolonged vacuum marked by the absence of coordinated international regulation of insolvency proceedings. The Regulation, rather than attempting to harmonize substantive laws or purporting to be a first step to an all-encompassing pan-European insolvency regime instead aimed at improving the efficiency and effectiveness of insolvency proceedings having cross-border dimensions by removing the formalities which had previously been associated with recognition and enforcement. Its goal was to establish common rules on cross-border insolvency proceedings, based on principles of mutual recognition and co-ordination. It sought to achieve this goal by harmonizing the rules regarding the jurisdiction, aiming at restoring creditors equality, introducing uniform rules of conflict of laws and disincentivising companies from seeking forum shopping.

Member States have been unwilling to accept a competences handover to the European Union. It has occurred, when the competencies to be transferred were considered by Governments sort of direct countries sovereignty expression. It took almost 40 years to arrive to the emanation of the regulation No. 1346/2000. In the light of the EU regulation No.1346/2000 and its new recasting. It is very interesting to analyze the main differences between the previous text of the regulation and its new recasting.

FIRST REGULATION ON INSOLVENCY PROCEEDINGS

A secondary procedure could be open in a foreigner country only in presence of dependence. A dependence is not just a belonging good. This would not be enough for opening a secondary procedure. A dependence is an organization of men and goods allowing a production¹. Such secondary procedure shall be limited to the country where the dependence is located. This limitation has a relevant importance, in fact in some countries an insolvency procedure has a universal attempt, so this secondary procedure pits some

¹ A production can consist of a production of services or products.

limits to the universalistic principle. The authority of the main procedure had not jurisdiction on the ancillary procedure, in such way posing an insurmountable bastion to the universalistic theory. Another indispensable element for a secondary procedure to start was to have a previous open main procedure. But the more interesting characteristic was that the basis on which the secondary procedure could be open relied on the legal system of the main procedure (Omar, 2013).

This is a quite peculiar characteristic because it could happen that a secondary procedure was open on the basis of foreigner rules, so if under the law of the country of the main procedure it was possible to open an insolvency procedure therefore would be possible to open a secondary procedure also if the legal system of the country where should be open the secondary procedure does not consider such a possibility.

So for example if in the alfa country (country of the main procedure) also an agricultural entrepreneur (i.e. farmer) could fill for bankruptcy, so also in other countries could be open a secondary procedure also if the legal system of the country beta did not contemplate such a possibility. A limit to what expressed before was represented by the public order clause. If a bankruptcy sentence was against the public order clause, it could not be implemented in the “receiving” country.

The function of the secondary procedure was to create a balance to the universalistic power of the main procedure. The European legislator in such way tried to limit the power of the main procedure and protect the local interest². An excess of complexity of the bankrupt assets could lead the Insolvency Office Holder³ to ask for the opening ancillary procedures. Also deep legislative differences could lead to new ancillary procedures. The EU Legislator was very pragmatic during the drafting of the 1346/2000 regulation and during its recasting.

The hierarchy between the main and the ancillary procedure before the recasting sometime was not clear. It could happen that an ancillary procedure was more relevant than the main procedure. Art. 29 of the regulation affirmed that every legitimate subject could ask for the opening⁴ of an ancillary procedure. This opening “de facto” limited to a cert extent the main procedure. To the secondary procedure was to be applied the law of that country and not the law of the country where the main procedure was. This was an impressive tool in order to stop the power of the main procedure; this tool did not functioned the other way round. The Insolvency Office Holder (IOH) of the main procedure could not avoid or block the opening of a secondary procedure. For these reasons was appropriate to affirm that the presumed hierarchy was valid up to a point. The main procedures still lead but were balanced by the possibility to open ancillaries ones. Sometimes having to cope with different legal systems could create quite a quantity of problems and inefficiencies to the IHO. So that it could happen that opening several ancillary procedure lead to a better management (Lai, 2011).

An interesting ancillary procedure was represented by the Daysitek case. The Daysitek was a French holding with the head company located in London. However the head company was sort of empty box, but the financial core of the company assets were located in France. However the main procedure had already been opened in London caus-

² In this case intending creditors.

³ We are talking about the Insolvency Office Holder of the main procedure.

⁴ Only when the requirements objective and subjective are met.

ing the impossibility of opening a true main procedure in France. Luckily it was possible to open an ancillary procedure⁵. Similar cases were the Rover case between France and England and the Illochroma case in Italy where the main procedure was opened in France but concretely was the Italian procedure⁶. In the Illochroma⁷ is due to be noticed as the French IOH opposed the opening of a secondary procedure⁸.

From these examples is possible to understand as the secondary procedure was considered as a tool allowing to correct possible mistakes or a way to avoid forum shopping⁹. It could happen that, taking into account the economic assets, the relevant procedure was the ancillary one; and this could modify the practical hierarchy between the procedures.

Setting “a priori” hierarchical rules may lead to quite difficult practical situations whose solution is not simple; for this reason the EU Legislator in the article 31 established an obligation for a reciprocal cooperation amidst the Insolvency Office Holders (Wessels, 2009). This cooperation is not a under a hierarchical order, it means that under certain conditions the two procedures are equal. However, it has to be noticed that:

- the Insolvency Office Holder of the main procedure had the right to ask for a 3 months suspension of the procedure;
- the secondary procedure consisted in a liquidation of the asset; no recovery was possible under the secondary procedure;
- In the hypothetical case that the secondary procedure produced an active residual, that active residual has to be passed over to the main procedure.

As an example on how the Regulation was not clear in explaining if there was a hierarchy, it is important to analyze art 32 of the regulation pre casting. Art 32 expressed that a creditor had the right to lodge a claim in any of the procedures in so far as the lodging was concretely useful and was not used as a dilatory tool.

An interesting aspect of the integration between the procedures is the credit insinuation. In any country there is a classification of the credits which makes some of the privileged. This classification may look like a pyramid where it means that some credits¹⁰ will be satisfied before than other. A real estate mortgage owned by a bank is without any doubt a privileged credit. On contrary an unclassified credit will be at the bottom of the mentioned pyramid.

Such classification differs from Country to Country. A credit privileged in a Country could be not or less privileged in another Country, the regulation 1346/2000 does not mention any tool in order to avoid superposition or other problematic situations which could create sort of procedural impasse.

⁵ Even if formally was a ancillary procedure, “de facto” the French procedure was treated as the main procedure even if was limited to the French territory.

⁶ Even if it was the procedure with the most relevant assets, it was a secondary procedure.

⁷ The reader may find the Illochroma sentence looking in the general database of the Italian ministry of Justice writing App. Torino, 10 marzo 2009.

⁸ Notably very often Insolvency Office Holders are reluctant to let open ancillary procedures. Even if the regulation 1346/2000 furnishes tools for a better coordination, there is still some resistance.

⁹ Forum shopping is the informal name given to the practice adopted by some litigants to have their legal case heard in the court thought most likely to provide a favorable judgment.

¹⁰ The credits at the top of the pyramid are the most secure, the ones that will be satisfied at first.

THE RECAST ON INSOLVENCY PROCEEDINGS

The recast has slightly changed the secondary proceedings. Nevertheless those changes had quite interesting repercussions. The recast specifies the new version of the regulation will lift this restriction and allow secondary proceedings to be rescue as well as liquidation proceedings. There will therefore not be any distinction in the types of proceedings that can be used as main or secondary proceeding.

The Recast regulation also recognizes that secondary proceedings may represent a risk and thus hamper the efficient administration of an insolvency estate. The Recast regulation provides different means to avoid the need to open secondary proceedings altogether. Main proceeding international office holders will be able to give an undertaking in respect of assets located in a member state where secondary proceedings could be opened that they will respect local distribution and priority rules. This would ensure that local creditors are not disadvantaged by not opening secondary proceedings.

The undertaking is to be approved by the “known local creditors”. A “local creditor” is a creditor whose claim against the debtor arises from or in connection with the operation of an establishment situated in a member state other than the one where the debtor has his centre of main interests. It will also empower officeholders in other jurisdictions to use this mechanism (Omar, 2013).

The undertaking needs to be approved by local creditors. The Recast regulation sets that “the rules on qualified majority and voting that apply for the adoption of restructuring plans under the law of the member state where secondary proceedings could have been opened shall also apply for the approval of the undertaking” (Regulation (EU) 2015/848, Art. 36). Each member state will have to specify what the required qualified majority voting rules are. However, for member states where there is more than one restructuring plan regime with different majority thresholds this may be more difficult. Recital 42 recognizes this and states that all member states need to designate the specific procedure which is to apply.

Where an undertaking has been approved, the court seized of a request to open secondary proceedings may still proceed. This is the case where the court is not satisfied that the undertaking adequately protects the general interests of local creditors – although, as recital 40 states, the court should take into account the fact that the undertaking has been approved by a qualified majority of local creditors. The main proceeding officeholder is to be given notice of a request to open secondary proceedings and have an opportunity to be heard. Where a temporary stay of individual enforcement action has been granted to allow for negotiations between the debtor and creditors, the court may stay the opening of secondary proceedings for a period of up to three months (provided suitable measures are in place to protect the interests of local creditors).

Secondary proceedings are strictly connected to group insolvencies and group coordination proceedings. The recast had introduced an innovative new chapter dealing with groups providing for additional co-operation between officeholders. Where more than one member of the group is in insolvency proceedings, an international office holder appointed in any proceeding will be able to request the opening of group coordination proceedings. For the purposes of the recast regulation, a “group of companies” is a parent undertaking and its subsidiary undertakings. A parent undertaking is an undertaking

which controls (either directly or indirectly) one or more subsidiary undertakings. Where an undertaking prepares consolidated financial statements in accordance with the EU Accounting Directive it is deemed to be a parent undertaking.

Where the opening of group coordination proceedings is requested at a number of member state courts simultaneously, the court first seized will have jurisdiction to consider the request. This avoids a determination of where a group's most crucial functions are performed in favour of a much simpler "court first seized" approach.

CONCLUSIONS

Understanding the main characteristics of the regulation 1346/2000 represents a very important tool for advancing research in entrepreneurship. In fact insolvency does not have to be understood as the end of entrepreneurship, on the contrary nowadays insolvency has to be treated just as a moment of an entrepreneurial experience, but not necessarily its last.

A limit to this research is the focus in the differences amid the ancillary procedures ante and post the recast. In the next future the author will analyze the main procedure aspects, after the recast. In fact few months have passed since the recast has been published in the journal of the European Union and we are still waiting for the its first application.

In this article the author summarized some of the main aspects of the regulation 1346/2000 which were and still are source of problematic issues. The Legislator tried to avoid interpretative doubts, however such a task is far away from being completely accomplished. Too many are the differences among the different legislative systems to permit a complete integration.

Too many times judges were not informed about pending claims in other countries and other judges did not know how to inform about the starting of a procedure. A recommendation for the future would be the following : Avoiding dangerous conflicts between authorities with a true strong cooperation. Often when an international insolvency procedure is open, the related information is not spread among the authorities of the interested countries. The judges too often avoid to truly cooperate amid them in international insolvency cases; covering themselves under the lack of written procedures; reaching an effective cooperation is an absolute need. For this reason a method of cooperation is needed to be implemented by the EU legislator; so to provide judges with tools allowing a fast and effective communication among the courts in Europe.

REFERENCES

- Council Regulation (EC) No. 1346/2000 of 29 May 2000 on insolvency proceedings. Official Journal L 160, 1-18.
- Daniele, L. (2004). *Il Regolamento N. 1346/2000 relativo alle procedure di insolvenza: spunti critici*, in Dir. fall., I, 593.
- Lai, L. (2012). A new prospective for saving companies intrinsic values. In: S. Morawska (ed.), *Ekonomia i prawo upadłości przedsiębiorstw* (pp. 281-289). Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej.
- Lai, L. (2011). *Domestic rules for cross-border insolvencies outside the EIR framework in Italy and Poland. Substantive Harmonisation and Convergence of Laws in Europe*. Papers from the INSOL Europe Academic Forum Annual Insolvency Conference, 21-22 September 2011, Venice, Italy.

- Omar, P. (2013). *International Insolvency Law: Reforms and Challenges*. London: Routledge.
- Regulation (EU) No. 2015/848 of the European Parliament and of the Council of 20 May 2015 on insolvency proceedings (recast). Official Journal of the European Union, L 141, 19–72.
- Wessels, B. (2010). *Complementing the European insolvency regulation with soft law*. Baden Baden: Nomos Verlag.
- Wessels, B., Markell, B.A., & Kilborn, J.J. (2009). *International Cooperation in Bankruptcy and Insolvency Matters*. Oxford: University Press.

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Creating the Environment for Innovation and Entrepreneurship

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Abstract

Innovation generation and diffusion have been widely acknowledged as hinging upon the complex set of institutional, social and psychological processes. The objective of the paper is to examine the need and possibilities of creating the environment for innovation and entrepreneurship in the university setting. In particular, this paper focuses on interrelationships and roles of specific groups of university members: the administration, faculty and students. The study is exploratory in character, based on observations and literature review. It starts with defining modern-day university as home of innovation emphasizing the need for interdisciplinary and interinstitutional approaches. The paper discusses the need of faculty to learn to reach across the institution and beyond to work with others, working across silos of academia and meeting with others from very different disciplines. Second it examines ways the university administration support can encourage innovation among its faculty, staff and students. Third, it draws on existing research to identify key dimensions of change. The study proposes pathways that may activate the mechanisms of climate and infrastructure for innovation. The proposed dimensions and analyzed areas of change can potentially form the foundations of a framework for universities seeking to diagnose their existing condition and use such findings to enhance the generation and diffusion of innovation. The university quest to break down the barriers and reach across the disciplines to generate innovation takes commitment which needs to be coupled with administrative change such as the reward structures lined up with the vision and changes regarding the teaching and learning practices as well as the physical environment for the classes, the class rooms and meeting spaces of students and faculty.

Keywords: innovation, environment for innovation; interdisciplinary; culture of innovation; tools of innovation

JEL codes: M14, I25, O21, O31, O35

INTRODUCTION

While innovation can happen accidentally anywhere one or more minds are together, if a university considers it to be part of its vision and mission it has to plan to encourage its growth. The University needs to create the atmosphere that will help with the growth of innovative and entrepreneurial thinking. The University must consider different types of leadership in innovative thinking, including the current focus on the design thinking. This paper examines creating the environment for innovation and entrepreneurship in the university setting. It draws on experience of two very different academic environments: US and Latin American Universities. In the US are 50 of the top 100 most innovative universities and in Latin America there are none (Thieveau, 2015).

The paper is exploratory in character and formulates important questions. It explores the potential of business or engineering schools as the right place to create the innovation environment through engaging interdisciplinary, and interinstitutional logic. The paper analyzes the problem of supporting teams functioning across departments, campuses and colleges and mentoring them with faculty from different areas. The paper also discusses student engagement: how early in the process should students be encouraged to participate? Is it better to start with first year students or seniors?

The first section of this paper addresses the location of the home of innovation in the university including the need for some schools that are single themed to work with other universities. Second it examines ways the university administration support can encourage innovation among its faculty, staff and students. In order for succeeding generations of students to learn the innovative process, the current generations of faculty must also learn the process. Third, the paper discusses the need of faculty to learn to reach across the institution and beyond to work with others, working across silos of academia and meeting with others from very different disciplines. This is necessary as hearing the different perspective opens one mind to new ideas, which is the first step in innovation. Fourth, the paper identifies the necessary environmental support for innovation; offering support for the culture of innovation on the campuses of the university. The conclusions suggest that instead of letting innovation happen apparently randomly, Universities can work hard to get them into a coherent stream of cross sectional cross institutional activities based on exchange and cooperation to encourage, facilitate, foster and thrive on innovation.

HOME OF INNOVATION: THE NEED FOR INTERDISCIPLINARY APPROACH

One can label any department or institute with the word innovation, but unless it is actually providing a nurturing environment for people across the disciplines it is probably not achieving its goal. Business and Engineering may not be the right or only place for innovation in the university. Traditionally universities have tried to work with business schools and engineering schools or colleges. Theoretically the engineers know how to build the idea and the business people from marketing and entrepreneurship should know what is needed. New Product texts often relate the two areas slowly adding on other business areas like Finance for cost of capital, Accounting for product cost, and operations for how to manufacture or put into pro-

cess the new item. It is one thing to go to the store and pick an item that exist and suggest that your organization should have one as well. It is another to try and come up with a new solution to problems that face people in our world, country or region. Problems can be well defined such as, how do you make it easier to have a really good cup of coffee in the morning, or how do you feed 9 billion people? Therefore Universities need at least two key elements to generate innovation. First universities must encourage teams that reach out across the institution to include different disciplines in the most vibrant and creative ways. Second extensive research must be done into defining the gap or the need to be resolved. This requires.

Since ancient times universities have separated faculty into different disciplines forming silos. These disciplines have often ended up in their own building such as the medical building, or they are grouped with similar disciplines such as the sciences building, containing biomedical science, chemistry, physics and more. In the Unites States as campuses were built the style of separation became more and more popular as donors were sought to fund the Anthropology building, the Communications building, or the Theater building. The practice of sprawling campuses with separate buildings for different disciplines led to much deeper scholarship in each discipline. When you spend all day with people in the same department you are not likely to easily pick up ideas from someone across the campus.

As disciplines get department heads and deans with their own reward structures they become more and more insulated from other departments and interdisciplinary thinking. Add to this separate accrediting agencies for business, engineering, and other disciplines and universities lose the important cross disciplinary, or anti disciplinary thinking that is needed to encourage creative innovative thinking. In *Innovative Pathways for University Entrepreneurship in the 21st Century*, it is pointed out that for entrepreneurship and innovation the working across the disciplines, especially across the silos is very threatening to administrators (Hoskinsons & Kuratko, 2014). University wide programs are silo busters and the question is the administration as ready as is the faculty to advance change? From a corporate perspective, Smith (2012) says that silo cause problems in three major areas, the priorities are not aligned, silos bloc information flows, and there is often a lack of coordinated decision making.

Many of the problems that the world faces today needs to be looked at across the disciplines. There are some large problems which have been labeled in the past wicked problems (Rittel & Melvin, 1973). Such a problem is that of feeding the world. This is a problem that requires multidisciplinary approaches: the demographers to show the rate of urbanization, the agronomist to show the amount of arable land, the ecologist to inform on the degrading ecosystems, big data experts to look at problems in new ways, the biologist, chemist and many more to help with solutions, as it is not only what is grown, but how much is lost in the ground, in handling, transport and storage. Add to this smart phones in the hands of farmers, apps, and the world of technology and problems can be more manageable working across disciplines (Carlson, 2015). Listed below is a long but not inclusive list of disciplines that would work well as part of an interdisciplinary innovation or entrepreneurship cohort:

- | | |
|----------------------------|----------------------------------|
| i. Anthropology | xvi. Kinesiology |
| ii. Art | xvii. Library Science |
| iii. Biomedical Sciences | xviii. Languages |
| iv. Chemistry | xix. Mathematics |
| v. Communications | xx. Medicine |
| vi. Computer science | xxi. Nursing |
| vii. Cultural studies | xxii. Occupational Therapy |
| viii. Dance | xxiii. Physical Therapy |
| ix. Design | xxiv. Physics |
| x. Education | xxv. Psychology |
| xi. Environmental Sciences | xxvi. Recreational Therapy |
| xii. Ethnography | xxvii. Research or Investigation |
| xiii. Geography | xxviii. Sociology |
| xiv. Graphics | xxix. Social Work |
| xv. History | xxx. Special Education |

Defining the gap, the problem, the opportunity that might be focused on is a very important issue for any innovative process. Universities have research institutes and faculty performing research all capable of helping to define the gap or the need. The problem definition or theme is a key to starting the innovation process. There is an art deciding on the opportunity of focus. If you think you can end poverty in the world you have no definition or focus. The United Nations in their millennial goals provided some distinct gaps to work on which led to much creative work on the problem of poverty (United Nations, 2015).

Design thinking can be a starting point in identifying and framing the problem. In Design thinking this is done with Empathy; trying to understand the experience of the segment of the population you are trying to serve. What is the problem? How many people experience this problem in the community, the regions, or the world? What are the people like who experience this problem? What do they feel when they experience the problem? Is this a problem that you see as a problem because of your culture? Maybe it is not perceived by the people you are observing. This is where those who are good at investigation and research can help. The challenge of the university is to be sure that these kinds of people are a part of innovation teams.

At the CIIC in New Zealand in 2015: There is no simple fix to the education system. The problems in the education systems of many countries are symptoms of a bigger cultural dysfunction. Acquiring knowledge must not be confused with memorizing information and acquiring beliefs. The goal of teaching must change from transmitting factual information to the cultivation of thinking tools. Knowing how to ask useful questions and knowing how to reason and use the scientific method is much more important than memorizing answers (CIIC, 2015).

Radjou *et al.* (2010) discuss the idea of, “reframers”, those who reframe a problem from a different perspective. Examples include, Indra Nooyi reframing Pepsi has a provider of health solutions, Jeffrey Immelt’s reframing GE Medical to focus on more for more people for less environment and economic cost and Ratan Tatta reframing the up and coming from low earners to high yearners. Universities can encourage these alternative ways of reframing problems. One clear method to at

least increase the perspective is to include more disciplines in the mix as people than will address questions from different perspectives.

ENCOURAGING AND SUPPORTING INNOVATION ACROSS THE DISCIPLINES AND INSTITUTIONS

There is a number of factors which can contribute to faculty exchanging ideas and working together across disciplines. Mentoring is one way to encourage the development of interdisciplinary work and potentially innovation. Most mentoring is done within colleges, and departments. In the case of Innovation, within the university reaching out across departments for those who think differently, possibly the reframers who can mentor others to think about problems in new ways holds great potential. If we take a look at a problem like the above mentioned feeding the 9 billion people in 2050 you can begin to think about how this interdisciplinary approach might help all the faculty involved to advance.

In order to expect outcomes, the right actions need to be rewarded. A reward structure for any of the interdisciplinary innovative activities sends a clear message. In most schools the rewards are passed out through the provost to the Deans and to the departments on some kind of rational system, (research, teaching, service), that supports the work of the departments and the schools or colleges and thus the university. This encourages the fiefdom, the territoriality or what is called in the United States the silo approach. Universities that really want to encourage looking at the world in new ways across the disciplines. Several options appear here: direct compensation as in traditional pay boost, some kind of indirect compensation such as the opportunity to participate in retreats that are workshops on innovation, or innovation in practice; and finally the opportunity to participate in some kind of innovative challenges. An example, might be ten faculty each given a portion of the cost of a travel some place in the world. As a team they must select where they are going, how much each of them will need to pay, what larger problem they hope to work on, and finally what will each discipline organize something in the country of focus relevant to the problem? This is just an idea of how this might work.

Reaching across institutions for interdisciplinary teams is another important concept. A typical early level example was a university that had a business school but did not have an engineering school would seek out an engineering college or university as a partner. This raises all sorts of challenges but also a vast array of opportunities.

If the goal is to create an environment where innovation can flourish than having faculty and students from different backgrounds can truly enrich the process and the potential for making the product real. Business students, and many others today can develop an idea. In order to take that idea to reality they need engineers, designers, and people from many of the careers mentioned above. University administrations need to be open to the idea of including other universities that have complimentary organizations, careers and students.

When the author was working in another country with a colleague and they had only a generalized regional university branch of one of the nation's main universities they reached out to find other universities to work with. The author's colleague scoured the regional city looking at public, private, church controlled, universities trying to find one that could contribute engineering and more to the mix. He was successful and most important the administra-

tions on both sides were willing to let this odd relationship of a public regional campus, and the local campus of a private national competitor work together. It got things moving.

Today in a similar effort in the United States two universities four colleges and one giant of innovation in the corporate world are working together to try and understand how best to do these look at problems in new and different ways as they seek to make innovation happen amongst their students and faculties. Administrations need to dare to explore new areas, encourage faculty members to try relationships that might not have been considered before. Leaders need to look at their own campuses and the disciplines and majors taught but what else is available in their city and in their region. In this technical age it may be that through software platforms teams from very different approaches can work together possible even in different languages.

SYSTEMATIC SUPPORT FOR THE CULTURE OF INNOVATION

There are many ways in which a university can begin to support innovation and innovative thinking amongst students and faculty. Some are focused on providing opportunities for students and some are focused on providing opportunities for faculty members to grow and change. It is interesting how many universities tend to focus on throwing money at the idea by hiring new staff, creating new units and other big plans. In fact, a little creative support may generate some rapid interdisciplinary activity and idea development.

An easy start up solution is to make available to students and faculty all the things that are going on in the region that are related to developing innovative thinking. In the United States there are many. There are programs like Business Plan Competitions, Idea Pitches, the Rally, Start-Up Weekend, and the Hult Prize that are occurring all the time. In many states and countries there are competitions, government, educational, industry, or artistic events related to innovation that could be put on the calendar. People are often surprised at how much is going on in their area that they never looked at before they started to put together a calendar.

Encouraging students to participate in innovation related events is important. Students do not require much of an incentive to enter competitions if the university will help to pay their entrance fee. Just the awareness that they can go to an office and have the potential of support for an entrance fee will be motivating. Of course once they are enrolled in a competition students become competitive and want to generate the best ideas they can. They use whatever resources that they can tap into. Many of them will either seek out a mentor or mentors, or run around the university getting people to help with each part of the project. This in itself generates interest and more of an innovation culture.

The students with their smart phones are so much more empowered today. In only a matter of minutes after finding out they have support they have a team and are working on the problem. They can reach out to the community quickly but with the apps now available they can contact people all over the world and if they can get over the language barrier they can get them moving as well. It only takes a little support and a little interest to get students highly motivated.

There are many excellent conferences that can help people advance in their thinking about innovation. These exist in different disciplines (SEA, Self-Employment in the Arts, CEO, Collegiate Entrepreneurs Organization which is interdisciplinary, Start Up Weekend which is interdisciplinary, interinstitutional, and engages the community) and in the pro-

fessional world. While the ones listed above tend to be US based there are many all around the world. Sustainability issues and the strength of technology have led to many interdisciplinary conferences and participating in them is a valuable source of inspiration, meeting new people and new ideas, for both faculty and students.

ROLE OF PEDAGOGY AND INFRASTRUCTURE IN ENCOURAGING APPLICATION

One can quickly make the argument that one should work with the most advanced students. They have the most discipline knowledge, the most experience, and the maturity to follow a process. However that might not work. The more advanced the students the more likely that they are well schooled in their disciplines. This is likely to impact their ability to be open to new ideas and to creativity. In contrast students who have little experience are much more open to ideas but may not have the technical skills. Some universities including the author's university have experimented with working on innovation with first year students. These students do not have defined approaches to problem solving that you might find in a specific discipline. They can focus on a general process of developing an idea without focusing on a discipline.

Faculty plays a central role in supporting innovation and encouraging new ideas generation. If a professor arrives at class with notes on the computer or in hand that they have been using for ten years it is doubtful that they are changing rapidly. Similarly if a professor is not willing to let the students challenge what they are saying the class is probably not encouraging innovative thinking. Academics need to give a lot of thought as to how you encourage innovation and entrepreneurial thinking. Sadly many of those teaching were taught under one of the great systems of memorization that existed in the 20th century. Even until the end of the twentieth century the focus had to be to learn, to know, and memorize, or work with the same things repetitively so that a student would know it for a life time.

In the 21st century all knowledge is easily accessible through a device we can carry on our person or in a hand bag. Ericsson estimates that 70% of the world's population will be smart phone users in 2020 and this is a game changer (Ericsson Mobility Report, 2015). The world's knowledge is accessible by almost everyone from almost anywhere. So what does a university do with her students? The idea of the sage on a stage or the lecturer in front of the class room or auditorium may be outdated. The challenge may be to help students to learn how to use the technology they are holding to access good information, and then how to apply it in a meaningful way. The university that wants to encourage innovation and entrepreneurship will be prepared to change pedagogies rapidly. This shift requires adaptation of administrators, reward systems, evaluation systems, and all the players in and around a university space.

There is much that one can do to encourage creativity, encourage innovation and entrepreneurial thinking but it requires university administration to think beyond traditional facilities. Most classrooms are arranged in some kind theater fashion with everything focused forward and that is what students are used to. They walk in sit down face the professor listen to a lecture or a presentation and leave. Some university introduce rooms in which everything points to the center. There are three screens and three projectors and ample whiteboard space both fixed and movable. Students from their seats can control a screen as well as the professor. First the setup of the room discourages a front helping

the professor to think in new ways. The students who suddenly are empowered as well begin to think differently. The room is amazingly flexible and in that way supports flexibility, creativity, and that helps with new thinking for entrepreneurship and innovation.

One has to wonder how many university administrators send their class room designers and furniture purchasing people out to see what is possible. In one of the university systems the author works with the faculty complained about their traditional armed chairs. However, when I suggested that maybe the buyer should join the group the faculty were surprised. How will the designers and buyers learn if they cannot see what is today and what may be coming tomorrow? Sadly it is often not the innovative professors, or the young that are asked to help with the design of new buildings. Instead the administration counts on the senior faculty and administrators they have known for a long time. So there are knew things but not the set up for whole new ways of thinking to create innovative learning communities.

The same problem exist with laboratories and workshops. How many laboratories or workshop are there in business colleges? Where is the space, and what needs to be in maker labs? Change is occurring rapidly and a few 3 D printers of different sizes are needed. Also needed are spaces to build with wood and material and to experiment. These are not present in most business colleges as they were built. Creativity flourishes when nurtured. What can the university do to create maker or creativity labs?

Along with labs advisors or people with know how are invaluable. How do you sew this? How to you make this out of wood? How do you create a 3D printed model with more strength? Having the technology is part of the issue and then having the people who can lead in its use, who can help students and faculty figure things out in the labs and workshops is important. In the United States good examples of these laboratories and workshops can be found in design schools and colleges.

There are a lot of things that University Administration can look at in order to support either or both innovation and entrepreneurship. Starting from the top does the university vision include innovation and entrepreneurship? Are there reward structures in place for those who are doing these kinds of activities? Do faculty who participate in programs of this sort expanding their skills and learning, and abilities get university rewards? This is admittedly problematic as innovation and entrepreneurship do not fit neatly into classes, they do not fit neatly into service, and the same is true with research. The standard areas for evaluation. Do universities need a culture change to reward these activities? Does the university support administration with spaces for innovation activities? Getting a space where you can put keep ideas on the walls, where you can do pictorial histories of ethnographic studies, where you can maintain the results of brainstorming it is original format can be important. Are the spaces suitable for model building, maintenance as students and faculty explore ideas?

Faculty who have ideas are often not the right people to transfer them to the market place. Does the university have some kind of tech transfer program? This would help the pure scientist evaluate their ideas and decide which ones may belong in the market place of the country or the world. Often faculty research develops obscure parts of something greater and others need to help them see that their ideas are only parts of a whole. A technology transfer program could be an important part of a whole innovation and

entrepreneurship push at a university. Faculty need to think differently if they are to learn with their students in the 21st century.

If the administration is committed to creating an environment for innovation and entrepreneurship it needs to offer a variety of programs to its students, but most importantly to its faculty. Technology is changing the ability to do things rapidly. Faculty need to rethink individual class meetings, whole classes, majors, or careers. How do you begin to create true interdisciplinary thinking and classes in a University? If you are working on entrepreneurship you have to recognize that it will draw from many disciplines and students will feel that classes are somewhat repetitive as they work on a market plan in marketing, a business plan in entrepreneurship, a strategic plan in management, a promotional plan in advertising or communications, a financial plan in finance. These challenges take time to work out and it requires novel approaches. The more support there is from administration the better.

Faculty programs can be offered in short programs as they are on some universities. Longer programs give faculty a chance to get away from their classes and to think on three important levels. First what is this thing that is innovation or entrepreneurship? By participating in a program they can increase their learning tremendously. Second what is the role of my discipline from Anthropology to Zoology in this kind of thinking? Lively moderated discussions can bring out the questions about how does this thinking work in biology to therapy. In the authors experience faculty from across the disciplines are at first puzzled as to why the university administration included them in such a program. Third, how do you use this in a course in medicine or social work? Some who are engaged in innovation or entrepreneurship believe that everyone should see the way immediately.

Change is not easy as faculty members have spent years and years getting more and more specialized. The larger and older the university the harder it may be to change the culture. Kirpatrick (2014) points out that being big and venerable is not good for innovation in the corporate world. The same may be true for universities in many countries. Even the rubrics for submitting papers to academic conferences can be quite restrictive in terms of open thinking. This is what faculty do. A university administration that wants to change that to look at the future differently must be willing to spend time educating and helping its faculty.

DISCUSSION

There is not readily apparent literature on creating climates for innovation within the university environment. Issaksen and Akkermans (2011) provides a good literature review demonstrate the importance of leadership on the climate for innovation. Issaksen *et al.* (1999) through their work at the Creative Problem Solving Group, Inc., point to Creativity Research Unit technical reports on specific organizations. For example they used their Situation Outlook Questionnaire (see dimensions below), to investigate the innovation climate in a global health care company. They found differences in climate perception with differences in empowerment and in risk. They went on to make recommendations to industry. Are universities similar enough on a global basis to develop such a measure to help determine climate?

Table 1. Dimensions of fostering innovation at universities

Ekvall's 10 dimensions adapted from M1 Creativity	Groupings adapted from M1 Creativity	As seen by author applied to Universities adapted from the author's writings above
Challenge	Resources	Challenges of administrative fiefdoms.
Idea Time		Mentoring across the disciplines, Tools for innovation across the campuses, Design thinking.
Idea Support		Defining the Gap, Innovation Challenges, Support for out of discipline conferences and interdisciplinary attendance.
Trust and openness	Motivation	Working across institutions.
Playfulness and Humor		Leadership style.
Conflicts		Conflicts over resources, and territory?
Dynamism		Developing a calendar of events. Design Thinking? Applied teaching.
Risk Taking	Exploration	Experimenting with different levels of students. Support for competitions.
Debates		Is debate welcome?
About the Issues		
Freedom		Interdisciplinary

Source: own evaluation based on (Ekvall & Ryammar, 1999).

In most universities every college and institute has its own climate through observation, which does not support innovation goals.

Similarly from an Engineering perspective Panuwatwanich *et al.* (2008) emphasized the important role of leaders in creating a culture of support for innovation. Ekvall and Ryammar (1999) looking at a Swedish University found that the university climate and resources appeared to be the strongest influence on creativity. They identified 10 dimensions that affect creativity. These were organizational and not focused on educational institutions or more specifically universities (Table 1). Further they were focused on creativity and not on innovation. Table 1 was created using Ekvall's 10 dimensions as found in M1 creativity and then trying to place the issues advanced above in this paper (M1 Creativity, 2016). There seems to be merit in university administrations taking a look at the organizational creativity work as a basis for creating an environment more encouraging and supportive of innovation.

Looking in the opposite direction at industry, Day (2016) of Idea Scale advances ten qualities of great innovators:

1. Encourage Risk Taking. In the universities this author has known we do just the opposite with young faculty.
2. Teach others.
3. Start Somewhere. This is the concept of lean startups, but is not the traditional advice or academics. Failure is ok, but what about in academia?
4. Look for Patterns.
5. Stay Positive. This is not necessarily the strength of faculty at most major institutions who feel limited, or restrained, this is not to say there are not many positive faculty.
6. Incentivize Innovation. This is mentioned above. Universities are willing to pay for potentially profitable patents but how much are they willing to invest in innovation, and innovative thinking?

7. Team players. A great example of this is team teaching, which unfortunately is often considered expensive.
8. Connect. Creating and supporting collaboration where it appears. Some universities actually punish those who reach outside their disciplines to work with others, to experiment, to try new pedagogies.
9. Value Culture. Day says that "57% of CEO's believe the most important factor for successful innovation is the culture. How many Chancellors, Rectors, and Presidents see as their job to create an innovative culture?"
10. Value Innovation.

Specifically looking at the Innovation Climate Educause Center for Applied Research found in 2004 that almost 2/3s of It departments had low or low average support for innovation (Katz et al., 2004). This gets more interesting when you look at their break out by type of institution where you see the highest support for innovation at BA granting institutions and it goes down steadily as you move up through Masters, Doctor Int. and Dr. Ext. Carnegie classes. While old, and limited, it does give some measurement of support for the innovation climate. Once again you think where IT reports and as in the case of creativity you end up looking at the role of the top administration in creating the environment.

From the literature it is clear that there the question of climate for innovation has been more important to corporations and other organizations. In this time of great change is it time for university administrations to think about assessing climate and then with knowledge making purposeful changes in the direction favoring innovation.

CONCLUSIONS

Innovation and Entrepreneurship in a university requires change from top to bottom and in each individual. It may actually be very threatening to some. Many have worked long to become a professor and know how to give a lecture in one discipline, know how to perform research in one discipline, and know how to be a professional in one discipline. When university wants to change to be more innovative more entrepreneurial what does that mean to an individual faculty member?

The third decade of the 21st century will be a time of even faster change than the second decade. More people will have useful access to the internet through smarter and cheaper devices. Students who have been brought up on technology will want to learn differently. In the United States preparations are being made for generation Z and how will they learn in contrast to the Millennials. Universities may have to wrestle with the idea that the human brain will be used less to store information and more to connect and apply information in new ways to advance humanity.

Universities that want to lead their nations forward will need to transform themselves from repositories of knowledge to centers of application of knowledge for the betterment of the human community, for the betterment of their nation, for the betterment of communities. Pure research will continue to be needed in all kinds of areas, but the ability to help students to think through how to connect and apply information in new ways will become increasingly important in the very near future.

Further areas of possible investigation could be the following issues: (i) what is the perception of administrators regarding innovation at universities?; (ii) is there

a difference in approach in the market driven countries versus countries driven by humanism?; (iii) could one of the tested organizational climates questionnaires be adapted to the universities to help administrators?

University administrations will need to craft a vision of what they hope their university can become and then work to transform their university in that direction. If the vision is to be innovative and entrepreneurial the administration needs to be prepared to help transform the faculty as only through that process can they begin to transform the thinking of their future generations of students. As pointed out in the paper, the administration has to take action and introduce changes for the creation of an environment that supports innovation and entrepreneurship.

REFERENCES

- Carlson, K. (2015). *Feeding the World with Data*, September 16, 2015. Retrieved from: <http://thomsonreuters.com/en/articles/2015/feeding-the-world-with-data.html> (15.01.2016).
- CEO (2016). *About CEO – Collegiate Entrepreneurs' Organization*. Retrieved from: <http://www.c-e-o.org> (15.01.2016).
- CIIC (2015). Conference on Interdisciplinary Innovation and Collaboration, Dec 15, 2015. Retrieved from: <http://ciic.s23m.com> (15.01.2016).
- Day, J. (2016). *What do Great Innovators Have in Common*. Retrieved from: <https://ideascale.com/what-do-great-innovators-have-in-common> (15.01.2016).
- EMES (2015). *5th EMES International Research Conference on Social Enterprise*. Retrieved from: <http://emes.net/events/conferences/5th-emes-international-research-conference-social-enterprise> (15.01.2016).
- Ekvall, G., & Ryammar, L. (1999). The Creative Climate: Its Determinants and Effects at a Swedish University. *Creativity Research Journal*, 12(4), 303-310.
- Ericsson Mobility Report (2015). *70 percent of world's population using smartphones by 2020*. Retrieved from <http://www.ericsson.com/news/1925907> (15.01.2016).
- Hoskinsons, S., & Kuratko, D.F. (Eds.) (2014). *Innovative Pathways for University Entrepreneurship in the 21st Century*. Bingley: Emerald.
- Issaksen, S.G., & Akkermans, H.J. (2011). Creative Climate: A Leadership Lever for Innovation. *Journal of Creative Behavior*, 45 (3), 161-187.
- Issaksen, S.G., Lauer, K.J., & Ekvall, G. (1999). Situational Outlook Questionnaire: A Measure of the Climate for Creativity and Change. *Psychological Reports*, 85, 665-674.
- Katz, R.N., Kvakik, R.B., Penrod, J.I., Pirani, J.A., Nelson, M.R., & Salaway, G. (2004). *Information technology Leadership in Higher Education*. Colorado: Educause Center for Applied Research, 1, 73-82. Retrieved from: <https://net.educause.edu/ir/library/pdf/ers0401/rs/ers04017.pdf> (15.01.2016).
- Kirpatrick, D. (2014). *Cultures of innovation*. Retrieved from: <http://thomsonreuters.com/en/articles/2014/enterprise-cultures-of-innovation.html> (15.01.2016).
- M1 Creativity (2016). The Climate for Creativity and Innovation. Retrieved from: <http://www.m1creativity.co.uk/innovationclimate.htm> (15.01.2016).
- Panuwatwanich, K., Stewart, R. A., & Mohamed, S. (2008). The role of climate for innovation in enhancing business performance: The case of design firms. *Engineering, Construction and Architectural Management*, 15(5), 407-422.

- Radjou, N., Prabhu, J., Kaipa, P., & Ahuja, S. (2010). How Reframers Unleash Innovation in Their Companies (And Beyond). *Harvard Business Review*. Retrieved from: <https://hbr.org/2010/07/how-reframers-are-unleashing-a> (15.01.2016).
- Rittell, H., & Webber, M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, 155-169.
- Smith, N. (2012). *To Build Your Business, Smash Your Silos*. Retrieved from: <http://www.fastcompany.com/1839317/build-your-business-smash-your-silos> (15.01.2016).
- Sramana, M. (2009). *Key to Innovation: Universities*. Retrieved from <http://www.forbes.com/2009/04/02/universities-innovation-government-technology-enterprise-tech-universities.html> (15.01.2016).
- Thiveaud, E. (2015). *The academic elite: 2015 Top 100 Most Innovative Universities*. Nov 19, 2015. Retrieved from: <http://thomsonreuters.com/en/articles/2015/academic-elite-2015-top-100-most-innovative-universities.html#> (15.01.2016).
- United Nations (2015). *United Nations Millennium Goals and Beyond 2015*. Retrieved from: <http://www.un.org/millenniumgoals> (15.01.2016).
- World Conference on Technology, Innovation and Entrepreneurship (2015). *Entrepreneurship for Technology and Innovation-Based Sustainable Development*. Retrieved from: <http://www.istanbuluniversityinnovation.org> (15.01.2016).

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Entrepreneurship Vulnerability to Business Cycle. A New Methodology for Identification Pro-cyclical and Counter-cyclical Patterns of Entrepreneurial Activity

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Abstract

In literature, there is ongoing discussion whether entrepreneurial activity, approximated by, for instance, changes in self-employment, tends to behave pro-cyclically, counter-cyclically or rather is a-cyclical. Thus far, both theoretical and empirical evidence, where various multiple methodological approaches are used, does not provide clear answer to the latter; while widely offered explanations are scattered and lack robustness. This paper is designed to contribute to the present state of the art, by presenting a novel methodological approach to identification of the relationship between the intensity of entrepreneurial activity and business cycle. Put differently, we aim unveil if entrepreneurship (approximated by changes in self-employment) behaves pro-cyclically, counter-cyclically or a-cyclically. To exemplify our new conceptual approach, we use quarterly data on deflated gross domestic product and self-employment. The empirical evidence presents the case of Italy. The period of analysis is restricted to the years 1995-2014. All statistics are extracted from OECD datasets on Annual Labor Force and Gross Domestic Product.

Keywords: Entrepreneurship; self-employment; vulnerability; small and medium sized enterprises; business cycle; economic growth

JEL codes: D22, E32, M21, O11, C10

INTRODUCTION

In literature, there is ongoing discussion whether entrepreneurial activity, approximated by, for instance, changes in self-employment, tends to behave pro-cyclically, coun-

ter-cyclically or rather is a-cyclical. Still relatively little efforts have been made to empirical verification of entrepreneurial behavior patterns over business cycles. In so far, both theoretical and empirical evidence, where various methodological approaches are used, does not provide clear answer to the latter; while widely offered explanations are scattered and lack robustness. We still lack consistent methodological framework allowing providing clear answer whether entrepreneurship lags or leads business cycles, or whether its behavioral patterns are pro-, or counter-cyclical, hence examining these relationships remains a challenging task.

Regarding the latter, some evidence may be traced in works of Kollinger and Thuri (2012), which using data for 22 OECD countries over the period 1972-2007, use Granger-causality tests to verify if entrepreneur activities are leading or lagging indicator over the business cycles; and their findings they show that entrepreneurship is leading indicator of the business cycle. Rampini (2004), using canonical real business cycle model, finds that entrepreneurship behaves pro-cyclical, which is associated with changes in risk aversion during respective phases of business cycle. Carmona et al. (2010), using quarterly data for self-employment and GDP in Spain and the United States, over the period 1987-2004, adopt the cross-correlations and VAR models to demonstrate that the hypothesis on pro-cyclicality of self-employment cannot be confirmed. At the same time, they present rather mixed results for various groups of self-employed. Klapper et al. (2014), using data for 109 countries over the period 2002-2012, find that entrepreneurial behavior demonstrates strong pro-cyclical patterns. More recent evidence may be also found in works of, *inter alia*, Parker (2002), Parker et al. (2012a,b), Milan et al. (2012), Baptista and Preto (2011).

This paper is designed to contribute to the present state of the art, by presenting a novel methodological approach to identification of the relationship between the intensity of entrepreneurial activity and business cycle. Put differently, we aim unveil if entrepreneurship (approximated by changes in self-employment) behaves pro-cyclically, counter-cyclically or a-cyclically.

It comprises six logically structured sections. Section first is the introduction. The second section briefly explains motivation and contextual background of our further research; while section third demonstrates literature review regarding empirical research examining existing relationships between entrepreneurial activities and business cycles. Next, section four extensively clarifies novel methodological approach allowing for identification whether entrepreneurship activity – approximated by changes in total self-employment – behaves pro-cyclically, counter-cyclically or rather tends to be a-cyclical. In section fifth, using quarterly data on total gross domestic product and total self-employment in Italy over 1995-2014, we exemplify this new methodology. The period of analysis is restricted to the years 1995-2014. All statistics are extracted from OECD datasets on Annual Labor Force and Gross Domestic Product. Finally section six concludes.

MOTIVATION AND CONTEXTUAL BACKGROUND

Both in theoretical and empirical literature, which examines emerging relationships between entrepreneurship and business cycle or economic growth; entrepreneurial activity is approximated by wide variety of measures. Most of studies, bases on the assumption that entrepreneur is simply a business owner; and such approach to defin-

ing an 'entrepreneur' is broadly accepted among scholars, despite the fact that within this numerous group of those who are classified as 'entrepreneurs', usually only a small selection of them may be classified as 'Schumpeterian entrepreneurs' (Schumpeter 1934, Kirzner 1999, Gick 2002), in its generic sense. However, even though such approach is often an over-simplification, in most of empirical works, each type of business owner is treated as an entrepreneur; henceforth a number of private businesses is an accepted measure of entrepreneurial activity in given economy (Koellinger & Thurik 2009). The latter additionally implies that, across empirical the number of active business / enterprises (where a great majority of them is privately owned-business) is treated equivalently as number of small and medium sized enterprises, number of self-employed persons or – alternatively, number of entrepreneurs. Consequently, changes regarding, *inter alia*, number of start-ups, birth rates, net growth of firm population, business ownership rate (as the percentage of non-agricultural owners incorporated and unincorporated businesses relative to the labour force), in economic literature, are broadly accepted as measures approximating entrepreneurial behaviors and attitudes.

A major disadvantage in running extensive and detailed empirical research on entrepreneurship and SMEs sector is lack of availability of balanced time series allowing for reliable cross-country and cross-time comparisons. In this context, statistical datasets on self-employment are relatively well-balanced and long-time series are available, which allows for reliable comparisons both cross time and space. Bearing in mind the latter, data on self-employment are often considered as good measure of entrepreneurship, especially when one yields for international research in this area of interest. Data on self-employment, as an exclusive alternative, are also broadly applied in short-term analysis, when, for instance, are confronted with business cycle. Hence, despite multiple disadvantages, self-employment rates and business owners rates are commonly used by many researchers as a proxy of entrepreneurship (Iversen et al. 2008, Thurik et al. 2008; Parker 2009; Koellinger, Thurik 2012). Importantly to note, as argued by Congregado et al. (2012), as in so far we lack better alternative to measure entrepreneurial activity, but all limitation associated with data on self-employment as a proxy of the latter, should be borne in mind and when drawing conclusion and formulating recommendations.

Among scholars, treating data on self-employment as a measure of entrepreneurship has gained significant popularity in mid-80s of XX century. Previously, self-employment was considered as 'worse' alternative to being an employee. The opinion that high self-employment rate is a syndrome of economic underdevelopment, and should drop as country develops, was very common. However, over last two decades of XX century, economic situation has changed essentially (Carree et al. 2007), and self-employment has gained popularity as a 'source' of new jobs creation, contributing effectively to unemployment reduction, and constituting new and highly-demanded alternative to contract work. Since then onward, growing number of self-employment persons was perceived as a manifestation of entrepreneurial spirit, fostering long-term economic growth and development (see Thurik & Wennekers 1999). Despite the previous, it also shall be borne in mind that empirical evidence on the positive role of increasing number of self-employed people is scattered, demonstrates case-wise vulnerability, while according to several research, like for

instance those of Davis et al. (1996), or Blanchflower (2000) do not unequivocally confirm the hypothesis that growing self-employment enhances economic growth¹.

When treating self-employment (absolute level, in-time variations or time-dynamics) as a measure of entrepreneurship, it shall be noted that this solution also has several limitations and disadvantages. Mueller and Arum (2004) emphasize extreme heterogeneity of this group of people, which results from several aspects. First, only a small share of persons classified as self-employed are those who offer contract work. Second, by some people being self-employed is treated as permanent work status; while for the rest of them being self-employed is only casual. Third, as claimed by Audretsch (2002), Baumol et al. (2009), or Congregado et al. (2012) most of self-employed persons are labeled as 'replicative' or 'me too', and only a small part of them is innovators. Fourth, among self-employed persons may be identified owners of 'old' firms and owners of newly born businesses (Koellinger, Thurik 2009); while both of them impact economic growth differently. Fifth, growing number of self-employed persons may be determined by legal regulations, like for instance, emerging new flexible forms of employment. Very frequently, occupational choices are not results of independent individual decisions, but are caused by pressure of former employers, who forced employees to establish their own businesses, if they want to continue their jobs. The latter usually negatively affects low-skilled persons, and may be identified as a 'dark side of flexible production' (Mueller & Arum 2004, p.12). All these aspects mentioned above may, in effect, generate inconclusive and hard to interpret results. For instance, Spain and Italy where self-employment rates are relatively high, if compared with other developed economies, demonstrate more intensive entrepreneurial attitudes than, for instance, the United States where self-employment rates are essentially lower (Iversen et al. 2008; Congregado et al. 2012). The fact, that Spain and Italy have relatively high self-employment rates does not mean that these economies are more entrepreneurial than economy of the USA where self-employment rates are essentially lower. In the same line, Portuguese economic development should be identified as more entrepreneurial-led than for instance German economy. Belso (2005), Parker (2005) or Carree et al. (2007) argue that each economy is characterized by entrepreneurship 'equilibrium' rate, which may be pre-conditioned by cultural background, social norms and attitudes, history or structure of the economy. Parker (2004) stated that however rates of entrepreneurship vary strongly between countries they exhibit 'a fairly high degree of temporal stability'. According to Parker (2005) stability of these rates in given regions (countries) and stable differences between them may be explained by self-perpetuating occupational choices within regions (countries) affecting payoffs in entrepreneurship and in-paid employment. On the individual level it is highly probable that a person who is currently self-employed, in the future will be classified as such. Such kind of 'inertia'² on regional and national levels was observed in broad variety of research and reported in seminal papers of, inter alia, Parker (1996), Cowling & Mitchell (1997), Parker & Robson (2004), Bruce & Mohsin (2006), Fritsch & Mueller (2007). Risk and sunk costs related to change of occupation

¹ "Probably the greatest interest in entrepreneurship springs from a belief that small businesses are essential to the growth of a capitalist economy. While the view that small businesses are responsible for a disproportionate share of job creation and innovation is disputed, this view is a common one". (Blanchflower 2000 p. 473)

² Some authors (ex. Dixit, Rob 1994) called such inertia "hysteresis".

reduce the total amount of entries and exits (Dixit and Rob 1994). "Only when average incomes in entrepreneurship reach some upper 'trigger point' will people become entrepreneurs. And they will leave entrepreneurship in the presence of adjustment costs if incomes drop to some lower trigger point (Congregado et al. 2012, p.1243). Hence business cycles affect entrepreneurship (self-employment) fluctuating around long-term trend determined by natural rate of self-employment. Congregado et al. (2012) demonstrate that various kinds of self-employed people exhibit different reaction to business cycle. Analyzing quarterly self-employment changes in Spain, between 1987 and 2008, he found employer self-employment rates tend to behave pro-cyclically, while own-account self-employment rates evolve rather counter-cyclically. However the same authors in another paper they did not find such relationship in case of the USA economy.

When analyzing the nature of the emerging relationships between entrepreneurship and business cycle, one should pay special attention to discrimination between the so called 'pull-factors' and 'push-factors', which heavily determine entries and exits from 'self-employment. The 'pull-factors' and 'push-factors' Parker (2009) labeled as 'opportunity pull' and 'recession push' respectively, emphasizing that during expansion phase of business cycle people are more toward self-employment-oriented, while during recession phase choosing self-employment – as an alternative, is often perceived as the only opportunity to work and exclusive source of personal income. At the same time, it appears to be extremely difficult to provide exact calculations the number of those entrepreneurs for whose the 'pull-factors' were decisive, and – those for whom the 'push-factors' determined their decision to enter self-employment. However, it may be argued that those for whom the 'pull-factors' were decisive, are more active entrepreneurs, more success-oriented and are more likely to create contracted work posts. Conversely, the entrepreneurs motivated by 'push-factors' probably consider their self-employment status as casual, and once the recession is over are more likely to become contracted workers. Notably, the following scenario is also probable: during the recession phase of business cycle, the impact of 'pull-factors' is much stronger than during expansion phase; which implies that a significant number of entrepreneurs, bearing in mind relatively low production costs and high rate of bankruptcies, should enhance them to set up their own business and create innovation. Providing empirical proofs in for or against of one these scenarios, still remains a challenging task. In this context, empirical evidence and research provided by GEM, are considered to be exclusive as those discriminating entrepreneurs when their own motivation to set-up own business is considered (Koellinger & Thurik 2009, p.10).

When discussing empirical research on entrepreneurship, the great majority of empirical evidence is based on self-employment data (total number of self-employed persons and/or self-employment rate). In here, it also should be noted that the total number of self-employed person reflects the net effects of inflows and outflows; and for this reason it should be carefully interpreted in terms of economic changes. Moreover, it is hardly possible to state whether self-employment entries may be treated as flow from unemployment and/or economically inactive group, and/or group of contracted workers. Analogously, we cannot identify the self-employment outflows.

In literature, there may be found empirically tractable arguments speaking in support of three different hypothesis regarding relationships between entrepreneurship and business cycle. These hypotheses are (Table 1):

1. Entrepreneurship behaves pro-cyclically;
2. Entrepreneurship behaves counter-cyclically;
3. Entrepreneurship behaves a-cyclically.

Arguably, if we observe that growing/falling number of self-employed persons, increasing/dropping rate of self-employment (*ceteris paribus*) or increasing/decreasing number of firm entries is accompanied by negative/positive changes in gross domestic product that approximates business cycle, then we state that entrepreneurship behave counter-cyclically. However, if both self-employment and gross domestic product commove in the same direction, that is to say – we observe simultaneous growths in self-employment and GDP, or drops both in self-employment and GDP; hence we claim that entrepreneurship behaves pro-cyclically. If, self-employment and GDP fluctuations around long-term trends are random, we may state that entrepreneurship behaves a-cyclically. Many claim that pro-cyclical entrepreneurship patterns are far better explainable by ‘pull-factors’ compared to ‘push-factors’; which suggests that growing demand, prices and profits (during expansion phase of business cycle) attracts people to establish their own businesses, more effectively than low costs of entry and production during recession. During recession, reported low costs and barriers of entry, along with low costs of production may attract potential future entrepreneurs, unemployed persons or contracted workers, enhancing them to set up their own business. Additionally, a selection of ‘push-factors’ (recession push) may determine flows from employees to own account workers. There are several studies concluding on positive correlation between the short-term economic growth and entrepreneurship (self-employment). Such claims may be found in works of Shleifer (1986), Audretsch, Acs (1996), Grant (1996) or Rampini (2004). Carmona et al. (2010), using quarterly data on self-employment and GDP, over 1980-2009, in the United States and Spain were considered, did not confirm the hypothesis on pro-cyclicality of self-employment. In turn, empirical evidence of Congregado et al. (2012), demonstrated for the same countries and time period as this of Carmona et al. (2010), allows confirming the hypothesis on pro-cyclical behavior of self-employment. Klapper et al. (2014), using panel data for 109 countries over the period 2002-2012, displayed that entrepreneurial behavior demonstrates strong pro-cyclical patterns. Reversely to the previous, counter-cyclical character of entrepreneurship (self-employment) may be concluded from such studies like: Caballer & Hammou (1994), Blanchflower (2000), Francois & Lloyd-Ellis (2003), Perotin (2006), or Millan et al. (2015). In previously cited works for Spain and USA, Congregado et al. (2012) have shown counter-cyclical changes of self-employment are reported only for own-account self-employed (not employers self-employed) and exclusively in Spain; while for the United States similar relationship was not confirmed. More evidence (see also Table 1) on the emerging relationships between entrepreneurship and business cycle, may be traced in works of, Bernanke & Gertler (1989) or Carlstrom & Fuerst (1997) who find that self-employment is rather a-cyclical versus GDP fluctuation; according to the research of Koellinger and Thurik (2009), deploying panel data for 22 OECD countries between 1972 and 2007, both hypotheses on counter-, or pro-cyclical behavior of entrepreneurship may not be confirmed – see also – Bernanke & Gertler (1989), Carlstrom & Fuerst (1997) or Rampini (2004).

Table 1. Relationships between entrepreneurship and business cycle

Research	Problem and research targets	Data	Country	Period	Method	Conclusion
Pro-cyclicity						
Shleifer 1986	How entrepreneurs' commonly shared expectations and their independent investment decisions influence the cyclical behavior of macroeconomic variables.	None	None	None	Theoretical quantitative model	Pro-cyclicality of entrepreneurship emerging as an effect of entrepreneurs' decision not to internalize external effects of their decisions to innovate and invest.
Audretsch, Acs 1994	Examination of determinants of new firm startups.	New entries in 117 industries, macroeconomic growth rate, cost of capital, unemployment rate.	USA	1976-1986	Pooled cross-section regression model	New firm startups are positively correlated with economic growth, pursuing of innovative activities and university-based research
Rampini 2004	Relationships between entrepreneurial activity, risk aversion, costs of agency.	None	None	None	Theoretical model of the optimal contracting	Entrepreneurial activity is pro-cyclical due to the risk associated with it.
Klapper et al. 2014	New firm registration along business cycle	Numbers of newly registered private limited liability companies per year	109 countries	2002-2012	Pooled OLS	Strong pro-cyclical pattern of new firm registration
Counter-cyclicity						
Caballero, Hamour 1991	The response of industries to cyclical variations in demand.	Davis and Haltiwanger's data on jobs flow (creation and destruction) in manufacturing	USA	1972-1986	A vintage model of creative destruction.	Productivity improving activities are undertaken during recessions when opportunity costs are temporarily low.
Francois, Lloyd-Ellis 2003	Entrepreneurs' decisions about sales and production along business cycle.	None	None	None	Theoretical; quantitative model.	Entrepreneurs do innovations and produce when costs are low (during recessions) and sale during booms when demand is high.
Blanchflower 2000	The role of self-employment in economies of OECD count	Self-employment rates and unemployment rates.	OECD countries	1966-1996	Pooled OLS, fixed effects models, probit models	Negative relationships between self-employment rates and unemployment rates for most OECD countries. Exceptions were Italy and Iceland.
Perotin 1996	Social entrepreneurship - why there are so few labor-managed firms (ex. cooperatives) in modern economies.	Entries and exits flows of cooperatives.	France	1979-2002	Poisson Maximum Likelihood (ML) estimations	Cooperative creations tend to be more counter-cyclical than conventional firms.
Millan et al. 2014	The role of the business cycle in the individual decision of own-account workers to hire employees.	Panel data from the European Community Household Panel (henceforth ECHP)	EU-15	1994-2001	Random effects binary logit models	Own-account workers are less likely to hire employees during recessions.
A-cyclicity						
Bernanke, Gertler 1993	The influence of entrepreneur's net worth on borrowing conditions and as result on investment fluctuations.	None	None	None	Theoretical neoclassical model of real business cycle.	Agency costs of investing are inversely related to entrepreneurs' net worth; emergence of accelerator effect during expansion phase of business cycle; asymmetric shocks on productivity
Carlstrom, Fuerst 1997	Development of quantitative model capturing the propagation of productivity shocks through agency costs.	None	None	None	General equilibrium model.	Assumption that that share of entrepreneurs in population is constant and does not fluctuate along business cycle.
Leading indicator						
Koellinger, Thurik 2009	Testing the theoretical predictions found in the literature with real data.	Real GDP, standardized unemployment rates and the shares of business owners in total labor force, share of nascent entrepreneurs in the adult population.	22 OECD countries	1972-2007 (OECD data); 2001-2006 (GEM)	Bivariate correlation, regression analysis.	Entrepreneurship is a leading indicator of business cycles.

Source: authors' compilation.

NEW METHODOLOGICAL APPROACH. CONCEPT CLARIFICATION

As argued in previous section, answering the question whether changes in entrepreneurial activity – approximated by, for instance, changes in total self-employment³ tend to behave pro-cyclically, counter-cyclically or maybe are contemporaneous over business cycle, still remains a challenging task. Some attempts of identification of the relationships between these two variables encompass adoption of various statistical and econometric techniques; however still, all these methods seem to be conclusive and interpretive enough to provide clear answer to the latter.

This section presents newly developed methodological approach, which was designed to examine how entrepreneurial dynamics changes over business cycle. We have intended to keep this method simple, conclusive and interpretive, so it may be adopted in broad variety of studies. However, at the heart of our considerations is whether entrepreneurship, measured by total self-employment, demonstrates pro-cyclical, counter-cyclical or contemporaneous behavior over business cycle.

Conceptualization

Our methodology developed to measure the entrepreneurial behavior over business cycle, is based on the following assumption:

- Business cycle is measured as deviations from long-term trends in value of total gross domestic product expressed in real terms (corrected for inflation);
- Entrepreneurial activity is measured by total self-employment (despite the fact, that self-employment does not perfectly measure entrepreneurship, it is broadly accepted by scholars, due to several important merits, like for instance – inclusiveness and convenience (Congredago et al. 2012) as self-employment time series are available for of long-run periods and for multiple countries, which enables cross-country comparisons; and as argued by Iversen et al. (2008) self-employed person are those which tend to bear risk, and thus demonstrate strong pro-entrepreneurial activities);
- Self-employment data may be used both including, or alternatively, excluding self-employment in agricultural sector (depending on time series availability);
- Self-employment and gross domestic product time series are seasonally adjusted;
- Preferably, quarterly time series data are applied.

Suppose that $Self_{i,t}$ stand for the number of people defined as self-employed⁴ in national economy, where i denotes country and t – time; while $GDP_{i,t}$ expresses the value of total gross domestic product (in real terms), with similar notations. By convention, we target to unveil whether $Self_{i,t}$ as a proxy of entrepreneurial intensity behaves *pro-cyclically*, *counter-cyclically* or *contemporaneously* over business cycle.

Defining business cycles, approximated by $GDP_{i,t}$, as deviations from long-term trends $GDP_{i,t}$, yields decomposing the time series into trend and the cycle. As the major aim of the proposed specification is to determine whether the variable $Self_{i,t}$ demonstrates *pro-cyclical*, *counter-cyclical* or *contemporaneous* behavior, our primary interest

³ In the paper terms ‘entrepreneurship’ and ‘sel-employment’ are used interchangeably.

⁴ According to national concept.

turns into examining the comovements of cycle components (c_t) \rightarrow $c_{t_Self_{i,t}}$ and $c_{t_GDP_{i,t}}$, which have been taken out of the original time series after its detrending.

Therefore, the original time series must be decomposed into two components that may be additively separable, as proposed by Hodrick and Prescott (1997):

$$y_t = \tau_t + c_t + \varepsilon_t \quad (1)$$

where:

- y_t - is the time series;
- τ_t - is trend component;
- c_t - stands for the stationary cyclical component that is determined by the stochastic cycles across multiple periods (Cogley and Nason, 1995);
- ε_t - may be defined as unobserved random component.

Following the Eq.(1), it may be argued that the trend component may be calculated by simply extracting:

$$\tau_t = y_t - c_t - \varepsilon_t \quad (2)$$

and so the cycle components follows as:

$$c_t = y_t - \tau_t - \varepsilon_t \quad (3)$$

Original time series may be easily decomposed into long-term trend and cyclical components by the use of various filtering techniques, like for instance, Baxter-King (King et al. 1995, Murray 2003), Butterworth (Selesnick & Burrus 1998), Christiano-Fitzgerald (Christiano & Fitzgerald 2003), or Hodrick-Prescott (Hodrick & Prescott 1997) filters.

In what follows, we demonstrate this new methodology, which combines two different approaches to identify how entrepreneurship behaves with business cycle.

First Approach

The first approach to identification whether entrepreneurship demonstrates *pro-cyclical*, *counter-cyclical* or *contemporaneous* behavior with the business cycle, involves standard time-series detrending procedures, which allow extracting the cyclical components from original time series.

Therefore, our time series on $Self_{i,t}$ and $GDP_{i,t}$ are filtered and decomposed into long-term trends and cyclical components.

Henceforth we obtain two long-term trends:

$$y_{t_Self_{i,t}} = \tau_{t_Self_{i,t}} + c_{t_Self_{i,t}} \quad (4)$$

and

$$y_{t_GDP_{i,t}} = \tau_{t_GDP_{i,t}} + c_{t_GDP_{i,t}} \quad (5)$$

with standard notation.

We argue that $c_{t_Self_{i,t}}$ – as self-employment cyclical components may be labeled as ‘entrepreneurship cycle’, while $c_{t_GDP_{i,t}}$ – as GDP cyclical components may be labeled as ‘GDP cycle’.

To observe the entrepreneurial activity over business cycle, on standard coordinate system we plot a number of observations (while the number of observation refers to the number of periods considered for analysis) – points; while each observation is defined by two coordinates determined by the value of cyclical components – $c_{t_Self_{i,t}}$ and $c_{t_GDP_{i,t}}$, at exact time period – t (see Fig.1).

We assume that changes in total self-employment are rather determined changes in gross domestic product than vice-versa, henceforth we plot $c_{t_Self_{i,t}}$ as depended variable, while $c_{t_GDP_{i,t}}$ is preferably treated as explanatory variable. We additionally plot two 'zero-lines' as two-dimensional reference grid, where one vertical (red) line indicates long-term GDP trend ($y_{t_GDP_{i,t}}$); and – horizontal (blue) line indicates long-term self-employment trend ($y_{t_Self_{i,t}}$). Drawing two 'zero-lines' on the original coordinate system allows defining four distinct quarters – Q1, Q2, Q3 and Q4, which is essential for our further analysis. We argue that all observations falling into 1Q and 3Q present pro-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$; while observation in 1Q present the present pro-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$ during the expansion phase of business cycle, and the observation in 3Q present the present pro-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$ during the recession phase of business cycle.

Contrary to the previous, we claim that observations falling into 2Q and 4Q present counter-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$; while the observation in 2Q present the present counter-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$ during the recession phase of business cycle, and the observation in 4Q present the present counter-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$ during the expansion phase of business cycle.

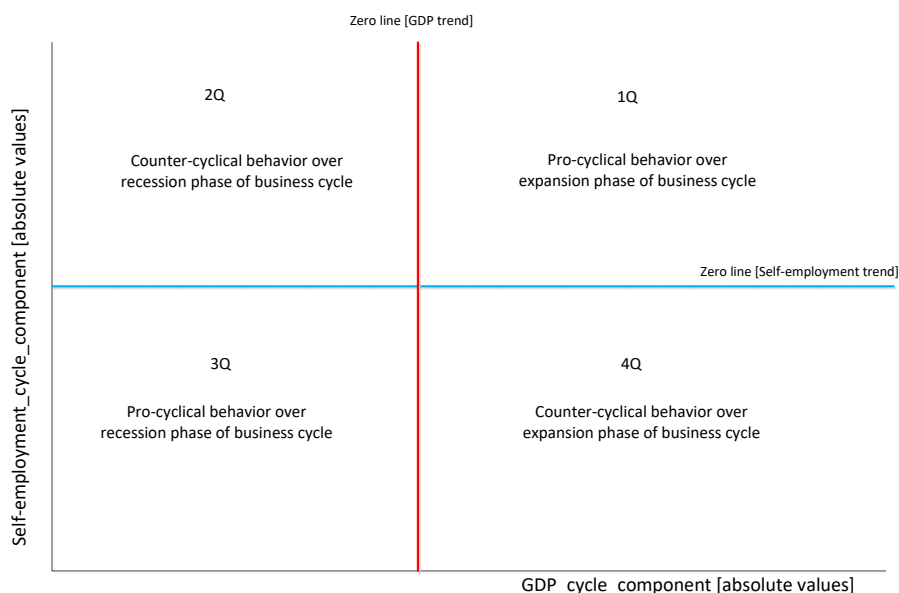


Figure 1. $Self_{i,t}$ versus $GDP_{i,t}$ – detecting pro-cyclical, counter-cyclical or contemporaneous behavior of self-employment with the business cycle

Source: authors' elaboration.

The first step of the analysis involves calculations of correlation coefficients between $c_{t_Self_{i,t}}$ and $c_{t_GDP_{i,t}}$ for the number of observations falling into respective quarters – 1Q, 2Q, 3Q and 4Q, which allows for preliminary identification of the strength of pro-cyclical or counter-cyclical behavior of $Self_{i,t}$ versus $GDP_{i,t}$ (see Table 2). However, importantly to note that to draw qualitative conclusion, total number of observation in

each quarter (1Q, 2Q, 3Q and 4Q) is essential, as concluding on very limited number of observations may be misleading and lack representativeness.

Table 2, summarizes expected statistical relationships between $c_{t_Self_{i,t}}$ and $c_{t_GDP_{i,t}}$ over respective phases of business cycle. Suppose, we are in the first or third quarter (Q1 or Q3), which shows that self-employment demonstrates rather pro-cyclical behavior during expansion/recession phase of business cycle. In this case, we expect that $c_{t_Self_{i,t}} > 0$ and $c_{t_GDP_{i,t}} > 0$ (during expansion phase), or $c_{t_Self_{i,t}} < 0$ and $c_{t_GDP_{i,t}} < 0$ (during recession phase). Importantly to note, that – regardless the quarter – calculated correlation coefficient may be both positive and negative. In Q1, positive correlation coefficient indicates that the higher changes in $|c_{t_GDP_{i,t}}|$ the higher changes in $c_{t_Self_{i,t}}$, and vice versa; while if correlation coefficient results to be negative – the higher changes in $|c_{t_GDP_{i,t}}|$ the lower changes in $|c_{t_Self_{i,t}}|$, and vice versa. In Q3, positive correlation coefficient indicates that the higher changes in $|c_{t_GDP_{i,t}}|$ the higher changes in $|c_{t_Self_{i,t}}|$ and vice versa; while if correlation coefficient results to be negative – the higher changes in $|c_{t_GDP_{i,t}}|$ the lower changes in $|c_{t_Self_{i,t}}|$, and vice versa. Similar calculation, however for Q2 and Q4, may suggest that self-employment demonstrates rather counter-cyclical behavior during expansion/recession phase of business cycle. In this case, we expect that $c_{t_Self_{i,t}} < 0$ and $c_{t_GDP_{i,t}} > 0$ (during expansion phase), or $c_{t_Self_{i,t}} > 0$ and $c_{t_GDP_{i,t}} < 0$ (during recession phase). In Q2, positive correlation coefficient indicates that the higher changes in $|c_{t_GDP_{i,t}}|$ the higher changes in $|c_{t_Self_{i,t}}|$, and vice versa; while if correlation coefficient results to be negative – the higher changes in $|c_{t_GDP_{i,t}}|$ the lower changes in $|c_{t_Self_{i,t}}|$, and vice versa. Analogous relationships are reported for Q4.

Table 2. Identification of pro-cyclical or counter-cyclical behavior of $Self_{i,t}$ with the business cycle

2Q	1Q
<p>Counter-cyclical behavior of $Self_{i,t}$ over the recession phase of business cycle (below GDP_trend line)</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 < 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively low/high changes in var2 (modulus).</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 > 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively high/low changes in var2 (modulus).</p>	<p>Pro-cyclical behavior of $Self_{i,t}$ over the expansion phase of business cycle (above GDP_trend line)</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 < 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively low/high changes in var2 (modulus).</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 > 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively high/low changes in var2 (modulus).</p>
3Q	4Q
<p>Pro-cyclical behavior of $Self_{i,t}$ over the recession phase of business cycle (below GDP_trend line)</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 < 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively low/high changes in var2 (modulus).</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 > 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively high/low changes in var2 (modulus).</p>	<p>Counter-cyclical behavior of $Self_{i,t}$ over the expansion phase of business cycle (above GDP_trend line)</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 < 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively low/high changes in var2 (modulus).</p> <p>If <i>r-squared</i> of $c_{t_Self_{i,t}}$ versus $c_{t_GDP_{i,t}} - r^2 > 0$ – relatively high/low changes in var1 (modulus) are accompanied by relatively high/low changes in var2 (modulus).</p>

Source: authors` elaboration.

Next, we propose to develop a new coefficient allowing identifying the ‘**entrepreneurship vulnerability**’ to business cycle. The Entrepreneurship Vulnerability Coefficients is as:

$$EVC_{i,t,q}^{self \leftrightarrow gdp} = \frac{c_{t-}Self_{i,t}}{c_{t-}GDP_{i,t}} \quad (6)$$

where:

- $c_{t-}Self_{i,t}$ - represents self-employment deviation (%) from long-term trends;
- $c_{t-}GDP_{i,t}$ - stands for gross domestic product deviations (%) from long-term trends;
- i - is country;
- t - time period and q stands respectively for Q1, Q2, Q3 and Q4 (as defined in Fig.1).

Put simply, the $EVC_{i,t,q}^{self \leftrightarrow gdp}$ expresses the ratio between $c_{t-}Self_{i,t}$ and $c_{t-}GDP_{i,t}$, indicating the difference in strength of simultaneous changes of self-employment (measured as $c_{t-}Self_{i,t}$) respective to GDP (measured as $c_{t-}GDP_{i,t}$) at given period t . By definition the entrepreneurship vulnerability coefficient – $EVC_{i,t,q}^{self \leftrightarrow gdp}$ value ranges from $(-\infty)$ to $(+\infty)$, but differs from zero ($EVC_{i,t,q}^{self \leftrightarrow gdp} \neq 0$). Put differently, the Entrepreneurship Vulnerability Coefficients, measures strength and direction of entrepreneurship (measures as total self-employment) reaction to changes in gross domestic product in i -country and t, q – time period.

As claimed, entrepreneurship may demonstrate pro-cyclical or counter-cyclical behavior over respective phases of business cycle. In this line, arguably when $EVC_{i,t,q}^{self \leftrightarrow gdp} > 0$ it shows that *self-employment* (entrepreneurship) *behaves pro-cyclically* regardless whether expansion or recession phase of business cycle is considered. And, reversely, when $EVC_{i,t,q}^{self \leftrightarrow gdp} < 0$ it shows that *self-employment* (entrepreneurship) *behaves counter-cyclically* regardless whether expansion or recession phase of business cycle is considered.

Considering the fact that ($EVC_{i,t,q}^{self \leftrightarrow gdp}$) coefficient represents the ratio between $c_{t-}Self_{i,t}$ and $c_{t-}GDP_{i,t}$, for the in-depth analysis of entrepreneurship vulnerability to changes in gross domestic product over business cycle. We propose to discriminate between 3 different categories of entrepreneurship vulnerability:

- *Strong Entrepreneurship Vulnerability* (hereafter – $SEV_{i,t,q}^{self \leftrightarrow gdp}$) – indicates that entrepreneurship may demonstrate strong pro-cyclical or strong counter-cyclical behavior both during expansion or recession phase of business cycle;
- *Weak Entrepreneurship Vulnerability* (hereafter – $WEV_{i,t,q}^{self \leftrightarrow gdp}$) – indicates that entrepreneurship may demonstrate weak pro-cyclical or strong counter-cyclical behavior both during expansion or recession phase of business cycle;
- *Neutral Entrepreneurship Vulnerability* (hereafter – $NEV_{i,t,q}^{self \leftrightarrow gdp}$) – indicates that entrepreneurship may demonstrate neutral pro-cyclical or strong counter-cyclical behavior both during expansion or recession phase of business cycle.

$SEV_{i,t,q}^{self \leftrightarrow gdp}$, $WEV_{i,t,q}^{self \leftrightarrow gdp}$ and $NEV_{i,t,q}^{self \leftrightarrow gdp}$ maybe identified, over respective phases of business cycle, regardless whether entrepreneurship patterns are reported as pro-cyclical or counter-cyclical. Arguably, entrepreneurship unveils strong vulnerability ($SEV_{i,t,q}^{self \leftrightarrow gdp}$) to business cycle when $|EVC_{i,t,q}^{self \leftrightarrow gdp}| > 1$; weak vulnerability

$(WEV_{i,t,q}^{self \leftrightarrow gdp})$ to business cycle when $|EVC_{i,t,q}^{self \leftrightarrow gdp}| < 1$; and – neutral vulnerability $(NEV_{i,t,q}^{self \leftrightarrow gdp})$ to business cycle when $|EVC_{i,t,q}^{self \leftrightarrow gdp}| = 1$ (also see – Fig.2).

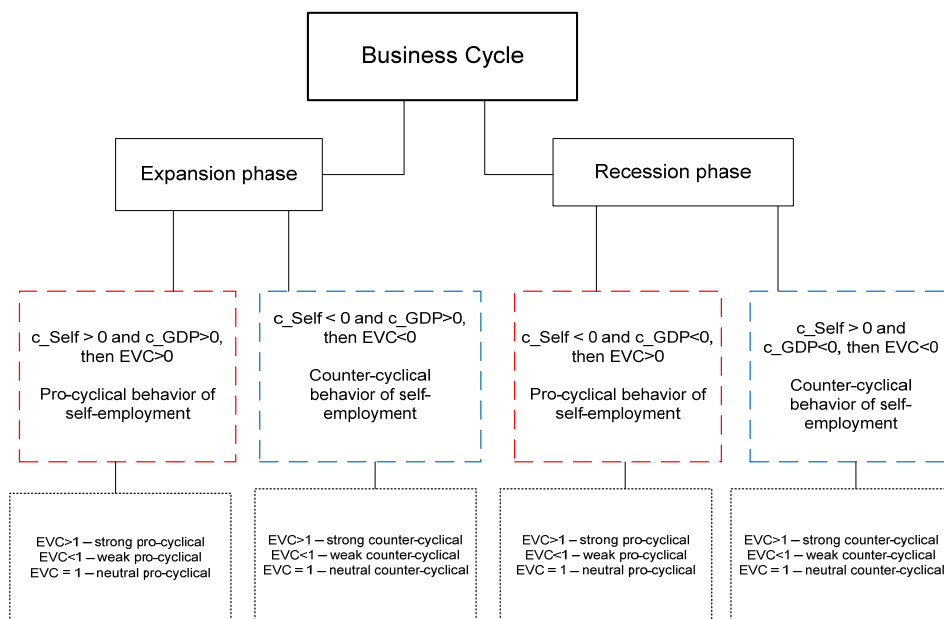


Figure 2. Categories of entrepreneurship vulnerability

Source: Authors' elaboration.

Second Approach

Second approach to identification if entrepreneurship demonstrates *pro-cyclical*, *counter-cyclical* or *contemporaneous* behavior over business cycle, encompasses deployment of original time series on self-employment and GDP, which are not decomposed into long-term trends and cyclical components. In this approach we rather target to conclude on pro-cyclical or counter-cyclical behavior of self-employment versus gross domestic product basing on detailed analysis of year-to-year dynamics of examined variables.

To this aim we define 4 variables:

- $GDP_{i,t_dynamic}$;
- $GDP_{i,[t;(t+n)]_aver_dynamic}$;
- $Self_{i,t_dynamic}$;
- $Self_{i,(t;(t+n))_aver_dynamic}$.

where:

i - denotes country

t - year, and the total period of analysis is given by $[t + n]$.

Moreover, we assume that over analyzed period $(t + n)$, $GDP_{i,t_dynamic} > 0$ and $Self_{i,t_dynamic} > 0$.

We also assume that the following is true (see also Fig.3):

- $GDP_{i,t,dynamic} > 1 \rightarrow$ expansion phase of business cycle at certain t-period;
- $GDP_{i,t,dynamic} < 1 \rightarrow$ recession phase of business cycle at certain t-period;
- $GDP_{i,[t;(t+n)]_{averdynamic} > 1} \rightarrow$ long-term growth cycle during the (t+n) period;
- $GDP_{i,[t;(t+n)]_{averdynamic} < 1} \rightarrow$ long-term recession cycle during the (t+n) period.

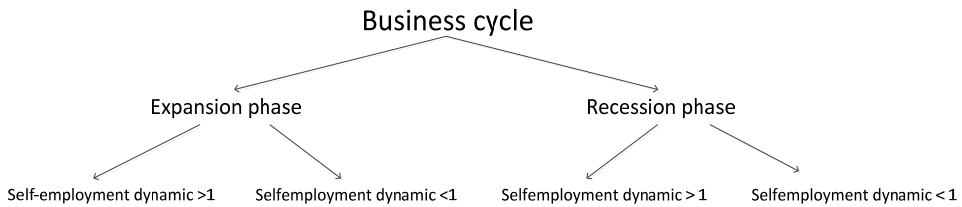


Figure 3. Business cycle phases versus self-employment

Source: authors' elaboration.

The second approach allows defining 4 different cases, which may be easily distinguished regarding long-term trends in self-employment and gross domestic product. These are:

CASE_1: Original time series data on self-employment and gross domestic product demonstrate average year-to-year dynamics higher than 1, over analyzed period $\rightarrow (Self_{i,[t;(t+n)]_{averdynamic} > 1}$ and $GDP_{i,[t;(t+n)]_{averdynamic} > 1}$).

CASE_2: Original time series data on self-employment and gross domestic product demonstrate average year-to-year dynamics lower than 1, over analyzed period $\rightarrow (Self_{i,[t;(t+n)]_{averdynamic} < 1}$ and $GDP_{i,[t;(t+n)]_{averdynamic} < 1}$).

CASE_3: Original time series data on self-employment demonstrate average year-to-year dynamics higher than 1, over analyzed period $(Self_{i,[t;(t+n)]_{averdynamic} > 1}$); while data on gross domestic product demonstrate average year-to-year dynamics lower than 1 $(GDP_{i,[t;(t+n)]_{averdynamic} < 1}$).

CASE_4: Original time series data on self-employment demonstrate average year-to-year dynamics lower than 1, over analyzed period $(Self_{i,[t;(t+n)]_{averdynamic} < 1}$); while data on gross domestic product demonstrate average year-to-year dynamics higher than 1 $(GDP_{i,[t;(t+n)]_{averdynamic} > 1}$).

In what follows we explain

a. Entrepreneurship behavior in expansion phase of business cycle

(CASE_1 and CASE_4)

As claimed in previous paragraphs, during expansion phase of business cycle, entrepreneurship may demonstrate pro-cyclical or counter-cyclical behavior.

a.1. CASE_1: $(Self_{i,[t;(t+n)]_{averdynamic} > 1}$ and $GDP_{i,[t;(t+n)]_{averdynamic} > 1}$).

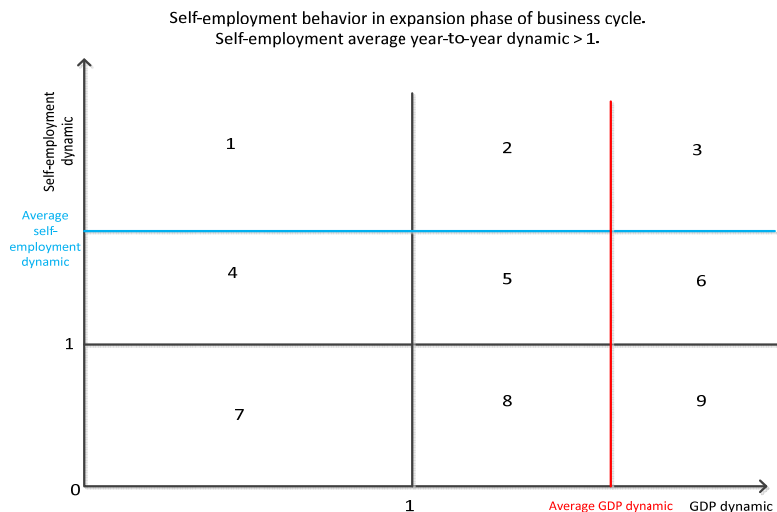


Figure 4. $Self_{i,t}$ versus $GDP_{i,t}$ – detecting pro-cyclical or counter-cyclical behavior of Self-employment

Note: this specification assumes no time series detrending procedures, but it bases on the $Self_{i,t}$ and $GDP_{i,t}$ year-to-year dynamics over analyzed period.

Source: authors' elaboration.

Table 3.

	Type of behavior $Self_{i,t}$ over business cycle	Formal condition
1P	Strong counter-cyclical	$Self_{i,t dynamic} > Self_{i,[t;(t+n)] aver dynamic}$; $GDP_{i,t dynamic} < 1$
2P	Strong pro-cyclical	$Self_{i,t dynamic} > Self_{i,[t;(t+n)] aver dynamic}$; $1 < GDP_{i,t dynamic} < GDP_{i,[t;(t+n)] aver dynamic}$
3P	Average pro-cyclical	$Self_{i,t dynamic} > Self_{i,[t;(t+n)] aver dynamic}$; $GDP_{i,t dynamic} > GDP_{i,[t;(t+n)] aver dynamic}$
4P	Average counter-cyclical	$Self_{i,[t;(t+n)] aver dynamic} > Self_{i,t dynamic} > 1$; $GDP_{i,t dynamic} < 1$
5P	Average pro-cyclical	$Self_{i,[t;(t+n)] aver dynamic} > Self_{i,t dynamic} > 1$ $1 < GDP_{i,t dynamic} < GDP_{i,[t;(t+n)] aver dynamic}$
6P	Weak pro-cyclical	$Self_{i,[t;(t+n)] aver dynamic} > Self_{i,t dynamic} > 1$ $GDP_{i,t dynamic} > 1$
7P	Pro-cyclical in recession phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t dynamic} < 1$ $GDP_{i,t dynamic} < 1$
8P	Counter-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t dynamic} < 1$ $1 < GDP_{i,t dynamic} < GDP_{i,[t;(t+n)] aver dynamic}$
9P	Counter-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t dynamic} < 1$ $GDP_{i,t dynamic} > GDP_{i,[t;(t+n)] aver dynamic}$

Source: authors' study.

a.1. CASE_4: ($Self_{i,t-[t-(t+n)]_{aver_dynamic}} < 1$) and ($GDP_{i,t-[t-(t+n)]_{aver_dynamic}} > 1$).



Figure 5. $Self_{i,t}$ versus $GDP_{i,t}$ – detecting pro-cyclical or counter-cyclical behavior of self-employment

Note: this specification assumes no time series detrending procedures, but it bases on the $Self_{i,t}$ and $GDP_{i,t}$ year-to-year dynamics over analyzed period.

Source: authors' elaboration.

Table 4.

	Type of behavior $Self_{i,t}$ over business cycle	Formal condition
1P	Counter-cyclical in recession phase - no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1; GDP_{i,t_dynamic} < 1$
2P	Pro-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1$ $1 < GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
3P	Pro-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1$ $GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$
4P	Average pro-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $GDP_{i,t_dynamic} < 1$
5P	Average counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $1 < GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
6P	Weak counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$
7P	Strong pro-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $GDP_{i,t_dynamic} < 1$
8P	Strong counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $1 < GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
9P	Average counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$

Source: authors' study.

b. Entrepreneurship behavior in recession phase of business cycle

(CASE_2 and CASE_3)

b.1. CASE_2: ($Self_{i,t-(t+n)]_{aver_dynamic} < 1$ and $GDP_{i,t-(t+n)]_{aver_dynamic} < 1$).

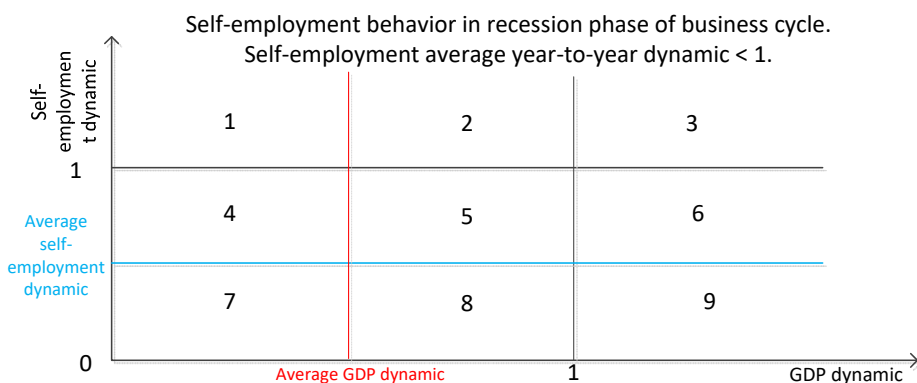


Figure 6. $Self_{i,t}$ versus $GDP_{i,t}$ – detecting pro-cyclical or counter-cyclical behavior of self-employment

Note: this specification assumes no time series detrending procedures, but it bases on the $Self_{i,t}$ and $GDP_{i,t}$ year-to-year dynamics over analyzed period.

Source: authors' elaboration.

Table 5.

	Type of behavior $Self_{i,t}$ over business cycle	Formal condition
1P	Counter-cyclical in recession phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1$ $GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
2P	Counter-cyclical in recession phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1$ $1 < GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$
3P	Pro-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} > 1$ $1 < GDP_{i,t_dynamic}$
4P	Weak counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
5P	Average counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $1 < GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$
6P	Average counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} < Self_{i,t_dynamic} < 1$ $1 < GDP_{i,t_dynamic}$
7P	Average counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $GDP_{i,t_dynamic} < GDP_{i,t;(t+n)]_{aver_dynamic}}$
8P	Strong counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $1 < GDP_{i,t_dynamic} > GDP_{i,t;(t+n)]_{aver_dynamic}}$
9P	Strong counter-cyclical	$Self_{i,t;(t+n)]_{aver_dynamic} > Self_{i,t_dynamic}$ $1 < GDP_{i,t_dynamic}$

Source: authors' study.

b.2. CASE_3: ($Self_{i,[t-(t+n)]_{aver_dynamic}} > 1$ and $GDP_{i,[t-(t+n)]_{aver_dynamic}} < 1$).

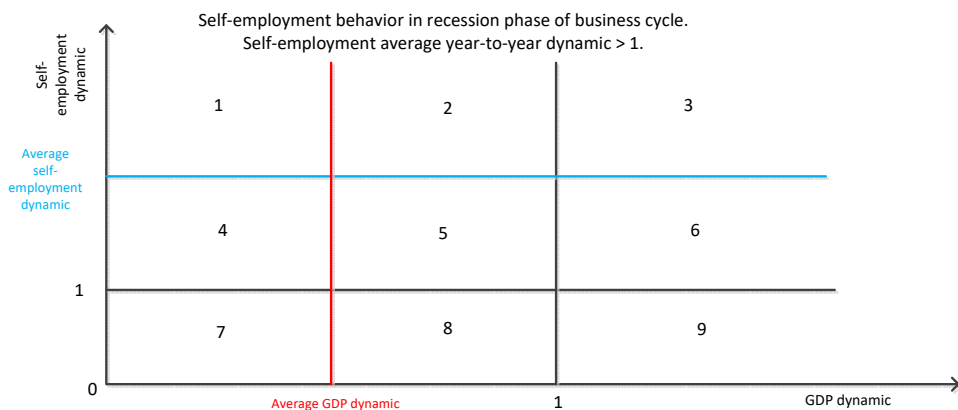


Figure 7. $Self_{i,t}$ versus $GDP_{i,t}$ – detecting pro-cyclical or counter-cyclical behavior of self-employment

Note: this specification assumes no time series detrending procedures, but it bases on the $Self_{i,t}$ and $GDP_{i,t}$ year-to-year dynamics over analyzed period.

Source: authors' elaboration.

Table 6.

	Type of behavior $Self_{i,t}$ over business cycle	Formal condition
1P	Average counter-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} < Self_{i,t_dynamic}$ $GDP_{i,t_dynamic} < GDP_{i,[t;(t+n)]_{aver_dynamic}}$
2P	Strong counter-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} < Self_{i,t_dynamic}$ $GDP_{i,[t;(t+n)]_{aver_dynamic}} < GDP_{i,t_dynamic} < 1$
3P	Strong pro-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} < Self_{i,t_dynamic}$ $GDP_{i,t_dynamic} > 1$
4P	Weak counter-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} > Self_{i,t_dynamic} > 1$ $GDP_{i,t_dynamic} < GDP_{i,[t;(t+n)]_{aver_dynamic}}$
5P	Average counter-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} > Self_{i,t_dynamic} > 1$ $GDP_{i,[t;(t+n)]_{aver_dynamic}} < GDP_{i,t_dynamic} < 1$
6P	Average pro-cyclical	$Self_{i,[t;(t+n)]_{aver_dynamic}} > Self_{i,t_dynamic} > 1$ $GDP_{i,t_dynamic} > 1$
7P	Pro-cyclical in recession phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} < 1$ $GDP_{i,t_dynamic} < GDP_{i,[t;(t+n)]_{aver_dynamic}}$
8P	Pro-cyclical in recession phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} < 1$ $GDP_{i,[t;(t+n)]_{aver_dynamic}} < GDP_{i,t_dynamic} < 1$
9P	Counter-cyclical in expansion phase – no discrimination among Strong/Average/Weak behavior	$Self_{i,t_dynamic} < 1$ $GDP_{i,t_dynamic} > 1$

Source: authors' study.

ENTREPRENEURIAL PATTERNS IN ITALY. PRO-CYCLICAL, COUNTER-CYCLICAL OR RANDOM WALK?

This section encompasses three consecutive parts. Section 5.1 briefly explains statistical data on self-employment and gross domestic product in Italy, which have been used in our empirical research. Next, Section 5.2 presents summary statistics on self-employment and gross domestic product in Italy over the period 1995-2015. In this section we also demonstrate self-employment and GDP time series decomposition, and investigate comovements between examined variables by using cross-correlation methodological framework (Burns & Mitchell, 1946). Finally, section 5.3 exemplifies adoption of our newly developed methodological approach to identification whether self-employment behaves pro-cyclically or counter-cyclically.

Data

To demonstrate whether entrepreneurial activity demonstrates pro-cyclical or rather counter-cyclical behavior over business cycle, we consider the case of Italy. To this aim we use exclusively two types of economic time series: quarterly data on total self-employment (hereafter – $Self_{i,t}$) – to measure the intensity of entrepreneurship; and quarterly data on total gross domestic product (hereafter – $GDP_{i,t}$) – to measure the business cycle. The sample period is set for 1995q1-2015q2. Data on self-employment and gross domestic product have been seasonally adjusted, and additionally GDP data has been corrected for inflation using seasonally adjusted quarterly deflators. Data on self-employment has been extracted from OECD Annual Labor Force Statistics, while data on GDP and deflators – from OECD Statistical database (accessed: December 2015).

Descriptive statistics and time-series properties.

Measuring entrepreneurship and business cycle co-movements – a standard approach

This section briefly discusses changes in self-employment ($Self_{It,1995-2015}$) and gross domestic product ($GDP_{It,1995-2015}$) in Italy between years 1995-2015. Additionally, it preliminarily investigates whether self-employment ‘movements’ are rather pro-cyclical or counter-cyclical over business cycle over examined period in Italy. To this aim, using statistical analysis of cross-correlations (Burns & Mitchell 1946), it shortly demonstrates results of comovements analysis between pair of series – $Self_{It,1995-2015}$ and $GDP_{It,1995-2015}$.

In our research, we follow the general convention and define the business cycle fluctuation as deviations from long-run trend in total gross domestic product time series data. In this line, we need to decompose the original time series into trend and its component. In literature there are several time series filters used allowing for separating trend and business-cycle components over various economic data; these are, for instance Hodrick-Prescot, Baxter-King or Christiano-Fitzgerald filters. In here we propose to adopt of the square-wave high-pass Butterworth filter, for time series detrending procedure, which originally was developed by Butterworth (1930), and then used in multiple empirical researches, see for instance works of Kaiser & Maravall (1999, 2012), Gomez (2001), Harvey & Trimbur (2003). As suggested by Stove (1986) and Pollock (2000), the use of low pass Butterworth filter, also referred as ‘maximally flat’, allows for flexible smoothing data time series, and hence trends and cyclical components estimation from

economic data. Also as claimed by Pollock et al. (1999) or Gomez (2001), the mechanical application of Hodrick-Prescott filter for economic time series detrending procedures, often leads to obtaining spurious results, and thus other band-pass filters or Butterworth filter is more suitable for extracting smooth cycles from economic time series. Consider that given time series may be decomposed into two additively separable components as proposed by Hodrick and Prescott (1997):

$$y_t = \tau_t + c_t + \varepsilon_t \quad (7)$$

where:

y_t - is the time series;

τ_t - is trend component;

c_t - stands for the stationary cyclical component that is determined by the stochastic cycles across multiple periods (Cogley and Nason, 1995);

ε_t - may be defined as unpredictable random component.

Following the Eq.(7), it may be argued that the trend component may be calculated by simply extracting:

$$\tau_t = y_t - c_t - \varepsilon_t \quad (8)$$

and so the cycle components follows as:

$$c_t = y_t - \tau_t - \varepsilon_t \quad (9)$$

Despite the fact, that the unobserved random component - ε_t - may affect the business cycle, most of standard detrending filters simply take out the trend out of original time series, while the sum of cyclical and unobserved random component ($c_t + \varepsilon_t$) are treated comprehensively as a measure of a cycle (Carmona et al. 2010).

Table 7 presents summary statistics on self-employment and GDP seasonally adjusted quarterly data in Italy over the period 1995q1-2015q2. In Fig.8 original time series on self-employment and GDP, including long-term trends ($y_{Self_{It,1995-2015}}$; $y_{GDP_{It,1995-2015}}$) generated from Butterworth filter, are plotted (left-hand graph). Additionally, Fig.8 unveils the statistical relationship between $Self_{It,1995-2015}$ and $GDP_{It,1995-2015}$ original time series over examined period (right-hand graph).

Table 7. Summary statistics – Self-employment and GDP in Italy. Quarterly levels, data seasonally adjusted. 1995q1-2015q2

	Obs.	value in 1995q1	value in 2015q2	Average	Min. value	Max. value	Average quarterly growth rate (%)
Gross Domestic product (total, millions, euro)	82	351785.9	386272.7	391139.2	351785.9 (1995q1)	425053.6 (2008q1)	0.11% per quarter
Self-employment (total, thousands, persons)	82	6024.5	6233.8	6378.9	6024.5 (1995q1)	6744 (2004q4)	0.042 % per quarter

Source: authors study.

As presented in Fig.8, in Italy over the period 1995q1-2015q2, at first look regarding self-employment (entrepreneurship) and GDP trends, both upward and downward trends are easily observable and distinguishable. Over analyzed years in Italy, considering original GDP time series the upward trend spans from first quarter of 1995 till first quarter of 2008, when GDP reached its maximum at $GDP_{It,2008q1} = 425053,6$ (mln Euro) (the trend peak is reported for 2007q1 and corresponds to $y_{GDP_{It,2007q1}}=414925,6$ mln

Euro); and since 2008q1 sharp downward trend of GDP is clearly visible. Regarding time series on self-employment similar observations with respect to in-time changes are reported. Preliminary analysis of self-employment time series, over the period 1995-2015, also allows distinguishing both upward and downward ‘parts’ of long-run trend. Regarding original self-employment time series, the total number of self-employed persons was steadily growing reaching its maximum in fourth quarter of 2004, $SELF_{It,2004q4}=6774$ thousands of persons (the trend peak is reported for 2005q3 and corresponds to $y_Self_{It,2005q3}= 6628$ thousands of persons); while since then onward rapid decreases in total number of self-employed persons are noted.

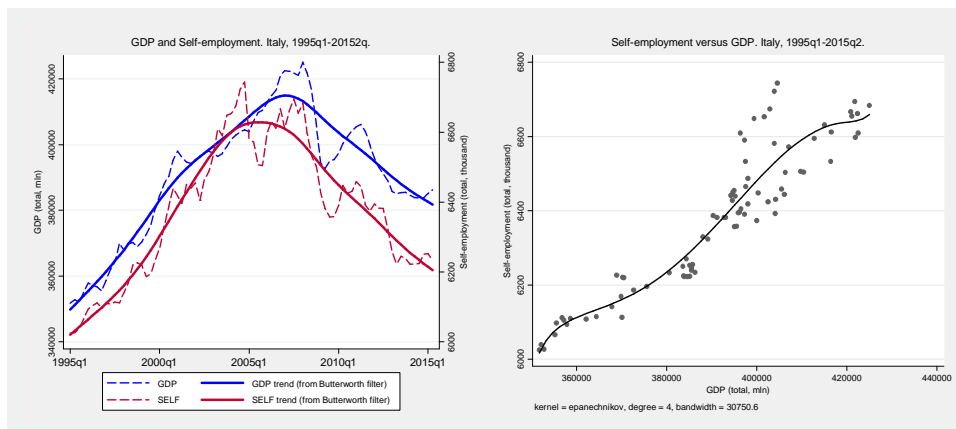


Figure 8. Self-employment and GDP in Italy. Quarterly levels, data seasonally adjusted. 1995q1-2015q2

Source: authors' elaboration. Note: right-hand graph – non-parametric approximation (4-degree local polynomial smoothing applied).

Additionally, the left-hand graph shows considerably high and possibly positive relationship between self-employment and GDP trends. Similar claims may be raised when looking at the right-hand graph where self-employment original time series are plotted versus GDP data. These may suggest that total number of self-employed persons and value of total gross domestic product are highly correlated over analyzed time periods, and they tend to ‘move’ in the same direction. This supposition may be also supported by calculated pairwise correlation coefficients for consecutive pairs of variables: $Self_{It,1995-2015}$ and $GDP_{It,1995-2015}$, which is 0.92 (statistically significant at 5% level of significance); and $y_Self_{It,1995-2015}$ and $y_GDP_{It,1995-2015}$, which is 0.95 (statistically significant at 5% level of significance).

Next, Fig.9 shows self-employment ($c_Self_{It,1995-2015}$) and GDP ($c_GDP_{It,1995-2015}$) cyclical components fluctuating around the trends, in Italy over the period 1995q1-2015q2. By convention, cyclical components – $c_Self_{It,1995-2015}$ and $c_GDP_{It,1995-2015}$, are expressed as deviations from long-term trends (%); while changes of $c_Self_{It,1995-2015}$ approximate ‘entrepreneurship cycle’ and changes of $c_GDP_{It,1995-2015}$ approximate ‘business cycle’. Casual analysis and observation of displayed in Fig.9 entrepreneurship cycle and business cycle may suggest that self-employment unveils rather pro-cyclical

tendencies, instead of behaving counter-cyclically or contemporaneously. Interestingly, what may be concluded from $c_Self_{It,1995-2015}$ and $c_{GDP_{It,1995-2015}}$ density plots (see Fig. 10 below), and descriptive statistics summarized in Table 4, values of $c_Self_{It,1995-2015}$ and $c_{GDP_{It,1995-2015}}$ vary between $\langle -1.8\%; 1.8\% \rangle$ and $\langle -3.5; 2.8\% \rangle$ respectively, however a great majority of observations ranges from (-2%) to (2%) regarding both $c_Self_{It,1995-2015}$ and $c_{GDP_{It,1995-2015}}$. This again supports the supposition that entrepreneurship cycle and business cycle are positively correlated (see also correlation coefficient between $c_Self_{It,1995-2015}$ and $c_{GDP_{It,1995-2015}}$ that is as 0.56 – see results in Table 8)

Table 8. Self-employment and GDP. Pairwise correlations. Italy, 1995q1-2015q2

	$Self_{i,1995-20}$	$GDP_{i,1995-20}$	$c_Self_{It,1995}$	$c_GDP_{It,1995}$	$y_Self_{It,1995}$	$y_GDP_{It,1995-2015}$
$Self_{i,1995-2015}$	1,00 (82)					
$GDP_{i,1995-2015}$	0,92* (82)	1,00 (82)				
$c_Self_{It,1995-2015}$	0,32* (82)	0,17 (82)	1,00 (82)			
$c_GDP_{It,1995-2015}$	0,18 (82)	0,30* (82)	0,56* (82)	1,00 (82)		
$y_Self_{It,1995-2015}$	0,96* (82)	0,92* (82)	0,05 (82)	0,03 (82)	1,00 (82)	
$y_GDP_{It,1995-2015}$	0,92* (82)	0,96* (82)	0,03 (82)	0,05 (82)	0,95* (82)	1,00 (82)

Source: authors' calculations. Note: in parenthesis – number of observations. Coefficients with (*) – statistically significant at 5%.

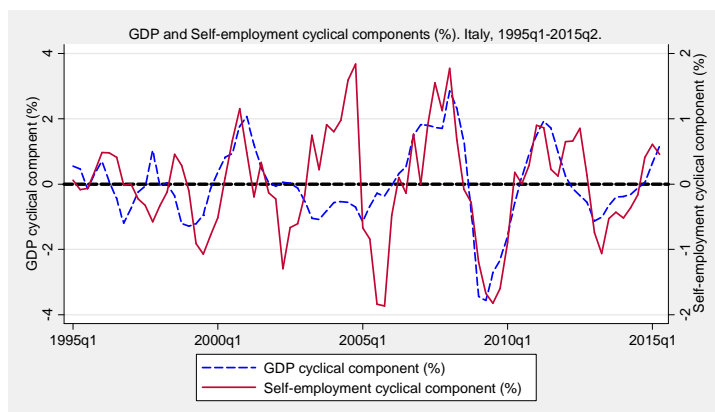


Figure 9. Self-employment and GDP cyclical components (%). Italy, 1995q1-2015q2

Source: authors' elaboration.

Next, deploying traditional statistics, we investigate the comovements between self-employment and GDP. To this aim adopting the methodological framework originally proposed by Burns & Mitchell (1946), we calculate cross-correlation coefficients (δ) between self-employment and GDP cyclical components ($Self_{cycle}$ versus GDP_{cycle}). Following King & Rebelo (1993) oraz Carmona et al. (2010), we define *comovements* of given pair of variable – x and y , as when: (1) – both variables x and y stand cyclical components and they

commove in the same direction over the business cycle so that the correlation coefficient between these two results to be positive; or – (2) – reversely, when variables x and y standing for cyclical components commove in opposite direction over the business cycle so that the correlation coefficient between these two results to be negative. We also may argue that if the correlation coefficient between variables x and y stand cyclical components is close to zero, then x and y do not commove. Regarding the business cycle analysis and comovements of different variables over it, we may say that if the calculated correlation coefficient between the variable explaining the business cycle and another defined variable y is positive, it raises arguments that variable y behaves pro-cyclically; while when the correlation coefficients is negative – variable y behaves counter-cyclically. We may also state that if the correlation coefficients are either negative or positive, by close to zero – the variable y demonstrates rather a-cyclical behavior. In other words, we treat calculated cross-correlation coefficients (δ) as a statistical measure of comovements between each pair of self-employment and GDP cyclical components series. Moreover, as argued by Prescott (1986), Kydland & Prescott (1990) or Harvey & Jaeger (1993), the calculated cross-correlation coefficient (δ) allows concluding on the phase shift of one series of data compared to another series of data. Put differently, the consecutive correlation coefficients are calculated between the detrended time series which are shifted backward or shifter toward by n periods; henceforth we may conclude whether one time series lags or – conversely, leads the other time series (in our case – self-employment and GDP).

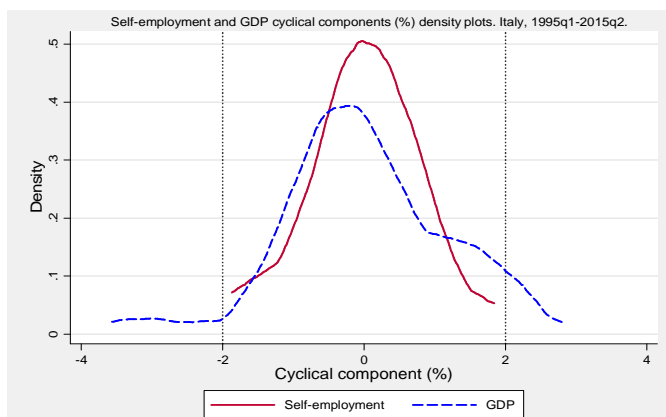


Figure 10. Self-employment and GDP cyclical components (%) density plots. Italy, 1995q1-2015q2
 Source: authors' elaboration.

Table 9. Self-employment and GDP cyclical components – summary statistics. Italy, 1995q1-2015q2

Variable	No. of obs.	Mean	Std. Dev.	Min. value	Max. value
Self-employment cyclical component	82	-0.0012758	0.806851	-1.865586 (2005q4)	1.840425 (2004q4)
GDP cyclical component	82	-0.0031055	1.190239	-3.563782 (2009q2)	2.854013 (2008q1)

Source: Authors' calculations.

Fig.11 and Table 10 comprehensively summarize the results of the analysis of $c_Self_{It,1995-2015}$; $c_GDP_{It,1995-2015}$ comovements over analyzed period in Italy. To be more specific, Table 5 reports cross-correlations between $c_Self_{It,1995-2015}$ and $c_GDP_{It,1995-2015}$ at different lags and leads; henceforth, the numbers defined as $(t - n)$ or $(t + n)$, show whether detrended time series on self-employment (entrepreneurship cycle) *lead or lag* business cycle (expressed as GDP deviations from long-run trend) by $n - periods$ (in here $- n - quarters$). If cross-correlation coefficient results to be highest at $t = 0$, then we it is argued that the self-employment and business cycle tend to move contemporaneously.

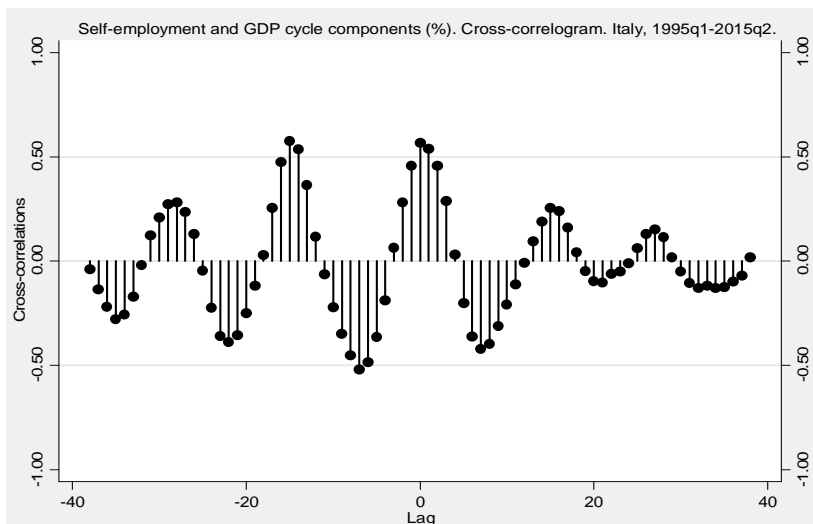


Figure 11. Self-employment (entrepreneurship cycle) and GDP (business cycle). Cross-correlogram. Italy, 1995q1-2015q2

Source: Authors` elaboration.

Table 10. Cyclical time paths of gross domestic output – correlation of self-employment and gross domestic output (GDP) BW-filtered cyclical components (%) at different leads (t-n) and lags (t+n). Italy, 1995q1-2015q2

	<i>cross – correlations ($Self_{i,t}; GDP_{i,t}$)</i>										
	$t - 5$	$t - 4$	$t - 3$	$t - 2$	$t - 1$	$t = 0$	$t + 1$	$t + 2$	$t + 3$	$t + 4$	$t + 5$
Self-employment (quarterly levels)	-0,36	-0,18	0,06	0,28	0,45	0,56	0,53	0,45	0,28	0,03	-0,20
	$Self_{i,t}$ leads $GDP_{i,t}$ (business cycle)					$Self_{i,t}$ and $GDP_{i,t}$ move contemporaneously	$Self_{i,t}$ lags $GDP_{i,t}$ (business cycle)				

Source: authors` calculations. Note: complete list of correlation coefficients for all 38 leads and lags – see Appendix X.

The results of cross-correlation analysis comprehensively suggest that, over analyzed period, the correlation coefficients are typically positive, which again speaks in support of the hypothesis on pro-cyclicality of entrepreneurship. Moreover, the highest cross-correlation coefficient is at $t=0$, hence entrepreneurship (self-employment) may be de-

fined as moving contemporaneously with the business cycle. Regarding the periods (t-1), (t+1) and (t+2), the cross-correlations only slightly differ from the result at t=0, but most importantly they are still positive. Finally, we observe that the cross-correlations for the remaining periods are substantially smaller, switching from being negative to positive.

Entrepreneurship Versus Business Cycle – Pro-Cyclical, Counter-Cyclical or Random Walk? Exemplification of New Methodology

This section targets to exemplify adoption of new methodology designed to verify whether entrepreneurship (measured as total self-employment) behaves pro-cyclically or counter-cyclically with the business cycle. In here, we deploy analogous economic time series as in Sect. 5.2, hence seasonally adjusted quarterly data on total self-employment and total gross domestic product (corrected for inflation) in Italy over the period 1995-2015. In what follows we present the results of our analysis, which are confronted with those formerly discussed in Sect. 5.2.

Similarly to the analysis in Sect. 5.2, original time series on self-employment and gross domestic product, using Butterworth filter, have been decomposed in long-term trends ($y_Self_{It,1995-2015}$; $y_GDP_{It,1995-2015}$) and cyclical components ($c_Self_{It,1995-2015}$; $c_GDP_{It,1995-2015}$) measuring from trends deviations. Figs. 12 and 13 plot $c_Self_{It,1995-2015}$ versus $c_GDP_{It,1995-2015}$, which exhibit statistical relationship between examined variables. In Figs. 12 and 13, two-dimensional reference grid has been plotted – red vertical line represent GDP trend and blue horizontal line represent for self-employment trend, which allows discriminating between pro-cyclical entrepreneurship behavior during expansion phase (→ observations falling into first quarter – Q1), pro-cyclical entrepreneurship behavior during recession phase (→ observations falling into third quarter – Q3), counter-cyclical entrepreneurship behavior during expansion phase (→ observations falling into second quarter – Q2) and counter-cyclical entrepreneurship behavior during recession phase (→ observations falling into fourth quarter – Q4).

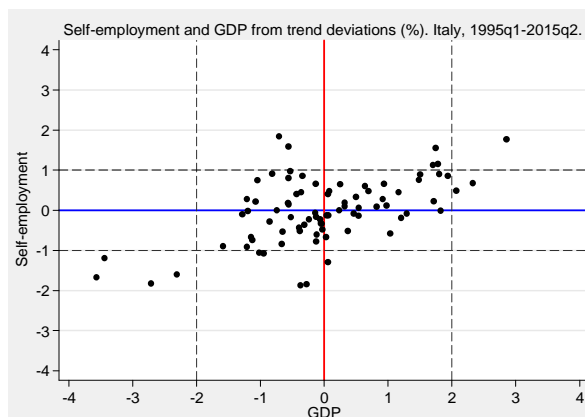


Figure 12. Self-employment and GDP cyclical components (%). Italy, 1995q1-2015q2

Source: authors` elaboration. Note: Red line → GDP trend; blue line → self-employment trend. Vertical and horizontal dash lines are drawn to capture most densely ‘populated’ areas.

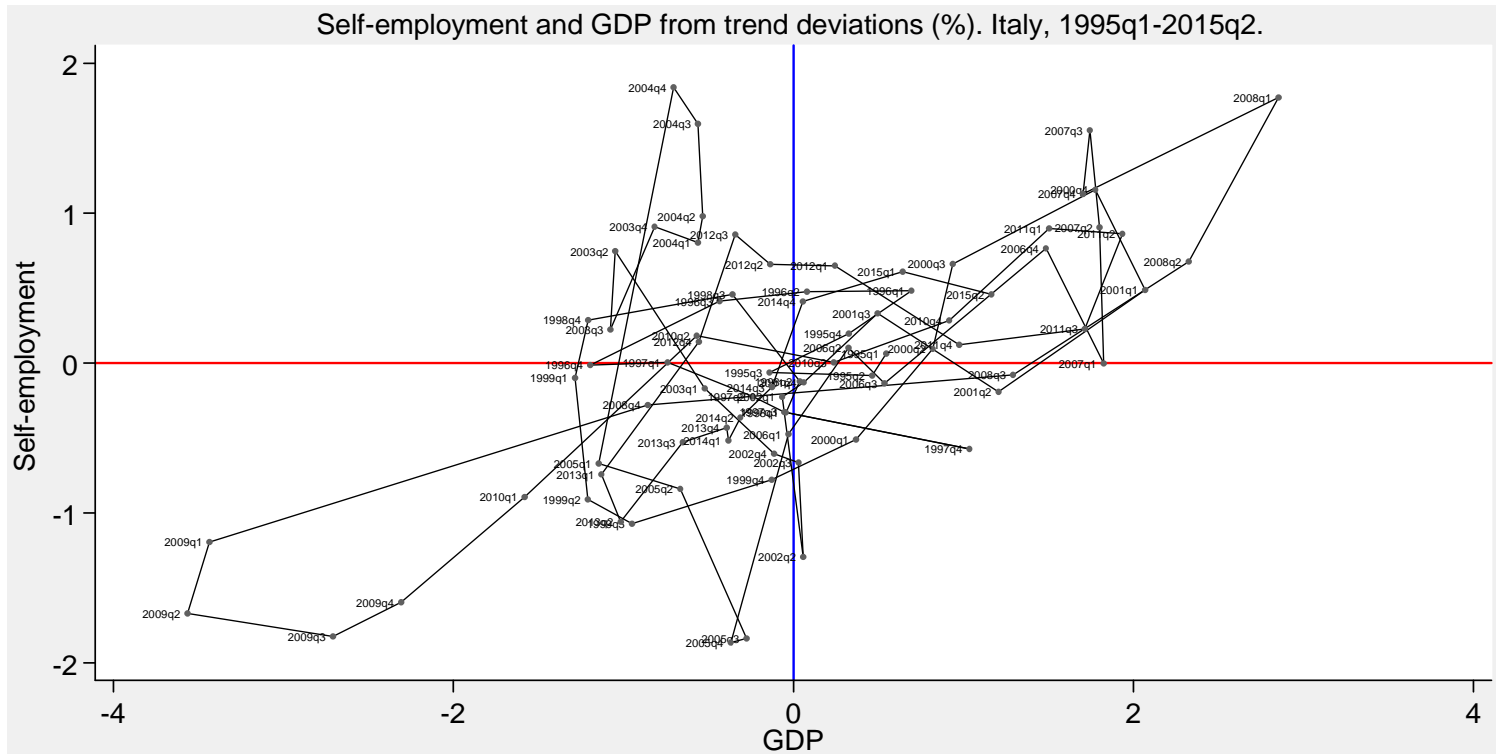


Figure 13. Self-employment and GDP cyclical components (%). Italy, 1995q1-2015q2

Source: authors` elaboration. Note: Red line → GDP trend; blue line → self-employment trend

Casual observation of Fig. 12 demonstrates that, in Italy over analyzed period, regardless the business cycle phase, self-employment – with only few exceptions, deviates from long-term trend at about (+/- 1%), which proves that patterns of entrepreneurial activity do not demonstrate abrupt ups and downs. Over the same time period in Italy, GDP fluctuations around long-term trend are found to be far more intensive – at about (+/-2%), compared to self-employment fluctuations. The latter may suggest that, over analyzed period in Italy, regardless entrepreneurial patters are found to be pro-cyclical or counter-cyclical during expansion and/or recession phase of business cycle, the reaction of entrepreneurial activity to changes in GDP is relatively weak.

However confirming or rejecting this supposition yields more detailed analysis, which results are discussed in the reminder of this section.

Discriminating between defined four distinct quarters – Q1, Q2, Q3 and Q4, implies splitting the original empirical sample, into four sub-samples. Hence our initial sample covering 82 quarterly observations has been divided into four sub-samples, while each one identifies different relationship emerging between $c_Self_{It,1995-2015}$ and $c_GDP_{It,1995-2015}$, in Italy between 1995q1 and 2015q2.

Table 11 summarizes all observations regarding $c_Self_{It,1995-2015}$ and $c_GDP_{It,1995-2015}$ falling into Q1, Q2, Q3 and Q4, along with respectively calculated Entrepreneurship Vulnerability Coefficients. Additionally, to shed more light on the nature of examined relationships, Figs. 14-17 graphically display identified relationships between $c_Self_{It,1995-2015}$ and $c_GDP_{It,1995-2015}$ and respective Entrepreneurship Vulnerability Coefficients in Q1, Q2, Q3 and Q4.

Let us consider the first quarter (Q1) (see also Fig.14), which encompasses 26 (32% out of total 82) observations demonstrating **pro-cyclical behavior of self-employment during expansion phase** of business cycle. That is to say that self-employment and GDP from trends deviations are positive ($c_Self_{It,Q1}>0$ and $c_GDP_{It,Q1}>0$). In Q1, calculated Entrepreneurship Vulnerability Coefficients for consecutive time periods are predominantly below 1, which suggest pro-cyclical behavior of self-employment during expansion phase of business cycle unveils generally weak vulnerability to gross domestic product fluctuations. If 26 observations are included, the average $Q1_EVC_{i,t,q}^{self \leftrightarrow gdp}$ is at 1.02 (see also Table 12) that indicates close to neutral entrepreneurship vulnerability to business cycle. However if 3 outlying observations – 1996q2, 2012q1 and 2014q4 (see Table 11) – are excluded, the average $Q1_EVC_{i,t,q}^{self \leftrightarrow gdp}$ significantly decreases, and results to be at about 0.46, which may be interpreted that pro-cyclical fluctuations of entrepreneurship during expansion phase of business cycle are at about twice weaker if compared to fluctuations of GDP over analogous time periods, and thus entrepreneurial activity maybe claimed as of weak vulnerability to business cycle.

Observations reported in the third quarter (Q3) (see also Fig. 15), encompassing 30 observations (36% out of total 82) also demonstrate **pro-cyclical behavior of self-employment however during the recession phase of business cycle**. This means that both self-employment and GDP from trends deviations are negative ($c_Self_{It,Q3}<0$ and $c_GDP_{It,Q3}<0$); hence decreases in GDP are accompanied by falling number of self-employed persons over analogous time periods. In Q3, calculated Entrepreneurship Vulnerability Coefficients in 15 time periods (quarters) exceed 1 ($Q3_EVC_{i,t,q}^{self \leftrightarrow gdp} > 1$),

which exhibits that in 50% of examined cases (time periods) entrepreneurial activity unveils strong vulnerability to business cycle. Put differently, during recession phase of business cycle, GDP negative deviations from trend are accompanied by relatively higher self-employment negative deviations from long-term trend. Alternatively we may state that self-employment demonstrates relatively strong reaction to business cycle. If calculate the average calculated Entrepreneurship Vulnerability Coefficient, but exclusively for those observations where $Q3_{EVC_{i,t,q}^{self \leftrightarrow gdp}} > 1$, it results to be at about 4.32. However, importantly to note, also in Q3 another 15 observations are reported where the Entrepreneurship Vulnerability Coefficients are below 1 ($Q3_{EVC_{i,t,q}^{self \leftrightarrow gdp}} < 1$), which suggests that self-employment vulnerability to the business cycle is weak. In this case, the average calculated Entrepreneurship Vulnerability Coefficient, but only for these observations where ($Q3_{EVC_{i,t,q}^{self \leftrightarrow gdp}} < 1$), is at barely 0.52. All these results allow drawing more general conclusion that during recession phase of business cycles when self-employment behaves pro-cyclically, strong entrepreneurship vulnerability is evidently dominant, which

Table 11. Self-employment and GDP from trends deviations (%), and Entrepreneurship Vulnerability Coefficients. Italy, 1995q1-2015q2

Q1 (expansion phase) (pro-cyclical behaviour)				Q2 (recession phase) (counter-cyclical behaviour)				Q3 (recession phase) (pro-cyclical behaviour)				Q4 (expansion phase) (counter-cyclical behaviour)			
Time	Self	GDP	V_1	Time	Self	GDP	V_2	Time	Self	GDP	V_3	Time	Self	GDP	V_4
1995q1	0,06	0,55	0,12	1996q3	0,41	-0,43	-0,95	1995q3	-0,06	-0,14	0,45	1995q2	-0,08	0,46	-0,18
1995q4	0,20	0,33	0,60	1997q1	0,00	-0,74	0,00	1996q4	-0,01	-1,20	0,01	1997q4	-0,57	1,04	-0,55
1996q1	0,48	0,69	0,69	1998q3	0,46	-0,36	-1,28	1997q2	-0,22	-0,24	0,94	1998q2	-0,12	0,04	-3,29
1996q2	0,48	0,08	5,98	1998q4	0,29	-1,21	-0,24	1997q3	-0,33	-0,05	6,01	2000q1	-0,51	0,37	-1,39
2000q2	0,09	0,82	0,11	2003q2	0,75	-1,05	-0,71	1998q1	-0,33	-0,04	7,71	2001q2	-0,19	1,21	-0,16
2000q3	0,66	0,94	0,70	2003q3	0,22	-1,08	-0,21	1999q1	-0,10	-1,29	0,08	2001q4	-0,13	0,06	-2,13
2000q4	1,16	1,78	0,65	2003q4	0,91	-0,82	-1,11	1999q2	-0,91	-1,21	0,75	2002q2	-1,29	0,06	-22,93
2001q1	0,49	2,07	0,24	2004q1	0,80	-0,56	-1,43	1999q3	-1,07	-0,95	1,13	2002q3	-0,66	0,03	-21,97
2001q3	0,33	0,50	0,67	2004q2	0,98	-0,53	-1,83	1999q4	-0,78	-0,13	6,03	2006q3	-0,14	0,53	-0,26
2006q2	0,10	0,32	0,31	2004q3	1,60	-0,56	-2,84	2002q1	-0,23	-0,07	3,44	2007q1	0,00	1,82	0,00
2006q4	0,76	1,49	0,51	2004q4	1,84	-0,71	-2,61	2002q4	-0,61	-0,11	5,34	2008q3	-0,08	1,29	-0,06
2007q2	0,90	1,80	0,50	2010q2	0,18	-0,57	-0,32	2003q1	-0,17	-0,52	0,32				
2007q3	1,55	1,74	0,89	2012q2	0,66	-0,14	-4,84	2005q1	-0,67	-1,15	0,58				
2007q4	1,13	1,70	0,66	2012q3	0,86	-0,34	-2,50	2005q2	-0,84	-0,67	1,26				
2008q1	1,77	2,85	0,62	2012q4	0,14	-0,56	-0,26	2005q3	-1,84	-0,28	6,68				
2008q2	0,68	2,32	0,29					2005q4	-1,87	-0,37	5,07				
2010q3	0,00	0,24	0,02					2006q1	-0,47	-0,03	16,29				
2010q4	0,28	0,92	0,31					2008q4	-0,28	-0,86	0,33				
2011q1	0,90	1,50	0,60					2009q1	-1,19	-3,43	0,35				
2011q2	0,86	1,93	0,45					2009q2	-1,67	-3,56	0,47				
2011q3	0,23	1,71	0,13					2009q3	-1,82	-2,71	0,67				
2011q4	0,12	0,98	0,12					2009q4	-1,60	-2,31	0,69				
2012q1	0,65	0,25	2,64					2010q1	-0,89	-1,58	0,57				
2014q4	0,41	0,06	7,38					2013q1	-0,74	-1,13	0,66				
2015q1	0,61	0,64	0,95					2013q2	-1,06	-1,02	1,04				
2015q2	0,46	1,16	0,39					2013q3	-0,53	-0,65	0,81				
								2013q4	-0,43	-0,39	1,10				
								2014q1	-0,52	-0,38	1,36				
								2014q2	-0,36	-0,31	1,17				
								2014q3	-0,16	-0,13	1,28				

Source: authors' calculations.

additionally may be supported by the fact that average $Q3_EVC_{i,t,q}^{self \leftrightarrow gdp}$, if calculated for all 30 observation, is at 2.4 (see Table 7).

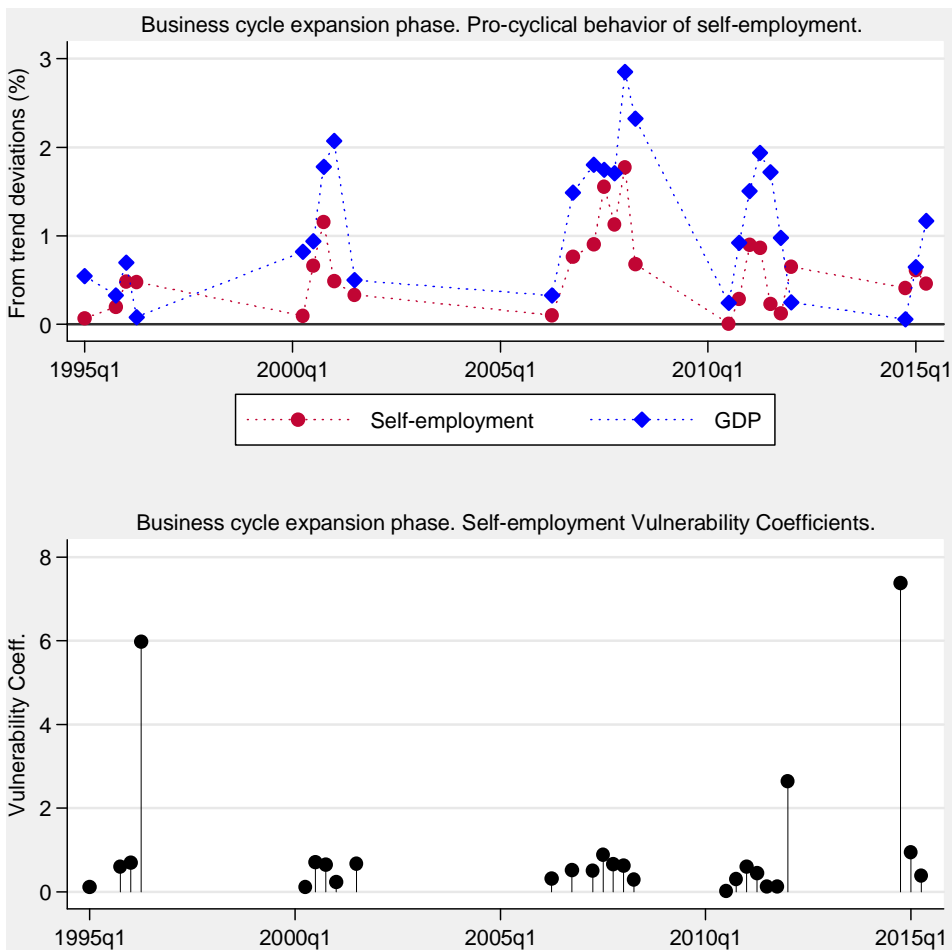


Figure 14. Pro-cyclical behavior of entrepreneurship; Expansion phase of business cycle
 Source: authors` elaboration.

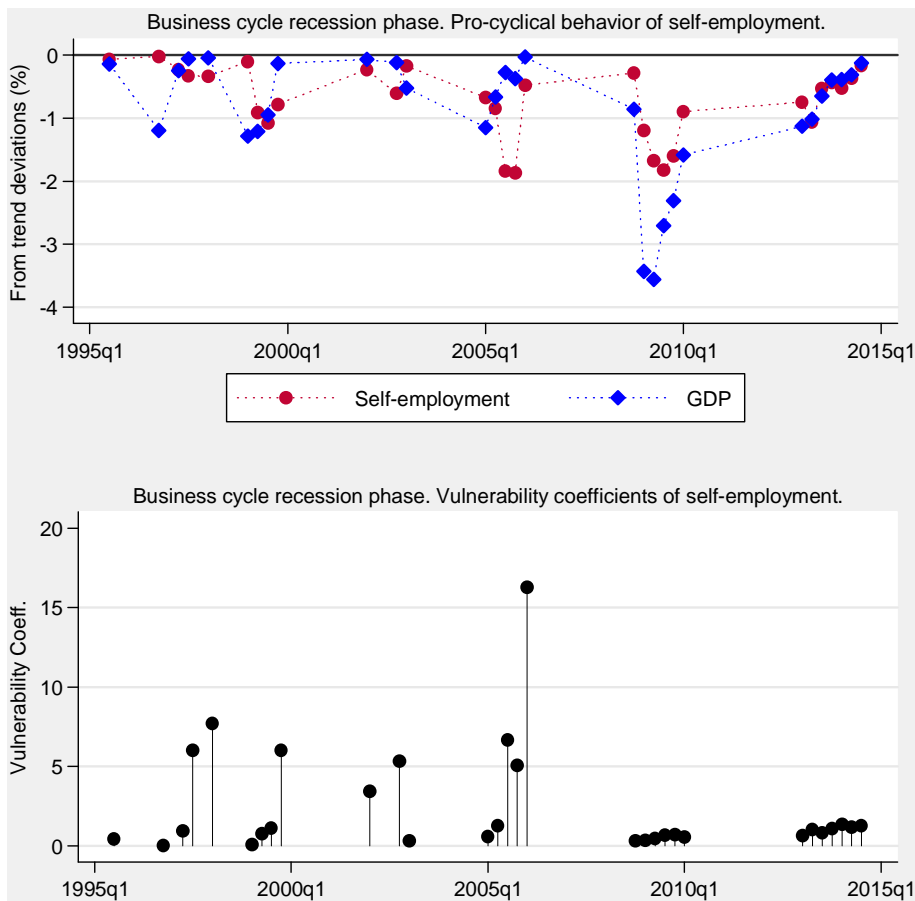


Figure 15. Pro-cyclical behavior of self-employment; Recession phase of business cycle
 Source: authors' elaboration.

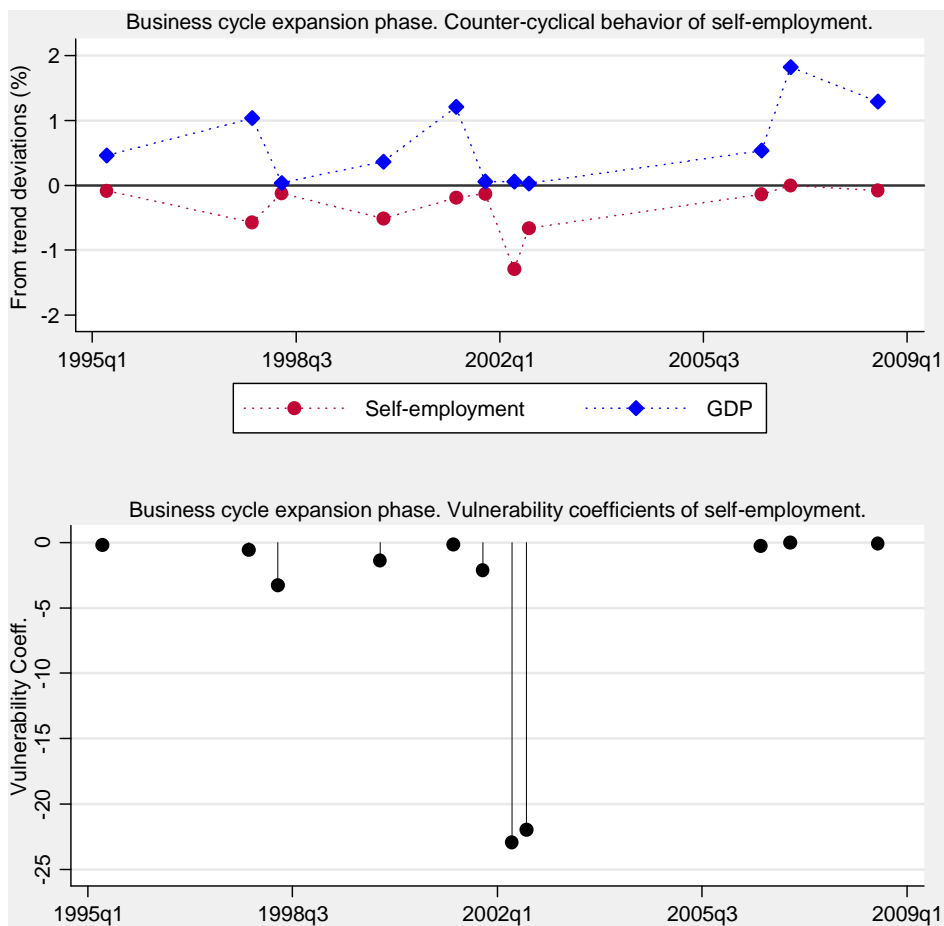


Figure 16. Counter-cyclical behavior of self-employment; Expansion phase of business cycle
 Source: authors' elaboration.

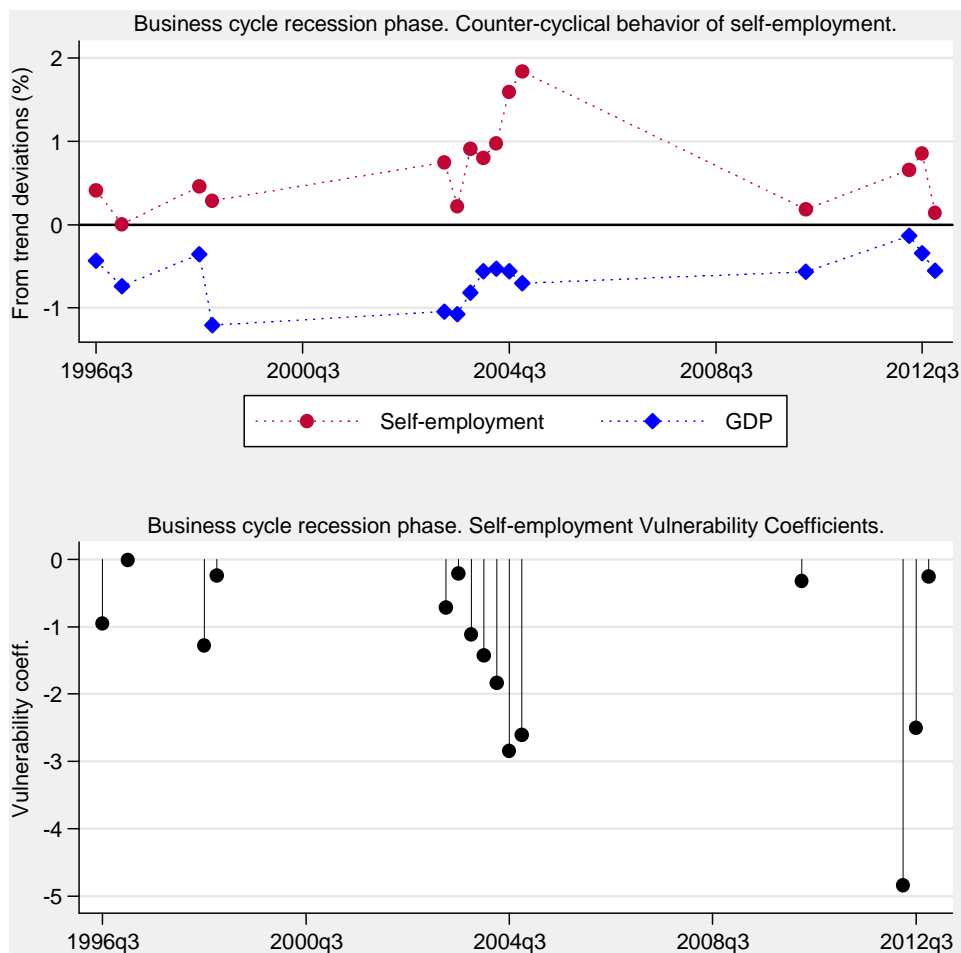


Figure 17. Counter-cyclical behavior of entrepreneurship; Recession phase of business cycle

Source: authors' elaboration.

Now, turning to the analysis of counter-cyclical behavior of entrepreneurship during both expansion and recession phase of business cycle, we discuss the results of Q2 and Q4 respectively. All 15 observations (19% out of total 82) falling into Q2, are classified as those representing counter-cyclical patterns of entrepreneurship during recession phase of business cycle (see Fig. 17). That is to say that decreases in GDP are accompanied by rises in self-employment ($c_{Self}_{t,Q2} > 0$ and $c_{GDP}_{t,Q2} < 0$). In this case calculated average $Q2_EVC_{i,t,q}^{self \leftrightarrow gdp}$, for all 15 observations, is at about $|-1.4|$, which may suggest strong entrepreneurship vulnerability to business cycle. Importantly, in 7 cases (time periods), the $Q2_EVC_{i,t,q}^{self \leftrightarrow gdp}$ is higher than 1, while in another 8 is lower than 1; however average values of $Q2_EVC_{i,t,q}^{self \leftrightarrow gdp}$ in these sub-samples are $|-2.31|$ and $|-0.38|$

respectively. Basing on these calculations, we may raise arguments speaking in support of hypothesis that during recession phase of business cycle pro-cyclical behavior of self-employment is characterized by strong vulnerability to GDP changes.

Finally, we have solely 11 observations classified for Q4, which exhibit counter-cyclical behavior of entrepreneurship during expansion phase of business cycle (see Fig. 16). That is to say that increases in GDP are accompanied by drops in self-employment ($c_Self_{it,Q4} < 0$ and $c_GDP_{it,Q4} > 0$). If all 11 observations are considered, the average $Q4_EVC_{i,t,q}^{self \leftrightarrow gdp}$ is at about -4.8 ; however it shall be borne in mind, that for two periods – 2002q2 and 2002q3, the values of entrepreneurship vulnerability coefficient were -22.9 and -21.9 respectively, which heavily affects the calculated average. Hence, to obtain more reliable result we exclude these two observations, and the corrected average $Q4_EVC_{i,t,q}^{self \leftrightarrow gdp}$ results at around -0.9. Considering the, corrected for outlying observation, average $Q4_EVC_{i,t,q}^{self \leftrightarrow gdp}$ suggests relatively weak entrepreneurship vulnerability to the business cycle. However, one should be rather caution when drawing conclusions on the features of counter-cyclical entrepreneurial behavior during expansion phase of business cycles, as these results are violated by two outliers, are drawn basing on very limited number of observations and hence may lack representativeness and robustness.

Table 12. Self-employment and GDP from trends deviations (%), and Entrepreneurship Vulnerability Coefficients – summary statistics. Italy, 1995q1-2015q2

	Variable	Obs.	Mean	Std. dev.	Min. Value	Max. Value	Absolute Difference between Max and Min Values
Q1 (expansion phase; pro-cyclical behavior of self-employment)	$c_Self_{it,Q1}$	26	0,6	0,4	0,004	1,7	1,7
	$c_GDP_{it,Q1}$	26	1,3	0,76	0,05	2,8	2,8
	$Q1_EVC_{i,t,q}^{self \leftrightarrow gdp}$	26	1,02	1,7	0,016	7,3	7,3
	$Q1_EVC_{i,t,q}^{self \leftrightarrow gdp}$ (outliers excluded)	23	0,46	-	-	-	-
Q2 (recession phase; counter-cyclical behavior of self-employment)	$c_Self_{it,Q2}$	15	0,6	0,5	0,003	1,8	1,8
	$c_GDP_{it,Q2}$	15	-0,6	0,3	-1,2	-0,1	1,1
	$Q2_EVC_{i,t,q}^{self \leftrightarrow gdp}$	15	-1,4	1,3	-4,8	-0,005	4,8
	$Q2_EVC_{i,t,q}^{self \leftrightarrow gdp}$ (outliers excluded)						
Q3 (recession phase; pro-cyclical behavior of self-employment)	$c_Self_{it,Q3}$	30	-0,7	0,5	-1,8	-0,02	1,8
	$c_GDP_{it,Q3}$	30	-0,9	0,9	-3,5	-0,03	3,5
	$Q3_EVC_{i,t,q}^{self \leftrightarrow gdp}$	30	2,4	3,5	0,01	16,3	16,3
	$Q3_EVC_{i,t,q}^{self \leftrightarrow gdp}$ (outliers excluded)						
Q4 (expansion phase; counter-cyclical behavior of self-employment)	$c_Self_{it,Q4}$	11	-0,3	0,4	-1,3	-0,004	1,3
	$c_GDP_{it,Q4}$	11	0,6	0,6	0,03	1,8	1,8
	$Q4_EVC_{i,t,q}^{self \leftrightarrow gdp}$	11	-4,8	8,7	-22,9	-0,002	22,9
	$Q4_EVC_{i,t,q}^{self \leftrightarrow gdp}$ (outliers excluded)	9	-0,9				

Source: authors` calculations.

REFERENCES

- Añón-Higón, D., Manjón-Antolín, M., Mañez, J. A., & Sanchis-Llopis, J. A. (2014). Does R&D protect SMEs from the hardness of the cycle? Evidence from Spanish SMEs (1990-2009). *International Entrepreneurship and Management Journal*, 11(2), 361-376.
- Arum, R., & Müller, W. (Eds.). (2009). *The reemergence of self-employment: a comparative study of self-employment dynamics and social inequality*. Princeton University Press.
- Audretsch, D. B., & Acs, Z. J. (1994). New-firm startups, technology, and macroeconomic fluctuations. *Small Business Economics*, 6(6), 439-449.
- Audretsch, D. B., & Fritsch, M. (2002). Growth regimes over time and space. *Regional Studies*, 36(2), 113-124.
- Baptista, R., & Preto, M. T. (2011). New firm formation and employment growth: regional and business dynamics. *Small Business Economics*, 36(4), 419-442.
- Baumol, W. J., Schilling, M. A., & Wolff, E. N. (2009). The superstar inventors and entrepreneurs: How were they educated?. *Journal of Economics & Management Strategy*, 18(3), 711-728.
- Beneito, P., Rochina-Barrachina, M. E., & Sanchis-Llopis, A. (2014). Ownership and the cyclicity of firms' R&D investment. *International Entrepreneurship and Management Journal*, 11(2), 343-359.
- Blanchflower, D. G. (2000). Self-employment in OECD countries. *Labour economics*, 7(5), 471-505.
- Burke, A., & Shaikat, A. (2015). Establishment creation and destruction across business density cycles: US evidence. *International Entrepreneurship and Management Journal*, 11(2), 377-392.
- Burns, A. F., & Mitchell, W. C. (1946). Measuring business cycles. *NBER Books*.
- Butterworth, S. (1930). On the theory of filter amplifiers. *Wireless Engineer*, 7(6), 536-541.
- Bruce, D., & Mohsin, M. (2006). Tax policy and entrepreneurship: New time series evidence. *Small Business Economics*, 26(5), 409-425.
- Caballero, R. J., & Hammour, M. L. (1991). *The cleansing effect of recessions*(No. w3922). National Bureau of Economic Research.
- Carrasco, R. (1999). Transitions to and from self-employment in Spain: an empirical analysis.
- Carlstrom, C. T., & Fuerst, T. S. (1997). Agency costs, net worth, and business fluctuations: A computable general equilibrium analysis. *The American Economic Review*, 893-910.
- Carmona, M., Golpe, A., & Congregado, E. (2010). Self-Employment and Business Cycles. Available at SSRN 1557304.
- Carmona, M., Congregado, E., & Golpe, A. A. (2012). Comovement between self-employment and macroeconomic variables. *SAGE Open*, 2158244012448665.
- Christiano, L. J., & Fitzgerald, T. J. (2003). The band pass filter*. *international economic review*, 44(2), 435-465.
- Congregado, E., Golpe, A. A., & Parker, S. C. (2012). The dynamics of entrepreneurship: hysteresis, business cycles and government policy. *Empirical Economics*, 43(3), 1239-1261.
- Cowling, M., & Mitchell, P. (1997). The evolution of UK self-employment: a study of government policy and the role of the macroeconomy. *The Manchester School*, 65(4), 427-442.
- Davis, S. J., Haltiwanger, J. C., & Schuh, S. (1998). Job creation and destruction. *MIT Press Books*, 1.
- Dixit, A., & Rob, R. (1994). Switching costs and sectoral adjustments in general equilibrium with uninsured risk. *Journal of Economic Theory*, 62(1), 48-69.
- Faria, J. R. (2014). Entrepreneurship and business cycles: technological innovations and unemployment. *International Entrepreneurship and Management Journal*, 11(2), 253-265.

- Francois, P., & Lloyd-Ellis, H. (2003). Animal spirits through creative destruction. *American Economic Review*, 530-550.
- Fritsch, M., & Mueller, P. (2007). The persistence of regional new business formation-activity over time-assessing the potential of policy promotion programs. *Journal of Evolutionary Economics*, 17(3), 299-315.
- Fritsch, M., Kritikos, A., & Pijnenburg, K. (2013). Business cycles, unemployment and entrepreneurial entry—evidence from Germany. *International Entrepreneurship and Management Journal*, 11(2), 267-286.
- Gick, W. (2002). Schumpeter's and Kirzner's entrepreneur reconsidered: corporate entrepreneurship, subjectivism and the need for a theory of the firm. *Entrepreneurship and the firm: Austrian perspectives on economic organization*, 87-101.
- Gomez, V. (2001). The use of Butterworth filters for trend and cycle estimation in economic time series. *Journal of Business & Economic Statistics*, 19(3), 365-373.
- Grant, D. S. (1996). The political economy of new business formation across the American states, 1970-1985. *Social Science Quarterly*, 28-42.
- Harvey, A. C., & Jaeger, A. (1993). Detrending, stylized facts and the business cycle. *Journal of applied econometrics*, 8, 231-231.
- Harvey, A. C., & Trimbur, T. M. (2003). General model-based filters for extracting cycles and trends in economic time series. *Review of Economics and Statistics*, 85(2), 244-255.
- Hodrick, R. J., & Prescott, E. C. (1997). Postwar US business cycles: an empirical investigation. *Journal of Money, credit, and Banking*, 1-16.
- Iversen, J., & Jorgensen, R. N. Malchow-Moller (2008), Defining and Measuring Entrepreneurship. *Foundations and Trends in Entrepreneurship*, 4(1).
- King, R. G., & Rebelo, S. T. (1993). Low frequency filtering and real business cycles. *Journal of Economic dynamics and Control*, 17(1), 207-231.
- Klapper, L., Love, I., & Randall, D. (2014). New firm registration and the business cycle. *International Entrepreneurship and Management Journal*, 11(2), 287-306.
- Kaiser, R., & Maravall, A. (1999). Estimation of the business cycle: A modified Hodrick-Prescott filter. *Spanish Economic Review*, 1(2), 175-206.
- Kaiser, R., & Maravall, A. (2012). *Measuring business cycles in economic time series* (Vol. 154). Springer Science & Business Media.
- King, R. G., Stock, J. H., & Watson, M. W. (1995). Temporal instability of the unemployment-inflation relationship. *Economic Perspectives*, 19(3), 2.
- Kirzner, I. M. (1999). Creativity and/or alertness: A reconsideration of the Schumpeterian entrepreneur. *The Review of Austrian Economics*, 11(1), 5-17.
- Klapper, L., Love, I., & Randall, D. (2014). New firm registration and the business cycle. *International Entrepreneurship and Management Journal*, 11(2), 287-306.
- Koellinger, P. D., & Roy Thurik, A. (2012). Entrepreneurship and the business cycle. *Review of Economics and Statistics*, 94(4), 1143-1156.
- Kydland, F. E., & Prescott, E. C. (1990). Business cycles: Real facts and a monetary myth. *Real business cycles: a reader*.
- Llopis, J. A. S., Millán, J. M., Baptista, R., Burke, A., Parker, S. C., & Thurik, R. (2015). Good times, bad times: entrepreneurship and the business cycle. *International Entrepreneurship and Management Journal*, 11(2), 243-251.

- Millán, J. M., Congregado, E., & Román, C. (2012). Determinants of self-employment survival in Europe. *Small Business Economics*, 38(2), 231-258.
- Millán, A., Millán, J. M., Román, C., & van Stel, A. (2015). Unraveling the relationship between the business cycle and the own-account worker's decision to hire employees. *International Entrepreneurship and Management Journal*, 11(2), 321-342.
- Murray, C. J. (2003). Cyclical properties of Baxter-King filtered time series. *Review of Economics and Statistics*, 85(2), 472-476.
- Parker, S. C. (1996). A time series model of self-employment under uncertainty. *Economica*, 459-475.
- Parker, S. C. (2005). Explaining regional variations in entrepreneurship as multiple occupational equilibria*. *Journal of Regional Science*, 45(4), 829-850.
- Parker, S. C. (2009). *The economics of entrepreneurship*. Cambridge University Press.
- Parker, S. C. (2012). Entrepreneurship and the Business Cycle: Evidence and Implications for Policy-Makers. In *Entrepreneurship, Norms and the Business Cycle*, Swedish Entrepreneurship Forum Report (pp. 35-51).
- Parker, S. C., Congregado, E., & Golpe, A. A. (2012a). Is entrepreneurship a leading or lagging indicator of the business cycle? Evidence from UK self-employment data. *International Small Business Journal*, 30(7), 736-753.
- Parker, S. C., Congregado, E., & Golpe, A. A. (2012b). Testing for hysteresis in entrepreneurship in 23 OECD countries. *Applied Economics Letters*, 19(1), 61-66.
- Parker, S. C., & Robson, M. T. (2004). Explaining international variations in self-employment: evidence from a panel of OECD countries. *Southern Economic Journal*, 287-301.
- Pérotin, V. (2006). Entry, exit, and the business cycle: Are cooperatives different?. *Journal of Comparative Economics*, 34(2), 295-316.
- Prescott, E. C. (1986, November). Theory ahead of business-cycle measurement. In *Carnegie-Rochester Conference Series on Public Policy* (Vol. 25, pp. 11-44). North-Holland.
- Pollock, D. S. G., Green, R. C., & Nguyen, T. (Eds.). (1999). *Handbook of time series analysis, signal processing, and dynamics*. Academic Press.
- Pollock, D. S. G. (2000). Trend estimation and de-trending via rational square-wave filters. *Journal of Econometrics*, 99(2), 317-334.
- Rampini, A. A. (2004). Entrepreneurial activity, risk, and the business cycle. *Journal of Monetary Economics*, 51(3), 555-573.
- Selesnick, I.W., & Burrus, C.S. (1998). Generalized digital Butterworth filter design. *Signal Processing, IEEE Transactions on*, 46(6), 1688-1694. Stove DC (1986) *The rationality of induction*. Oxford: Clarendon Press.
- Shleifer, A. (1986). Implementation cycles. *The Journal of Political Economy*, 1163-1190.
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (Vol. 55). Transaction publishers.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small business economics*, 13(1), 27-56.

Appendix:

Appendix X. Cyclical time paths of gross domestic output – correlation of self-employment and gross domestic output (GDP) BW-filtered cyclical components (%) at different leads ($t - n$) and lags ($t + n$). Italy, 1995q1-2015q2.

Period	$\text{cross} - \text{correlations}(\text{Self}_{i,t}; \text{GDP}_{i,t})$	Period	$\text{cross} - \text{correlations}(\text{Self}_{i,t}; \text{GDP}_{i,t})$	Period	$\text{cross} - \text{correlations}(\text{Self}_{i,t}; \text{GDP}_{i,t})$	Period	$\text{cross} - \text{correlations}(\text{Self}_{i,t}; \text{GDP}_{i,t})$
t-38	-0.0391	t-18	0.0284	t+1	0.5388	t+21	-0.1014
t-37	-0.1363	t-17	0.2548	t+2	0.4566	t+22	-0.0603
t-36	-0.2194	t-16	0.4752	t+3	0.2888	t+23	-0.0489
t-35	-0.2779	t-15	0.5758	t+4	0.0305	t+24	-0.0093
t-34	-0.2560	t-14	0.5377	t+5	-0.2018	t+25	0.0613
t-33	-0.1704	t-13	0.3652	t+6	-0.3623	t+26	0.1312
t-32	-0.0200	t-12	0.1177	t+7	-0.4215	t+27	0.1515
t-31	0.1238	t-11	-0.0631	t+8	-0.3958	t+28	0.1139
t-30	0.2102	t-10	-0.2212	t+9	-0.3109	t+29	0.0179
t-29	0.2722	t-9	-0.3485	t+10	-0.2073	t+30	-0.0502
t-28	0.2809	t-8	-0.4508	t+11	-0.1108	t+31	-0.1058
t-27	0.2366	t-7	-0.5194	t+12	-0.0074	t+32	-0.1290
t-26	0.1303	t-6	-0.4842	t+13	0.0960	t+33	-0.1186
t-25	-0.0462	t-5	-0.3648	t+14	0.1891	t+34	-0.1290
t-24	-0.2241	t-4	-0.1884	t+15	0.2550	t+35	-0.1241
t-23	-0.3594	t-3	0.0635	t+16	0.2409	t+36	-0.0975
t-22	-0.3889	t-2	0.2823	t+17	0.1612	t+37	-0.0692
t-21	-0.3544	t-1	0.4585	t+18	0.0422	t+39	0.0177
t-20	-0.2507	t=0	0.5666	t+19	-0.0486		
t-19	-0.1174			t+20	-0.0954		

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Corporate Reputation and Performance: A Legitimacy Perspective

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Abstract

The objective of this paper is to investigate the mediating role of innovation legitimacy between corporate reputation and enterprise growth. Four hypotheses were formulated and tested in to achieve the research objective. We collected data from 191 enterprises in 16 provinces in China. In total, 300 enterprises were selected to participate in this study. Descriptive analyses showed that the valid data covered a wide range of samples in terms of enterprise types and sizes, industries, market positions and years of establishment. The data was analysed by regression analysis. The results of this research suggest that corporate reputation has significant positive relationship with enterprise growth. This positive relationship was found through all pathways tested. This means that brand image, social responsibility, innovation capability and staff quality are all important to enterprise growth. Similar effects were found for innovation legitimacy on enterprise growth, indicating that legitimacy is an important theoretical perspective in understanding how businesses could develop in various important aspects. Legitimacy is an important theoretical framework in understanding the complex relationships between corporate reputation and enterprise growth, especially from the innovation perspective.

Keywords: corporate reputation; enterprise growth; legitimacy; innovation; China

JEL codes: L26, O53

INTRODUCTION

Being argued to be the most valuable organisational asset (Gibson, Gonzales & Castanon, 2006) and intangible resource (Hall, 1993), corporate reputation has long been acknowledged as a significant source of sustained competitive advantage (Fombrun & Shanley, 1990). Not surprisingly, research evidence shows that corporate reputation has significant implications on a variety of organisational and business issues including costs (Deephouse, 2000) and pricing policies (Rindova, Williamson, Petkova & Sever, 2005). It has been argued that corporate reputation also has long-term effects on firms (Fang, 2005). Amongst these scholarly efforts, positive links between corporate reputation and firm performance have been established (Fombrun & Shanley, 1990).

Concurrent with the growth of empirical evidence showing positive links between corporate reputation and firm performance that has been spanning over a quarter century, the existing research is largely focused on the theoretical framework of the resource-based view (RBV) (Barney, 1991). While useful, this emphasis may fail to explain the complex relationships between the two variables (Carmeli & Tishler, 2005). This paper seeks to contribute to our understanding of the complexity of relationships between corporate reputation and firm performance through the lens of legitimacy (Suchman, 1995). Specifically, the objective of this study is to investigate the potential mediating role of innovation legitimacy between corporate reputation and enterprise growth. By analysing quantitative data collected from Chinese enterprises, our findings suggest that innovation legitimacy has a significant mediating effect on the positive correlations between corporate reputation and enterprise growth.

The remaining of this article is structured as follows. First, we review literature to show how innovation legitimacy may act as a mediator between different dimensions of corporate reputation and enterprise growth. We construct a conceptual model to illustrate the hypothesised pathways between variables based on our review of relevant research. In the next section, we explain our sampling and data collection procedures as well as how these data were analysed by statistical tools. Detailed analyses and results will be demonstrated next before we will discuss these results and the implications. We then discuss the limitations of this research and point out future research directions. We conclude our research in the final section of this article.

LITERATURE REVIEW

This section reviews research on legitimacy, corporate reputation and firm performance to derive hypotheses for this study. We begin by reviewing literature on corporate performance.

Corporate Reputation

Corporate reputation, for this study, is broadly understood as a perceptual representation of an organisation regarding a set of its attributes associated with or inferred from the organisation's past activities, referring to both perceived identity and image of an organisation. While organisational identity has an internal focus and organisational image usually refers to internal audiences, corporate reputation tends to involve perceptions of all stakeholders (Walker, 2010). The most studied theoretical

perspective within corporate reputation literature is RBV. Studies from the RBV perspective view corporate reputation as an unreplaceable resource of the company that may lead to sustained competitive advantages and examine how such effects are resulted (Flanagan & O'Shaughnessy, 2005), for example, through uncertainty reduction by signalling product quality (Rindova *et al.*, 2005). Another frequently used theory in the literature is signalling theory, focusing on strategic organisational signals that are perceived and decoded by the stakeholders. For example, Basdeo, Smith, Grimm, Rindova and Derfus (2006) applied corporate reputation into explaining how stakeholders may view a company's strategic choices as signals sent by the company to form impressions. From this perspective, social perceptions may influence corporate reputation (Turban & Greening, 1997). Many scholars have studied corporate reputation from other theoretical perspectives including game theory (Milgrom & Roberts, 1982), stakeholder theory (Cable & Graham, 2000), social identity theory (Turban & Greening, 1997) and mass communication theory (Deephouse, 2000). Within a number of theories studied, a predominant theoretical perspective is institutional theory whereby the focus is on institutional contexts and reputation building. Institutional theory is used in the literature to investigate how organisations can gain socio-cultural legitimacy to enhance organisational reputation by exploring their institutional contexts. From this perspective, environmental contexts of an organisation are crucial to its reputation in order to legitimate its activities. This study extends the literature by putting the spotlight on organisational innovation legitimacy.

Organisational Innovation Legitimacy

Legitimacy may be broadly understood as a generalised perception that an entity, and/or its actions, is justified according to a societal culture. As an important source of organisational resources, legitimacy enhances the stability of organisational innovation because organisational innovation that are perceived to be appropriate and desirable tend to receive more resources from stakeholders (Parsons, 1960) and have less collective action problems (Olson, 1965). Since legitimacy involves a collective rationale explaining the actions and purposes of an organisation (Jepperson, 1991), legitimate organisations are likely to be more comprehensible and thus ready to sustain.

Within the existing literature, legitimacy has been studied from different perspectives. For example, Dowling and Pfeffer (1975) suggest that organisational actors may support a company policy based on the policy's expected value to them, implying a kind of exchange legitimacy. Organisations may also possess dispositional legitimacy, evidenced by the fact that organisational actors often perceive, or act as though that, organisations have personalities including interests, styles and tastes (Pfeffer, 1981). From an evaluative angle, moral legitimacy reflects a normative assessment of organisational actions (Aldrich & Fiol, 1994), indicating judgements on whether the organisation is 'doing the right thing'.

From a consequential perspective, Scott and Meyer (1991) tested organisational consequential measures such as automobile emission standards and hospital mortality rates to test organisational effectiveness. Structurally, organisations may be viewed as categorically legitimate whereby organisational legitimacy resides in its morally favoured structural characteristics (Zucker, 1986). Individually, organisational legitimacy may rest on the leaders in the organisation, albeit such personal legiti-

macy may be more transitional and idiosyncratic (Zucker, 1986). Finally, legitimacy may be studied on a cognitive level, indicating taken-for-granted assumptions and beliefs about the organisations and their activities (Jepperson, 1991).

The studies of organisational legitimacy dynamics focusing on cognition are different from legitimacy based on evaluation or interests, as cognitive legitimacy does not involve a positive or negative evaluation of organisations (Aldrich & Fiol, 1994). Grounded on this cognitive angle, this paper extends the literature by studying legitimacy based on perceptions of the level of legitimacy on organisational innovations. The next section reviews literature on corporate performance.

Corporate Performance

In this study, we examine corporate performance through the lens of enterprise growth. Sustained growth of a corporation is an understandable organisational objective that guides organisational strategies and management practices. Although the goal to grow may appear more important for relatively smaller companies, interestingly, research shows that organisational growth does not need to depend on the size of the organisations (Lee, 2010). Within the enterprise growth literature, a commonly accepted claim is that it relates significantly to organisational innovation. Akman and Yilmaz (2008) suggested that innovation is an important way for companies to sustain and develop their corporate performance and maintain long-term success. Similarly, it is suggested that innovation may lead to business growth in the long run (Cho & Pucik, 2005). Since it is well established that corporate performance relates to corporate reputation, and based on the above review on organisational legitimacy, the claim that innovation may be an important strategic tool to achieve enterprise growth gives a ground to study the complex relationships between corporate reputation, innovation legitimacy and enterprise growth. The next subsection explains the specific hypotheses of this study.

Hypotheses

Several hypotheses may be derived for testing the relationships between corporate reputation, innovation legitimacy and enterprise growth from the reviewed theoretical frameworks. The first hypothesis tests a direct relationship between corporate reputation and enterprise growth. From the RVB point of view, corporate reputation is a source of valuable and rare resources sustaining competitive advantages of organisations. Following on from this, Fombrun and Shanley (1990) argue that sound corporate reputation is positively related to expected return on investments, which may stimulate enterprise growth. Moreover, Petkova, Wadhwa, Yao and Jain (2014) indicate that a firm's reputation can increase its future performance. Taking a similar view, Gatzert (2015) evidence also that it is of high relevance between corporate reputation and corporate financial performance. We therefore put forward the first hypothesis as below:

H1: There is a positive correlation between corporate reputation and enterprise growth.

As already pointed out in the literature review, innovation is a crucial means to sustain long-term business growth. The positive relationship between innovation and business growth has been tested and proven under many different circum-

stances. For example, Eluinn (2000) suggested that innovation drives growth in outsourcing, while Grossman and Helpman (1993) claimed that innovation is an engine for growth in a global context. As legitimacy is a related concept to institutional theory which is a predominant framework in understanding corporate reputation, we hypothesise that innovation legitimacy may mediate the positive relationship between corporate reputation and enterprise growth:

H2: Innovation legitimacy has mediating effects between corporate reputation and enterprise growth.

Organisation can gain on the base of continuous innovation, product service only constantly updates to ensure to meet the public's changing needs. Also, the corporate reputation will affect people's perception of new products and services, good reputation to obtain people's identity to new products and services, such as brand effect. Public's loyalty is higher, the easier it is to accept the brand's other innovative products. Every new products /services will face the liability of newness when it enters the market, and the constraint of legitimacy is the main reason. Corporate reputation is very important for gaining innovation legitimacy, the public's loyalty to enterprise will directly affect the public's perception of products and services, and then will affect the innovation legitimacy. From the sociology perspective, to build a reputation is an effective way to obtain legitimacy. Petkova (2016) argue that new firm's reputation is significantly important to enhance legitimacy under conditions of high or extreme market uncertainty. Therefore, corporate reputation is established on base of the public's wide acceptance, Social approval is the base to obtain the innovation legitimacy.

New institutionalism theory believes, that direct cause of the high mortality of new enterprises is the lack of legitimacy, some start-up failure is due to the lack of social public trust, and not to very well solve legitimacy problem, rather than because of market constraints. enterprise growth is realised in the enterprise innovation gradually, innovation legitimacy is crucial for an enterprise to grow. Once enterprise has got innovation legitimacy, that means innovation will be accepted by government and related department, and can meet the requirements of social moral and values, and is accepted by the public. New products and services will face the new barriers to market entry. Enterprise needs to overcome the constraint of public cognitive legitimacy, and to help enterprise grow. Therefore, innovation legitimacy become the important factor for enterprise growth. High legitimacy likely win the support of stakeholders, enterprise can acquire important resources, cooperation and knowledge transfer, help enterprise accelerate to grow.

Based on these analyses, and related to H2 hypothesis, there are two additional hypotheses to further clarify the complex relationships between corporate reputation, innovation legitimacy and enterprise growth, so we set forth the below hypotheses for this study:

H3: Innovation legitimacy is positively related to corporate reputation.

H4: Enterprise growth is positively related to innovation legitimacy.

MATERIAL AND METHODS

Sampling

We collected data from 191 enterprises in 16 provinces in China. In total, 300 enterprises were selected to participate in this study. Out of the 246 sets of returned questionnaires, 55 were deemed invalid and excluded from this study. Descriptive analyses showed that the valid data covered a wide range of samples in terms of enterprise types and sizes, industries, market positions and years of establishment. Among the participated enterprises, majority were from Anhui province (43%), followed by those from Zhejiang (8%), Guangdong (8%), Jiangsu (7%), Shanghai (6%) and Beijing (6%). Most of these respondents were from private firms (46%) while the rest surveyed worked in state owned enterprises, including state share-holding enterprises (26%), foreign companies (9%) and joint ventures (6%). Majority (55.5%) of these companies were small-medium enterprises employing less than 500 employees, while almost half of them had less than 10 years of company history. Respondents were relatively evenly spread among over 10 broadly defined industries such as manufacturing, finance, transportation and real estate sectors. Similarly, they were also relatively evenly distributed in terms of market positions.

Survey Instruments

To contextualise survey instruments in China, we follow Li and Zhou's (2015) recent conceptual model and used their proposed survey instruments to conduct this research. Following Li and Zhou (2015), we anchored the questionnaire items of corporate reputation, enterprise growth and innovation legitimacy on a number of established and well-tested measures in Western and Chinese contexts (Li & Zhou, 2015). Corporate reputation was studied through four dimensions, including brand image, social responsibility, innovation capacity and staff quality (22 items in total). Innovation legitimacy was studied by regulative legitimacy, normative legitimacy and cognitive legitimacy (11 items in total). Enterprise growth was studied by six items, including performance on financial, human resources and innovation aspects. Responses were measured on a Likert scale (1 represents extremely disagree; 7 represents extremely agree).

Pilot Study

In validating measures used in this research, a preliminary study was conducted. In total, 70 samples were surveyed with a valid response rate of 96.8%. Statistic testing indicated that the measures were reliable and samples were valid, i.e., values of all items were above 0.7 and KMO values were above 0.7.

Data Analysis

We first tested the reliability of measures used in this study. The α values of all dimensions of corporate reputation were above 0.7, i.e., brand image ($\alpha = 0.793$), social responsibility ($\alpha = 0.857$), innovation capability ($\alpha = 0.875$) and staff quality ($\alpha = 0.929$). The internal reliability of these dimensions was deemed sound (CITC values were above 0.4). As well, the α values of all dimensions of innovation legitimacy were above 0.7, i.e., regulative legitimacy ($\alpha = 0.882$), normative legitimacy ($\alpha = 0.959$)

and cognitive legitimacy ($\alpha = 0.916$). All in all, the measures used in this research were deemed to be reliable. In a similar vein, KMO values indicated that the measures were sound and valid. We firstly used The Ran correlation analyses (Spearman correlation coefficients) in this research to analyse the correlation between corporate reputation (each dimension), innovation legitimacy (each dimension) and enterprise growth. But the degree of correlation analysis can verify between closely, but cannot explain the causal relationship between them. Then, we used multiple linear regression (MLR) analysis to analyse the data and path analysis was used to examine the hypotheses (Wangbin & Yuli, 2011; Okeke, Ezeh & Ugochukwu, 2015; Jauch, Glueck & Osborn, 1978). The results of this research are explained in the next section.

RESULTS AND DISCUSSION

The research results suggested that, in supporting the existing literature, there were positive correlations between all dimensions of corporate reputation (i.e., brand image, social responsibility, innovation capability and staff quality) and enterprise growth. Therefore, hypothesis 1 was fully supported. Hypothesis 2 hypothesised that innovation legitimacy had mediating effects between corporate reputation and enterprise growth. Regression analysis results showed that this was partially supported. Among the possible mediating pathways, normative legitimacy mediated between brand image and enterprise growth, staff quality and enterprise growth, as well as social responsibility and enterprise growth, but did not have significant mediating effects between innovation capability and enterprise growth. Similarly, regulative legitimacy and cognitive legitimacy mediated between brand image and enterprise growth, innovation capability and enterprise growth and staff quality and enterprise growth, but did not have significant mediating effects between social responsibility and enterprise growth. In a similar vein, hypothesis 3 was also partially supported. Although there were significant positive correlations between innovation legitimacy and corporate reputation, such correlations between social responsibility and normative legitimacy, social responsibility and cognitive legitimacy and innovation capability and regulative legitimacy were not significant. On the other hand, hypothesis 4 was fully supported. There were significant positive correlations between all dimensions of innovation legitimacy and enterprise growth as tested in this research. Therefore, hypotheses 1 and 4 were fully supported whereas hypotheses 2 and 3 were partially supported (Table 1 and 2).

The results of this research showed that corporate reputation has significant positive relationship with enterprise growth. This positive relationship was found through all pathways tested. This means that brand image, social responsibility, innovation capability and staff quality are all important to enterprise growth. Similar effects were found for innovation legitimacy on enterprise growth, indicating that legitimacy is an important theoretical perspective in understanding how businesses could develop in various important aspects. Although the mediating role of innovation legitimacy between corporate reputation and enterprise growth was only partially supported, most pathways showed significant mediating effects of innovation legitimacy between the two variables. The results of this research imply

that legitimacy is a fruitful theoretical framework in understanding the positive correlation between corporate reputation and enterprise growth.

Table 1. Descriptive Statistics and Correlations ($n = 191$)

Variables ^a	mean	SD	1	2	3	4	5	6	7	8
1 BI	4.954	1.384	1							
2 SR	4.542	1.524	0.402**	1						
3 IC	4.951	1.397	0.632**	0.501**	1					
4 SQ	5.068	1.236	0.326**	0.411**	0.206**	1				
5 RL	4.956	1.472	0.603**	0.478**	0.432**	0.413**	1			
6 NL	5.181	1.226	0.557**	0.212**	0.598**	0.504**	0.610**	1		
7 CL	5.091	1.128	0.512**	0.204*	0.509**	0.477**	0.597**	0.754**	1	
8 EG	4.727	1.282	0.549**	0.503**	0.551**	0.429**	0.712**	0.686**	0.736**	1

^aNotes: BI-brand image, SR-social responsibility, IC-innovation capability, SQ-staff quality, RL-regulative legitimacy, NL- normative legitimacy, CL-cognitive legitimacy, EG-enterprise growth.

Source: own study based on survey data in China.

Table 2. Multiple Linear Regression

Variables ^b	Model1 (EG)	Model2 (RL)	Model3 (NL)	Model4 (CL)	Model5 (EG)	Model6 (RL mediate CR&EG)	Model7 (NL mediate CR&EG)	Model8 (CL mediate CR&EG)
CONS	1.352***	1.273***	1.045***	1.453***	1.521***	2.186***	2.351***	2.068***
BI	0.185*	0.362***	0.222**	0.207**	–	0.125+	0.151*	0.134*
SR	0.262***	0.269***	0.014	0.016	–	0.203***	0.171*	0.177**
IC	0.210**	0.029	0.340***	0.249***	–	0.189***	0.134*	0.101+
SQ	0.269***	0.222***	0.279***	0.295***	–	0.412***	0.261***	0.469***
RL	–	–	–	–	0.357***	–	–	–
NL	–	–	–	–	0.154*	–	–	–
CL	–	–	–	–	0.358***	–	–	–
Adj-R ²	0.376	0.327	0.379	0.317	0.536	–	–	–
F	29.583	29.082	29.918	21.559	74.018	40.426	33.359	43.578

^bNotes: BI-brand image, SR-social responsibility, IC-innovation capability, SQ-staff quality, RL-regulative legitimacy, NL- normative legitimacy, CL-cognitive legitimacy, EG-enterprise growth.

Source: own study based on survey data in China.

Our study shows that there are significant positive relationships between brand image, social responsibility, innovation capability, staff quality, and enterprise growth. These indicate that the higher corporate reputation, enterprise will obtain the greater opportunities of growth. Similar to Dowling and Pfeffer (2002) found that corporate reputation, being enterprise important strategic asset, has important effect to corporate performance. Enterprise with good reputation, can have a high position in the customer heart, gain customer loyalty, use intangible assets to build enterprise core competitive capability, to promote enterprise sustainable development.

Also this study found there partly exists a correlation between organisation reputation and innovation legitimacy. Similar to Dacin, Oliver and Roy (2007) it can be pointed out that entrepreneurial team reputation plays an important role in gaining the legitimacy of start-up. Brand image is helpful to make new products more accepted by government and professional institutes, and can be widely accepted by the

customers, which implies that the new product is in accordance with the public ethics and value. Our empirical research shows that the higher enterprise obtains innovation legitimacy, the better enterprise grows. Legitimacy is helpful to improve the growth performance of small and medium-sized enterprise. Enterprise's new product, which has higher innovation legitimacy, will be known and accepted by government departments, professional institutions and the public. Conforming to social values and moral standards facilitates sustainable development of enterprise.

CONCLUSIONS

Main Conclusions, Implications and Recommendations for Practice

Corporate reputation has a positive influence on enterprise growth. Brand image is useful to introduce innovative products into markets, and at the same time high reputation shows that the value of organisation is in keeping with social values, and meets social morality. That kind of organization can make the enterprise innovative products known and accepted by the public, which means that the enterprise has obtained innovation legitimacy, that can promote enterprise growth. Innovation capability can help enterprise integrate and utilise innovation resources, good corporate reputation is helpful to the development of enterprise innovation behaviour. So enterprise should pay attention to the maintenance of brand image, to be responsible for products, customers, shareholders and employees. And to be able to find new market demand, to raise their ability to innovate, to follow the principle of being people-oriented, to attract more qualified talents to join, in order to realize the sustainable growth of enterprise.

Innovation legitimacy plays an important role in the enterprise growth process. Enterprise growth must depend on innovation, and innovation legitimacy has become the important influence factor of enterprise innovation to be realised. Regression analysis shows that there is a significant correlation between normative legitimacy, regulative legitimacy, cognitive legitimacy, and enterprise growth. At the same time, regulative legitimacy, normative legitimacy, cognitive legitimacy, has a mediating effects between corporate reputation and enterprise growth. This suggests that good corporate reputation can help enterprises obtain customer resources, the accumulation of customer resources can promote enterprise technology innovation. Good corporate reputation can bring high customer loyalty for a long time, thus greatly reduce the time of the innovation product accepted by market, innovative products can more quickly overcome the entering defect of the market.

There are significantly positive relationships between Innovation legitimacy and corporate reputation of brand image, staff quality. Moreover, corporate reputation of social responsibility is significantly related to regulative legitimacy, innovation capability is positively related to normative legitimacy and cognitive legitimacy. This suggests that it is particularly important for enterprises in lack of regulative legitimacy, to strengthen brand image maintenance, and social responsibility, and to improve staff quality. When an enterprise lacks normative legitimacy and cognitive legitimacy, it is important for enterprise to enhance the corporate reputation of brand image, innovation capability, and staff quality. In case of lack of innovation

legitimacy enterprise may take steps to obtain in accordance with the different correlation of each dimension of corporate reputation.

Limitation and Future Research Direction

This research was conducted in Chinese context and its measures were highly contextualised. Although the reliability and validity of these measures were tested to be acceptable, the generalisability of the results in other societal contexts may not be granted. This is especially worthy of attention as legitimacy is a cultural product. Future research is encouraged to further pursue the theoretical framework of legitimacy in understanding enterprise growth, corporate reputation and their relationships. The generalisability of the research results may be further tested in Western contexts in the future.

This research studied the mediating effects of innovation legitimacy between corporate reputation and enterprise growth. Its results suggested that innovation legitimacy significantly mediated the positive relationship between the other two variables. In supporting the existing literature, positive correlations between corporate reputation and enterprise, and innovation legitimacy and enterprise growth were also found. Future research may look into these results in other contexts and further pursue the legitimacy perspective in understanding corporate reputation and enterprise growth.

REFERENCES

- Akman, G., & Yilmaz, C. (2008). Innovative capability, innovation strategy and market orientation: an empirical analysis in Turkish software industry. *International Journal of Innovation Management*, 12(1), 69-111.
- Aldrich, H.E., & Fiol, C.M. (1994). Fools rush in? The institutional context of industry creation. *Academy of Management Review*, 19, 645-670.
- Petkova, A.P. (2016). Standing Out or Blending In? The Formation of New Firms' Legitimacy and Reputation under Different Levels of Market Uncertainty. *Corporate Reputation Review*, 19(1), 22-34.
- Petkova, A.P., Wadhwa, A., Yao, X., & Jain, S. (2014). Reputation and Decision under Ambiguity: A Study of U.S. Venture Capital Firms, Investments in the Emerging Clean Energy Sector. *Academy of Management Journal*, 57(2), 422-448.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17(1), 99-120.
- Basdeo, D.K., Smith, K.G., Grimm, C.M., Rindova, V.P., & Derfus, P.J. (2006). The impact of market actions on firm reputation. *Strategic Management Journal*, 27, 1205-1219.
- Cable, D.M., & Graham, M.E. (2000). The determinants of job seekers' reputation perceptions. *Journal of Organizational Behavior*, 21(8), 929-947.
- Carmeli, A., & Tishler, A. (2005). Perceived organizational reputation and organizational performance: An empirical investigation of industrial enterprises. *Corporate Reputation Review*, 8(1), 13-30.
- Cho, H.J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555-575.
- Dacin, M.T., Oliver, C., & Roy, J. (2007). The legitimacy of strategic alliances: an institutional perspective. *Strategic Management Journal*, 28(2), 169-187.
- Deephouse, D.L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *Journal of Management*, 26(6), 1091-1112.

- Dowling, J.E., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review*, 18, 122-136.
- Eluinn, J.B. (2000). Outsourcing innovation: the new engine of growth. *Sloan Management Review*, 41(4), 13-28.
- Fang, L.H. (2005). Investment bank reputation and the price and quality of underwriting services'. *The Journal of Finance*, 60(6), 2729-2761.
- Flanagan, D.J., & O'Shaughnessy, K.C. (2005). The effect of layoffs on firm reputation. *Journal of Management*, 31(3), 445-463.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy Of Management Journal*, 33(2), 233-258.
- Gibson, D., Gonzales, J.L., & Castanon, J. (2006). The importance of reputation and the role of public relations. *Public Relations Quarterly*, 51(3), 15-18.
- Grossman, G.M., & Helpman, E. (1993). *Innovation and growth in the global economy*. MIT press. Retrieved on April 30, 2016 from <https://mitpress.mit.edu/books/innovation-and-growth-global-economy>
- Hall, R. (1993). A framework linking intangible resources and capabilities to sustainable competitive advantage. *Strategic Management Journal*, 14(8), 607-618.
- Jauch, L.R., Glueck, W.F., Osborn, R.N. (1978). Organizational Loyalty, Professional Commitment, and Academic Research Productivity. *Academy of Management*, 21(1), 84-92.
- Jepperson, R.L. (1991). Institutions, institutional effects, and institutionalism. In W.W. Powell, & P.J. DiMaggio (Eds.), *The new institutionalism in organizational analysis*: (pp. 143-163). Chicago: University of Chicago Press.
- Lee, C.Y. (2010). A theory of firm growth learning capability, knowledge threshold, and patterns of growth. *Research Policy*, 39(2), 278-289.
- Li, H.G., & Zhou, J. (2015). Organization reputation and enterprise growth: the mediating role of innovation legitimacy. *Science & Technology Progress and Policy*, 32(10), 84-87.
- Milgrom, P., & Roberts, J. (1982). Predation, reputation, and entry deterrence. *Journal of Economic Theory*, 27, 280-312.
- Gatzert, N. (2015). The impact of corporate reputation and reputation damaging events on financial performance: Empirical evidence from the literature. *European Management Journal*, 33(6), 485-499.
- Okeke, T.C., Ezeh, G.A., & Ugochukwu, N.O.A. (2015). Service Quality Dimensions and Customer Satisfaction with Online Services of Nigerian Banks. *Journal of Internet Banking and Commerce*, 20(3).
- Olson, M. (1965). *The logic of collective action*. Cambridge, MA: Harvard University Press.
- Parsons, T. (1960). *Structure and process in modern societies*. Glencoe, IL: Free Press.
- Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. In L.L. Cummings, & B.M. Staw (Eds.), *Research in organizational behavior: an annual series of analytical essays and critical reviews* (pp. 1-52). Amsterdam: Elsevier.
- Rindova, V.P., Williamson, I.O., Petkova, A.P., & Sever, J.M. (2005). Being good or being known: An empirical examination of the dimensions, antecedents, and consequences of organizational reputation. *Academy of Management Journal*, 48(6), 1033-1049.
- Scott, W.R., & Meyer, J.W. (1991). The organization of societal sectors. In W. W. Powell, & P.J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 108-140). Chicago: University of Chicago Press.

- Suchman, M.C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610.
- Turban, D.B., & Greening, D.W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40, 658–672.
- Walker, K. (2010). A systematic review of the corporate reputation literature: definition, measurement, and theory. *Corporate Reputation Review*, 12(4), 357-387.
- Wangbin, H., & Yuli, Z. (2011). New Venture Capability of the Transformation from Entrepreneurial Orientation to the New Venture Performance: A Theory Model and Empirical Study in China. *Nankai Business Rivew*, 14(1), 83-95.
- Zucker, L.G. (1986). Production of trust: Institutional sources of economic structure, 1840-1920. *Research in Organizational Behavior*, 8, 53-111.

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The Potential of Business Environment Institutions and the Support for the Development of Small and Medium-sized Enterprises

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Abstract

The paper aims to assess the use of the potential of business environment institutions to support SMEs in the light of the author's own research. The author's study was carried out in 2012-2014 in two stages: quantitative research (a survey on the sample of 590 SMEs) conducted with the use of the PAPI and CAWI methods based on a survey questionnaire and qualitative research conducted among 10 representatives of business environment institutions with the use of in-depth interviews (IDI) based on a questionnaire with a standard list of information sought. The study results suggest that the role of business environment institutions in the development of small and medium-sized enterprises in the present conditions is small. This is a result of, on the one hand, little interest of SMEs in the support offered by these institutions, and, on the other hand, the fact that frequently the services offered do not meet the needs of enterprises. To improve the situation, on the part of business environment institutions, it is necessary to update information on the scope of cooperation, undertake extensive promotional activities, adjust the offer to the needs of enterprises and expand cooperation, especially by providing financial support for enterprises.

Keywords: SMEs; business environment institutions; support for SMEs; potential of business institutions; entrepreneurship

JEL codes: R11, M21, L26, O44

INTRODUCTION

The development of small and medium-sized enterprises is affected by many internal factors (related to the person of the entrepreneur and the characteristics of the enter-

prise), as well as external ones arising from the environment, of which business environment institutions constitute an essential part. They are especially important for support of small and medium-sized enterprises (SMEs) in the financial, advisory, information, training, organisational and legal areas. This support is regarded as a factor facilitating and stimulating their development.

Business environment is part of the economy, filling the gap between market mechanisms and actions of public administration, providing mainly service functions through a network of institutional infrastructure, enabling businesses growth and development (Bąkowski & Mażewska, 2012). Business environment includes (Dominiak, 2013):

- institutional infrastructure – including business environment institutions;
- business services – advisory, training, information and financial services;
- innovative environment – a set of innovation centres and R&D institutions along with their internal and external links;
- climate favourable to economic activity.

Business environment institutions are part of institutional infrastructure and play an important role in the development of small and medium-sized enterprises through the provision of services for start-ups as well as enterprises already operating in the market. Enterprises that intend to introduce innovations and apply new technologies also need specialised support, which can be provided by the innovative environment. Undoubtedly, commercial enterprises providing different kinds of specialised business services as well as the so-called climate favourable to initiate and develop economic activity also play an important role in supporting SMEs.

The existing analysis of business environment institutions supporting SMEs in Poland evaluate highly their potential due to the significant number of these entities in the country, as well as a to a specialised range of support they offer. However, as indicated by numerous studies, efficiency of operation and the range of services offered by these institutions is unsatisfactory.

This paper aims to assess the use of the potential of business environment institutions to support SMEs in the light of the author's own research conducted in 2012-2014 among owners and co-owners of small and medium-sized enterprises and representatives of business environment institutions in Poland. In order to achieve the objective set, two types of research were carried out: quantitative research conducted with the use of the PAPI (Paper And Pen Personal Interview) and CAWI (Computer Assisted Web Interview) methods based on a survey questionnaire and qualitative research conducted with the use of in-depth interviews (IDI) based on a questionnaire with a standard list of information sought.

The first part of the paper, based on review of literature, presents the characteristics of business environment institutions in Poland in terms of support offered to business entities. The second part of the paper presents the methodology of the author's own research conducted among SMEs and selected business environment institutions as well as the research results that allow to assess the use of the potential of business environment institutions to support small and medium-sized enterprises. The findings are presented in the form of discussion. The paper ends with conclusions and recommendations for the support of small and medium-sized enterprises in Poland.

LITERATURE REVIEW

Characteristics of Business Environment Institutions in Poland

Small and medium-sized enterprises face many barriers in their development, which can to a large extent reduce the quality and availability of support derived from the environment (Matejun, 2015). This support is provided through the interaction of SMEs with the institutional sphere in the form of specific policies and instruments. The policy supporting small and medium enterprises is focused on the existing entities, while the policy to support entrepreneurship concentrates mainly on potential entrepreneurs and entrepreneurs in the course of implementing a business idea (North & Smallbone, 2006; Stevenson & Lundström, 2007; Dyer & Ross, 2007; Niska & Vesala, 2013). Each of these policies requires other areas and instruments of support. In the case of SME support policies, the following elements are most frequently mentioned: financing, consulting, R&D&I, education, and development of infrastructure (De, 2000; Gancarczyk, 2010), while in the case of the policy supporting entrepreneurship, the most important elements include: promotion of entrepreneurial attitudes, education, support for the creation of new businesses and financing start-ups (Lundström & Stevenson, 2005). The forms of support offered reflect certain groups of assistance solutions which include instruments of support usually in the form of commercial and non-commercial services provided by business environment institutions (Niska & Vesala, 2013; Matejun, 2015).

The literature presents numerous terms that describe institutions supporting business entities, of which the most common are: support institutions, business environment institutions, support infrastructure, non-profit business environment, innovation and business centres, innovation and technology transfer infrastructure. These differ in relation to the type of institutions that belong to the so-called institutional business environment.

The entities that operate within the framework of institutional infrastructure may be divided into two groups (European Commission, 1996, as cited in Fabińska, 2013, pp. 72-73):

1. Resource centres – entities that possess an appropriate potential comprising material and non-material resources (e.g.: equipment, knowledge, financial resources) that can be made available to enterprises in the form of services or on the basis of cooperative relations. Their competences allow to meet specific needs reported by enterprises (in terms of quality, time and costs). Typical entities in this category include: R&D units, operating at universities and in large companies, institutions providing financial support (e.g. venture capital funds, business angels).
2. Interface organisations – entities that are catalysts of interactions between institutions offering support in the form of specific competences (e.g. technological, financial, etc.) and enterprises that require this support. Typical entities in this category include: technology transfer centres, regional development agencies, business chambers and other organisations for entrepreneurs, technological parks and incubators.

According to the Polish Business and Innovation Centres Association (Stowarzyszenie Organizatorów Ośrodków Innowacji i Przedsiębiorczości w Polsce, SOOIPP), business environment institutions are referred to as innovation and business centres and are divided into three categories (Table 1) (Mażewska, 2015, p. 8):

1. Business centres are institutions that deal with widely understood business promotion and business incubation aimed at creating business entities and jobs, as well as providing support services to SMEs and stimulating the development of peripheral areas or areas suffering from a structural crisis.
2. Innovation centres are entities engaged in widely understood business promotion and incubation, channelling their activities towards the development of innovative business entities.
3. Non-bank financial institutions are institutions involved in the distribution of repayable and non-repayable financial instruments financed by funds provided by the European Union and derived from private sources.

Table 1. Classification of innovation and business centres in Poland

Innovation and business centres		
Business centres:	Innovation centres:	Non-bank financial institutions:
<ol style="list-style-type: none"> 1. Training and consulting centres; 2. Entrepreneurship centres; 3. Business centre; 4. Pre-incubators; 5. Business incubators; 	<ol style="list-style-type: none"> 1. Technology, scientific, scientific and technology, industrial and technology parks, techno-parks; 2. Technology incubators; 3. Technology transfer centre; 4. Academic business incubators; 5. Innovation centres. 	<ol style="list-style-type: none"> 1. Regional and local loan funds; 2. Credit guarantee funds; 3. Seed capital funds; 4. Business angels network.

Source: Mażewska (2015, p. 8).

These institutions offer support in the area of (Filipiak & Ruszała, 2009, p. 42):

- improving the management of the enterprise and making better use of its resources,
- establishing contacts with foreign partners,
- providing business information and consulting services,
- establishing cooperative relations with large companies,
- granting or helping to obtain financial support,
- encouraging entrepreneurs to organise themselves into producer or distribution groups and creating a system of cooperation and subcontracting,
- improving competitiveness through absorption and implementation of new technologies.

R&D units, employer organisations, special economic zones, clusters, networks supporting entrepreneurship and innovation, as well commercial organisations providing training, consulting and financial services also play an important role in supporting SMEs.

Support for small and medium-sized enterprises is delivered with the use of various forms and instruments. Forms of support consist of specific groups of support solutions characterised by certain similarities in their impact on development processes of small and medium-sized enterprises, e.g.: non-repayable financial assistance, capital support, consulting and training assistance. Support instruments are specific solutions possible to acquire and use in the development of small and medium-sized enterprises, e.g.: in the framework of non-repayable financial assistance – subsidies, grants from public funds (Matejun, 2015, p. 50). In the area of business start-ups, the following financial instruments are particularly important: grants, loans, guarantees, EU funds, venture capital,

business angels, tax incentives and information instruments such as information and consulting services, training in the area of entrepreneurship and starting a business. Institutional support in the form of business incubators, as well as industrial and technology parks, is also important (Gancarczyk, 2010).

The potential of business environment institutions is manifested in the range of services offered and their availability. According to the study conducted in 2014 by SOOIPP, Poland had 681 business and innovation centres, which included (Mażewska, 2015, p. 11):

- 42 technology parks,
- 24 technology incubators,
- 42 technology transfer centres,
- 47 innovation centres,
- 103 capital funds,
- 81 local and regional loan funds,
- 58 credit guarantee funds,
- 7 networks of business angels,
- 207 consulting and training centres,
- 46 business incubators.

The data presented highlights a significant number of these centres in Poland and different characteristics of their operations. With regard to the territorial system, business environment institutions operate throughout the country. In terms of voivodeships (regions), the largest number of the centres can be found in the Mazowieckie, Śląskie and Wielkopolskie Voivodeships, while the smallest number in the Podlaskie, Lubuskie and Opolskie Voivodeships. The greatest number of these centres can be observed in the regions with a high economic potential and a strong market, while fewer are located in the regions weaker in terms of socio-economic development, which build the infrastructure to support innovative projects at a very slow rate (Mażewska, 2015, pp. 13-14).

Services offered by business environment institutions can be often acquired by entrepreneurs on preferential terms or for free as the majority of these services are financed by the EU funds and/or offered by non-profit institutions. Despite such opportunities, a small number of small and medium-sized businesses benefit from this support. The reason for this state of affairs, as confirmed by numerous studies (Wach, 2008; Gancarczyk, 2010; Lisowska, 2013; Comarch, 2014), is little or no knowledge among entrepreneurs about the services offered by business environment institutions, as well as their reluctance to cooperate and a negative attitude towards the support offered. This means that SMEs do not fully exploit the potential of these institutions to support their development and raise the level of their competitiveness. Previously conducted studies have also confirmed that a small number of SMEs which use the so-called business services have been supported primarily by means of financial and advisory assistance, assessed by the respondents as adequate to allow the further development of their companies (Gancarczyk, 2010; Lisowska, 2013; Matejun, 2015).

MATERIAL AND METHODS

The research aims to assess the use of the potential of business environment institutions to support SMEs in the light of the author's own research conducted between 2012-2014 among owners and co-owners of small and medium-sized enterprises and representatives of business environment institutions in Poland. In order to achieve the objective set, the following research hypothesis was adopted: the potential of business environment institutions is not used fully by small and medium-sized enterprises due to little interest on the part of these entities in the support offered and the mismatch between the offer of these institutions and the needs of SMEs.

In order to achieve the objective set and verify the research hypothesis, two research instruments were prepared: a survey questionnaire and an in-depth interview scenario. The survey was conducted with the use of the PAPI and CAWI methods, while the qualitative research was conducted with the use of in-depth interviews (IDI) based on a questionnaire with a standard list of information sought.

The author's study was carried out in two stages. The first stage involved the quantitative research – a survey conducted on the sample of 590 small and medium-sized enterprises from the private sector. The national official register of business entities (REGON) of the Central Statistical Office constituted the sampling frame. The so-called legal unit (corresponding approximately to an enterprise with all its subsidiaries) was adopted as the sampling unit (the statistical unit in the study). Then a sample of 6,000 entities was randomly selected. Stratified sampling was used according to the following criteria: the number of persons employed (3 groups: micro-enterprises: 0–9 employees; small enterprises: 10–49 employees; medium-sized enterprises: 50–249 employees) and the voivodeship (region) based on its office location. The sample size was determined with a large excess due to the applied research technique. The study was conducted with the use of a questionnaire sent by mail and e-mail. It was then supplemented by a direct interview survey, due to the low return on questionnaires sent.

The main research limitation was the sample size i.e. the number of received, completed questionnaires, was 590 (9.8% return rate). The conducted quantitative research, on the one hand, made it possible to reach more business entities and ensure the degree of anonymity of the respondents (it was often a prerequisite for conducting the survey). On the other hand, there was a high degree of difficulty associated with completing the survey, e.g.: partially filled questionnaires and problems with the interpretation of some questions.

In order to assess the representativeness of the realised sample, a comparison of its structure with the structure of the population was carried out based on the following characteristics: the company size (micro, small and medium-sized enterprises) and the location (the voivodeship according to its office address). The comparison results allowed to regard the analysed sample as representative of the general population.

Micro-enterprises were the dominant group in the study (55.8%), while small enterprises amounted to 26.8% and medium-sized enterprises to 17.4%. The majority of the surveyed enterprises were involved in trade and services (approx. 70%), and only less than 30% in manufacturing. The regional, local and national market was their main area of activity, only one in ten companies expanded its business to the international market. Mostly manufacturing enterprises operated in international markets (Lisowska, 2013).

The second stage of the study comprised qualitative research carried out by means of the individual in-depth interview (IDI) conducted among 10 respondents that were representatives of business environment institutions (presidents, directors, managers). The selection of the sample was purposeful as it included the institutions that had a diverse support offer for SMEs and their representatives expressed willingness to participate in the study. The full names of the organisations were not disclosed to preserve the anonymity of the interviewees, only the type of institution was indicated. The surveyed institutions included: a regional development agency, a technology transfer centre, an academic business incubator, a loan fund, a guarantee fund, a technology park, a business incubator, a regional chamber of commerce, an industrial and technological park, and an entrepreneur service centre.

RESULTS AND DISCUSSION

Only 31.7% of the surveyed SMEs cooperated with business environment institutions. Small and medium-sized enterprises dominated among cooperating enterprises (Figure 1). The cooperation took place both in a systematic and sporadic manner. However, systematic cooperation dominated, mainly in the form of consultation centres/ entrepreneur service centres and business centres. Sporadic cooperation took place primarily in the case of technology transfer centres. Such a distribution of the responses shows an untapped potential of business environment institutions that small and medium-sized enterprises could use to support their development.

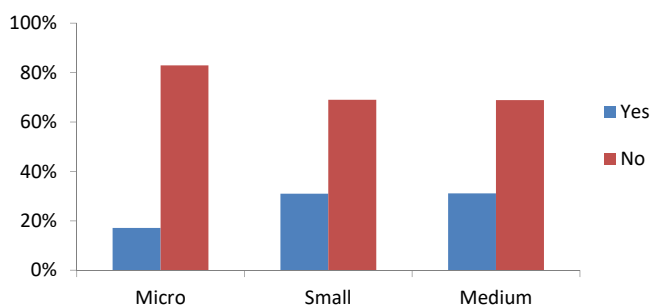


Figure 1. Cooperation of enterprises with business environment institutions

Source: own calculations based on the author's research results ($n = 590$).

The enterprises that cooperated with business environment institutions also indicated what kind of institutions they were. The respondents' answers varied depending on the size of the company, which is also confirmed by the Kruskal-Wallis¹ test (more on the subject of the test, among others, in: Urdan, 2010; Kufs, 2011), its results and probability value ($p < 0.05$) (Table 2).

¹ The Kruskal-Wallis test allows to compare more than two independent populations. It is used when the dependent variable is quantitative, but does not meet the assumptions related to the normal distribution or is expressed on an ordinal scale.

Table 2. Kruskal-Wallis statistic (H) and the level of probability value (p) of variables that determine the type of business environment institutions that the enterprise cooperated with

Type of business environment institutions	The Kruskal-Wallis statistic (H)	Probability value (p)
Training and consulting centres	15.93	0.00
Technology transfer centres	17.82	0.00
Technology parks	8.14	0.04
Networks of business angels	8.09	0.04
Loan and guarantee funds	11.29	0.01
Business incubators	7.30	0.06
Consultation centres/entrepreneur service centres	10.37	0.01
Business centres	15.53	0.00

Source: own calculations based on the author's research results ($n = 187$).

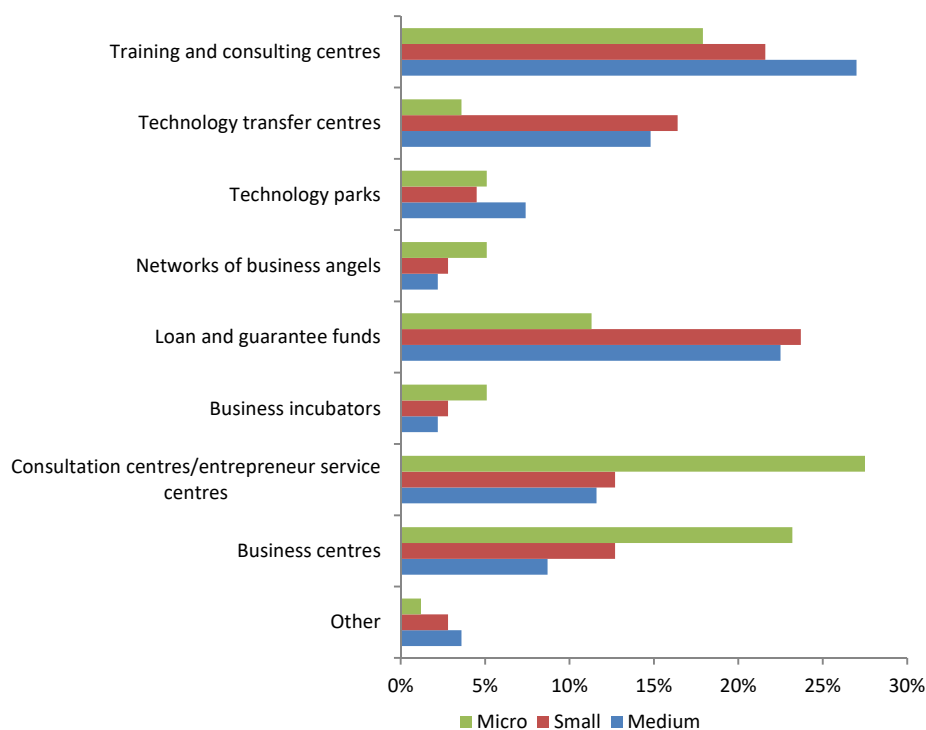


Figure 2. The type of business environment institutions that the company cooperated with*

* Calculations for the business environment institution indicated first by the respondent.

Source: own calculations based on the author's research results ($n = 187$).

In the case of the micro-enterprises, the most popular were consultation centres/entrepreneur service centres (27.5% of the responses), as well as business centres (23.2% of the responses), in the case of small enterprises – loan and guarantee funds (23.7% of the responses), as well as training and consulting centres (21.6% of the re-

sponses). The medium-sized enterprises indicated in this respect technology transfer centres (27.0% of the responses), as well as loan and guarantee funds (22.5% of the responses) (Figure 2). Such a distribution of response indicates diverse needs in terms of support. Micro-enterprises usually need general information about running a business and opportunities to raise funds, while small and medium-sized enterprises require specialised services, e.g. in the area of improving innovativeness, technology transfer, etc.

The surveyed entrepreneurs were least likely to cooperate with business incubators and networks of business angels, which may indicate under-utilisation of the full potential of these institutions in the support of SMEs that are at early stages of development.

The enterprises that cooperated with business environment institutions also indicated the effects of the said cooperation. The respondents' answers varied depending on the size of the company, which was also confirmed by the Kruskal-Wallis test, its results and probability value ($p < 0.05$) (Table 3 and Figure 3).

Table 3. Kruskal-Wallis statistic (H) and the level of probability value (p) of variables that determine effects of the enterprise's effect with business environment institutions

Cooperation effects	The Kruskal-Wallis statistic (H)	Probability value (p)
Establishing cooperation with other enterprises	13.05	0.00
Obtaining assistance in solving a problem (consulting)	9.19	0.03
Purchase of new technologies	11.37	0.01
Increasing export opportunities	5.11	0.14
Finding new customers and/or markets	4.17	0.19
Possibility of human resources development	17.76	0.00
Joint projects and ventures	6.02	0.09
Ability to implement innovative solutions	13.15	0.00
Use of the EU funds	15.96	0.00
Access to expertise	12.27	0.01
Acquisition of financial resources	8.51	0.04

Source: own calculations based on the author's research results ($n = 187$).

In the case of the micro-enterprises, the main effects of cooperation included: obtaining assistance in solving a problem (consulting) (17.5% of the responses), access to expertise (15.9% of the responses), raising funds (13.7% of the responses), as well as the use of the EU funds (11.2% of the responses). Small enterprises pointed to raising funds (20.1% of the responses), access to expertise (14.7% of the responses), establishing cooperation with other enterprises (12.5% of the responses) and the possibility of the development of human resources (11.4% of the responses). The medium-sized enterprises indicated in this respect: the purchase of new technologies (17.9% of the responses), the ability to implement innovative solutions (16.5% of the responses), raising funds (12.7% of the responses), as well as the use of the EU funds (11.3% of the responses) (Figure 3).

The enterprises that did not cooperate with business environment institutions indicated the reasons for the lack of cooperation. The respondents' answers varied depending on the size of the company, which was also confirmed by the Kruskal-Wallis test. Its results and probability value ($p < 0.05$) highlighted the diversity of the majority of the variables examined (Table 4).

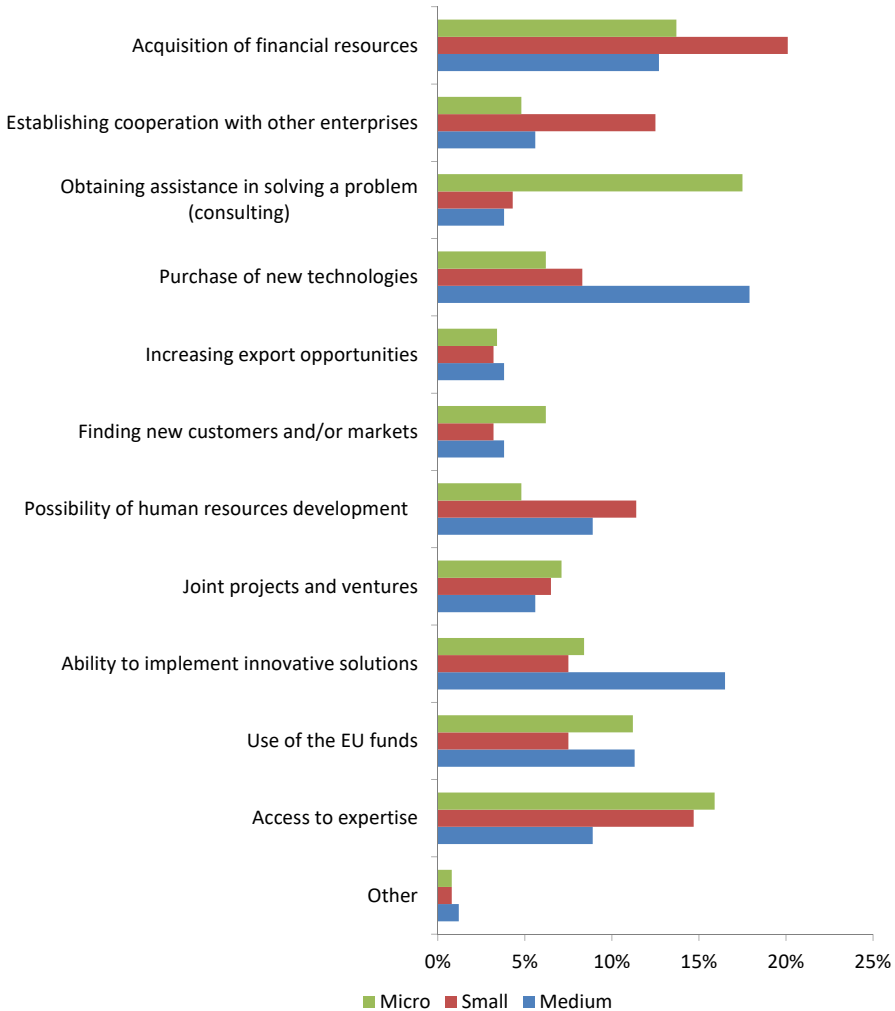


Figure 3. Effects of the enterprise's cooperation with business environment institutions*

* Calculations for the effect of cooperation with business environment institutions indicated first by the respondent.

Source: own calculations based on the author's research results ($n = 187$).

The micro-enterprises pointed to the following reasons: a lack of measurable benefits derived from such cooperation (25.1% of the responses), no need to use such services (19.5% of the responses) and a lack of information about services provided by business environment institutions (16.2% of the responses). The small enterprises pointed to no need to use such services (18.6% of the responses), a lack of measurable benefits derived from cooperation (14.8% of the responses) and a lack of an offer suitable to the needs of the enterprise (12.1% of the responses). The medium-sized enterprises indicated the unsatisfactory quality of services offered (18.3% of the responses), a lack of in-

formation about services provided by business environment institutions (14.4% of the responses) and no need to use such services (12.1% of the responses) (Figure 4).

Table 4. Kruskal-Wallis statistic (H) and the level of probability value (p) of variables that determine the reasons for lack of cooperation between the enterprise and business environment institutions

Reasons for lack of cooperation	The Kruskal-Wallis statistic (H)	Probability value (p)
The offer unsuitable to the enterprise's needs	14.30	0.00
Lengthy procedures associated with initiating and maintaining cooperation	10.96	0.01
Lack of measurable cooperation benefits	17.44	0.00
Too few/no such institutions in the region	7.08	0.07
No such services available	5.27	0.15
Unsatisfactory quality of the offer	9.70	0.02
No need to use such services	10.12	0.02
Limited possibilities to adapt the solutions offered to the enterprise's needs	8.83	0.04
Lack of information about BEIs' services	13.67	0.00
Too high costs of cooperation	4.89	0.18

Source: own calculations based on the author's research results ($n = 403$).

According to the respondents, the problem with cooperation with business environment institutions lies in the fact that in most cases it is initiated by enterprises which come to these institutions with a specific need. There is, however, a lack of action in the opposite direction, i.e. initiating cooperation by business environment institutions. A large percentage of the enterprises that do not feel tangible benefits of cooperation and do not have the need to use the services offered by business environment institutions is also worth noting. This fact indicates the existence of an awareness barrier among entrepreneurs, i.e.: they do not have confidence in these institutions, do not appreciate their activity, have a low opinion of the manner these services are provided, as well as of the competence of the personnel. The responses obtained suggest that the entrepreneurs expect other directions in terms of support for business activity than are currently offered by these institutions.

The surveyed enterprises also rarely benefited from public aid (only 24.9%). Small and medium-sized enterprises dominated among the beneficiaries (Figure 5). The reasons for this situation should be sought, on the one hand, in insufficient resources to obtain such assistance, and on the other hand, in a lack of current information about the forms of support offered.

The enterprises that benefited from public aid indicated what kind of assistance they received. The respondents' answers varied depending on the size of the company (Figure 6.), which was also confirmed in the case of most of the analysed variables by the Kruskal-Wallis test, its results and probability value ($p < 0.05$) (Table 5).

The micro-enterprises mainly made use of preferential loans and credits (28.0% of the responses), reduced contributions (e.: NII contributions) (26.3% of the responses),

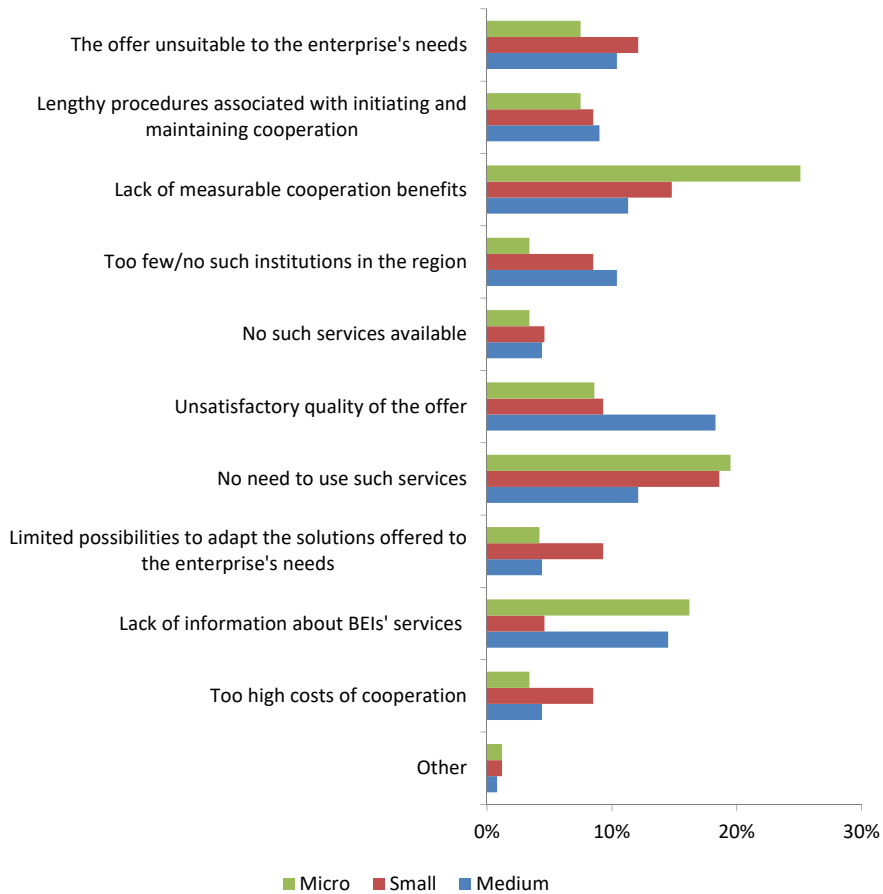


Figure 4. Reasons for lack of cooperation with business environment institutions

** Calculations for the reasons for the lack of cooperation with business environment institutions indicated first by the respondent.*

Source: own calculations based on the author's research results (n = 403).

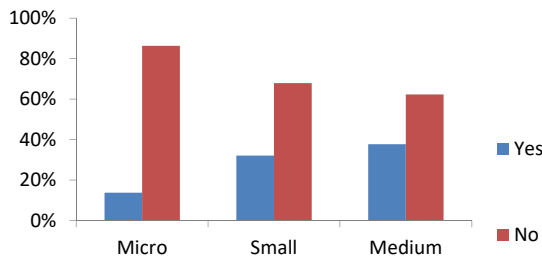


Figure 5. Use of public aid by SMEs

Source: own calculations based on the author's research results (n = 590).

small grants from the EU funds (24.1% of the responses), as well as loan and credit guarantees (21.6% of the responses), while medium-sized enterprises took advantage of tax reductions and exemptions (26.9% of the responses), and the EU grants (23.7% of the responses) (Figure 6). Other forms of public aid that the enterprises used comprised consulting services, internships and trainings. Such a distribution of the responses shows greater willingness of the surveyed enterprises to use public aid in the form of safe financial instruments such as preferential loans offered by support institutions.

Table 5. Kruskal-Wallis statistic (H) and the level of probability value (p) of variables that determine forms of public aid that the enterprise used

Reasons for lack of cooperation	The Kruskal-Wallis statistic (H)	Probability value (p)
Loan and credit guarantees	17.94	0.00
Reduced contributions (e.g.: National Insurance Institution contributions)	20.42	0.00
Subsidies from the state budget	6.99	0.07
Tax reductions and exemptions	10.92	0.01
Preferential loans and credits	15.98	0.00
Grants from the European Union	9.06	0.03

Source: own calculations based on the author's research results (n = 147).

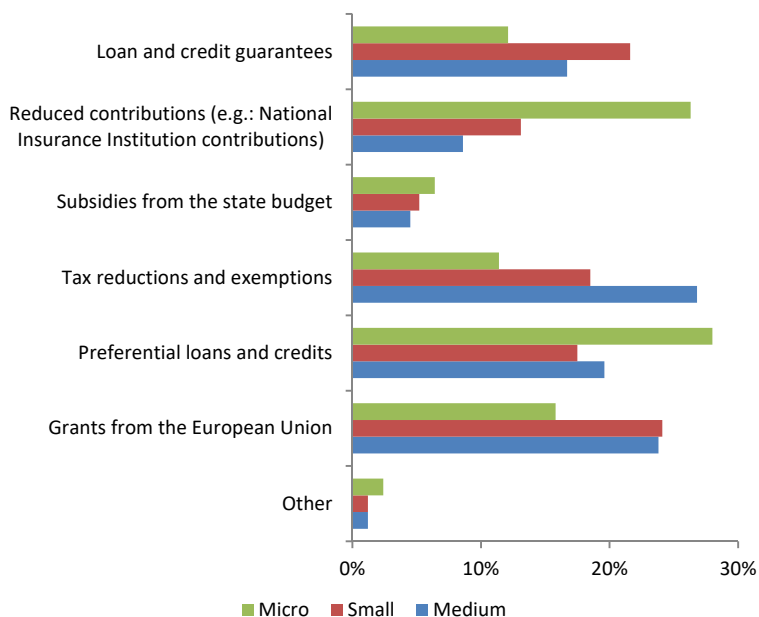


Figure 6. Forms of public aid the enterprise used

* Calculations for the used form of public aid indicated first by the respondent.

Source: own calculations based on the author's research results (n = 147).

The opinions of representatives of business environment institutions (BEIs) on this cooperation, collected during qualitative research, complemented the study on the sup-

port of SMEs provided by these institutions.

Table 6. Activities undertaken by BEIs to establish cooperation with entrepreneurs

Type of institution surveyed	Offer for SMEs	Activities undertaken by BEIs to establish cooperation
Regional development agency	<ul style="list-style-type: none"> - information, consulting and training services on establishing and running a business, - preparation of grant applications, - loans to start and develop business activity, - regional consultation centre 	"Information meetings about the possibilities of cooperation with entrepreneurs in the form of seminars and conferences, the creation of a website containing offers of cooperation, organising trade missions, preparation of a business guide".
Technology transfer centre	<ul style="list-style-type: none"> - providing a database of technological offers, - consulting and training services in the field of commercialisation of advanced technologies and implementation of innovation, - commercialisation of technologies, - preparation of innovation evaluations, - establishing science and business cooperation and providing support for R&D projects, - preparation of technological offers for industry 	"Active participation in actions that promote the range of services offered: developing a website, organising seminars and conferences with the participation of entrepreneurs, expanding cooperation offers to include services that respond to the needs of entrepreneurs, establishing cooperation between science and business".
Academic business incubator	<ul style="list-style-type: none"> - services for students, alumni, faculty members in the field of: start-up support, infrastructural support of economic activity and business support; - providing practical knowledge and examples of good practices in the area of establishing and running a business 	"Updating the offer and adapting it to the needs of newly-started businesses, preparing a newsletter, promotion in the media (Innovation Portal) and through collaborating institutions, organising meetings with business angels for presenting new business ideas".
Loan fund	<ul style="list-style-type: none"> - granting low-interest (non-commercial) loans for establishing and developing economic activity (micro-financing, seed capital, the JEREMIE initiative) 	"Participation in seminars and conferences, updating the website, reaching out directly with an offer of cooperation to enterprises. Cutting red tape and simplifying procedures for obtaining support to a minimum".
Guarantee fund	<ul style="list-style-type: none"> - providing guarantees for loans and credits to small and medium-sized enterprises 	"Taking measures to promote the activities of the fund, updating the offer, organising free seminars on promoting entrepreneurship, cooperation with banks and financial institutions".
Technology park	<ul style="list-style-type: none"> - possibility of doing business using the premises and technical infrastructure on preferential terms, - consulting services in the field of technology transfer and transformation of R&D results of activity into technological innovations 	"Increasing financial support for businesses – loans, credit guarantees, the EU grants, reducing red tape. Organising seminars and conferences for entrepreneurs, engaging in a dialogue with enterprises regarding the need for cooperation".
Business incubator	<ul style="list-style-type: none"> - providing premises for newly established small and medium-sized enterprises on preferential terms, - providing advice, e.g.: legal, tax, accounting, marketing 	"Expanding the offer of support to sources of financing for future entrepreneurs, opening new centres in the region, adjusting the offer to the needs of entrepreneurs – opening a training and consulting centre".
Regional chamber of commerce	<ul style="list-style-type: none"> - training and advice for start-ups, - preparation of applications, - consultation centre - the organisation of events such as trade shows, conferences, seminars and industry meetings 	"Measures to promote the range of services offered include: updating the website, providing a Chamber newsletter and a professional journal, promotion at events such as trade shows, conferences and seminars with the participation of entrepreneurs in the region".
Industrial and technological park	<ul style="list-style-type: none"> - land for investment, - consulting services for SMEs – credit applications, application for the EU funds, accounting and financial services related to implemented projects, - exhibition space, - virtual office 	"Taking measures to promote the park offer via the website, organising events, cooperation with other business environment institutions, organising meetings with potential investors".
Consultation centre; Entrepreneur service centre	<ul style="list-style-type: none"> - 2nd level intermediate body for the implementation of the Regional Operational Programme for Lodz, - advisory services for SMEs on how to obtain funds from the EU 	"Conducting an information campaign about the Lodz ROP, updating the website, preparation of instructional videos on how to prepare an application for financing from the EU funds".

Source: own compilation based on the author's research results ($n = 10$).

The representatives of BEIs when asked about their cooperation with small and medium-sized enterprises emphasised the diverse situation that exists in terms of this cooperation. A small number of enterprises are interested and eager to work with BEIs. However, there are companies that are not interested in this cooperation due to e.g.:

a lack of trust and a lack of knowledge of the offer, as well as the fact that the BEIs' offer is not adjusted to their needs. The analysis of the statements made by the representatives of business environment institutions indicate the main barriers to cooperation between enterprises and BEIs. The barriers associated with enterprises include:

- low propensity for cooperation,
- lack of funding for co-financing projects,
- lack of knowledge about the possibilities of cooperation,
- lack of innovation and lack of willingness to make changes,
- not seeing the purpose and benefits of cooperation,
- lack of qualified staff.

The barriers associated with business environment institutions include:

- insufficient information and promotional activities,
- failure to adapt the offer to the needs of enterprises,
- lack of specialised services,
- incompetence of employees.

While indicating the barriers to cooperation, the respondents suggested the following actions (Table 6) that should be undertaken to improve these relations:

- updating information on the scope of cooperation on the website,
- undertaking extensive promotional activities,
- closer cooperation with local government, adjusting the BEIs' offer to the needs of enterprises,
- expanding the scope of cooperation, particularly to incorporate financial support for enterprises,
- change in the human resources policy in order to provide professional services.

CONCLUSIONS

The research findings suggest that the network of business environment institutions in Poland is well-developed. These institutions are mainly located in large cities and regions with a high economic potential, where a relatively large number of business entities provide opportunities for diversification of services offered. The study shows that the role of business environment institutions in the development of small and medium-sized enterprises in the present conditions is small. This is a result of, on the one hand, little interest on the part of SMEs in the support offered by these institutions, and, on the other hand, the fact that frequently the services offered do not meet the needs of enterprises.

Entrepreneurs who collaborated with business environment institutions perceived benefits resulting from this cooperation, however, the exploitation of the potential of these institutions was limited by many barriers on the part of enterprises, i.e. a lack of funds for co-financing projects, a lack of knowledge about the possibilities of cooperation, as well as on the part of business environment institutions, i.e. insufficient information and promotional activities, a lack of adjustment of the offer to the needs of enterprises, and a lack of specialised services.

A lack of activities related to initiating cooperation is a weak point of cooperation between SMEs and business environment institutions. A large percentage of the enterprises

that do not feel tangible benefits of cooperation and do not have the need to use the services offered by business environment institutions is also worth noting. This fact indicates the existence of an awareness barrier among entrepreneurs, i.e.: they do not have confidence in these institutions, do not appreciate their activity, have a low opinion of the manner these services are provided, as well as of the competence of the personnel.

To improve the situation, on the part of business environment institutions, it is necessary to update information on the scope of cooperation, undertake extensive promotional activities, adjust the offer to the needs of enterprises and expand cooperation, especially by providing financial support for enterprises. Activities aimed at improving the flow of information between business entities and promotion/establishment of cooperation between science and business are also important to improve SMEs' relations with business environment institutions.

REFERENCES

- Bąkowski, A., & Mażewska, M. (2012). *Osrodki innowacji i przedsiębiorczości w Polsce. Raport 2012*. Warsaw: PARP.
- Comarch (2014). *Finansowanie MSP z dotacji UE*. Raport z badań Comarch i dotacjomat.pl. Retrieved on January 10, 2016, from <http://dotacjomat.pl/wp-content/uploads/2015/02/raport-dotacjomat.pl.pdf>
- De, D. (2000). SME Policy in Europe. In D.L Sexton & A. Lundström (Eds.), *Handbook of Entrepreneurship Policy*. Oxford, Malden: Blackwell.
- Dominiak, J. (2013). Rola otoczenia biznesu w rozwoju regionalnym w Polsce. In Z. Zioto & R. Rachwał (Eds.), *Uwarunkowania rozwoju gospodarczego układów przestrzennych* (pp. 45-49). Kraków: Wydawnictwo Naukowe UP.
- Dyer, L.M., & Ross, C.A. (2007). Advising the Small Business Client. *International Small Business Journal*, 25 (2), 130-151.
- European Commission (1996). *Regional Action for Innovation Methodology in Design, Construction and Operation of Regional Technology Transfer*. Volume II: Assessment of the Regional Innovation Support Infrastructure. EIMS Publication No 19, Luxemburg: European Commission.
- Fabińska, M. (2013). Business Environment Institution in the Light of the Operational Programme Innovative Economy. *Acta Universitatis Lodziensis, Folia Oeconomica*, 277, 71-87.
- Filipiak, B., & Ruszała J. (2008). *Instytucje otoczenia biznesu*. Warsaw: Difin.
- Gancarczyk, M. (2010). *Wsparcie publiczne dla MSP. Podstawy entrepreneur a praktyka gospodarcza*. Warsaw: C.H. Beck.
- Kufs, Ch. (2011). *Stats with Cats: The Domesticated Guide to Statistics, Models, Graphs and Other Breeds of Data Analysis*. Tucson, Arizona: Wheatmark.
- Lisowska, R. (2013). *Zarządzanie rozwojem małych i średnich przedsiębiorstw w obszarach zmarginalizowanych*. Lodz: Uniwersytet Łódzki.
- Lundström, A., & Stevenson L.A. (2005). *Entrepreneurship Policy. Theory and Practice*. International Studies in Entrepreneurship. New York: Springer.
- Matejun, M. (2015). *Absorbacja wsparcia w zarządzaniu rozwojem mikro, małych i średnich przedsiębiorstw-podejście strategiczne*. Łódź: Politechnika Łódzka.

- Mażewska, M. (2015). Infrastruktura otoczenia biznesu w Polsce. In A. Bąkowski & M. Mażewska (Eds.), *Ośrodki innowacji i przedsiębiorczości w Polsce. Raport 2014* (pp. 7-25). Poznań/Warsaw: SOOIPP.
- Niska, M., & Vesala, K. (2013). SME policy implementation as a relational challenge. *Entrepreneurship & Regional Development*, 25, 521-540.
- North, D., & Smallbone, D. (2006). Developing Entrepreneurship and Enterprise in Europe's Peripheral Rural Areas: Some Issues Facing Policy – makers. *European Planning Studies*, 14(1), 41-60.
- Stevenson, L., & Lundström, A. (2007). Dressing the Emperor: The Fabric of Entrepreneurship Policy. In: D.B. Audretsch, I. Grilo, & R. Thurik (Eds.), *Handbook of Research on Entrepreneurship Policy*. Cheltenham: Edward Elgar Publishing.
- Urdan, T.C. (2010). *Statistics in Plain English*. New York: Routledge.
- Wach, K. (2008). *Regionalne otoczenie małych i średnich przedsiębiorstw*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie.

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Venture Capital as a Source of Financing Small and Medium-sized Enterprises in Poland: Selected Aspects

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Abstract

Entrepreneurship financing is a challenge for company managers in every industry. Competitive market requirements and advancing globalization trigger continuous changes in economic conditions that companies are constantly adjusting to. Capital flows enabling efficient financing and development of businesses should be mobile, with a direct bearing on decisions on capital allocation. Thus, the following questions arise: what sources, in addition to equity and loans, are used by small and medium-sized enterprises in Poland? Do they make use of all the possibilities available in the capital market and what are the reasons behind their choices regarding development strategies and funding sources for such strategies? This article builds on the authors' own research on companies' survival and preferences as to the choice of financing sources in the various stages of development, carried out on the basis of source data from various annual reports and publications that have been produced and made available by capital market institutions. It also addresses diversification of financial portfolios of companies that seek financing sources for their own entrepreneurship that allows their development, efficiency and maximization of performance, and thus consolidation of their market position, including through venture capital.

Keywords: SMEs; financing source; venture capital; company age

JEL codes: L25, O12

INTRODUCTION

Small and medium-sized enterprises play an important role in today's economy, which is reflected primarily by their numbers. In 2014, more than 22.3 million non-financial enter-

prises¹ operated in the European Union, of which 1.77 million conducted business in Poland, a decrease by 1.3% compared to 2013² (Muller et al., 2015; CSO, 2014, p. 22). Their key role as entities influencing macroeconomic indicators lies not only in their number but also in creation of new jobs (CSO, 2014). One of their major characteristics is their fast adaptation to market changes, legal regulations and transformations in the socio-economic environment. They flexibly respond to local, regional, national and even international needs (Łuczka, 2013). They successfully operate in new sectors and industries, internationalizing their business and developing in an increasingly broad sense. Their access to sources of capital, especially investment capital, is, however, still limited and they continue to face credit discrimination as indicated by J.K. Galbraith (see: Łuczka, 2013, 2001; Bielawska, 2005). At the same time, small and medium-sized enterprises prefer traditional sources of financing. They most commonly use money market rather than capital market instruments. The reason for this lies both in entrepreneurs' habits and their lack of confidence in external sources of financing, reflected by the so-called SME credit mentality, and in scarce knowledge about the main capital market instruments in Poland. They also face barriers in each phase of their life cycle. The rates of bankruptcies and liquidations and survival rates after 5 years of operation affect the opportunities for access to capital market instruments as well (CSO, 2015; Małecka, 2015b, pp. 39-54).

Development capital has been a subject of interest in the economic theory and business practice for many years (Milewski, 1998, p. 305; Małecka, 2016, pp. 145-168). Despite a wide variety of opinions (Robinson, 1958, p. 161; Smith, 1998, p. 427; Łuczka, 2015, see: Smith, 2007), all of them are consistent as regards one fundamental issue, namely that development capital covers this part of resources that yield profit. When defining capital, F.J. Busse's view should be taken into account because he sees capital from the financial management perspective as a financial investment including the aspect of ownership (Busse, 1993, p. 19, quoted in: Łuczka, 2015, pp. 86-97). Definitions by S.C. Myers, R. Elsas, E. Florysiak, F. Modigliani and M.H. Miller highlight that the way companies choose their capital structure is unclear (Elsas & Florysiak, 2008, p. 39; Modigliani & Miller, 1958; Myers, 1997, pp. 575-592).

Concerning the determinants of SME capital structure, a correlation can be noticed between company size and capital structure being built. That relationship is inversely proportional: the larger the enterprise, the lower the ownership share. One thing is sure: regardless of the controversies among researchers examining the issue in question, it is essential to have capital. Therefore, sources of financing are a major management concern.

This article presents research into survival rates and development stages of enterprises as factors determining the choice of financing sources, in view of their impact, and market track record of companies as an element translated directly to the confidence in SME owners and their negotiating position. The authors' research results show that small businesses have the highest capacities and survival rates.

Looking at the geographical distribution of fundraising in 2014, venture capital was most popular in France, Belgium and the Netherlands with a 46.1% share, whereas in the Scandinavian countries and Germany alike it reached 8.4% of all funds of this type

¹ The figures do not include sections A (agriculture, forestry, hunting and fishing), K (financial and insurance activities), O (public administration and defence activities) according to the Classification of Business Activities in Poland (PKD 2007).

² The figures concern Poland in 2013.

worldwide. In the same period, the United Kingdom recorded a 10.2% share. Spain, Italy and Portugal have a 6.8% share, while Poland, together with other Eastern European countries, only 0.9% (EVCA/PEREP_Analytics, 2015, p.21).

MATERIAL AND METHODS

The authors' research covered micro, small and medium-sized enterprises in Poland in order to analyse the influence of their age and conditions for their survival as well as the impact of those factors on the choices made by SME owners in designing and diversifying sources of financing. In order to calculate and present the findings in tables and charts, mathematical analysis tools were employed that allowed for determining: the number, dynamics and trends examined on the basis of linear regression methods (Freedman, 2009), and for making a comparative analysis of obtained indicators.

COMPANY SURVIVAL AND AGE AS FACTORS DETERMINING SME CAPITAL STRUCTURE IN POLAND

In their operations, micro, small and medium-sized enterprises face numerous barriers connected, among others, with (1) the lack of adequate procedures and (2) in-company corporate governance, (3) access to outlet markets, (4) internationalization, (5) organizational and legal form and, finally, (6) raising funds for development. Their survival capacity determines their capital structure as emphasized in the relevant literature. The analysis of the Polish Central Statistical Office data also shows that most businesses, both micro and small and medium-sized enterprises, failed after 2 to 4 years of their operation in 2009-2013. One characteristic aspect is that in recent years the survival rate increased: by 32.5% in 2012 and 11.41% in 2013 for small companies, and by 4.56% in 2012 and 14.21% in 2013 for medium-sized enterprises. Micro-enterprise survival rate decreased in the period under examination. This trend would not have been detected if not for a thorough analysis of each subsector since SME general statistics reveal shorter survival in that period, the reason being a large number of micro-enterprises across the sector. Small companies were very stable within the group of enterprises surviving for 5 or more years. From 2010 onwards, they showed an upward YoY trend: 6.42%, 5.42%, 0.91% and 3.02% in consecutive years. The biggest fluctuation and the lack of clear trends occur among micro-enterprises, yet 2013 witnessed bankruptcy or liquidation of companies in each age range studied. Importantly, the overall survival rate of all SMEs operating for 5 or more years increased, though slightly, among medium-sized enterprises (by 0.95% in 2012 and 0.05% in 2013), with small businesses being most stable (Figures 1, 2, 3, 4).

The survival rate is a major factor determining SME capital structures because it is synonymous with credibility, first and foremost, and with an established market position and financial track record as creditworthiness determinants. It thus affects the rating of a company applying for a loan since it provides important information about its entrepreneurship and ability to survive in a competitive market. The 1991 research by D.W. Diamond demonstrated that the longer the history of cooperation with a bank, or the older the company, the lower the costs of a bank loan or credit offered (Diamond, 1991). Companies operating in the market longer are less likely to go bankrupt, meaning that

their credit risk is lower, which improves their position to negotiate bank credits or bank fees (Brüderl & Mahmood, 1996; quoted in: Łuczka, 2015).

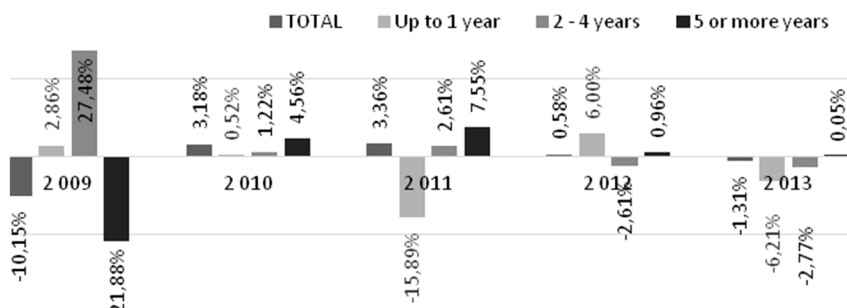


Figure 1. All SMEs by years of conducting activity and by survival rate in 2009-2013

Source: own study based on the research results from CSO, 2015.

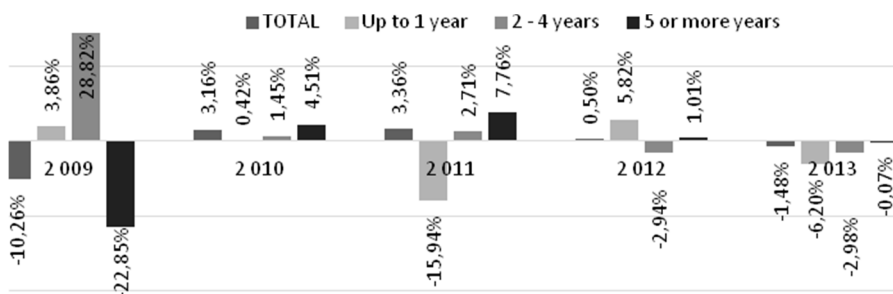


Figure 2. Micro-enterprises by years of conducting activity and by survival rate in 2009-2013

Source: own study based on the research results from CSO, 2015.

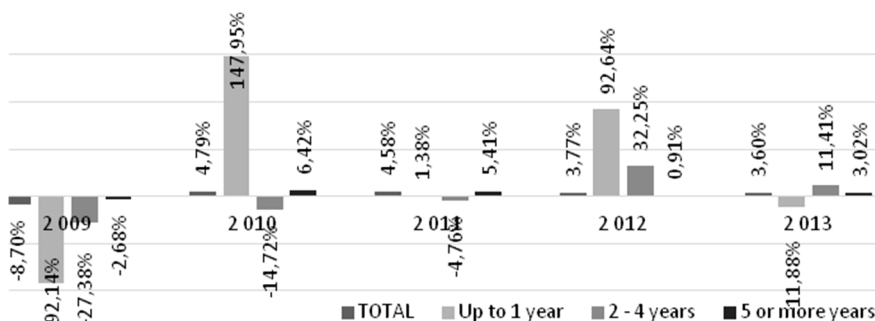


Figure 3. Small enterprises by years of conducting activity and by survival rate in 2009-2013

Source: own study based on the research results from CSO, 2015.



Figure 4. Medium-sized enterprises by years of conducting activity and by survival rate in 2009-2013

Source: own study based on the research results from CSO, 2015.

Owing to its basic functions as a public capital market, the stock exchange is crucial to capital flows and the development of economies, both nationally and globally (see: Płókarz, 2013). Statistics clearly show how important company survival rate is. For companies to be able to make full use of the capital market, in particular Initial Public Offering (IPO), the survival rate must be credible as it is one of the requirements to meet in order to aspire for the status that allows for cooperating with the stock exchange and raising development capital in this way (Małeczka, 2015a, pp. 496-507; Małeczka, 2015b, p. 39-54). This also applies to the NewConnect market (see: Kordela, 2013). So what can innovative entrepreneurs who are resolved and confident of their success do? One of many opportunities to raise long-term capital lies in venture capital including: seed capital, start-up capital, business angel schemes and corporate venturing, depending on the stage of company development or financing source. Yet, according to the research results, micro-entrepreneurs almost exclusively use equity (Łuczka, 2013). Only slightly over 4% of the companies studied take into account trade credit in their management. The figures demonstrate that the correlation between size and equity invested is degressive. The larger the company, the wider the range of financing sources (Table 1). Equity is used to the smallest extent by medium-sized enterprises (58.5%), yet the figures on other financing options chosen, including trade credit (17.5%), should be mentioned.

Table 1. SME size and capital structure

Number of employees	Capital structure					Number of SMEs
	equity	long-term credit	short-term credit	leasing	trade credit	
self-employment	91.1	1.5	2.2	0.8	4.3	72
1-9	78.7	5.3	3.9	3.3	8.9	176
10-49	71.6	6.3	5.2	5.8	11.2	74
50-249	58.5	10.3	7.6	6.3	17.5	37
TOTAL:						359

Source: Łuczka, 2013, p. 170.

Further results of the authors' research reveal that the equity share is reduced slightly as an SME grows older: the share of 84.9% in the first year of a company's operation falls to 74.5% in the early stage of development between 3 and 5 years of its existence. This group

also accounts for the highest proportion of trade credit in diversified financial portfolios of the enterprises studied. This confirms the thesis about preparing the company for succession or resale. Simultaneously, there was an increase in long-term credits in the capital structures. Other instruments examined do not reveal a steady trend (Table 2).

Table 2. SME age and capital structure

Company age (in years)	Capital structure					Number of SMEs
	equity	long-term credit	short-term credit	leasing	trade credit	
up to 1 year	84.9	4.6	1.1	3.6	5.7	18
1-2	80.0	4.2	3.8	3.0	8.9	33
3-5	73.5	5.8	4.2	4.2	12.3	70
6-9	79.5	6.1	3.4	3.7	7.5	80
10-19	77.7	4.4	4.7	3.8	9.4	126
over 20	78.8	6.1	4.2	1.2	9.6	34
TOTAL:						361

Source: Łuczka, 2015, p. 94

According to the authors' results, the most interesting group includes small and medium-sized entrepreneurs who have been active in the economic market for over 3 years, hence fall within the CSO statistics in ranges: 2-4 and 5 or more years of operation. This is because they exhibit a stable trend and take mature financial decisions that are assessed if they are ready to use financial market instruments.

The age and survival rates of enterprises have long been examined in the relevant literature. According to F.S. Mira's research conducted on Spanish SMEs within 5 years, there is a positive relationship between company size and the structure of its fixed assets on the one hand and long-term debt on the other and a negative relationship in the case of short-term debt (Mira, 2003, pp. 1-23). A reference should also be made to the 2010 research by H. Schneider clearly indicating a preference for short-term credits among small and medium-sized enterprises (Schneider, 2010, p. 220). Each company develops in many stages that occur cyclically. Thus, the literature specifies two primary phases: maturation and ageing (see: Grzywacz, 2012; Jaworski, 2010; Łuczka, 2013). N. Berger and G.F. Udell distinguish four financing cycles while a company grows, pointing to four phases: childhood, adolescence, maturity and decline. The research that they conducted in 1998 covered every phase, highlighting the financing source preferred by entrepreneurs in each of them (Berger & Udell, 1998). The equity share was 49.6% and third-party capital constituted 50.4%. The sources of equity included 31.3% of the owner's funds and only 5.5% of funds raised from business angels or venture capital, with the latter rarely being a financing source in the first phase of the company growth cycle and only becoming more important in the adolescent stage, i.e. after 3 to 4 years of existence. Third-party capital, although dominated by bank credit³, included the trade credit share of 15.8%. Therefore, the age and market survival rate of enterprises and the distribution of financing sources are significant for the conducted analysis.

³ Bank credit accounted for 18.8% and, together with trade credit, constituted a total of one third of third-party capital.

VENTURE CAPITAL AS A SOURCE OF FINANCING SMALL AND MEDIUM-SIZED ENTERPRISES

As mentioned above, each business develops in multiple cyclical stages, with the most important one being its start. Hardly anyone thinks about the start of companies such as Hewlett Packard, Euronet and Google having world-famous logos, especially considering their financing sources that enabled them to develop in this manner (Tamowicz, 2004). Looking at such enterprises, venture capital becomes more meaningful as one of the most interesting capital market instruments that sometimes offer a more attractive form and solutions than banks. Venture capital is frequently called pro-developmental because it emphasizes the role of man and his inventiveness and is a major driver of innovation-based economy (Figure 5). It is mainly invested in the markets for new technologies that develop more dynamically than the rest of the industry (Gompers & Lerner, 2001, pp. 145-168; Małecka & Łuczka, 2016, pp. 418-431). What should also be highlighted is the opportunity to finance initial market operations through to the opportunities to provide funds for acquisitions and buyouts.

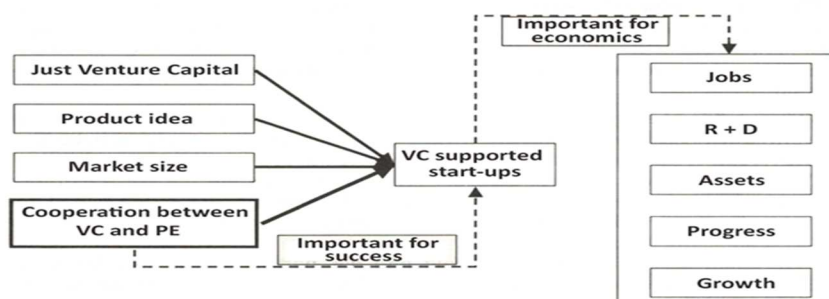


Figure 4. The importance of venture capital in micro- and macroscale

Source: Welpel I., Managementunterstützung durch Venture-Capital-Gesellschaften- eine empirische Untersuchung, in: A.-K. Achleitner, H. Klandt, L.T. Koch, K.-I. Voigt (Ed.), *Jahrbuch Entrepreneurship. Gründungsforschung und Gründungsmanagement*, Springer Berlin, Heilderberg, New York, 2006, p. 72.

The early development stages of enterprises, depending on their size, may be supported by financing sourced directly from the capital market, such as start-up or seed capital. Such solutions are chiefly addressed to the smallest businesses. Both seed and start-up capital is used to finance enterprises at the very beginning of their activity, hence, indeed, helps them design new business concepts, build prototypes, conduct preliminary market research, prepare business plans, register and enter the market. Such offered solutions may be as diverse as the scale of the related business, ranging from the amounts of several thousand to several million in funds, and as diverse as experience and know-how of the people involved. Company age and portfolio then become major indicators as they are directly connected with the level of investment risk, i.e. profits expected by potential investors. The correlation and development stages for assessment purposes were illustrated by many studies, including the authors' own research, in the first chapter. It is, therefore, obvious that financing a company's start-up phase, market entry and competitive position development is the riskiest and least profitable venture capital investment

since preparation costs reduce future profitability. That is why such projects are expected to yield high returns and investment activities are mainly undertaken in highly innovative segments, e.g. high-tech (Małeczka & Łuczka, 2016, pp. 418-431). In Poland, the approach to using venture capital funds also depends on the industry and skills of entrepreneurs who are increasingly being supported by the EU programmes offered through the Polish Agency for Enterprise Development (PARP) and the National Contact Point for the Competitiveness and Innovation Framework Programme⁴ (CIP). Thanks to the participation of representatives of the European Investment Fund, the National Capital Fund, PARP, the Polish Private Equity and Venture Capital Association, and entrepreneurs and potential investors, the legal framework and tax opportunities are clearer to the enterprises directly concerned⁵. It should also be emphasized that venture-capital-financed projects may involve both private investors and public funds (PARP, 2012). PARP activity⁶ and projects implemented by it should be studied separately.

The owners' attachment to their companies and their reluctance to admit third parties is an essential dilemma in SME management. The value of a company's fixed assets is also the value of the owner's property and collateral. The link between the value of fixed assets and the level of debt in small and medium-sized enterprises is weak and, if exists, it only concerns short-term debt, which confirms the theory about the preference for short-term financial commitments among company owners (Schneider, 2010, p. 220; Małeczka, 2016, pp. 91-122).

The structure of venture capital raising involves a specific form of capital injection for an emerging or already existing company through issuing stocks or shares. This specificity consists in the fact that, instead of credit contracted, i.e. debt, new capital is introduced into enterprises as ownership interest, namely as equity capital, making the investor a co-owner of the financed company. Enterprises are financed in this way for a clearly defined period that can be short-term (e.g. a year, helping to prepare the company to launch a new technological line or cooperate with the stock exchange) or long-term (financing subsequent phases of its precise development path). After the contractual deadline expires, venture capital funds are always withdrawn by selling the stocks or shares held. Development funds are raised in this manner in non-public capital market, often called private equity, because they may be used only by companies that have not been listed on a stock exchange.

The very form and structure of venture capital is much more attractive than traditional forms of fundraising, where it is necessary to provide pledges, liens or own contributions as collateral subject to additional percentage fees paid regularly as interest irrespective of the company's financial condition. This role is played by the shareholding and related corporate rights to vote at general meetings, the right to inspect and receive financial information about the company, without any additional costs or debt, since the inves-

⁴ A seed financial offer is exemplified by the University Challenge Seed Funds, a British programme that created 19 seed funds focused on finding interesting investment projects in the academic community. In the 2002-2003 reporting period, it qualified approximately 100 projects for financing with 13 million GBP.

⁵ The workshops organized by those institutions in October 2012 presented the Silicon Valley idea of US-Poland Innovation Hub to assist Polish companies trying to conquer international markets. The patronage was assumed by Silicon Valley venture capitalists affiliated with Stanford University and the US-Polish Trade Council (USPTC).

⁶ PARP implements, inter alia, projects under 1.2.3. Sectoral Operational Programme "Improvement of the Competitiveness of Enterprises" (SPO WKP): Silesia Fund Sp. z o.o., BIB Seed Capital Sp. z o.o., SATUS Sp. z o.o., MCI.Bio Ventures Sp. z o.o., BAS Sp. z o.o., IIF Seed Fund Sp. z o.o.

tor, who is a co-owner, gains profits from capital venture when the company value increases. The value of the investor's collateral consisting of shares or stocks contributed as equity grows then too. The difference also lies in the degree of involvement in company management: venture capital shareholders are usually interested in all aspects connected with the company because they are directly concerned about raising the company value.

Given tax and regulatory considerations, funds choose different legal forms and structures; they also may be registered in countries other than those where they invest. It is a responsibility of company owners to choose and verify potential sources of financing and their legal forms. However, most venture capital funds are established by pension funds, banks, insurance companies and large corporations, i.e. legal persons with a well established and known market position and large pools of capital guaranteed for their disposal⁷. Selection of investors making up a fund is not so important for its operational mode but the funds themselves tend to cooperate with specific groups of partners (e.g. banks are mainly focused on cooperation with mature companies that usually require much shorter financing than new businesses). It is assumed that pension funds, banks, insurance companies and large corporations account for 65% of operators responsible for allocation of capital to funds in Europe, whereas foreign institutions, chiefly banks, dominate in this respect in Poland (Tamowicz, 2004).

Table 3. Characteristics of selected forms of financing

Type of financing	Change of company structure	Credit-worthiness	Business track record	Collateral held	Development prospects
Bank credit	-	+	+	+	+
Trade credit	-	+	+	+	+
Leasing	-	+	+	+	+
Seed and start up	+	-	-	-	++
Venture capital*	+	-	-	-	+
Private equity**	+	-	-	-	+
Corporate venturing***	+	-	-	-	+
Business angels****	+	-	-	-	+

* Venture capital includes seed and start-up capital used only in the early stages of development.

** Economically, it differs from venture capital only as regards its much larger scale of financing; it provides financing in the advanced stages of company development.

*** It falls within the definition of venture capital and is provided by large corporations for the development of industries of interest for financing corporations; it provides greater market and technological support than the classical venture capital.

**** The same characteristics as venture capital, offered by individuals rather than legal persons; it means lower financing in practice.

Source: own study.

In Poland, there are several venture capital funds with different industrial⁸ or financial specializations, and sometimes with different investment limits and market reputations. Although the latter may seem to be the least important, the reputation of a given fund

⁷ Those may be, for example, retirement savings, premiums paid by policyholders, deposits that can yield attractive profit when managed as venture capital.

⁸ Given the risk of or liability for damages, venture capital is not invested in all market industries. In particular, all social and political links (e.g. production of and trade in: weapons, tobacco, alcohol, narcotics, products posing the risk of environmental pollution) are avoided.

should be checked thoroughly. Indeed, long-term cooperation is at stake so treatment of partners and business culture should not remain unknown (psik.org.pl, 01.01.2016).

Funds most frequently cooperate with businesses that meet four basic conditions ensuring that a project is successful and risks are minimized:

- professional, cooperating project team,
- competitive advantage manifested chiefly through project innovation in a particular field,
- offered rate of return proportionate to the duration and risk of investment,
- ensuring that the fund can exit the investment after the contractual period (in practice, 3-7 years) expires.

The first condition is definitely soft as the assessment covers not only education and experience of the team with managing projects and companies but also character traits of the team leader. Strong personality, managerial competences, focus on success and business integrity are also assessed. The most important elements ensuring the interest of funds include market uniqueness that will guarantee competitive advantage or create barriers to competition emergence, with a clearly defined target group and specified needs to respond to, and project embeddedness in a growth market of sufficiently large size, free from excessive regulatory interference by the State. It should be noted that the practice confirms that growth expectations of seed companies and start-ups are at 30%-100% per year and decrease in direct proportion to maturity of financed enterprises, which is inevitably associated with their age. Therefore, M. Porter underlined that “Descriptions of business leadership still use old metaphors, quote ancient Chinese generals and apply their skills to business. However, defeating the enemy is a thing of the past. We have to fight to be unique, not the best”.

The reception of venture capital in SMEs, described in this article, is also confirmed by the opinion of M. Zagórski⁹ saying that the loss of control of the company and lack of in-company corporate governance in the majority of SMEs are barriers to such investment in the future of companies: “(...) A founding entrepreneur who created his/her company from scratch often approaches funds, seeking capital to develop his/her business because he/she wants to leave ‘something’ to his/her children and grandchildren. (...) It is impossible to do business with such a partner because he/she does not treat his/her company as a product or investment. Generally, he/she is a very capable and resourceful person committed to his/her work who does virtually everything in his/her company and thus knows everything about it. And besides him/her, nobody knows anything about his/her company. This is, unfortunately, a very bad situation. (...) If something happens to him/her, the company practically disappears and so does the money invested in it by the fund! ... Given these personnel issues, it is worth noting that investment depends not only on a great idea but also on a complete management team at the medium level as well.” (quoted in: Tamowicz, 2004, p. 18). This is confirmed by the list of the most commonly used criteria, published by D. Klonowski in 2004, which begins with top ranked indicators of managerial staff potential, competence and experience. Only in subsequent steps are market competitiveness and attractiveness and the project content, i.e. a product or service, assessed (Table 4).

⁹ Marcin Zagórski was vice-president of the Polish Private Equity and Venture Capital Association in 2004-2005, president of HALS Venture Capital Fund in 1999-2004.

It should also be noted that the list of necessary conditions does not contain what often seems to be most important, i.e. technical, technological and engineering aspects that financing seekers frequently regard as crucial and that are ranked even lower than in D. Klonowski's model. Emphasis is also put on knowledge about the industry and the level of competition. Assessment covers consolidation risks that may occur in the years of financing and the intensity of competition in a particular sector and its profitability: entry, threat of substitution, bargaining power of customers and suppliers, and rivalry among current competitors (see: Porter, 1994).

Table 4. The most common criteria used for investment project selection

Selection criteria	Ranking		Selection criteria
Managerial potential of entrepreneur	1	15	Scale and possibility of further financing rounds
Previous experience	2	16	Ability to maintain market position
Market size and growth	3	17	Competitors for transaction
Completeness of project team	4	18	Ease of market entry
Expected rate of return	5	19	Nature and intensity of competition
Experience in the industry	6	20	Ability to disburse cash (e.g. dividend)
Company valuation	7	21	Availability of supply and distribution network
Value added of products/services	8	22	Possibility of influencing business
Market seasonality	9	23	Time to viability
Investor protection	10	24	Prospects for building a consortium
Possibility of investment exit	11	25	Company development stage
Level of market consolidation	12	26	Compliance with fund's internal conditions
Market share	13	27	Condition of Polish economy
Availability of clear business plan	14		

Source: Klonowski D. Kapitał wysokiego ryzyka w Polsce. Kryteria podejmowania decyzji inwestycyjnych. Organizacja i Kierowanie, No. 1/2003, p. 86; quoted in Tamowicz P., 2004, p. 19.

Correctly designed information memoranda addressed to investment funds and standards and requirements that they should meet are a very important and broad topic that should, undoubtedly, be further explored. This also applies to the issue of employee and management stock options and the cycle of investment completion and fund withdrawal.

Venture capital provided through investment funds, i.e. corporate venturing, is also interesting. The scale of such investment is several times broader than that of the classical venture capital, and the motivation is slightly different – usually it is to acquire minority stakes in fast-growing companies and resell them after a few years or integrate such companies into the investor's own group. In this case, in addition to financial benefits, the investor may monitor all innovations and technological advances frequently incubated in rapidly growing SMEs. The economic performance of the entire sector is positively influenced by the common practice of employing that method to stimulate internal entrepreneurship in large corporations by encouraging and increasing involvement of the most valuable and creative workers to start their own businesses through supporting their host corporation financially¹⁰.

Business angels are the last possible form, where individuals invest their private savings in stocks/shares in early-stage innovative small businesses with high value growth

¹⁰ Corporate venturing originated in the United States and is also popular in France, Germany, the UK and the Scandinavian countries (e.g. Electricite de France, Bayer Innovation GmbH, SAP AG, Siemens, Telefonica, British Gas, Nokia). Corporate venturing in Poland is exemplified by Intel Capital, Prokom Investment, ComputerLand, Softbank.

potential. In Europe, that market operates best in the UK. It is not developed in Poland yet, but the end of 2003 saw the establishment of the Polish Business Angels Club, which offers matching services for projects and capital providers (www.polban.pl).

In Poland, it is the information industry dealing with computers, software and data processing that is most interested in funds (41%). It is followed by construction (12%) – site preparation, construction, installations, finishing, rental of construction equipment, and by other services and services of discharge of sewage and cultural and sports activities (12%). The section comprising health protection and social aid – including medical services in hospitals, primary health centres (also veterinary) and education and care institutions, i.e. nurseries and social aid centres – also stands out (Figure 6). Table 5 shows an overview of venture capital fund development and performance in Poland in 2007-2013.

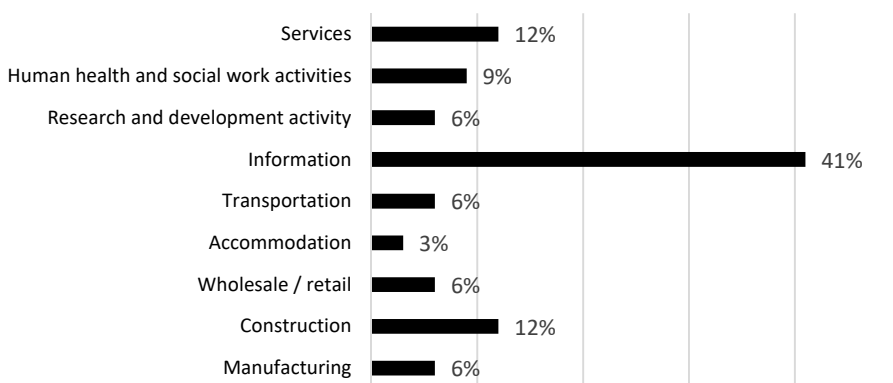


Figure 6. Polish industries in which venture capital clients operated in 2011

Source: PARP, materials of the SME Education Forum: How to become and remain an entrepreneur (Forum Edukacyjne Małych i Średnich Przedsiębiorstw. Jak zostać i pozostać przedsiębiorcą). Warsaw, 2011.

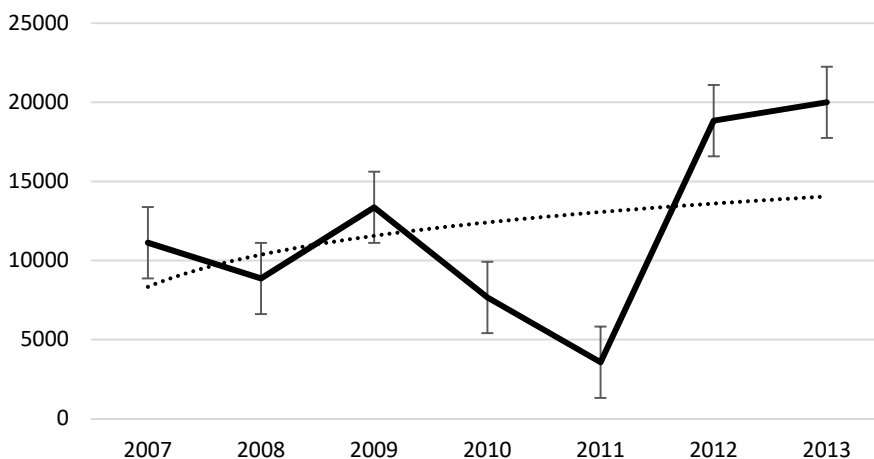


Figure 7. New funds and their upward trend in Poland in 2014

Source: own elaboration based on the data from EVCA (2007) 2014 European Private Equity Activity.

Table 5. Venture funds in Poland in 2007-2013

Venture Funds (Amounts in € thousands)	2007		2008		2009		2010		2011		2012		2013	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Academic institutions	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Banks	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Capital markets	0	0,0	0	0,0	2 730	20,4	0	0,0	0	0,0	0	0,0	0	0,0
Corporate investors	0	0,0	0	0,0	0	0,0	3 830	50,0	1 230	34,6	0	0,0	0	0,0
Endowments and foundations	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Family offices	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Fund of funds	0	0,0	0	0,0	4 550	34,1	0	0,0	1 230	34,6	9 420	50,0	0	0,0
Government agencies	8 560	77,0	0	0,0	0	0,0	3 830	50,0	0	0,0	0	0,0	10 000	50,0
Insurance companies	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Other asset managers (including PE houses other than fund of funds)	2 560	23,0	0	0,0	1 820	13,6	0	0,0	0	0,0	0	0,0	0	0,0
Pension funds	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Private individuals	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	9 420	50,0	10 000	50,0
Sovereign wealth funds	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0	0	0,0
Unclassified	0	0,0	8 860	100,0	4 260	31,9	0	0,0	1 100	30,9	0	0,0	0	0,0
New funds raised	11 120	100,0	8 860	100,0	13 360	100,0	7 660	100,0	3 560	100,0	18 840	100,0	20 000	100,0

Source: EVCA 2007-2014.

CONCLUSIONS

Financing entrepreneurship, especially SMEs, is an extensive and complex issue. There are many factors determining the owners' choice of the strategic financing source. Strong trends can, however, be noted when examining the age and survival rate of companies. In Poland, small entrepreneurs who have operated for 2-4 years represent the most stable trends, whereas decisions taken by entrepreneurs active in the market for 5 or more years clearly indicate diversified financial portfolios. Trade credit is one of the most popular solutions but venture capital instruments are also attracting attention of mature businesses. Although the company size is a strong factor affecting capital structure, SMEs continue to regard access to finance as the main barrier to development. This was stressed by T. Beck et al. in 2006: 39% of micro-enterprises, 38% of small enterprises and 29% of medium-sized enterprises felt discrimination as confirmed by N. Daskalakis and E. Thanou in 2010, namely 21.9% of micro-enterprises, 21.7% of small businesses and 20.2% of medium-sized enterprises still thought that access to the financial market was limited. Acknowledging the authors' research results, another possible reason for this should be highlighted – Polish SMEs lack knowledge about the capital market and opportunities offered by solutions such as venture capital that may be used in each stage of company operations. To illustrate this, it is enough to indicate a few enterprises that may provide an inspiration because they travelled from the start-up phase to companies with recognizable logos and significant shares in the Polish market: Travelplanet.pl (a listed company selling trips on the internet), Diagnosis Sp. z o.o. (medical products, devices and equipment), CH Helios S.A. (a cinema network), Eratech S.A. (rendering industry), Nepis S.A. (author of Yanosik communicator).

REFERENCES

- Beck, T., Demirgüç-Kunt, A., Laeven, L., & Maksimovic, V. (2006). The Determinants of Financing Obstacles. *Journal of International Money and Finance*.
- Berger, A.N., & Udell, G.F. (1998). The Roles of Private Equity and Debt Markets in Financial Growth Cycle. *Journal of Banking and Finance*, 22.
- Bielawska, A. (2005). Wyjaśnienie trudności nowo powstających przedsiębiorstw w dostępie do kredytów jako przejaw realizacji teorii asymetrii informacji. In A. Bielawska (Ed.), *Uwarunkowania rynkowe rozwoju mikro i małych przedsiębiorstw*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Bielawska, A. (2001). *Podstawy finansów przedsiębiorstwa*. Szczecin: Wydawnictwo Zachodniopomorskiej Szkoły Biznesu.
- Busse, F.-J. (1993). *Grundlagen der betrieblichen Finanzwirtschaft*. München-Wien: R. Oldenbourg Verlag.
- Brüderl, J., & Mahmood, T. (1996). *Small Business Mortality in Germany: A Comparison Between Regions and Sectors*, „Discussion Paper FS IV”, 96-20, Berlin: Wissenschaftszentrum.
- Churchill, N.C., & Lewis, V.L. (1983). The five Stages of Small Business Growth. *Harvard Business Review*, 63(3), <https://hbr.org/1983/05/the-five-stages-of-small-business-growth>.
- [CSO] Central Statistical Office. (2014). *Activity of non-financial enterprises in 2013*. Warszawa: CSO.
- Daskalis, N., & Thanou, E. (2010). Capital Structure of SMEs: To what extent does size matter? *Working Paper Series*.

- Diamond, D.W. (1991). Reputation Acquisition in Debt Markets. *Journal of Political Economy*, 97.
- Elsas, R., & Florysiak, D. (2008). *Empirical Capital Structure Research: New Ideas, Recent Evidence and Methodological Issues*, "Münchener Wirtschaftswissenschaftliche Beiträge" (BWL).
- Freedman, D.A. (2009). *Statistical Models. Theory and Practice*. Cambridge: Cambridge University Press.
- Gehrke, M. (2010). *Kapitalstrukturpolitik und Kapitalgeberinteressen. Eine theoretische und empirische Analyse*. Frankfurt: Frankfurt School Verlag.
- Gompers, P., & Lerner, J. (2001). The Venture Capital Revolution. *Journal of Economic Perspectives*, 15(2), pp. 145-168, <http://dx.doi.org/10.1257/jep.15.2.145>
- Grzywacz, J. (2012). *Kapitał w przedsiębiorstwie i jego struktura*. Warszawa: Oficyna Wydawnicza Szkoły Głównej Handlowej.
- Jaworski, J. (2010). *Teoria i praktyka zarządzania finansami przedsiębiorstw*. Warszawa: CeDeWu.PL.
- Klonowski, D. (2003). Kapitał wysokiego ryzyka w Polsce. Kryteria podejmowania decyzji inwestycyjnych. *Organizacja i Kierowanie*, 1.
- Koredela, D. (2013). *NewConnect – rynek giełdowy dla małych i średnich przedsiębiorstw*. Warszawa: CeDeWu.pl
- Łuczka, T. (2015). Mikroekonomiczne determinanty struktury kapitału w małych i średnich przedsiębiorstwach. Determinanty związane z cechami przedsiębiorstwa. In: A. Bielawska (Ed.), *Uwarunkowania rynkowe rozwoju mikro, małych i średnich przedsiębiorstw*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Łuczka, T. (2013). *Makro- i mikroekonomiczne determinanty struktur kapitału w małych i średnich przedsiębiorstwach*. Poznań: Wydawnictwo Politechniki Poznańskiej.
- Łuczka, T. (2001). *Kapitał obcy w małym i średnim przedsiębiorstwie. Wybrane aspekty mikro makroekonomiczne*. Warszawa: Wydawnictwo Naukowe PWN.
- Małecka, J. (2016). Revenues, Expenses, Profitability and Investments of Potential Contenders for the Status of a Listed Company in Poland. *Oeconomia Copernicana*, 6(4), pp. 91-122, <http://dx.doi.org/10.12775/OeC.2015.031>
- Małecka, J. (2015a). Giełda Papierów Wartościowych w Warszawie jako potencjalne źródło finansowania małych i średnich przedsiębiorstw. In: A. Bielawska (Ed.), *Uwarunkowania rynkowe rozwoju mikro, małych i średnich przedsiębiorstw*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Małecka, J. (2015b). Economic condition of legal persons in the SME sector – potential participants of the capital market in Poland. In M. Starnawska (Ed.), *Social, innovative and financial dimensions of enterprising organizations*. Gdańsk: Gdańsk University of Technology.
- Małecka, J., & Łuczka, T. (2016). The Structure of Venture Capital Raising by Companies in Poland and Central and Eastern Europe: Selected Aspects. *IMECS 2016*, pp. 418-431. The Department of Entrepreneurship of the University of Economics. Prague. WOS:000386957700037.
- Milewski, R. (1998). *Podstawy ekonomii*. Warszawa: PWN.
- Mira, F.S. (2003). How SME Uniqueness Affects Capital Structure: Evidence from 1994-1999 Spanish Data Panel. *Working Paper Series*, May 5.
- Modigliani, F., & Miller, M.H. (1958). The Cost of Capital Corporation Finance and the Theory of Investment. *American Economic Review*, 48(3), <http://dx.doi.org/10.2307/1809766>
- Muller, P., Caliandro, C., Peycheva, V., Gagliardi, D., Marzocchi, Ch., Ramlogan, R., & Cox, D. (2015). *Annual Report on European SMSs 2014/2015. SMSs start hiring again.*, Karen Hope Editor, for the European Commission.
- Myers, S.C. (1997). The Capital Structure Puzzle. *Journal of Finance*, 39(3).
- Porter, M.E. (1994). *Strategia konkurencji. Metody analizy sektorów i konkurentów*. Warszawa: PWE.

- Robinson, J. (1958). *Akumulacja kapitału*. Warszawa: PWN.
- [PARP] (2012). *Warsztaty na temat venture capital*. Warszawa: PARP.
- [PARP] (2011). *MSP Forum Edukacyjne Małych i Średnich Przedsiębiorstw. Jak zostać i pozostać przedsiębiorcą*. Warszawa: PARP.
- Schneider, H. (2010). *Determinanten der Kapitalstruktur*. Weisbaden: Gabler Verlag.
- Smith, A. (1998). *Bogactwo narodów*, vol. 1. Quoted in: H. Landreth & D.C. Colander, *Historia myśli ekonomicznej*. Warszawa: PWN.
- Smith, A. (2007). *Badania nad naturą i przyczynami bogactwa narodów*. Warszawa: PWN.
- Tamowicz, P. (2004). *Venture Capital – kapitał na start*. Warszawa: PARP.
- Welpe, I. (2006). Managementunterstützung durch Venture-Capital-Gesellschaften- eine empirische Untersuchung. In A.-K. Achleitner, H. Klandt, L.T. Koch & K.-I. Voigt (Eds.), *Jahrbuch Entrepreneurship. Gründungsforschung und Gründungsmanagement*. Berlin, Heidelberg, New York: Springer, p. 72.
- <http://biznes.pl/magazyny/smorszczewski-bardzo-perspektywiczny-rynek/dq67q1>, 01.01.2016
- www.psyk.org.pl
- www.polban.pl

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Utilisation of Business Advice in Small Innovative Firms: the Role of Trust and Tacit Knowledge

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Abstract

The aim of this paper is to expand the understanding of the influence of trust relationship, as well as tacit knowledge on the process of business advice utilisation in small innovative firms. The analysis is based on empirical research conducted with the use of the explorative approach. The multiple case study methodology was used. Trust relationships as well as tacit knowledge were identified as factors essential to the process of utilisation of business advice in small innovative firms. It was recognised that the significance of both factors is related not only to the process of advice, but also as a purpose of activities happening prior to advice. They are referred to as the initial phase. The findings provide implications for further research of the structure of the process of business advice utilisation. It is related to the inclusion of the "initial phase", as well as to the necessity to include both factors in further research. The paper also provides implications related to the measurement of business advice output, and recommendations on the construction of public policy instruments.

Keywords: innovative firms; business advice; trust relationship; tacit knowledge; utilisation of business advice

JEL codes: C33, F21

INTRODUCTION

As small firms have, by definition, limited internal resources, and as some of them have additionally limited managerial knowledge and business experience, they are likely to benefit from a wise use of external expertise (Hurmerinta-Peltomäki & Nummela, 2004; Hinton & Hamilton, 2013). Especially competitiveness of small innovative firms is regarded as dependent on the ability to access the resources of external knowledge effectively (Caloghirou, Kastelli & Tsakanikas, 2004; Kang & Kang, 2009). Recent research suggests that indeed the intensity of business advice is considerably high among small innovative firms (Stawasz, Głodek, Stos & Wojtas, 2004; Bennett, 2007; Johnson, Webber & Thomas, 2007).

It has been recognised that small innovative firms use a variety of external advisors, ranging from family and friends to government-provided services and private consultants (Ramsden & Bennett, 2005). However, in the literature and in practice, it is visible that firms – when they operate and develop – use also other sources of external expertise to enhance their final business offers, i.e. venture or seed capital shareholders, co-owners with a different background, employers or other entrepreneurs (North, Baldock, Mole, Wiseman & Binnie, 2011; Soriano & Castrogiovanni, 2012). Despite the fact that a considerable amount of studies is available on the issue of business advice, ranging from the impact of advisory services to the firm's satisfaction analysis (Bennett & Robson, 2003; OECD, 2004; Chrisman, McMullan & Hall, 2005; Johnson et al., 2007; Yusuf, 2010), the development of innovative business offers and the development of small innovative firms that follows, in conjunction with differently sourced business advice, remains poorly recognised. This has an impact on difficulties in measuring business advice for small innovative firms, starting from problems with the definition of business advice itself, its role and placement within the process of development, followed by difficulties in defining possible results of business advice, and comparing those results against different criteria.

Therefore, there is a need to understand deeply the business advice logic in the context of small innovative firms. For this purpose, the authors conducted a series of Europe-wide case studies on which they base their description of the advice process taking place within small innovative firms. They were studied based on a common diagnostic questionnaire which served as the basis for a semi-structured interview. The analysis conducted led to the observation that the presence of trust relationship as well as the tacit knowledge exchange and creation are present at subsequent stages of the advisory process. It is related particularly to the processes of the complex, intensive advisory relationship referred to as the utilisation of business advice (Głodek & Łobacz, 2015).

The aim of this paper is therefore to expand the understanding of the influence of trust relationship as well as tacit knowledge on the process of business advice utilisation in small innovative firms. The paper presents the theoretical background emphasising the interaction between the advisor and the entrepreneur, with special attention paid to establishing and maintaining the trust relationship between the entrepreneur and advisors, as well as to the kind of tacit knowledge. The analysis includes a dynamic perspective related to the differentiation of the initial phase, which precedes the advice process, and the process itself.

SMALL INNOVATIVE FIRMS IN THE PROCESS OF BUSINESS ADVICE

Small Innovative Firms' Behaviour and the Need for External Knowledge Advice

Small innovative firms are considered as especially important in today's economy (IDC, 2007; Gagliardi et al., 2013). Those are defined as firms which proactively seek new solutions in order to provide better market offers to their (potential) customers and therefore propose enhanced value in comparison to what is already available. Thus, they are looking for rents higher than typically established for the product line. Based on this condition, small innovative firms are regarded as growing enterprises managed by owners-entrepreneurs. As such, assuming possible venture financing typical for small innovative firms with a high growth potential, those are firms where the owner-entrepreneur holds the majority of shares. However, since this condition limits directly the size of the firm, the most important here is the entrepreneur's role in strategic decisions making, as well as the possible impact of third parties on those decisions (Łobacz & Głodek, 2015).

Due to their specific features, small innovative firms, as small firms in general, are considered as behaving strategically differently than bigger entities. They are described as 'emotional economic units', motivated more by 'doing' rather than by 'managing' (Dexter & Behan, 1999). Additionally, they create a very personal and idiosyncratic culture with a strong focus on informal communication (Storey, 1994; Cagliano et al., 2010; Mazzarol, 2011). Thus, they are described as making their decisions in the informal way, to a large extent grounded in trust and based on a holistic approach (Gibb, 2000). It is also said that small firms in general represent the 'culture' in which the decisions and, as a consequence, actions of the owner-entrepreneur are shaped by a motivation to be independent, an intuition and a desire for personal compatibility among the members of the entrepreneurial team (Dalley & Hamilton, 2000).

In terms of knowledge acquisition, it is highlighted that owners-entrepreneurs look for external knowledge which can be directly employed in their processes, thus, they avoid theoretical knowledge (Dalley & Hamilton, 2000). They also prefer to 'learn by doing' and stress that learning by experience is the most valuable way of knowledge acquisition (Dalley & Hamilton, 2000). External knowledge acquisition seems to be important whenever maintaining competitiveness of small innovative firms is considered. Some firms experience a critical knowledge gap resulting from relatively high complexity of technology and market exploration problems faced by innovation-focused entrepreneurs, or the erosion of innovation rent while implementing new market offers, which can be limited when more knowledge is used in the process (Bennett & Robson, 2003; OECD, 2004; Chrisman et al., 2005; Johnson et al., 2007; Mazzarol & Reboud, 2009; Yusuf, 2010). In both cases, it is crucial to maintain their competitiveness and profitability.

The development of small innovative firms also generates a need for the acquisition of external knowledge necessary to launch new products and to manage the process of expansion. It often requires exploration of new options and solutions that enable firms to deal with future and/or existing problems (Wren & Storey, 2002). This allows the firm to enter the next stage of its development in terms of the organisation of daily operations, configuration of resources and market interactions (Churchill & Lewis, 1983; Garnsey, 1996; Matlay, 1999; Łobacz, 2012). Thus, the use of external expertise is especially needed when new market offers are implemented. As innovative entrepreneurs are highly focused

on the introduction of new offers (Łobacz, 2012), their need for business advice is supposed to be of frequent nature (Łobacz & Głodek, 2015).

Delivery of Business Advice for Small Innovative Firms

Business advisors are perceived as market players who are able to provide knowledge resources for firms with limited access to those resources. As business advice has many different forms, ranging from the provision of general knowledge, through specialised trainings to coaching and mentoring, business advisors are variously defined in consecutive studies and in practice (Bennett & Robson, 2003; Johnson et al., 2007; Mole, Baldock & North, 2013). Therefore, from the point of view of support they offer to small innovative firms, they are broadly defined as individuals, whether self-employed or employed within a private or public organisation, who use their knowledge to add value to the firm's business activity through the provision of short or long term support at the operational or strategic level (Łobacz & Głodek, 2015).

In this context, advice may be considered as a resource available for the small firm (Bennett & Robson, 2003; Chrisman et al., 2005; Robson & Bennett, 2010). However, some small firms are not interested in reaching for it. North et al. (2011) indicate that 60% of British SMEs did not make any use of external formal assistance during the three years prior to being surveyed.

The subsequent authors stress, however, a huge differentiation of business advice provided specifically for small innovative firms. This includes not only the type of advice needed or the type of advisor chosen within the process (Bennett & Robson, 1999), but also the level of management which the advice influences (North et al., 2011), as well as the type of formal behaviour in relations with the advisor (Strike, 2012). In their broad study, Bennett & Robson (1999) indicate six types of business advice layers: professional specialists, professional generalists, market contacts, social contacts, business associates and government agencies. The list comprises professional private or public organisations as well as informal parties.

Although most studies focus on formal sources of advice, it was observed that owners-entrepreneurs tend to use informal ones more frequently (North et al., 2011; Soriano & Castrogiovanni, 2012). Those include friends and family or other inner-circle advisors, but also agents who are in a business relation with the firm, e.g. accountants, suppliers, bank employees, customers, and trade partners (Blackburn & Jarvis, 2010). Informal business advice is especially used by newly-established firms (up to three years from their foundation) and those in the course of the transformational process (North et al., 2011). Informal advice has been also observed to be especially important for family firms, which operate based on closer family and business relations (Strike, 2012).

While it is argued that firms which use informal advice subsequently tend to search for formal sources of knowledge (North et al., 2011), it is also suggested that the distinction between informal advice and formal assistance is not always clear cut, and formality is a function of the situation and the structure of the advice that is sought (Robson, 2008). This blurred border suggests that the categorisation of advisors based on their background may not constitute an important issue for small firms. Since the crucial issue for them is to find external knowledge ready to be directly employed in their internal processes, the differentiation based on the content of advice may be perceived as more influential.

North et al. (2011) used the content factor to differentiate between transactional assistance and transformational assistance. Transactional assistance relates to situations when support is provided at arm's length via a particular piece of information in order to assist with standard, day to day business operations. Transformational support, in turn, is observed when in-depth, diagnostic support is required in order to facilitate stepped change relating to business growth and productivity. Furthermore, Christensen & Klyver (2006) distinguish between the advisor's role on the basis of different business relations considered. They contrast the situation in which the consultant is assumed to 'know what' and also to 'know how' knowledge should be transferred to the firm with the case when the advisor acts as a change agent, acquiring knowledge about the firm and the context in which it operates, thus participating in the creation of unique new knowledge, which can be further used as a unique strategic resource specifically by this particular firm.

Business advice for small firms includes virtually all areas of business. However, it has to be pointed out that a substantial part of advisory activity refers to the provision of services focused on dedicated, narrow topics. It is determined by the entrepreneur and refers to isolated areas of company activity. The survey done by North et al. (2011) indicated that 83% of guidance in the UK SMEs is related to specified areas. Typical advice refers to the field of accounting and legal advice related to compliance issues. Sales and marketing, survival, finance, IT systems and websites were also indicated as the areas of SMEs' interest (North et al., 2011). Other business advice areas encompass, among others: conditions relating to market information (including international markets), technical solutions relating to new products, recruiting staff or management of cash flow. This may suggest that the use of business advice is related to the problems encountered by the company in its daily operations, or challenges of development processes.

In the research done by North et al. (2011) the minority of small businesses (17%) which were involved in business advice activity in the last three years benefited from advice related to more complex issues. Thus, taking into account that some form of advice is used by less than half of small businesses, it should be noted that comprehensive consulting is extremely rare. Chrisman et al. (2005) indicate that this type of advice can provide particularly high value to innovative firms at the start-up phase.

Trust

There is no single comprehensive definition of trust, and significant diversity exists even within disciplines (Walter & Smallbone, 2006). However, in terms of business behaviour, the trust concept is related to the perception of the probability that other agents will behave in a way that is expected (Gambetta, 1988). Williamson (1993) points out that, both in personal and commercial relations, trust is often based on a calculated risk. The person trusting is convinced that trusting is a rational behaviour because the risk associated with the bestowed trust that is not fulfilled is justified by the potential gains if the trust is maintained. One of the factors related to trust can be the risk of undertaking undesirable actions based on the acquired knowledge about the company. Some entrepreneurs may show distrust related to the quality of advice (Scott & Irwin, 2009, North et al., 2011), which carries the risk of no effect and the loss of resources involved (at this time).

Additionally, there are various concerns related to the inherent personal interaction between the owner-manager and the external advisor as well as the task interaction (Ramsden

& Bennett, 2005; Dyer and Ross, 2007) suggest the existence of possible power imbalances and disparate 'world views' between advisors and business owners. Some owner-managers simply may feel unsure of their ability to deal with 'smart and sophisticated consultants' as equal process partners. Some researchers claim that because small firm's owners tend to value their independence greatly, the acceptance of advice may be recognised as a symbol of dependence or even of failure (Curran, Jarvis, Blackburn & Black, 1993). To search for assistance, the owner-entrepreneur must see the need for advice, i.e. must be convinced of his or her own knowledge gaps and admit their existence (Chrisman et al., 2005).

Tacit Knowledge

Chrisman et al. (2005) indicate that the transfer of tacit knowledge is particularly recommended in the context of new companies. Tacit knowledge may increase the quality and value of the knowledge gained from advisors. Since the tacit elements of that knowledge are unique to the individual and the venture, those elements are likely to be rare, difficult to imitate, and only substitutable with other knowledge of similar quality (Barney, 1991; Labas, Courvisanos & Henson, 2015). Since tacit knowledge is not transferable separately from its context, it creates important constraints related to its transferability to other parties (Chaston 2010; Thorpe, Holt, Macpherson & Pittaway, 2005). With regard to business advice, we can assume that the transfer must be linked directly to the purpose of advice itself. Therefore, tacit knowledge related to a start-up company should be transferred with relation to the particular company, not as general information.

The limited ability to codify tacit knowledge makes its transfer an even more complex issue. The possible way to transfer tacit knowledge is to use a direct interaction of two or more entities. This is usually a time-consuming process and requires high involvement of both parties.

Business Advisors' Roles in the Development Process of Small Innovative Firms

The conducted analysis reveals that the delivery of business advice for small innovative firms has many different forms and dimensions and its impact is dependent on many different factors, which are approached and described separately in consecutive studies. Despite the fact that many authors touch directly on the problems faced by innovative entrepreneurs, it is necessary to include the attitude to externally sourced knowledge of pro-active and self-confident firm owners as well as difficulties in specification of problems to work on for which the external advice is needed. The currently available models propose limited understanding of the nature of business advice for small innovative firms. As a consequence, the picture of business advice for small innovative firms remains blurred and its impact on firms' competitiveness is difficult to measure. Thus the process analysis reveals a different perspective on business advice, which seems to be providing a valuable insight into the phenomenon.

The understanding of current research on business advice leads to the separation of two distinctive roles of business advisors providing their services for small innovative firms: (1) the role of expert, and (2) the role of process participant. The typically defined role of expert is to be perceived as a source of external knowledge resources which should be temporarily supplemented, as they are not needed on a regular basis in day-to-day operations, but are necessary to proceed with particular actions and at the same time incorporation of those resources into the firm's structures would be cost-ineffective. In contrast, the role of process participant is related to the transfer and creation of

knowledge which is required to move forward (survive or develop) in particular circumstances; this type of knowledge is thus more intangible and in order to apply it in the firm's processes, it must be combined with knowledge embedded within the firm.

When looking at those two roles from the process perspective, two distinctive behaviours with respect to business advice are to be defined, which are called respectively (1) the use and (2) the utilisation of business advice (Głoddek & Łobacz, 2015). The first one, the use of business advice, refers to the activity of an individual or a team of individuals who know frontier knowledge and best practices, and who transfer this knowledge to firms in a professional way (Christensen & Klyver, 2006). In this case, the specific portion of knowledge is delivered to the firm and the advisor is assumed to have the capability to decide what type of knowledge is in those specific circumstances required, and also how it should be implemented. The firm receives the knowledge and it may decide whether to make use of it and to what extent it will be actively engaged in its implementation. The relation may be thus described as a one-way knowledge flow. In this scenario, the outcomes of the advisory process are to some extent predictable and depend highly on the quality of knowledge which is transferred, on the one hand, and the level of involvement in the implementation of advised solution, on the other hand.

In contrast, the utilisation of business advice presumes a long term relation within the process, which involves a multidimensional combination of knowledge sourced from the background and experiences of the advisor or a team of advisors and the firm's owners. The advisor, from this perspective, is seen as a participant of the new solution development process. She/he is thus a participant of the creation process, who listens, observes, and identifies problems, but also their context (entrepreneurial, organisational, market, etc.), and then she/he actively takes part in the recurrent process of new ideas generation, selection and adjusting them to the context of a particular firm. An outcome of the process is new knowledge combined from internal (mostly the owner-manager) and external sources (the business advisor). Outcomes of this process are often unpredictable in terms of scope and time horizon, but often also spectacular and with a strategic meaning.

RESEARCH METHODOLOGY

The aim of this paper is to expand the understanding of the influence of trust relationship as well as tacit knowledge on the process of business advice utilisation in small innovative firms. In order to achieve the set objective, two research hypotheses were formulated:

H1: The creation of the trust relationship between the owner/manager and the business advisor before the onset of the advisory process determines the occurrence of business advice utilisation.

H2: Business advice utilisation results in the creation of new tacit knowledge.

The nature of the objective and the hypotheses formulated had an impact on the applied research methodology. The analysis is based on empirical research conducted with the use of the explorative approach. The multiple case study methodology was used (Yin, 1989), as this method has been recognised as a valuable approach to the study of small businesses (Chetty, 1996) because it offers a useful framework for analysing the real context, in particular, when the phenomenon is influenced by a number of factors determining each activity (Yin, 1989) and its nature is not very clear.

The process of empirical data collection took place using the individual in-depth interview technique. The instructions for the in-depth interview shaped the measurement tool. The formula of narrative interview was adopted, hence communication techniques were used in order to focus the discussions on the issues related to the subject of the research, at the same time assuming the greatest possible freedom of expression of the interlocutor. This enabled the creation of optimal, natural and reproducible conditions to conduct a conversation, which is particularly important in terms of ensuring the accuracy and reliability of measurement.

The in-depth interviews were conducted personally by members of the research team with owners of small innovative firms. They were asked about the development context of the firm from the beginning of its foundation, and all aspects related to broadly defined advisors within the process. The interviews were recorded on digital media, which enabled their repeat use at the stage of data analysis. On the basis of each interview, a case study protocol was also prepared. The study was conducted in the years 2014-2015 on a group of forty small innovative companies located in three different regions of Europe. The provision of business advice to the firm, within the last three years before the interview, was one of the key case selection criteria. All the case studies were focused around the understanding of the participation of different types of business advisors in the process of small innovative firms' development. It was especially concentrated on the interaction between the entrepreneur and the advisor while operating on a daily basis and implementing changes and the outcome of the process. Within the analysis, the rationale for searching for external advice, as well as the advisor's motivation to participate in the process were specially considered. In the framework of the study, four cases of advice utilisation which are described and analysed in the paper were identified.

CASE STUDIES ANALYSIS

Case Study 1

The case concerns a small firm offering cloud-based management tools targeted at small and medium-sized enterprises. The firm was founded by three entrepreneurs with the support of public-private seed capital fund. The entrepreneurs have a technical background and approximately ten years' work experience in large companies, in the IT development and team management positions. The firm was established based on the implementation to the market of the innovative product in the form of software supporting administration of large companies. Although the product was technically well prepared for the market launch, the firm encountered a significant problem with the conversion of free beta users to clients willing to pay for the final product.

The idea of strategic change and conversion of primary logic was a result of advice which originated from the board of supervisors. The formation of the board of supervisors was one of the requirements stated in the investment agreement with the seed fund. The original composition of the board was the result of negotiations with the investor. Due to the nature of activities of public-private fund, some members of the board were employees of the investor - the regional development agency. The level of business knowledge of its members was, however, not very highly rated by the entrepreneurs. For reasons independent from the firm and investment fund representatives, the regional development agency after a few months decided to withdraw its representatives from the board.

As a result, the entrepreneurs could propose to replace them with persons that they chose (“We looked for them intensively and established a range of different contacts. In Poland there are very few cloud start-ups which have succeeded”). Those who were eventually accepted to the board had been selected according to the criteria of business experience, and industry-specific experience had been especially valued (“At the moment, we have constructed the board of supervisors with the presence of great mentors who are experienced in cloud-based applications. (...) gradually we exchanged them [the members of the board of directors] for people who have experience in sales, in the development of start-ups and the board have become very, very valuable”).

After the change of the board of supervisors (approx. 12 months after the foundation of the firm), the intense interaction between its members and the entrepreneurs started. The right questions began to be asked. Those questions initiated the debate on the nature of the business problems of the firm (the board of supervisors helped not to get distracted by issues that were not critical to the firm’s core business).

In the beginning, the entrepreneurs were advised to focus more strictly on ‘problems of tomorrow’, and at the same time some urgent issues requiring intervention were neglected. Those were related, in particular, to marketing problems, especially advertisement and distribution channels (“At that time (...) we had a lot of ideas, for example: let’s find a company in the neighbouring countries which will help us distribute our product, or we may find people to affiliate marketing (...) and maybe let’s go to a few conferences”. But “...we received [from the board of directors] a strong message that we needed first to learn to sell our product directly from the website. If it proves that the product is saleable, then it will be worth trying to start sequentially building the network of sales channels. Before doing this, it must be checked whether the product has to be tailored to the specific audience”). When the entrepreneurs adopted this approach, they realised that the firm could not follow the current strategy and stick to selling the product they had developed.

At meetings with the board of supervisors, actions that should be taken were gradually identified. First of all, the board members motivated the entrepreneurs to contact their customers directly, not through the virtual media but in person. This allowed them to learn how current customers use their product, and revealed that to a large extent the product was used for different purposes than it was designed because the customers valued mostly one additional feature of the product instead of its core function. The lessons learnt were analysed during the board of supervisors’ meetings, and additionally the members of the board decided to test the product themselves (“...it also made it clear to us that we [the product] are not for everyone”). As the members of the board familiarised themselves with the product, they participated in the process of new product design, by giving suggestions for desired functionalities, but also by stressing the importance of end users’ perspective (“... He [one of the board members] told us: if we make a product for marketing personnel, we cannot listen to engineers and IT people. They are able to generate thousands of ideas of new features that are not really needed. He said: Listen to everybody, not just programmers, if you do not make a product for managing software development”). That was a lesson crucially important to us and the future of the firm.

The summary of factors related to the trust relationship and tacit knowledge creation in Case Study 1 is presented in Table 1.

Table 1. Summary of advice process: Case Study 1

Trust relationship	Case 1
Initial phase (prior to the phase of advice)	<p>Contacts were initiated during networking meetings. The entrepreneurs looked for people with sectoral expertise. It was not a process of looking for new employees, but rather a process of acquiring new sector-specific knowledge.</p> <p>The trust relationship was initiated during a range of meetings with each expert. It was a base for making the choice regarding experts. The length of the phase – 6-12 months.</p>
Advisory phase	<p>Consolidation of trust was achieved through (i) demonstrating professional competences – esp. indicating the problems crucially important for the business and thus preventing the entrepreneurs from spending too much time on secondary issues; (ii) demonstrating commitment to the business through, e.g. personal involvement in the process of product testing.</p> <p>The advisor's remuneration was not fixed in the process, it was based on the final success of the project. The remuneration model changed during the process of advice, with the investment decision of the advisory firm.</p>
Tacit knowledge involvement – advisors' side	Case 1
Knowledge based on previously existing experience	<p>Extended sector-specific knowledge, as well as business development knowledge. It was described by the entrepreneurs as asking typical questions related to the business and product development (including service design), but at the right moment of the advisory stage.</p>
Newly developed knowledge	<p>New tacit knowledge is developed through personal involvement of the advisors in the process of product redesign, followed by strategic change. They were involved in the product testing process, followed by a joint analysis of customer feedback during the meetings of the supervisory body.</p>

Source: own study.

Case Study 2

Case no. 2 concerns the advice provided for an entrepreneur who owns a group of four IT microenterprises. All the companies were engaged in various IT operations, ranging from implementing complex IT systems provided by a large market player to developing individual IT systems customised to particular requirements. The entrepreneur separated businesses into different companies because this approach was necessary to build different corporate images in different markets. The owner can be described as a serial entrepreneur who started with the first of the current businesses seven years before the analysis. The entrepreneur had earlier experience in business – he had founded and run two service providing firms which had been liquidated (“I simply failed to manage those businesses.”). The crisis which prompted the need for advice was closely linked to the person of the entrepreneur.

Prior to obtaining the advice, the entrepreneur, who had founded all the firms, was heavily involved in management activities. He described the strategy as keeping personnel costs as low as possible (“In the course of the year I hired the first employees - cheap and inexperienced”). However, as the scale of business grew along with the companies' development, some management obstacles as well as profitability issues appeared (“I

realised that most of my working time I fought with my employees, and at the end of the day I had no reward"). Seven years after the foundation of the first firm, the entrepreneur decided to temporarily give up operational management. For approx. 8 months he was looking for a solution for himself. He took an MBA course, participated in various educational and networking events on management philosophy and management strategies. Those experiences caused changes in his perception of the management aspect ("I realised that only if you can measure something, you can manage it").

One of the main benefits from participating in the MBA course was meeting new people, including those with considerable experience in business and in business advice. They changed his view on doing business. ("When I started doing business, I thought that there were very expensive guys (advisors) providing some advice, but when I met them personally and listened to them, I realised that their work could be very useful"). The entrepreneur built a trust-based relationship with the people he met, and they started acting as his informal advisors, providing their services during the discussions at the MBA course. After that period of very effective discussions, the entrepreneur took a decision to start the formal process of advice. The process began with the determination of general business objectives to be achieved. It allowed an initial indication of the scope of work. The entrepreneur pointed out his vision for the firm, especially as it concerned his role as the job supervisor, not the person solving operational problems. The key issue was also the management strategy, and especially the enforcement of capacity efficiency without direct supervision of the business owner.

The advisory process lasted six months. It was provided by a team of 3 to 4 people. In terms of the business content, it began with audits of all the companies in the group. The advisors focused particularly on human resource management, building objectives and their measurement, as well as marketing and finance issues. They worked full time in other firms (at different management levels of large and medium-sized companies) located in other cities, hence they worked as the firm's advisors mostly at weekends. The results of the analyses conducted by the advisors were broadly discussed and used as vehicles to look for a solution. The entrepreneur participated in most of the meetings, acting as a principal, but also as a team member with the most extended knowledge about his firms, their operations and markets. The advisors were employed on a part-time employment contract, which regulated payment for advice services, but did much more work based on the personal relationship. As a result, the advisors helped to develop the management system of individual teams, in particular the principles of defining targets, monitoring and controlling with the support of financial indicators. The implementation of the new management system resulted in an increase of turnover (twice) and of profitability (five times) in all the four firms. The entrepreneur also founded another company exploring a new market.

The summary of factors related to the trust relationship and tacit knowledge creation in Case Study 2 is presented in Table 2.

Table 2. Summary of advice process: Case Study 2

Trust relationship	Case 2
Initial phase (prior to the phase of advice)	Contacts were initiated during the MBA course attended by the entrepreneur and his future advisors. They had several informal discussions about doing business and, specifically, small company management issues. All this happened during long meetings – approx. 4/5 hours each. The length of the phase – approx. 6 months.
Advisory phase	The trust related to confidence in professional skills of the advisors was built during the initial phase. Building on that, the entrepreneur agreed that the design of the advisory process was subordinated to the advisors' time constraints (all the advisors worked full time in corporations). The adjustments were related to the timing (weekends), the process length (6 months), as well as the manner in which advice was provided (time consuming - frequent meetings and discussions with the presence of the entrepreneur). The advisors' remuneration was not fixed in a detailed way, it was based on the final success of the project. The remuneration model changed during the process of advice, along with the investment decision of the advisory firm.
Tacit knowledge involvement – advisors' side	Case 2
Knowledge based on previously existing experience	Company (large and medium-sized companies) based experience, mainly in human resource management, marketing, and finance management.
Newly developed knowledge	New tacit knowledge was developed during the six months of interacting between the entrepreneur and the team of 3 persons (for limited time 4 persons), with intensity of once every one/two weeks. As described during the interview – the meetings were crucial to building the common understanding as well as to developing the direction for advisory work.

Source: own study.

Case Study 3

Case no. 3 concerns the development of an initial concept and the start-up phase of a small firm providing telemedicine services. The first version of the project itself was created approx. 5 years before establishing the firm. The idea came from a group of 20 doctoral students and master students. They began to look for an investor, however, at that time the project was assessed as imperfect in terms of business feasibility. As a result, the project was abandoned for four years. Finally, the challenge was retaken by an entrepreneur who is also a scientist specialising in biotechnology. To start with the services, it was necessary to develop new solutions in the fields of electronics, IT and data transmission management. In the very beginning, the entrepreneur faced problems which could not be solved without external support. Those were related to the launching into the market of the first product and the construction of the business model for the newly established firm.

The advice was provided at the seed stage of the firm's development. The team of advisors consisted of experts working for a small consulting company which supported the project team at the seed stage of the project. Their aim was to prepare the project for

venture capital investments. The initial role of the consulting company was to provide advice, however, gradually, step by step, the advisors increased their engagement in the project. Finally, when the public-private vc fund at the last stage of pre-investment process decided not to invest in the project (the reason was not related to the project, but was connected with serious internal financial problems of the fund), the consulting company decided to invest the first round of capital investment.

Table 3. Summary of advice process: Case Study 3

Trust relationship	Case 3
Initial phase (prior to the phase of advice)	Contacts were initiated when the entrepreneur was looking for external support in the preparation of the business plan for a possible venture capital investor. The trust relationship was initiated by: (1) providing strategically important knowledge at the very first meeting, (2) demonstrating a high commercial potential of the project, as well as high motivation of the entrepreneur.
Advisory phase	Consolidation of trust was through demonstrating professional competencies of both sides, openness in discussing current problems and demonstrating the determination to work to achieve common goals. The trust relations were established between the entrepreneur and the head of the advisory group - based on this, some new advisors were introduced for short-term activities.
Tacit knowledge involvement – advisors' side	Case 3
Knowledge based on previously existing experience	Knowledge in the field of marketing, business models, and legal issues.
Newly developed knowledge	New tacit knowledge was developed during a series of meetings. The process of consultancy consisted of weekly face to face meetings. New knowledge was related, among others, to the service design adjusted to a very specific market segment. A number of changes in the business model of the developing company were one of the consequences of the new knowledge

Source: own study.

When the process of advice provision started, a direct person was delegated from the consulting company to work with the entrepreneur on the development of the project. They met regularly on a weekly basis. The support was focused around the customer profile, as well as the marketing and business model. The additional area of support was related to legal issues concerning the project. The entrepreneur stressed the importance of acquiring specific business knowledge. ("We learnt a lot and it was a really terribly active year in this respect", "We are more science-oriented", "They pay attention to digits, even those after the decimal, which for us were not significant...", "...we pay attention to other things, and thus complement each other in this work"). The entrepreneur highlights that the technical side of the project is completely based on the knowledge developed by the firm and its subcontractors, but the marketing strategies and (partly) the business model are an outcome of many consultations and mutually developed ideas. The relation is based on the assumption that decisions are taken by the entrepreneur, but they are based on solutions developed through mutual discussions. The advisor-investor's reward for work was covered by the shares in the venture ("Their role is to support (us), we have a common

goal, we are in the same team and it would not make any sense if the investor received funds from us"). For this firm, the advisor is a source of business knowledge that the initial founders did not have. The success of the firm is a result of strict cooperation between those who have technological knowledge with parties who add business expertise to the process of product development and marketing. Without this cooperation, this firm's success would be questionable.

The summary of factors related to the trust relationship and tacit knowledge creation in Case Study 3 is presented in Table 3.

Case Study 4

The case study concerns consultancy delivered to a company providing para-medical as well as analytical services in the veterinary field. The cooperation between the entrepreneur (research based experience, with limited business practice) and the advisors originated when the entrepreneur was looking for assistance in the preparation of the application for a public investment grant. At that time he was willing to receive public funding for the implementation of his invention (in the veterinary field) in a future start-up company. During the meetings with the advisors, he discovered that his case was not appropriate for the grant. However, because of a high business potential of the technologies which the entrepreneur possessed in the form of know-how, the advisors indicated a possibility to use venture capital investment during the start-up phase.

The main advisory process was related to building a complete business model for the new company with all strategic and formal elements. It was provided before formalising the firm's foundation by a group of persons cooperating with a public-private seed capital investor. The persons providing advice were partners in a consulting company focused on supporting the development of new innovative ventures. The process of advice in its basic phase lasted approx. 6 months. It included support for the process of building the strategic concept of the project.

In discussing the design of the venture project, the entrepreneur was encouraged and supported to gain a broader perspective on the project and the company. The advisory process was conducted by a team consisting of persons representing the consulting company (2-3 persons at the session) and the representative of the seed fund. The sessions during which the owner-entrepreneur, along with a team of advisors, discussed the development potential of the new firm, as well as the mutual relation of services and capabilities to achieve synergy, constituted an important component of the process. The result of the advisory process was a significant redesign of the scope of the planned portfolio of services provided by the company. They were designed in such a way as to start a business with a focus on non-innovative services, widespread within the target group, and then develop gradually to be ready to implement services which were to be highly innovative and thus highly profitable.

The meetings of the owner-entrepreneur with the advisors were long and complex. In this framework, business concepts were developed and therefore it was difficult to determine the authorship of individual ideas. ("It's hard to determine who the author of a particular idea is. We were sitting in this room, a few people. He asked: what else is on the market, what could be done? Someone thought: the German market is service-oriented (...) and the question [was addressed to the originator]: Can you do it? [answer:] Of course,

no problem”). A high level of interaction between the owner-entrepreneur and the advisors was underlined. Ideas were put forward by both sides, commented on, and then became the basis for the next ideas. It can be argued that to some extent the entrepreneur agreed to a certain restriction of independence. Nevertheless, in the course of the entire advisory process and after the founding of the company, he kept a dominant power. The end result was a thorough reconstruction of the new company's business model (“The result of our work was a complete change in the design, from an initial concept of a kind of ‘local veterinary super-clinic’ to the idea of “a laboratory with a national scope”). The advice was provided without any upfront payment. The remuneration of the advisors was in the form of a minority stake in the company. According to the respondent, the entrepreneur was unable to pay for such extensive advice with his own money.

Table 4. Summary of advice process: Case Study 4

Trust relationship	Case 4
Initial phase (prior to the phase of advice)	The trust relationship was initiated during 3-4 meetings, initiated by the entrepreneur who at that time was looking for assistance in the preparation of formal part of an application form for a public investment grant.
Advisory phase	Consolidation of trust was through demonstrating openness during an intensive knowledge exchange process as well as demonstrating professional competencies of the advisors. Both sides of the process showed flexibility in terms of adjustment of the initial assumptions and ideas. Trust was essential to the business concept development process, which was built upon a number of joint meetings (including brainstorming sessions) with an open information exchange.
Tacit knowledge involvement – advisors' side	Case 4
Knowledge based on previously existing experience	Knowledge in the field of marketing, business models, and legal issues. Experience related to the development of new venture strategies.
Newly developed knowledge	The complete business model as well as the product-market portfolio were developed thorough the process of group work. The result of the process was fundamentally different from the initial idea of the entrepreneur.

Source: own study.

The summary of factors related to the trust relationship and tacit knowledge creation in Case Study 4 is presented in Table 4.

FINDINGS

The cases of the provision of intense and prolonged advice for innovative small businesses were analysed. Particular attention was paid to the two intangible factors, i.e. the trust relationship as well as tacit knowledge. Both of them were identified as factors essential to the process of utilisation of business advice.

The trust relationship was identified at every step of the advice process. However, the initial phase of the advice process seems to be of key significance. It encompasses

initial contacts between company owners and advisors. It is the process of a personal nature involving a number of face to face meetings. The belief in the capacity of the advisor to solve the problem is a key to establish the cooperation. It should be noted that no form of formal verification of knowledge has been applied. The entrepreneurs do not have the appropriate instruments and knowledge. None of the cases include activities that could be called "trial order" and that would constitute a kind of test before entering into the advisory contract.

The establishment of the trust relationship appeared to be necessary to go through the process of the advice utilisation. It allows the interaction between the entrepreneur and the advisor at the high level of intensity, which involves among others: (i) openness in knowledge sharing, (ii) openness in generating new ideas, (iii) elasticity related to implementing new ideas to existing solutions. Since advice is related to the basic foundations of companies (new or existing), it is necessary to reveal all or almost all the details of the firm's operations – which is consistent with H1.

In none of the identified cases of advice utilisation, a detailed formal contract was signed. A trust-based and long-term relationship assuming mutual benefits if the firm succeeds can be observed instead. Informal cooperation, which becomes formal when the results of the implemented change become more visible, is typical. Although formal contracts are sometimes signed, they are very general and a reward for the advisor's work is rarely defined at the beginning of the process. Nevertheless, the advisor is interested in working harder than agreed, which has its etiology in a deep, personal relation or a business relationship, and this is even more visible when the entrepreneur's determination to implement changes and agreed solutions is observed. The advisor must be also ready to share knowledge and resources when the reward is not assured, and thus he/she must perceive other sources of reward instead of direct benefits from the advice. The entrepreneur, on the other side, must be, first of all, ready for change, but also open enough to admit his or her own knowledge gaps and problems faced. Self-awareness and honesty constitute the key for success here.

The knowledge which is built as an outcome of the advice utilisation is strictly related to a specific case of the given company. Every solution is single-use, unique in its application, and takes into account a range of unique factors, including the personality of the entrepreneur and his/her personal and managerial features. Thus, an important part of the advisory process involves tacit knowledge – either at the stage of advisory process or as its outcome – which is consistent with H2.

The process of new knowledge creation is complex and requires the advisor's involvement not only at the problem solving stage but also at the stage of the problem formulation. Entrepreneurs are not able to precisely specify encountered problems. Additionally, these problems are of dynamic nature, i.e. they change in time as subsequent decisions are made and actions are taken. This is due to the fact that they appear in the strategic change context and relate to both the management of crisis and the transformation of the firm. They occur when the entrepreneur wants to change the firm significantly or wants to explore new opportunities, but his/her ability to do that is limited in terms of knowledge and experience.

In order to solve thus defined problems, the interaction between the entrepreneur (or a team of entrepreneurs) and the business advisor (or a team of advisors) is needed. Thus the transfer of knowledge does not look like a typical one-way flow but is multidimensional

and the process of advice is to be perceived as a complex process of constructing new, customised solutions involving the process of adapting them to the specific firm's context. From this point of view, the business advice is the process of constructing new knowledge combined from internal and external sources. In this interaction, the knowledge and experiences of the entrepreneur and the advisor are necessary for the process to be effective. Different backgrounds and different histories of both actors are valued in this respect as they create the potential for more creative and thus spectacular ideas for problem solutions. Therefore, they build a base for the creation of knowledge which is highly specific, and because of high intensity of personal interaction does not necessarily need to be encoded. Thus, a substantial share of the process outcome has a form of tacit knowledge.

CONCLUSIONS

The analysis conducted led to the description of the features of the process of business advice utilisation with particular respect to trust as well as tacit knowledge issues. Both elements are intangible in their nature and cannot be demonstrated and identified directly, therefore, the analysis involves a range of factors which indicate them indirectly. The adopted research method in the form of individual in-depth interview technique proved to be adequate to the highly complex phenomenon of the process of business advice for small innovative companies. However, a relatively small number of the analysed cases restricts to a certain extent the possibility of formulating broad generalisations.

Both analysed elements were identified in all the described cases as vital for the process. In the case of trust relationship, its role was indicated as a factor enabling the start of the process of advice. Thus, the importance of the initial phase should be highlighted. It involves a range of personal contacts, hence it is in line with a mixed perception of the process which involves professional as well as personal factors. Furthermore, the specific relation between the advisor and the entrepreneur (the individual relation) or a group of advisors and a group of entrepreneurs (the group relation) is very important for the process. The specification of such a relation was partly addressed in previous studies (Bennett & Robson, 2003), as well as by Kautonen, Zolin, Kuckertz and Viljamaa (2010). In particular, Chen, Sun, Helms and Jih (2008) indicate that the beginning of the relationship between the company and the advisor is initiated prior to commencing advisory activities. However, the rationale and options of such a relation must be further researched.

The trust relationship factor seems to be considered as one of factors that have a significant impact on the initialisation of the process of business advice utilisation in small innovative firms. It may also have implications related to public policies supporting business advice in SMEs. The presence of the initial phase of advice with all its consequences (e.g.: timing, nature of contacts, and the process of trust relationship building) influences the policy instruments which may be used in the process. It excludes the use of selection of advisory offer based on the price, which constrains the entrepreneur's choice to a limited number of (e.g.: certified) professionals. Furthermore, the solutions restricting the free extension or modification of advisory relationships with the same advisor are incompatible with the nature of the process. In practice, the indicated constraints refer to the use of solutions based on public procurement and rigid contracts.

Tacit knowledge was identified as an enabling factor as well as an outcome of the business advice utilisation process. When tacit knowledge is considered an enabling factor, it

may be seen as an element allowing the provision of effective assistance for the company in the process of advice utilisation. This may highlight the importance of the initial phase of advice. Initial contacts are partly related to the analysis of the advisor's professional as well as interpersonal competences. The analysed cases have shown that establishing confidence on the part of the entrepreneur is not related to formal factors, but rather to the entrepreneur's perception of the knowledge base presented by the advisor, and because of informal nature of the initial contacts, it is mainly tacit knowledge which may be evaluated.

Tacit knowledge considered as an outcome of the process provides implications to measurement of business advice in terms of its impact on business performance and thus competitiveness. The distinction between the use and the utilisation offers a new framework in which variables common for all the cases are consistent and known. It also opens paths for a further process analysis, and thus the measurement of a short and long term impact, or even for distinguishing between the impact and the influence considering different time perspectives as specified by Łobacz and Głodek (2015). We may assume that an equally important effect of the advice is enlargement of the knowledge base of the small firm, which may be applicable to subsequent growth phases of the enterprise.

The presence of new tacit knowledge perceived as an outcome of advice is associated with close, direct cooperation between the owner/manager and the business advisor. Labas et al. (2015) recognise advantages that interactive cooperation provides for knowledge creation. In broader view it suggests that the concept of business advice utilisation contributes to advance the understanding of business advice for small innovative firms in the long and short term process perspective. It provides an explanation of the new knowledge creation process, which is associated with strategic change and takes into account a significant role of the entrepreneur-advisor combination and their mutual relations.

The analysis also raises some new questions which need to be answered. For example, it is not very clear yet whether outcomes of both the use and the utilisation of business advice differ considerably or which factors determine significantly the value of the final outcomes. However, what is already known provides clear guidelines how to approach these issues.

REFERENCES

- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Bennett, R.J. (2007). Expectations-based evaluation of SME advice and consultancy: an example of business link services. *Journal of Small Business and Enterprise Development*, 14 (3), 435-457.
- Bennett, R., & Robson, P. (1999). The Use of External Business Advice by SMEs in Britain. *Entrepreneurship and Regional Development*, 11(2), 155-180.
- Bennett, R., & Robson, P. (2003). Business link: use, satisfaction and influence of local governance regime. *Policy Studies*, 24(4), 163-186.
- Blackburn, R., & Jarvis, R. (2010). *The role of small and medium practices in providing business support to small- and medium-sized enterprises*. (Project Report) New York, USA, International Federation of Accountants.
- Cagliano, R., Blackmon, K., & Voss, Ch. (2001). Small firms under MICROSCOPE: international differences in production/operations management practices and performance. *Integrated Manufacturing Systems*, 12(7), 469 – 482.

- Caloghirou, Y., Kastelli, I., & Tsakanikas, A. (2004). Internal capabilities and external knowledge sources: complements or substitutes for innovative performance? *Technovation*, 24(1), 29-39.
- Chaston, I. (2010). *Entrepreneurial management small firms*, London: Sage.
- Chen, R.-S., Sun, Ch.-M., Helms, M.M., & Jih, W.-J. (2008). *Role Negotiation and Interaction: An Exploratory Case Study of the Impact of Management Consultants on ERP System Implementation in SMEs in Taiwan*. *Information Systems Management*, 25(2), 159-173.
- Chetty, S. (1996) The Case Study Method for Research in Small and Medium-Sized Firms. *International Small Business Journal*, 15(1), 73-85.
- Chrisman, J.J., McMullan, E., & Hall, J. (2005). The Influence of Guided Preparation on the Long - Term Performance of New Ventures. *Journal of Business Venturing*, 20(6), 769-791.
- Christensen, P.R., & Klyver, K. (2006). Management consultancy in small firms: how does interaction work? *Journal of Small Business and Enterprise Development*. 13(3), 299-313.
- Churchill, N.C., & Lewis, V.L., (1983). The Five Stages of Small Business Growth. *Harvard Business Review*, 1983, 63(3), 30-50.
- Curran, J., Jarvis, R., Blackburn, R., & Black, S. (1993). Networks and small firms: constructs, methodological strategies and some findings. *International Small Business Journal*, 11(2), 3-25.
- Dalley, J., & Hamilton, B. (2000). Knowledge, Context and Learning in the Small Business. *International Small Business Journal*, 18(3), 51-59.
- Dexter, A., & Behan, G. (1999). Small Business Consumers: The Emotional Economic Unit. *Journal of the Market Research Society*, 41(2), 171-194.
- Dyer, L.M., & Ross, C.A. (2007). Advising the small business client. *International Small Business Journal*, 25(2), 130-151.
- Gagliardi, D., Muller, P., Glossop, P., Caliendo, C., Fritsch, M., Brtkova, G., Bohn, N. U., Klitou, D., Avigdor, G., Marzocchi, C., & Ramlogan, R. (2013). *A recovery on the horizon? Annual report on European SMEs 2012/2013*, report http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2013/annual-report-smes-2013_en.pdf.
- Gambetta, D. (1988). Can We Trust Trust? In D. Gambetta (Ed.) *Trust. Making and Breaking Cooperative Relations*, Oxford: Blackwell.
- Garnsey, E. (1996). *A New Theory of the Growth of the Firm*, Proceedings of the 41st ICSB World Conference 1996, Stockholm.
- Gibb, A. (2000). SME Policy, Academic Research and the Growth of Ignorance, Mythical Concepts, Myths, Assumptions. Rituals and Confusions, *International Small Business Journal*, 18(3), 13-34.
- Głodek, P., & Łobacz, K. (2015). *Use and utilisation of business advice*, paper presented at University-Industry Interaction Conference 24-26 of June, Berlin, Germany.
- Hinton, M., & Hamilton, R.T. (2013). Characterizing high-growth firms in New Zealand. *International Journal of Entrepreneurship and Innovation*, 14, 39-48.
- Hurmerinta-Peltomäki, L., & Nummela, N. (2004). From temporary support to systematic resource development: expert services from an SME perspective. *Journal of Small Business and Enterprise Development*, 11(2), 233-243.
- IDC (2007). *Study on Innovative ICT SMEs in Europe*, DC EMEA, October.
- Johnson, S., Webber, D.J., & Thomas, W. (2007). Which SMEs use External Business Advice? A Multivariate Subregional Study. *Environment and Planning*, 39(8), 1981-1997.

- Kang, K.H., & Kang, J. (2009). How do firms source external knowledge for innovation? Analysing effects of different knowledge sourcing methods. *International Journal of Innovation Management*, 13(1), 1-17.
- Kautonen, T., Zolin, R., Kuckertz, A., & Viljamaa, A. (2010). Ties that blind? How strong ties affect small business owner-managers' perceived trustworthiness of their advisors. *Entrepreneurship and Regional Development*, 22(2), 189-209.
- Labas, A., Courvisanos, J., & Henson, S. (2015). *Business advisor knowledge and knowledge transference: a conceptual framework*, Small Enterprise Association of Australia and New Zeland, 28th Annual SEAAANZ Conference Proceedings, 1-3.07.2015, Melbourne.
- Łobacz, K. (2012). *Koncepcja oceny procesu komercjalizacji przedsięwzięć gospodarczych w akademickich inkubatorach przedsiębiorczości*, doctoral dissertation, University of Szczecin, Szczecin.
- Łobacz, K., & Głodek, P. (2015). Development of Competitive Advantage of Small Innovative Firm – How to Model Business Advice Influence within the Process? *Procedia Economics and Finance*, 23, 487 – 494.
- Matlay, H. (1999). Employee relations in small firms: A micro-business perspective. *Employee Relations*, 21(3), 285 – 295.
- Mazzarol, T. (2011). *Entrepreneurship and innovation. Readings and cases*, second ed., Tilde University Press.
- Mazzarol, T., & Reboud, S. (2009). Strategic innovation in small firms: an introduction, In T. Mazzarol, S. Reboud (eds.) *Strategic innovation in small firms. An international analysis of innovation and strategic decision making in small and medium sized enterprises* (pp. 1-36). Cheltenham–Northampton: Edward Elgar.
- Mole, K.F., Baldock, R., & North, D. (2013). Who Takes Advice? Firm Size Threshold, Competence, Concerns and Informality in a Contingency Approach, *ERC Research Paper*, 9, September.
- North, D., Baldock, R., Mole, K., Wiseman, J., & Binnie, C. (2011). *Research to Understand the Barriers to Take up and Use of Business Support*. London: For the Department for Business Innovation and Skills.
- OECD (2004). *Effective policies for small business*, OECD report.
- Ramsden, M., & Bennett, R.J. (2005). The benefits of external support to SMEs: “Hard” versus “soft” outcomes and satisfaction levels. *Journal of Small Business and Enterprise Development*, 12(2), 227 – 243.
- Robson, P.J.A., Jack, S. L., & Freel, M.S. (2008). Gender and the use of business advice: evidence from firms in the Scottish service sector. *Environment and Planning C: Government and Policy* 26(2), 292–314.
- Scott, J.M., & Irwin, D. (2009). Discouraged advisees? The influence of gender, ethnicity, and education in the use of advice and finance by UK SMEs. *Environment and Planning C-Government and Policy*, 27(2), 230-245.
- Soriano, D.R., & Castrogiovanni, G.J. (2012). The impact of education, experience and inner circle advisors on SME performance: insights from a study of public development centers. *Small Business Economics*, 38, 333–349.
- Stawasz, E. (2013). Factors shaping innovation capacity of SMEs. In Borowiecki R., Jaki A., Rojek T (eds.) *Contemporary economies in the face of new challenges. Economic, social, and legal aspects*.(pp. 367-379), Krakow, Foundation of the Cracow University of Economics.
- Stawasz, E., Głodek, P., Stos, D., & Wojtas, J. (2004). *Analiza potrzeb innowacyjnych przedsiębiorstw z sektora MSP w województwie łódzkim*, LORIS, Łódź.
- Storey, D. (1994). *Understanding Small Business Sector*, London, Routledge.

- Strike, V.M. (2012). Advising the Family Firm: Reviewing the Past to Build the Future. *Family Business Review*, 25(2), 156-177.
- Thorpe, R., Holt, R., Macpherson, A., & Pittaway, L. (2005). Using knowledge within small and medium-sized firms: A systematic review of the evidence. *International Journal of Management Reviews*, 7(4), 257-281.
- Walter, F., & Smallbone, D. (2006). Exploring the Role of Trust in Entrepreneurial Activity. *Entrepreneurship Theory and Practice*, 30(4), 465-475.
- Williamson, O. (1993). Calculativeness, trust, and economic organization. *Journal of Law and Economics*, 36(2), 453-486.
- Wren, C., & Storey, D. (2002). *Evaluating the effect of soft business support upon small firm performance*. Oxford Economic Papers, 54(2), 334-365.
- Yin, R.K. (1989). *Case study research: design and methods*, Sage Publications, London.
- Yusuf, J.-E. (2010). Meeting entrepreneurs' support needs: are assistance programs effective? *Journal of Small Business and Enterprise Development*, 17(2), 294 – 307.

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Analytical Hierarchy Process: An Optimal Methodology for Research in Entrepreneurship

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Abstract

This paper aims to propose the Analytical Hierarchy Process (AHP) as a mathematical tool for research in entrepreneurship through an example of its application in which the expected requirements of governmental policies to promote the creation of startups are identified. The study is structured on a model of AHP, in order to dispose quantitative and qualitative analytical foundations to determine the alternatives that best fit the criteria to achieve multiple objectives. The results show the priority of governmental policies that best promote the creation of startups, according to the directors of a set of Mexican University Business Incubators (UBIs). The research in entrepreneurship could be complemented with analytical tools that consider subjective judgments. The proposal of applying AHP models allowed obtaining refined assessments by selecting alternatives that accomplish the established criteria in order to reach an objective. This research provides evidence about the methodological advantage that represents the process of hierarchy of alternatives based on mathematical analysis. The results of the applied scenarios exhibit the AHP as a valuable resource to resolve problems that include relations between involved qualitative and quantitative variables in the entrepreneurial framework.

Keywords: AHP; Entrepreneurship; Government policies

JEL codes: L26, O38

INTRODUCTION

The complex environment of entrepreneurship and small business framework has been fortified with qualitative and quantitative researches which most of the times are identified in separated methodologies. Due to the importance of analysing both types of data, this paper aims to propose the Analytical Hierarchy Process (AHP) as a mathematical tool for the research in entrepreneurship through an example of its application in which the expected requirements of governmental policies to promote the creation of startups are identified.

The entrepreneurship environment involves decision-making process which most of the times must accomplish multiple objectives simultaneously (Somsuk & Laosirihongthong, 2014). Furthermore, the alternatives of solution that best fulfill the established criteria also tend to be multiple. It is therefore essential to formulate mathematical models with analytically hierarchy of the wide variety of feasible qualitative and quantitative combinations among the objectives to be achieved, through the established criteria and the best alternatives. This study is structured on an AHP model, in order to dispose quantitative and qualitative analytical foundations to determine, with mathematical formality, the alternatives that best fit the criteria to achieve multiple institutional or particular objectives.

The main contribution of this work is the proposal of the Analytical Hierarchy Process (AHP) as a tool for researching in entrepreneurship; in order to validate such proposal, we identify the criteria and alternatives that best promote the creation of startups on the basis of the main literature (Aernoudt, 2004); (Carayannis & Von Zedtwitz, 2005); (Autio, Kenney, Mustard, Siegel, & Wright, 2014); (Radosevic & Myrzakhmet, 2009). The developed model was applied to the directors of a set of Mexican University Business Incubators (UBIs), and it allows identifying their priorities through the AHP methodology (Saaty, 1977; Chang, 1996).

The paper is organized as follows: this introduction is considered as section one; in section two the literature review and details of the AHP methodology (according to Chang, 1996) are developed; section three includes the AHP schemas for qualitative analysis applied at UBIs which promote the creation of startups; finally the discussion and conclusions are presented.

LITERATURE REVIEW

The qualitative and quantitative analysis of the entrepreneurship environment favors business decision-making, which has been recently characterized by the increase in the use of systems which consider available resources in order to get optimal schemes. This could be modeled through formal representations, in order to clarify the relationships between needs, established objectives and available resources. The actors involved in such environment require parameters and indicators of performance, hence certain fields of mathematics can play a fundamental role as auxiliary tools for the establishment of priorities among the diversity of required elements for an optimal decision-making process.

The application of analytical systems for decision-making is widely used by companies and consortia, since it provides signals to anticipate solutions to problems

threatening their survival into the market. It can be said in general that most models include a combination of both normative and prospective aspects. Logical and symbolic representations between the elements of a decision-making system using semantic resources, describe the qualitative and quantitative relations in a comprehensive way. Therefore mathematical modeling as a resource for the understanding and communication, has received increasing attention within the management and business communities. In this work the AHP is considered as an optimal tool to enable the relations mentioned above as it is described below.

Analytical Hierarchical Process (AHP)

The Analytical Hierarchical Process (AHP) emerged at the beginning of the eighties as a methodological resource that allows combining qualitative and quantitative information. To build a decision, the AHP model is based on the definition of multiple criteria, as well as on the identification and weighting of alternatives that fulfill these criteria. Given its capacity to combine objectives, criteria and multiple alternatives, the theory of AHP is widely applicable for decision-making under uncertainty.

In the AHP model the subjective judgments based on the experience of the decision maker, are combined with the qualitative and quantitative information available. This combination as a result generates the determination of a consistent prioritisation for the existing alternatives (Saaty, 1977).

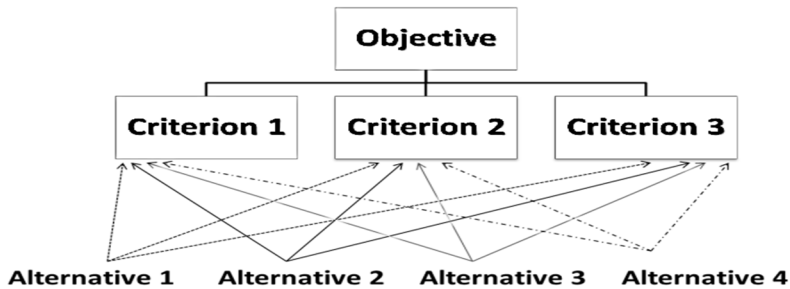


Figure 1. Schematic objective, criteria and multiple alternatives representation

Source: own elaboration.

As a methodological principle of AHP, the available information (qualitative and quantitative) is combined with value judgments based on the knowledge and expertise of the decision maker. This combination allows determining the relevance of each criterion in relative terms.

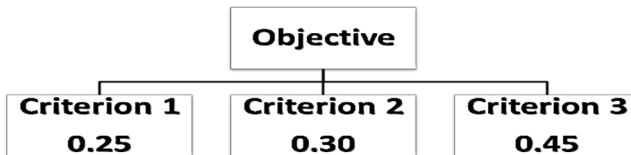


Figure 2. Example of relative criteria importance

Source: own elaboration.

The AHP methodology involves pairwise comparison between the existing alternatives, taking into account the degree of compliance that each alternative has with respect to each of the criterion. At this stage of the process, we have to consider the series of transverse and longitudinal data that might exist as well as all available qualitative information that could be exploited for the establishment of value judgments.

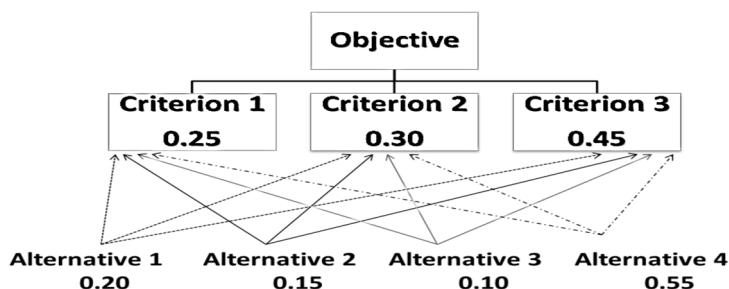


Figure 3. Scheme of multicriteria and multialternatives with quantified relevance

Source: own elaboration.

As a corollary of the process, through closed operations of matrix algebra, the Vector calculus corresponding to the ranking of alternatives takes place as a result of the integral combination of relevance relating to each one of the criteria.

Table 1. Matrix of criteria pairwise comparison

	Criterion 1	Criterion 2	Criterion 3
Criterion 1	1	1	0.3
Criterion 2	1	1	1
Criterion 3	3	1	1

Source: own elaboration.

The AHP calculates through matrix algebra, the corresponding vector of the given alternatives with the integral combination of relative importance associated with each criterion, obtaining the global priority for the achievement of the objectives, whose notation is:

- For each given objective $i = 1, 2, \dots, m$, we solve the W_i weights;
- For each objective i , we compare the $j = 1, 2, \dots, n$ alternatives and we solve the W_{ij} weights with respect to the objective i ;
- We solve the final W_j weight with respect to the objective, thus $W_j = w_{1j}w_1 + w_{2j}w_2 + \dots + w_{mj}w_m$.

The weights of the alternatives are sorted in descending order according to W_j , and the highest value indicates that this is the priority alternative to achieve the given objective and the one that best accomplishes the criteria.

The AHP has got increasing attention as a subject of research (both basic and applied), particularly during this century. This is due largely to the development of computer applications that allow carrying out operational processes of matrix algebra and vectors, permitting the simulation of scenarios, the combinatory analysis as well as the application of numerical sophisticated methods for sensitivity analysis.

AHP Methodology

The theoretical principles underlying the methodology of AHP were developed during the last decades of the 20th century. Basically, it is part of the branches of mathematics that are more related to vector analysis and matrix algebra.

The AHP models conforms matrices on the basis of value judgments, in order to obtain quantitative values of the criteria and alternatives in the model. The evaluators select the level of importance of each criterion with respect to another, as well as the relative importance of the alternatives with reference to each criterion according to the Saaty’s scale.

Table 2. Saaty’s scale

Intensity	Level of importance	Meaning
1	Equal	Two activities contribute in equal way to the objective
3	Moderate	The experience and the judgement slightly favor one activity over the other
5	Strong	The experience and the judgement strongly favor one activity over the other
7	Very strong	One activity is much more favored over the other
9	Extreme	The evidence of favoring one activity over the other is absolute and totally clear
2,4,6,8	Intermediate values	Adjacent values
Reciprocal	$a_{ij}=1/a_{ji}$	Hypothesis of the method

Source: own elaboration based on (Saaty, 1977).

As an example we have the selection of the level of importance of the criterion “Eligible budget” respect to the criterion “Operational” assuming that the evaluator gives a value of “5” to the criterion to the left with respect to its homologous:

Table 3. Example of comparison of criteria

Comparison of criteria																		
Criterion ↓ vs.	←————— —————→													Criterion ↓				
Eligible budget	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	Operational

Source: own elaboration.

The example shows that the criterion “Eligible budget” is *strongly* more important than the criterion “Operational”. Each group of pairwise comparisons represents a support matrix of the final prioritization.

Table 4. Matrix with numerical coefficients

	Eligible budget	Operational	Resilient
Eligible budget	1	5	4
Operational	0.20	1	2
Resilient	0.25	0.50	1

Source: own elaboration.

In order to represent the degree of importance that has a criterion of selection against others, the AHP methodology relies on the formation of a matrix of judgements. In table 4, the numerical coefficients are registered indicating which of the criteria is more important than the others.

In the above comparison process, whole numbers were used to indicate the importance of each criterion against others. The scales based on whole numbers determine strictly defined categories. However, the comparative judgements carried out by individuals are not usually strictly categorical. The presence of individual subjective perceptions, make necessary the consideration of a not strictly categorical metric of reference.

In figure 4, we compare a metric of strictly categorical reference with another that is not which we call fuzzy metric (Chang, 1996). It could be seen that in the first case, each category is limited by a whole number.

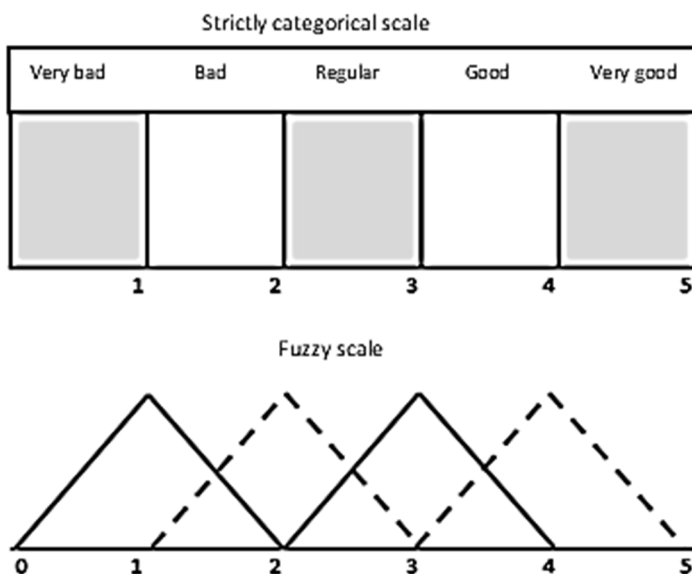


Figure 4. Categorical metric and fuzzy metric

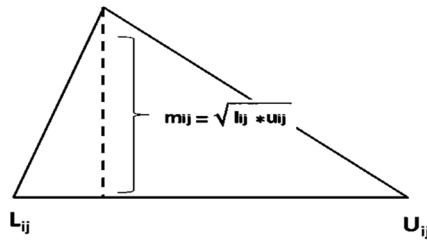
Source: own elaboration.

On the contrary, in the fuzzy scale there are overlaps. This allows that the belonging to a category is not strict, and even allows the possibility of belonging to two categories simultaneously. Triangles that are formed by joining the vertices are known as real triangular fuzzy numbers, and they are represented, such as (0, 1, 2) or (3, 4, 5).

In general terms \tilde{A} represents a matrix of judgments $n \times n$ which contains real numbers of the type of triangular fuzzy numbers a_{ij} for all $i, j \in \{1, 2, \dots, n\}$ as shown in the following matrix.

$$\tilde{A} = \begin{bmatrix} (1,1,1) & a_{12} & \dots & a_{1n} \\ a_{21} & (1,1,1) & \dots & a_{2n} \\ \dots & \dots & (1,1,1) & \dots \\ a_{n1} & a_{n2} & \dots & (1,1,1) \end{bmatrix}$$

here $a_{ij} = (l_{ij}, m_{ij}, u_{ij})$ with l_{ij} as lower value, u_{ij} is the superior limit and m_{ij} is the geometric average of l_{ij} and u_{ij} , it means:



Assuming that M_1 y M_2 are two triangular fuzzy numbers with $M_1=(l_1, m_1, u_1)$ y $M_2=(l_2, m_2, u_2)$. The basic calculus are:

$$M_1 + M_2 = (l_1 + l_2, m_1 + m_2, u_1 + u_2)$$

$$M_1 \times M_2 = (l_1 l_2, m_1 m_2, u_1 u_2)$$

$$M_1^{-1} = \left(\frac{1}{u_1}, \frac{1}{m_1}, \frac{1}{l_1} \right)$$

In order to determine the vector W of hierarchy, according to (Chang, 1996), the following steps are required:

By adding the rows of the matrix of fuzzy numbers A , the vector of real fuzzy numbers is obtained. (1)

$$RS = \begin{bmatrix} rs1 \\ rs2 \\ \vdots \\ rsn \end{bmatrix} = \begin{bmatrix} \sum_{j=1}^n a_{1j} \\ \sum_{j=1}^n a_{2j} \\ \vdots \\ \sum_{j=1}^n a_{nj} \end{bmatrix} = \begin{bmatrix} \left(\sum_{j=1}^n l_{1j}, \sum_{j=1}^n m_{1j}, \sum_{j=1}^n u_{1j} \right) \\ \left(\sum_{j=1}^n l_{2j}, \sum_{j=1}^n m_{2j}, \sum_{j=1}^n u_{2j} \right) \\ \vdots \\ \left(\sum_{j=1}^n l_{nj}, \sum_{j=1}^n m_{nj}, \sum_{j=1}^n u_{nj} \right) \end{bmatrix}$$

The row vector of fuzzy numbers (RS) is normalized in order to get a simplified vector S (2).

$$\tilde{S} = \begin{bmatrix} \tilde{s}_1 \\ \tilde{s}_2 \\ \vdots \\ \tilde{s}_n \end{bmatrix} = \begin{bmatrix} rs_1 \otimes \left(\sum_{j=1}^n rs_j\right)^{-1} \\ rs_2 \otimes \left(\sum_{j=1}^n rs_j\right)^{-1} \\ \vdots \\ rs_n \otimes \left(\sum_{j=1}^n rs_j\right)^{-1} \end{bmatrix}$$

Where $\left(\sum_{j=1}^n rs_j\right)^{-1}$ is derivate from RS and it is calculated

$$\left(\sum_{j=1}^n rs_j\right)^{-1} = \left(\frac{1}{\sum_{k=1}^n \sum_{j=1}^n u_{kj}}, \frac{1}{\sum_{k=1}^n \sum_{j=1}^n m_{kj}}, \frac{1}{\sum_{k=1}^n \sum_{j=1}^n l_{kj}} \right),$$

this is, the normalization of each component of the fuzzy triangular number should be done. The possibilities for not fuzzy values of the vector V have to be determined: (3)

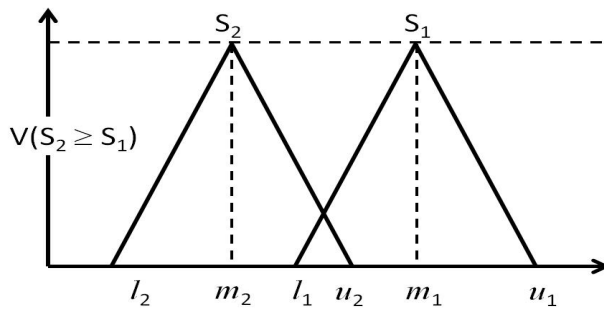
$$V = \begin{bmatrix} v1 \\ v2 \\ \vdots \\ vn \end{bmatrix} = \begin{bmatrix} \min V(S_1 \geq S_k) \\ \min V(S_2 \geq S_k) \\ \vdots \\ \min V(S_n \geq S_k) \end{bmatrix}$$

Where: S_k is the normalized row vector from step (2).

The grade of possibilities of $S_2 = (l_2, m_2, u_2) \geq S_1 = (l_1, m_1, u_1)$ is obtained by:

$$V(S_1 \geq S_2) = \begin{cases} 1, & \text{if } m_2 \geq m_1 \\ 0, & \text{if } l_1 \geq u_2 \\ \frac{l_1 - u_2}{(m_2 - u_2) - (m_1 \geq l_1)} & \text{Other wise} \end{cases}$$

As it is shown in the next figure:



Finally, the last normalization of not fuzzy values of W vector is determined: (4)

$$W = \begin{bmatrix} w1 \\ w2 \\ \vdots \\ wn \end{bmatrix} = \begin{bmatrix} v_1 / \sum_{i=1}^n v_i \\ v_2 / \sum_{i=1}^n v_i \\ \vdots \\ v_n / \sum_{i=1}^n v_i \end{bmatrix}$$

In which the final ranking of the alternatives is established.

Schemas of AHP application for qualitative analysis

As it has been put in evidence above, AHP models allow solving problems of decisions with objectives, criteria and multiple alternatives. To carry out this research, computational algorithms which allow to apply Chang methodology for the simulation of scenarios of decision, and the sensitivity analysis of the vector W of ranking of alternatives, were scheduled.

The aim of this research was the evaluation of expected requirements of government policies to promote the creation of new enterprises. The model was applied to the management level of the IPN, UNAM and ITESM University Business Incubators (UBIs)¹. Three criteria were established as expected requirements regarding the mentioned governmental policy (Figure 5).

¹ IPN, UNAM and ITESM are the Spanish abbreviation of National Polytechnic Institute, Autonomous National University of Mexico and Technological Institute of High Studies of Monterrey respectively.

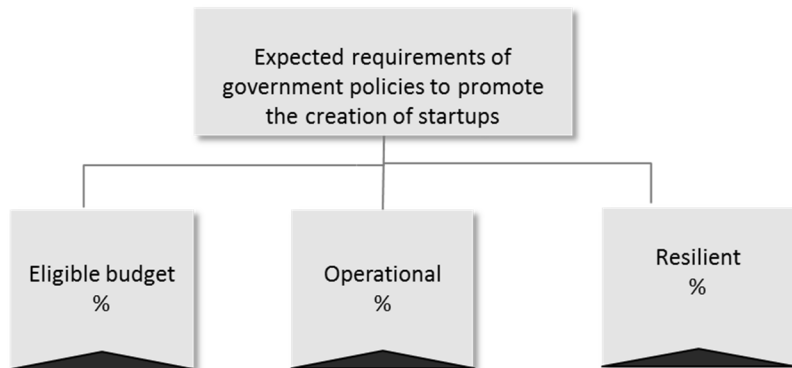


Figure 5. Criteria to fulfill in the AHP Model

Source: own elaboration.

The criteria of the model were selected on the basis of the literature about BIs and entrepreneurship (Aernoudt, 2004; Aerts, Matthyssens, & Vandembemt, 2007; Carayannis & Von Zedtwitz, 2005).

To be considered, any alternative towards the goal must comply with the criteria: “eligible budget”, “operational” and “resilient”².

With respect to the alternatives, among the variants developed in this research, the one that fully represents the multiple graph was selected, it means, the scheme of inter-related nodes, with a represented node by each criterion. Such selection is based on (Radošević & Myrzakmet, 2009) (Grimaldi & Grandi, 2005) (Bergerk & Norrman, 2008) and it is outlined in figure 6.

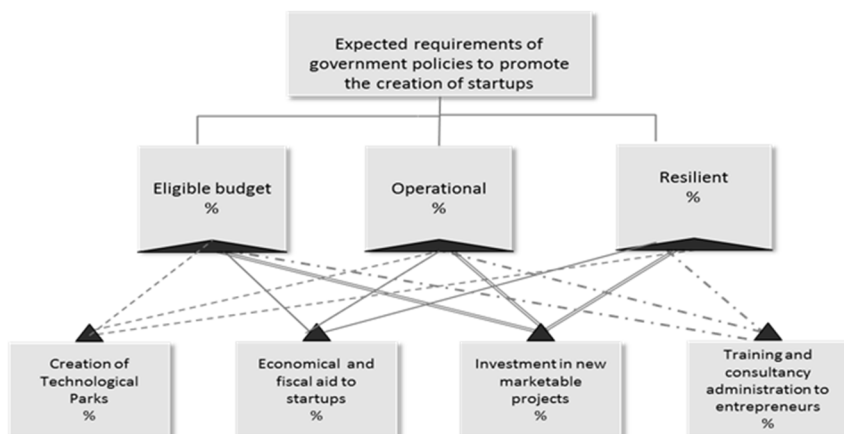


Figure 6. Interrelated nodes of criteria and alternatives

Source: own elaboration.

² The criterion “Eligible budget” refers to the availability of financial resources. The criterion “Operational” is related to the availability of the optimal human resources to develop the required activities. The criterion “Resilient” refers to the low vulnerability of the environment.

In order to apply a version of the AHP model of Chang comprising within the judgment matrix, fuzzy triangular valuations with $\Delta = 0$, the process of pairwise comparison was carried out, and subsequently the corresponding normalizations for calculating the matrix products giving rise to the transposed vector W^t of the ranking of alternatives. Figures 7, 8 and 9 exhibit the results.

The AHP model shown in figures 5 and 6 was applied to experts in promotion of entrepreneurship of the IPN, UNAM and ITESM UBIs. The comparisons were performed in order to identify the expected requirements of public policies to promote the creation of new enterprises, in such a way that with each qualitative evaluator judgments, four matrices were compiled and their transposed vectors W^t allow to rank the alternatives; in this way the strategic importance for policies to promote the creation of enterprises is established according to the following results:

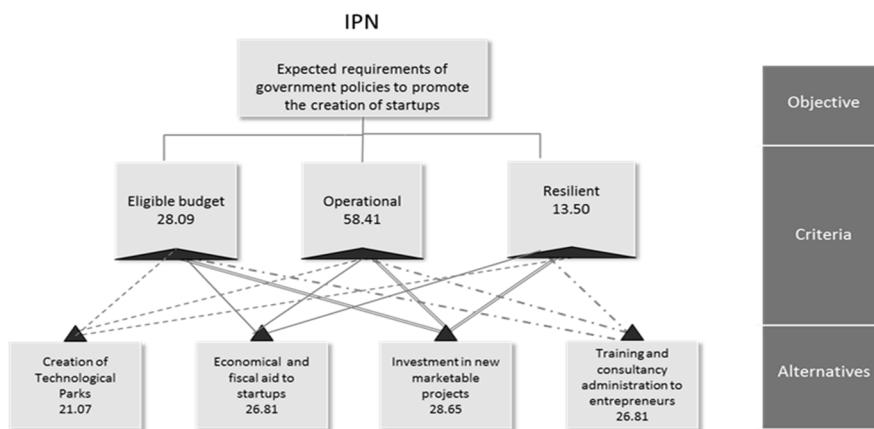


Figure 7. IPN multicriteria and multialternatives quantified relevance scheme

Source: own elaboration according to the results obtained by the AHP model applied to IPN.

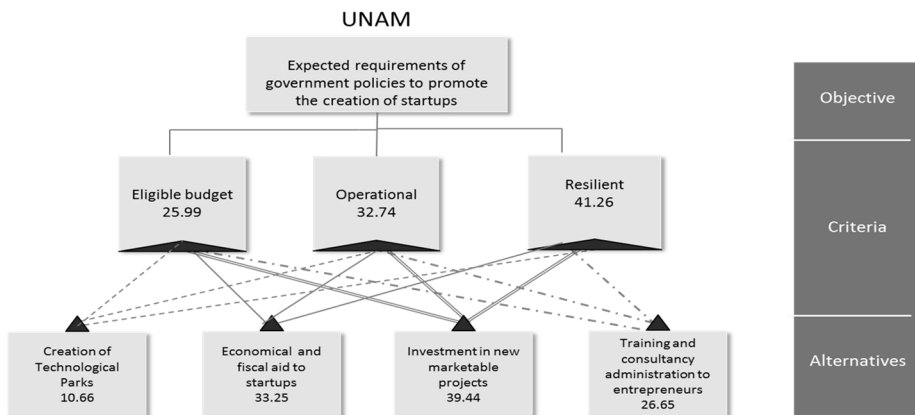


Figure 8. UNAM multicriteria and multialternatives quantified relevance scheme

Source: own elaboration according to the results obtained by the AHP model applied to UNAM.

To be able to make decisions once the prioritisations are ready, the most important alternatives are those whose weighting value is higher. The applied model shows that the criterion called “Operational” pointed by (Aerts, Matthysens, & Vandenbempt, 2007; Carayannis & Von Zedwitz, 2005) is the most important and the priority alternative is the “investment in new marketable projects” pointed by (Grimaldi & Grandi, 2005).

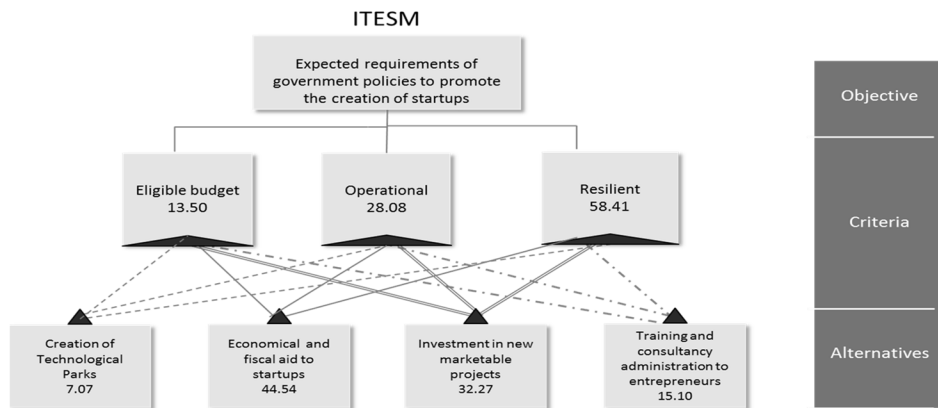


Figure 9. ITESM multicriteria and multialternatives quantified relevance scheme
 Source: own elaboration according to the results obtained by the AHP model applied to UNAM.

Table 5. Global prioritisation of criteria and alternatives of the AHP applied model

Category	Criteria	IPN	UNAM	ITESM	National Average	Alternatives	IPN	UNAM	ITESM	National Average
Expected requirements of government policies to promote the creation of startups	Eligible budget	28.09	25.99	13.5	22.53	Creation of Technological Parks	21.07	10.66	7.07	12.93
	Operational	58.41	32.74	28.08	39.74	Economical and fiscal aid to startups	26.81	23.25	44.54	31.53
	Resilient	13.5	41.26	58.41	37.72	Investment in new marketable projects	28.65	39.44	33.27	33.79
						Training and consultancy administration to entrepreneurs	26.81	26.65	15.1	22.85

Source: own elaboration according to the results obtained by the AHP model applied to IPN, UNAM and ITESM.

DISCUSSION

Since Schumpeter (1934) research on entrepreneurship has attracted the attention all around the world, but there is still a lack in this framework. Most of the studies have been quantitative or qualitative as (Aernoudt, 2004; Bergerk & Norrman, 2008) among others important researchers. According to (Wong, Ho, & Autio, 2005), it is needed to develop qualitative and quantitative evidence of entrepreneurship; due to this fact, this work proposes the AHP as a tool of mix both kind of methods.

Through the example of the prioritization of alternatives to promote the creation of startups on the basis of an AHP model, it provides more certainty that other methods like surveys, interviews or descriptive works because the subjective judgments of the evaluators could be represented in such a model. We found the AHP method as a refined useful perspective for research on entrepreneurship. This work is an example of the application of a qualitative and quantitative method which allows the prioritisation according to some established criteria. The results of the assessment show that “investment in new marketa-

ble projects” (Grimaldi & Grandi, 2005) is the priority of the directors of the studied UBIs and the most important criterion for them is “Operational”, which means that UBIs request the specialized people to develop activities fostering the creation of startups (Aerts, Matthyssens, & Vandenbempt, 2007; Carayannis & Von Zedtwitz, 2005).

In this work the criteria and alternatives of governmental policies to promote the creation of startups that the three most important Mexican UBIs prioritise were identified on the basis of the literature; nevertheless it is important to continue with the analysis of others UBIs in different regions, specially in developing economies (Radas & Bozié, 2009).

The proposal of this work is to complement the entrepreneurship framework with analytical tools that provide certainty to subjective judgments and allow the combination of qualitative and quantitative methods. The proposal of applying AHP models allows obtaining refining assessments by selecting alternatives that accomplish the established criteria in order to reach an objective as Saaty (1977) and Chang (1996) developed.

CONCLUSIONS

The applied model of AHP allows the identification of the expected requirements of government policies to promote the creation of startups. The investment in new marketable projects is the most important alternative to achieve the objective of creating new enterprises, according to the directors of the evaluated Mexican UBIs.

The qualitative analysis is eminently a complex path that usually brings significant results to the decision making process involved in entrepreneurship. For this reason, the construction of scenarios by combining objectives, criteria and alternatives is fundamental for the planning and development of strategic programs directed to the enterprise consolidation.

This research provides evidence about the methodological advantage that represents the process of hierarchy of alternatives based on mathematical analysis. The results of the scenarios presented here, exhibit the AHP as a valuable resource to resolve scenarios that include the multiplicity and complexity of the relations between the qualitative and quantitative variables involved in the entrepreneurial framework. Although this work is limited to some Mexican UBIs, the AHP is suggested as an optimal and complementary tool for future research works on entrepreneurship.

REFERENCES

- Aernoudt, R. (2004). Incubators: Tool for Entrepreneurship? *Small Business Economics*, 23(2), 127-135.
- Aerts, K., Matthyssens, P. & Vandenbempt, K. (2007). Critical role and screening practices of European business incubators. *Technovation*, 27(5), 254-267.
- Bergerk, A. & Norrman, C. (2008). Incubator best practice: A framework. *Technovation*, 28(1-2), 20-28.
- Carayannis, E. & Von Zedtwitz, M. (2005). Architecting gloCal (global-local), real-virtual incubator networks (G-RVINS) as catalysts and accelerators of entrepreneurship in transitioning and developing economies: lessons learned and best practices from current development and business incubation. *Technovation*, 25(2), 95-110.
- Chang, DY. (1996). Applications of the extent analysis method on fuzzy AHP, *Journal of European Operational Research*, 95 (3), 649-655.
- Chee Yew Wong. (2009). Explaining the competitive advantage of logistics service providers: A resource-based view approach, *Journal of International Production Economics*, 128 (1), 51-67.

- Grimaldi, R. & Grandi, A. (2005). Business incubators and new venture creation: an assessment incubating models. *Technovation*, 25(2), 111-121.
- Kwong, C. (2002). A fuzzy AHP approach to the determination of importance weights of customer requirements in quality function deployment, *Journal of Intelligent Manufacturing*, 13 (5), 367-377.
- Metin, C. (2007). Application of fuzzy extended AHP methodology on shipping registry selection: The case of Turkish maritime industry, *Expert Systems with Applications*, 36 (1), 190-198.
- Mikhailov, L. (2003). Evaluation of services using a fuzzy analytic hierarchy process. *Applied Soft Computing*, 5 (1), 23-33.
- Osorio, J. C., & Orejuela, J. P. (2008). El Proceso de Análisis Jerárquico (AHP) y la toma de decisiones multicriterio. Ejemplo de aplicación, *Scientia et Technica*, 39 (2), 247-252.
- Pacheco, J. F., & Contreras, E. (2008). Manual metodológico de evaluación multicriterio para programas y proyectos. Santiago de Chile: Naciones Unidas.
- Pi-Fang Hsu. (2008). Optimizing resource-based allocation for senior citizen housing to ensure a competitive advantage using the analytic hierarchy process, *Building and Environment*, 43 (1), 90-97.
- Piñeiro, C. (2003). La evaluación de inversiones en tecnologías de la información. Aplicaciones a la teoría de la decisión multicriterio. *Revista Galega de Economía*, 12 (1), 1-18.
- Radas, S. & Bozié, L. (2009). The antecedents of SME innovativeness in an emerging transition economy. *Technovation*, 29(6-7), 438-450.
- Radosevic, S. & Myrzakhmet, M. (2009). Between vision and reality: Promoting innovation through technoparks in an emerging economy. *Technovation*, 29(10), 645-656.
- Saaty, T. (1977). A Scaling Method for Priorities in Hierarchical Structures. *Journal of Mathematical Psychology*, 15 (3), 234-281.
- Schumpeter, J. (1934). Teoría del desenvolvimiento económico, Una investigación sobre ganancias, capital, crédito, interés y ciclo económico. México: Fondo de cultura económica.
- Somsuk, N. & Laosirihongthong, T. (2014). A fuzzy AHP to prioritize enabling factors for strategic management of university business incubators: Resource-based view. *Technological Forecasting & Social Change*, 85, 198-210.
- Wong, P. K., Ho, Y. P. & Autio, E. (2005). Entrepreneurship, Innovation and Economic Growth: Evidence from GEM data. *Small Business Economics*, 24(3), 335-350.

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The Decisive Role of Strategic Human Resources Management in the Success of Entrepreneurship and Innovation in Modern Enterprise: A Proactical Model

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Abstract

The role of human resources (HRA) is a decisive element that implements institutional development and inter-organizational transfer, in cooperation with the role of Entrepreneurship which promotes knowledge / skills / experiences through leaders, and joint venture to redesign and analyse the influence of the different roles of top managers, intermediate managers, and employees, as well as HR inter-organizational practices in this transfer. The hypotheses of this paper are based on new model using the complementary relationships between: (1-HR Analytics /2- Efficient Leadership /3- Corporate Entrepreneurship/ 4 - Organizational Change / Culture /5- Innovative Enterprise / joint venture/6- Performance). The importance of innovation for economic and social development is generally accepted by all concerned and the changes in the environment and increasing competitiveness among enterprises have forced leaders of companies to be constantly innovative in order to succeed within this context. Enterprises must improve their flexibility and gain competitive advantages by nurturing entrepreneurs through their operations, Entrepreneurship and innovation plays also an indispensable role in improving productivity and promoting economic growth. There are many definitions for corporate entrepreneurship and development, although all are based on entrepreneurial behaviour includes innovation, pro-activeness and risk-taking, or HRA and skills perspective. Entrepreneurial behaviour is based on achieving and exploiting market opportunity to raise the enterprises innovative capacity.

Keywords: HR Analytics; Leadership; Entrepreneurship; Innovation; Performance

JEL codes: M12, 015

INTRODUCTION

The subject of intersection between (HRM /Leadership/ Entrepreneurship / Innovation/ Joint Venture /Performance) take more importance during this decade because before Scholars didn't focus their research's and studies on the interchangeability and complementarities of these topics.

Now, The literature on HRA and Leadership in entrepreneurial firms / Innovation / Joint Venture tried to determine how far this line of research had progressed. Some pioneer researchers analysed these topics studied in this literature and identified the limitations of this Field while looking for future lines of research. HRAnalytics invests in talents and competencies of all Persons in Organizations using the Big Data's and the strategic style of management. Leadership here is considered as leverage in any used means to properly manage the organization toward goals. Entrepreneurship would encourage the building of relationships among employees, between employees / organization and between employees / key organizational stakeholders. The Innovation is the results of these necessary inter-relationships because they represent essential channels for the flow of knowledge and information, which are the building blocks of Venture, innovation and new opportunities.

Some specialists and practitioners of management and Economy are recognized (HRM / Leadership / Entrepreneurship / Innovation) as a key mechanism for stimulating entrepreneurial initiatives within firms , and most studies have approached the phenomenon within the context of large corporations, but few is known about its characteristics in small and medium-sized enterprises.

How do HRA practices promote an appropriate working environment for Entrepreneurship? The main studies show that the creation of personal relationships and the development of an open communications between owner-Leaders and HR, and among employees themselves, can help to explain the dynamics of entrepreneurial behaviours in Organizations. The communication tools are important, not only for promoting entrepreneurship activities, but also for creating the appropriate work environment to carry out other resource management practices that stimulate entrepreneurial behaviours to become innovative .

This paper discusses the intersection between HRA and Leadership with the corporate entrepreneurship for encouraging all HR to play an essential role in the innovation performance of the corporate entrepreneurship, and for orient future research in HRM and economy in entrepreneurial firms by enabling them to better understand the direction in which the field is going and what gaps remain.

The papers also highlight different HRM factors of entrepreneurial behaviour and their influence on corporate entrepreneurship and innovation or venture by presenting a model easily used in Organizations for achieving results from different empirical contexts as small and medium-size firms or big enterprises.

In the theoretical part of the paper, we will present the literature concerning key elements of HR Analytics /Leadership/ Entrepreneurship / Innovation/ Joint Venture relationship. In the practical part, we present the practical Model of intersection of these components in the modern enterprises for improving performance and raising the productivity or applying the appropriate style of Management.

THEORETICAL PART

Literature Review

In the ten past years, many scientists and practitioners have been interested in the relationship between HRM and entrepreneurship / innovation, but few of them present the intersection between HR Analytics with leadership / Entrepreneurship / innovation / performance.

This research contributes to submit an approach based on a practical model which explains this perspective and methodology. A number of key constructs have emerged as being important to the promotion of modern enterprises. This review has focused upon the various HR Analytics practices that are believed to influence leadership /entrepreneurship/joint venture / innovation /performance.

First, HR analytics is an area in the field of analytics that refers to applying analytic processes to the HR department of an organization in the hope of improving HR performance and therefore getting a better return on investment at the level of organization. HR analytics aims to provide insight into each process by gathering data and then using it to make relevant decisions about how to improve these processes. (Janssen .Cory :company of Investopedia.com),and it can help to resolve big problems and issues surrounding these requirements . Using HR analytics will guide the managers to answer questions and gain insights from information at hand, then make relevant decisions and take appropriate actions. BERSIN. J. (2012), Spotfire Blogging Team. (2012). So, Several innovative large organizations have started building these kinds of HR Analytics with great success in the past years (Google, HP, SAS), and an overview of the HR Analytics benefits , proposed by SAS as the following. (BALLA. J. (2014).

Second, the leadership assumes the intersection upon the exchange of knowledge (tacit and explicit) as well as other resources among (Leadership / employees and between Leadership /employees / external partners or stakeholders (Kanter & All, 1983, 1985, 1990, 2002, 2002). The Leadership is fundamentally a moral undertaking because it involves people, and their hopes, dreams and aspirations. Human-centred leaders have technical and moral competences, and obtain results by helping people grow and flourish so they can freely choose to deliver exceptional results and create environments in which people can flourish, and trust them to head in the right direction in accord with purpose and principles. Results-centred leaders need command and control models of leadership to keep everything and everyone moving in the right direction. (Human - centred Leadership (2015).

Third, the entrepreneurship is supported by organizational learning, as suggested by several scholars of (CE) Corporate Entrepreneurship (Floyd & Wooldridge, 1999; McGrath, 2001; Zahra, Nielsen et al., 1999). Entrepreneurship is a strategic orientation involving the regeneration of products, processes, services, strategies or even whole organizations (Covin & Miles, 1999).

For human capital, HRM and HR development argue that in the creation, development and sustainability of new ventures human resources play a critical role, and without their development or recognition of this importance the future of the new enterprise is somewhat precarious. (Rowena Barrett & Susan Mayson (/2015).

There are success factors linking HR practices to Entrepreneurship,These include the appropriate use of rewards, the provision of management support for innovation, the availability of resources for innovation, an organizational structure condu-

cive to learning and cooperation, and individual risk taking . (Hornsby, Kuratko , and Montagno (1999).

Here is the true essence of being an entrepreneur, “It seems to be in the blood, that quality to run with a dream, also essential: A love of risk and a high tolerance for ambiguity” (McGraw-Hill (1995).

Many people believe that entrepreneurs are a special group of individuals who have the necessary skills and talents needed to be an excellent business owner. But, in reality, many entrepreneurs are just like anybody else, but they have the desire to change the world with the gifts and talents they have. (Zimmerman. Donya .JD (2015).

Fourth, the Innovative activities require a willingness on the part of organizational members to take on risk. Agency theory suggests that individual agents may be risk averse relative to principals as a result of their inability to diversify personal risk. (Eisenhardt, 1989). This assumption that the internal and external exchange of knowledge is founded upon the formation of trust and social capital (Bolino et al., 2002; Nahapiet & Ghoshal, 1998; Perry-Smith & Shalley, 2003). Therefore, these training and development practices are expected to have a positive influence on the formation of social capital and trust, and the presence of discretionary behaviours. There is a lack of consensus as to the degree of risk that organizational entrepreneurs must assume, although it is considered lower than that assumed by entrepreneurs acting independently. However, there is an agreement that entrepreneurial organizations require a greater degree of risk acceptance on the part of their employees. (Block & MacMillan, 1993).

The key Elements Relationship Between: (HR Analytics /Leadership/En-trepreneurship /Joint Venture/Innovation/Performance)

The Importance of HR Analytics in the Modern Enterprises?

The HR Analytics represents the top stage of HRM evolution. It began to expanding in the modern Firms and Organizations few years ago , especially in USA, Japan , Canada , North Europe , west Europe , but in the emerging and sub-developing countries this approach stayed far of this stage. Now , The practice of HRM and Entrepreneurship explain the relationship between HRM / Leadership / Entrepreneurship / organizational culture for promoting the innovation and performance in the modern enterprises.

These practices are an important tools for creating and reinforcing an organization’s culture and values . Therefore, they are useful to consider how HRM may indirectly influence Entrepreneurship through the creation of an innovation supportive culture (Chandler, Keller, & Lyon, 2000).

The Role of Efficient Leadership in the Modern enterprises

We all influence people in our lifetime, and we each have the responsibility of leadership, we influence others by what we say and do—and by how we do our work. There is a need for truly great leaders, leaders who are trustworthy, ethical, good, honest and who have high personal standards. The world is looking for honest and upright leaders, being in leadership roles with greater and lesser responsibilities. What is a leader? “A leader is a person who influences people to accomplish a purpose.” How do you become a leader? “A leader correctly assesses a situation and knows how to take the next step.”

Table 1. The five main stages of HRM (MERI . Mohamed-Meri (2015)

Period	Time period	Levels /Stages	Activities
1	1970-90	1-Workers Affairs	Implementation of the workers affairs: (employment, wages, upgrades, medical, pension). - Director of the Department of workers affairs specialist in Law or any others specialties'
	1970-1985	2-Personnel Management	Implementation of the 1 previous level, +: (Recruitment and Selection, training and development, reward and compensation, performance evaluation, Career management and planning). - Director of the Department of Personnel: specialist in general management.
	1985-2005	3-HRM	Implementation of the 2 previous levels, + : (Strategic management, learned and flexible organization, participative management, leadership, HR Auditing, competencies management). - Considering HR as a fortune and renewable resources. - Director of the Department of HRM: specialist in HRM.
2	2005-2012	4-HR Metrics	Implementation of the 3 previous levels,+: (Recruiting metrics, Retention metrics, Training and Development metrics, Staffing metrics, Leadership Metrics, Talent Management Metrics, and HR Metrics Pro). Director of the Department of HR Metrics: Specialist in HR Metrics.
3	2012 -.....	5-HR Analytics	Implementation of the 4 previous levels,+: (providing future, looking insights on the business, predicting Data's, builds analytic models at the lowest levels of the business—at the individual HR level, looks for predictable behaviors', propensities, Data's business rules, finding quantifying patterns in the data using complex mathematical models , predict future outcomes) . Director of the Department of HR Analytics: Specialist in HR Analytics.

Source: own study.

Whether you know it or not, whether you believe it or not, you're a leader or an influencer! Leadership is simply the ability to turn a dream or a vision of a desired future state into a reality with and through the cooperation of other people. To be leaders, we need each other to reach our goals, each of us has only some of the skills needed to do a great job, we need to surround ourselves with people to fill in our gaps. Understanding your strengths and the strengths of others is a key to effective leadership. The people you want to influence will not rise to a higher standard of excellence than what they observe in you. The key to being a good leader is endurance—being a non-quitter, Leaders don't grow in a comfort zone. Leaders are not people with exceptional talent; they are people who have learned from their mistakes and get up and try again. Persistence is a key to effective leadership: Set measurable goals and work toward accomplishing them. You will find that many times you may have to work alone, You will probably be

lonely. People are looking for leaders who are willing to give it all they have, and they will follow—for a while. When you are in leadership, you have to solve problems. As leaders, we have to be responsible, no matter how painful it is. Running away is not an option. Facing problems and dealing with them by making good decisions is the difference between a leader and a follower. Being a leader means being a servant. You are always on call. A leader works hard. Don't expect your staff or the next generation to do what is right if they see you doing what is wrong. It is of utmost importance to have high ethical standards to be an effective leader, Find the power to change your life and your world—let God be your guide. (Kehler. Katherine J(2015).

Human-Centred Leadership, which puts people first and integrates the moral and technical dimensions of leadership. Our world is so focused on results, there is an overwhelming tendency to consider and reward, the technical aspects of leadership. The technical leadership includes all skills and competencies that you need to do well in order to lead in business, government and society. moral leadership involves leading people in the right way, to do what is good, to become the best version of themselves and in particular creating the environment in which that can happen. Human-centred leaders create environments in which people can flourish, and trust them to head in the right direction in accord with purpose and principles. Human-centred leaders build a technical edifice on a moral foundation, and so become great leaders in business, government and society. (Howard . Anthony (2015)

The Organizational Change / Culture and Entrepreneurship/Innovation in the Modern Enterprises

Organizational Change / culture is one of the domain of the HRM which influences the Leadership / Entrepreneurship and Innovation. Organizational culture is an important source of sustained competitive advantage as it possesses the characteristics of a strategic asset, namely scarcity, inimitability, value creating and non-tradability (Barney, 1986). In a comparison of the new business development practices of successful and unsuccessful firms, (MacMillan (1987) reports that successful firms had in common the ability to create a venture some culture by inspiring pervasive commitment throughout the division, by avoiding extrinsic incentives and promoting intrinsic rewards. Effective leaders were able to build the subordinate confidence needed to experiment and take on additional risk. This was achieved by providing encouragement and the necessary managerial support to develop from an existing competence base. Support included providing the freedom to act without rigid constraint and monitoring. Most studies do not explicitly address HRM practices, and the results of these studies suggest that HRM can influence entrepreneurship and Innovation through the creation of an entrepreneurial Change /culture organization which promotes entrepreneurship with intrinsic rewards, delegation of responsibility and avoiding overly rigid controls. (Chandler et al. (2000) . Finally, propose that HRM influences creativity and innovation by creating a supportive culture. They found that perceived management support and organizational reward systems promote an innovation supportive culture.

The Influence of Corporate Entrepreneurship/HRM in the Modern en-terprises

Some scholars proposed models for understanding the entrepreneurship in relationship with HRM. In examining these models we note that they focus on:

1) traits, 2) cognitive-based behaviour, 3) human and social capital (Rowena Barrett and Susan Mayson (2015).

So, entrepreneurship is a strategic orientation involving the regeneration of products, processes, services, strategies or even whole organizations (Covin & Miles, 1999). The first dimension is the conceptualization of HRM practices and its relationship with the entrepreneurship. Some researchers have focused upon individual HRM practices, such as compensation (Balkin & Gomez-Mejia, 1984, 1987), while others have examined the influence of entire HRM systems (Laursen, 2002). The growing popularity of the systems perspective reflects interest in the impact that the HR function, can have upon organizational performance. Entrepreneurship is an important aspect of firm performance that HRM systems are expected to influence.

Studies of HRM systems take a perspective that has become increasingly popular in examinations of HRM and firm level outcomes (Huselid, 1995, Heneman & Tansky, 2002). It is generally proposed that when HRM practices are internally consistent, they reinforce one another so that their sum is a synergistic influence upon desired employee behaviours (Delery & Doty, 1996).

(Hornsby, Kuratko, and Montagno (1999) identify five success factors linking HR practices to entrepreneurship. These include : (the appropriate use of rewards, the provision of management support for innovation, the availability of resources for innovation, an organizational structure conducive to learning and cooperation, individual risk taking).

(Twomey and Harris (2000) report evidence of a correlation between the presence of a bundle of HR practices (selection, training, performance management, rewards and career development practices) which encourage intrapreneurial behaviours and Entrepreneurship. Unfortunately the inferences from this study are limited due to the correlational nature of the evidence and the use of a single source for data. Finally, Hayton (2004) distinguishes discretionary HRM practices from traditional practices. Discretionary practices, such as incentive pay, employee suggestion schemes and formal employee participation programs are those which encourage employee commitment, cooperation, knowledge sharing and voluntary, extra-role behaviours. In contrast, traditional HR practices focus upon defining jobs, staffing jobs through a matching process, and monitoring prescribed performance. In a study of US small and medium sized enterprises, Hayton (2004) provides evidence that discretionary practices promote entrepreneurship and this relationship is stronger for firms operating in high technology industries.

One common thread in these studies of HRM practices and Entrepreneurship is the need for HR systems to support informal employee contributions, to encourage cooperation and to avoid unnecessary bureaucratic constraints on behaviour. However, when we examine details of these practices, important contingencies such as technology, strategy, environment or firm life-cycle are rarely considered. A further limitation in current research on HR systems and overall entrepreneurship is a general absence of theory.(Hayton. James C. (2005).

Entrepreneurs have been described in the following ways: (High risk takers; Innovators and inventors; Individuals who want to be their own boss; and Individuals who love to think and live outside of the box. Entrepreneurs have many characteristics that enable them to start their own business and be successful at it. Here are seven basic characteristics of a "true entrepreneur": (Zimmerman . Donya ,JD(2015).

Characteristic 1: A true entrepreneur has no choice but to start their own business because they were unable to find employment or had been fired from a job.

Characteristic 2: A true entrepreneur will “keep their eyes open” when starting and running their own business. They understand the risks and setbacks.

Characteristic 3: A true entrepreneur does not start their own business for the money, but to give something back to society and to add value to others lives..”

Characteristic 4: A true entrepreneur is very passionate about their business and very optimistic at the same time.

Characteristic 5: A true entrepreneur has no problem with starting from scratch or trying out new ideas to generate revenue for their business.

Characteristic 6: A true entrepreneur has the ability to overhaul a current business industry or create a new business industry..”

Characteristic 7: A true entrepreneur has self-confidence, very motivated, a strong sense of reality, and action oriented.

However, There are many misconceptions of what it takes to be a true entrepreneur. Many individuals believe that anyone who starts their own business comes from another planet or has special talents that make them stand out from the crowd. Many people believe that entrepreneurs are a special group of individuals who have the necessary skills and talents needed to be an excellent business owner. There are many myths and misconceptions out there regarding what it takes to become an entrepreneur:

Myth 1: Entrepreneurs are from another planet, flamboyant, impulsive, and daredevils.

Myth 2: Entrepreneurs are blind optimists, self-centered, and selfish.

Myth 3: The Small business owners cannot compete with the big boys “big business”.

Myth 4: Entrepreneurs need much money to promote their business, but, many successful entrepreneurs understand that you can market your small business on a shoestring budget.

Myth 5: Entrepreneurs only start their own business to make lots of money. In the first two to five years of a new business, the owner will lose money or break-even.

Myth 6: Entrepreneurs are born and not made. some people certainly naturally possess more socially entrepreneurial characteristics than others.

Myth 7: Entrepreneurs are not afraid to take risks. The best entrepreneurs did take some risks when it came to starting their own business, but they understood those risks before starting their business. (Zimmerman . Donya ,JD(2015).

The Innovation/joint venture/Performance in the Modern enterprises

In spite of the fact that Entrepreneurship can be divided in the three categories : *corporate venturing*, *strategic entrepreneurship* and *innovation*, these elements cannot be seen as fully independent from each other. For instance, there is a close link between corporate venturing activities and both strategic entrepreneurship and innovation (Narayanan, Yang, & Zahra(2009). The strength of the link mainly depends on the objective of a corporate venturing initiative: some corporate venturing activities may serve as a vehicle to introduce innovations or new products to the market, but other initiatives may lead to strategic renewal due to “significant changes in a company’s business, strategy or competitive profile” (Narayanan, Yang, & Zahra(2009). An overview of the aforementioned classification of Entrepreneurship and its elements is given in Figure.

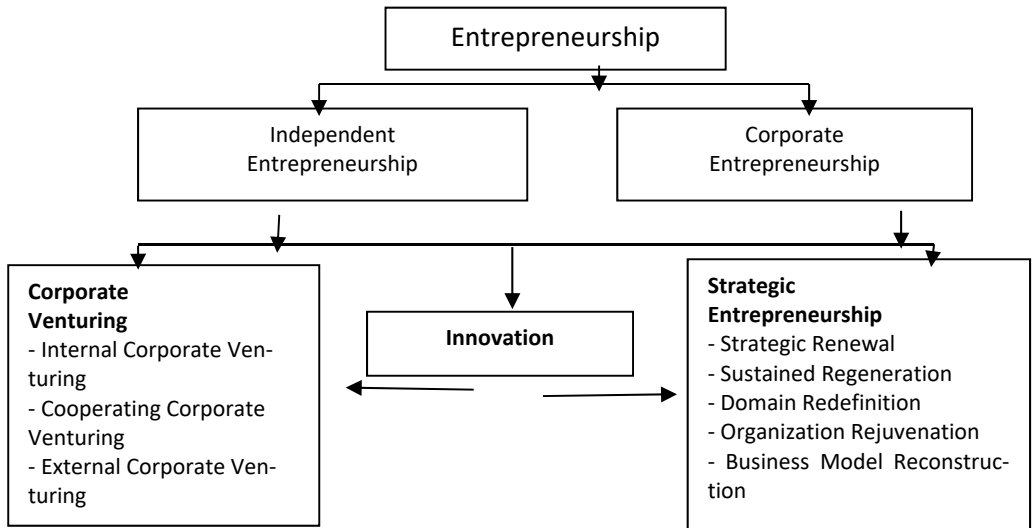


Figure 1. Classification of Corporate Entrepreneurship and its Components

Source: own elaboration.

As already mentioned in the theoretical fundamentals of HRM, an organization is defined as the unification of people who pursue collective goals. Therefore, the behaviour of an organization is substantially determined by its individual members. Depending on the desired level of *Entrepreneurship*, an appropriate expression of each attitude, characteristic or behavior is required. This relationship can be illustrated as follows in Figure 3.

Table 2. Relevant Employee Characteristics For Corporate Entrepreneurship

Low Level Of Entrepreneurship	Highly Repetitive, Predictable Behaviour	High Level Of Entrepreneurship	Highly Creative, Innovative Behaviour
	Very Short Term Focus		Very Long Term Focus
	Highly Independent Autonomous Behaviour		Highly Cooperative Independent Behaviour
	Very Low Risk Taking		Very High Risk Taking
	Very High Concern for Process		Very High Concern for Results
	High Preference To Avoid Responsibility		High Preference To Assume Responsibility
	Very Inflexible To Change		Very Flexible To Change
	Very Comfortable With Stability		Very Tolerant Of Ambiguity and Unpredictability
	Very Low Task Orientation		Very High Task Orientation
	Focus on Efficiency		Focus on Effectiveness

Source: (Brigham .Keith H , De Castro .Julio O.(2003).

THE PRACTICAL PART

The Impact of HR Analytics System on the (Leadership /Entrepreneurship/Organizational Culture / Joint Venture/Innovation) in the Modern Enterprises

Some of authors propose an assumption that the internal and external exchange of knowledge is founded upon the formation of trust and social capital (Bolino et al., 2002; Nahapiet & Ghoshal, 1998; Perry-Smith & Shalley, 2003). This discretionary behavior in the form of organizational citizenship, trust, and social capital are reciprocally related and are therefore included as a single mediating construct to simplify the model (Bolino et al., 2002; Malhotra & Murnighan, 2002; Perrone, Zahreer, & McEvily, 2003). Social capital and knowledge exchange perform as important mediators in the association between HRM practices and Corporate Entrepreneurship. This Conceptual framework explains the relationship between HRM and CE.

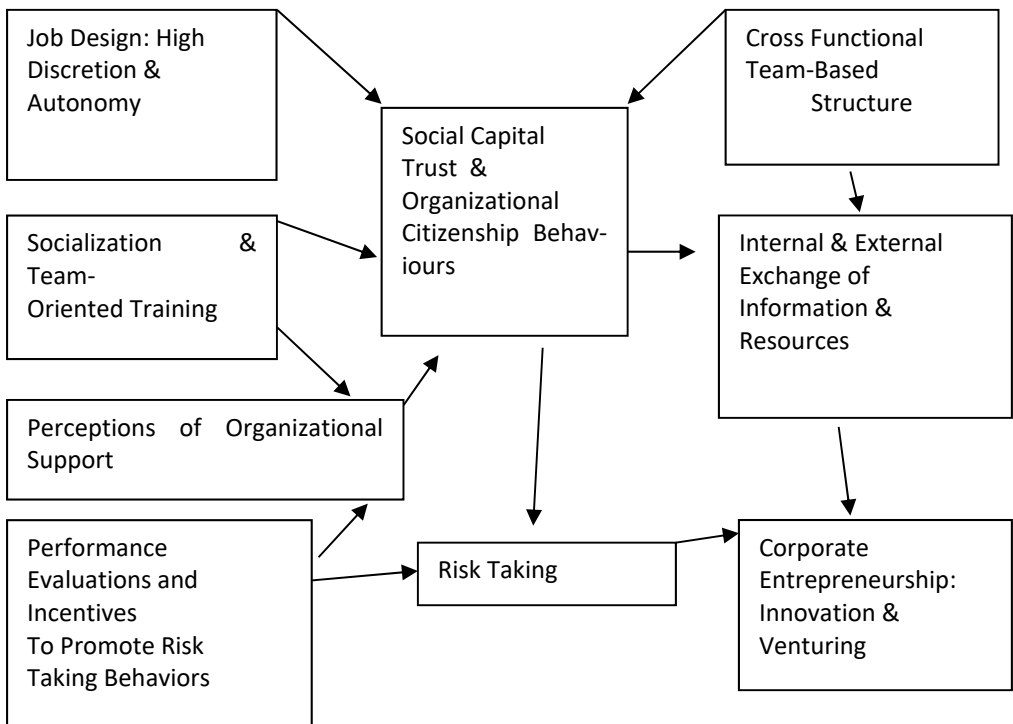


Figure 2. Conceptual framework for the relationship between HRM and corporate entrepreneurship

Source: Hayton, James C.(2005).

A research of (Domingo R. Soriano, José M. C. Martínez,2007) conducted on leadership style and entrepreneurial behaviour confirmed relationship and participa-

tive leadership foster entrepreneurial spirit, among members in firms.(Domingo R. Soriano, José M. C. Martínez (2007).

Likewise , A small group of studies have examined the impact of HR Analytics practices systems upon (Leadership /*Entrepreneurship*/Joint Venture/Innovation).

(Soutaris (2002) examines the relationships between HR and innovation in Greek manufacturing firms. He reports that both human capital investments and the incentives offered for contributions to innovation were of major importance with respect to firm innovativeness.

(Laursen (2002) and Laursen and Foss (2003) propose that new HRM practices (teamwork, delegation and performance related pay) will have a greater impact on innovation when used in combination and this relationship will vary according to the knowledge-intensiveness of industries because these practices promote decentralization, better coordination and better combination of knowledge and skills.

It is important to acknowledge that HRM practices, levels of corporate entrepreneurship and their interrelationships may be influenced by dimensions of national culture (Hayton, George, & Zahra,2002).

A truly entrepreneurial leader has the capability to influence others to embrace entrepreneurial spirit. Hence, businesses will be able to benefit from the creation of leadership in the organization. (Sang M. Lee, Daesung Chang, Seong-bae Lim (2005).

Furthermore, a theory of social learning concludes that leaders have the ability to influence the team members' behaviour, creating the conditions necessary for CE; an individual is found to be lack of competence to perform the role of entrepreneur; especially in large organization due to the degree of complexity surrounding the business' activity. It is reasonable to propose firms to create a condition of leadership that cultivates entrepreneurial spirit in manufacturing firms, generating innovation performance for corporations. This figure explains the correlation between (HRM/ Leadership / Entrepreneurship /Joint venture / Innovation).

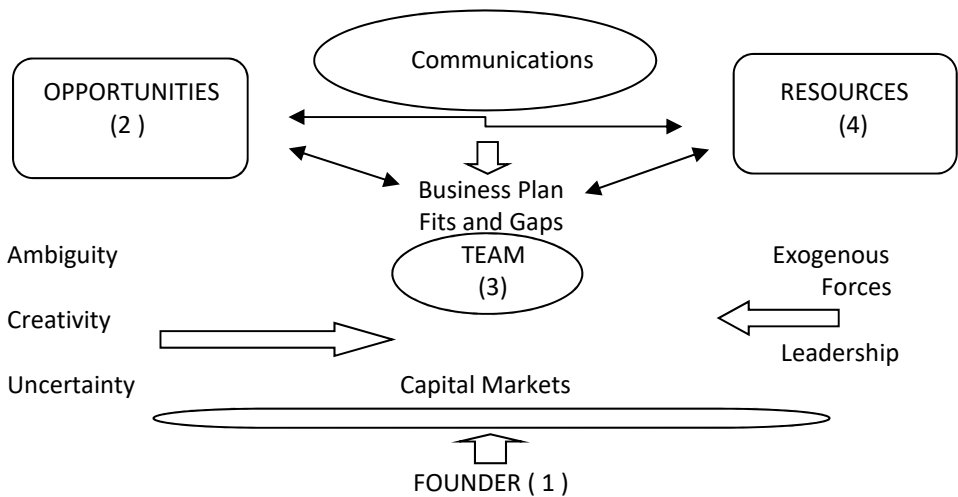


Figure 3. The correlation between (HRM/Leadership/Entrepreneurship/Joint venture/Innovation)

Source: Timmons, Jeffry, A.; Zacharakis, Andrew, and Spinelli, Stephen (20004).

The Impact of Leadership and HRM on Entrepreneurship

Leadership is one of the most essential elements for improving enterprise’s performance, and leaders are potent sources of managerial rents and hence sustained competitive advantage (Rowe. W. Glenn (2001).

Leadership Substitute Theory.(Steven Kerr, John M. Jermier (1978) and Leader-member Exchange Theory.(Tayla N. Bauer, Stephen G. Green (1996).

postulate that the association between leadership style and situational favourableness will enhance the effectiveness of leadership in organization. Conversely, HRM implies a concern with anything and everything that relate to the management of employer-employee relationship. (Boxall . Peter, Purcell .John (2000).

Thus, HRM plays an important role that supports managers in performing HR-related routine business activities.(Renwick. Douglas, Mac Neil . Christina (2002).

The practice of HRM particularly in formulating HR policies, strategies, procedures attracts and retains the best talent in organization is indeed shaped by senior management to guarantee business effectiveness. (Purcell . John (1999).

An effective leader is able to adapt leadership behaviour or style that meets employees expectation effectively. Therefore, the association between the leadership styles and management of human resource became a critical contributor to business success. The identification of the specific mechanism between leadership and HRM practices should be considered as a central issue in this line of research. the formulated proposition is:

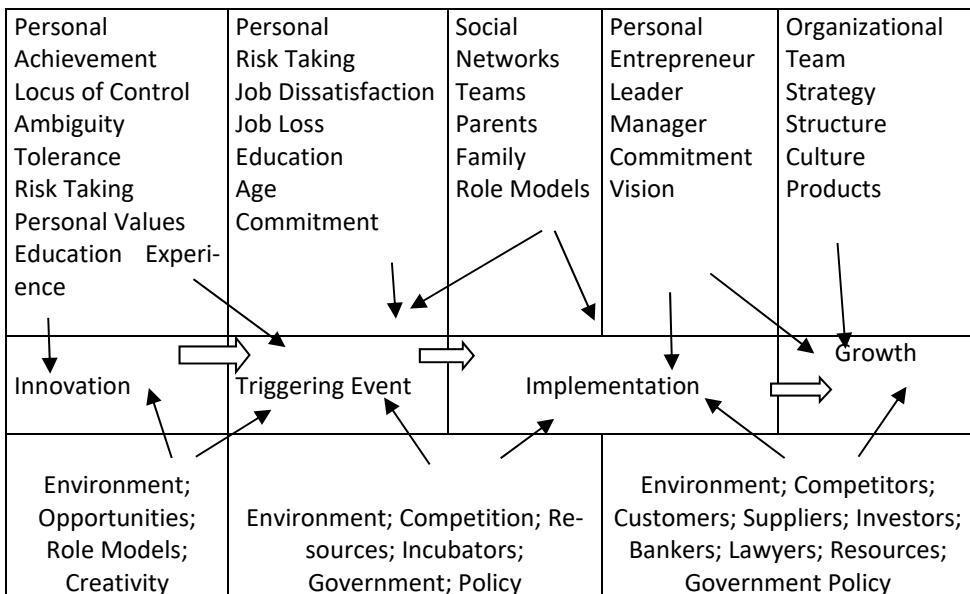


Figure 4. Model of Entrepreneurial Process

Source: Bygrave,W.D.(2004)

The role of HRM is essential in shaping the organizational culture and enhancing morale of employees and teams. HRM practices such as training and development,

performance appraisal, compensation, etc. are often tied to improving learning in organizations and enhancing motivation of employees. HRM practices are treasured of having high impact in adding the value of intellectual capital in firms. Other HRM practices have been investigated including team based practices, delegation and performance-based pay. (Laursen. Keld, Foss .Nicolai J.(2003).

Some researchers have investigated HRM practices from a system perspective. Five key success factors of CE in the context of US and Canada have been tested and confirmed including : (rewards, management support for innovation, resources availability, organizational structure refined for learning, and risk taking behaviour) . (Hornsby .Jeffrey S., Kuratko. Donald F., Montagno .Ray V(1999).

Some Studies have been conducted in the western countries to measure the contribution of HRM practices in supporting teamwork by minimizing organizational boundaries, and encourage organizational commitment and informal contribution apart from formal task and responsibilities. However, the study of the effect of HRM practices on CE in the Malaysia context is yet to be carried out for fill the gap by conducting this study.(Chee-Yang Fong , Yin-Kuan Ng , Peter Sin-Howe Tan , Ai-Na Seow (2013).

A model incorporating HRM /Leadership, / Entrepreneurship is developed to enhance manufacturing firms’ innovative capacity through cultivation of entrepreneurial spirit within the organizations. This Figure illustrates the proposed relationship between HRM /Leadership, and CE. According to this model, we suggest greater presence of HRM / Leadership and will result greater CE in organizations.

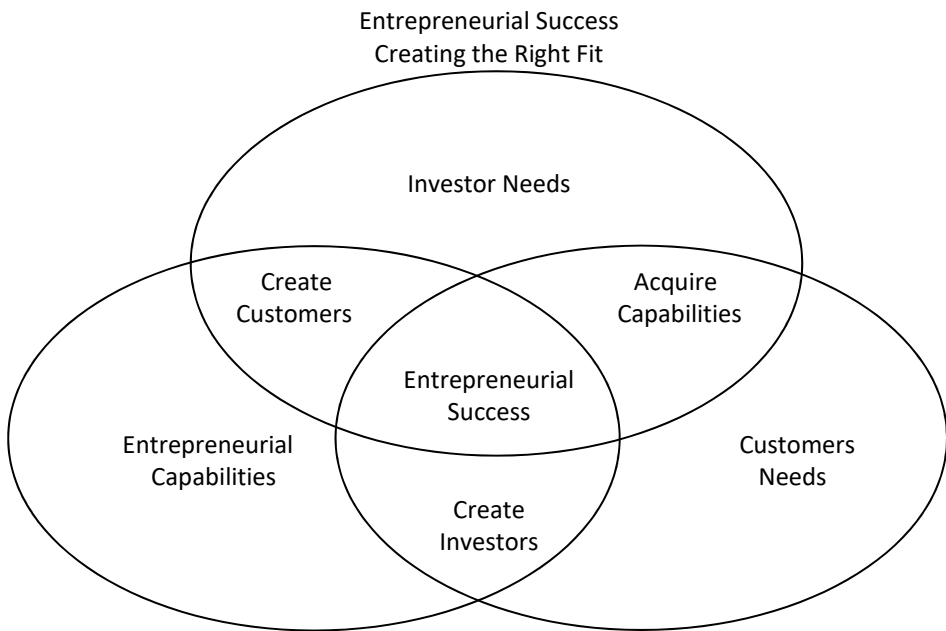


Figure 5. A model incorporating HRM /Leadership, / Entrepreneurship

Source: Vadim Kotelnikov - 1000 Venture .com.

The Impact of HRM Practices on the Corporate Venturing and Innovation

An old study on the relationship between HRM and venturing and innovation has been focused on the reward levels of executives and technical experts in high technology firms should be elevated in order to encourage innovation through compensating the high risks faced. (Balkin .David B., Gomez-Mejia .Luis R. (1984).

A second important aspect of CE is corporate venturing, which involves the creation of entrepreneurial opportunities through the establishment or acquisition of a new business. This may take place within the structure of the existing firm (internal venturing) or outside in an independent or external venture. As with innovation, a key challenge for firms engaging in venturing activities is the question of how to structure compensation practices. In particular, a central question is how to balance internal equity in the established organization while achieving external equity in the new venture. While external equity supports employee attraction and retention, internal equity supports cooperation and knowledge exchange.

HRM systems and corporate venturing Studies of the contributions that an HRM system can make to corporate venturing often highlight a list of key success factors. The literature on HRM and corporate venturing is less well developed and more diverse than that for innovation. However, it does return to the two important themes already noted in the literature on HR and innovation: the issue of formal versus informal entrepreneurial roles and the question of risk acceptance. (Souder (1981) and others (Kanter, 1983, 1985; MacMillan, 1987) Other authors have noted the importance of corporate entrepreneurs who have access to informal networks. Informal networks evolve in cycles of perspective sharing, trust building and cooperation that enhance the exchange of knowledge and promote organizational learning (Adler & Kwon, 2002; Bolino, Turnley, & Bloodgood, 2002; Leana & Van Buren, 1999; Perry-Smith & Shalley, 2003).

The development of social capital is largely the result of informal processes. It has been suggested that when employees engage in discretionary, extra role behaviours that benefit co-workers and the organization, they help build trust, a shared perspective and consequently social capital (Bolino et al., 2002). Therefore, one would expect that HRM practices that influence employee discretionary helping (citizenship) behaviours will be associated with the development of richer networks of informal relationships, greater trust, social capital and knowledge sharing. The second issue that the literature on HRM and venturing highlights is the issue of risk. This is consistent with the earlier discussion of HRM and innovation. It also highlights an opportunity for integration across the two streams in that venturing, like innovation, requires employee risk acceptance.

The distinction between the two relates to which types of employees have the opportunity to engage in each of the two activities. While all employees may be encouraged and have the opportunity to engage in innovative activities, the opportunities to engage in venturing may be more restricted. What these two aspects of CE have in common, however, is the need to understand risk profiles of individual employees, in relation to contingencies such as environment, organization, and also individual differences. It is clear that development of our understanding of the HRM–CE relationship hinges upon the issue of risk acceptance by employees and managers.

The Influence of Organisational Change (Culture) Management / Corporate Entrepreneurship / corporate venturing on the Innovation/ performance

Pettigrew and Whipp (1993) that argue there are no universal rules when it comes to leading and managing change. Several advocates of the emergent approach have suggested sequences of actions that organisations should comply with. However, many of these suggestions tend to be rather abstract in nature and difficult to apply (Burnes, 2004). There are some authors who offer more practical guidance to organisations and managers. Three of these authors are Kanter (1983, 1989), Kanter et al. (1992), Kotter (1996) Luecke (2003).

The table below combines the commandments of those autors for executing change in order to identify similarities and differences between these models.

As the emergent approach to change is relatively new compared to the planned approach, it is argued that it still lacks coherence and a diversity of techniques (Bamford and Forrester, 2003; Wilson,1992). Another criticism of the emergent approach is that it consists of a rather disparate group of models and approaches that tend to be more united in their scepticism to the planned approach to change than to an agreed alternative (Bamford and Forrester, 2003; Dawson, 1994). However, according to Burnes (1996) the general applicability and validity of the emergent approach to organisational change depends on whether or not one believes that all organisations operate in dynamic and unpredictable environments to which they constantly have to adapt.

Table 3. A comparison of three models of emergent change

Kanter et al.'s Ten Commandments for Executing Change (1992)	Kotter's Eight-Stage Process for Successful Organisational; Transformation (1996)	Luecke's Seven Steps (2003)
1) Analyse the organisation and its need for change 2) Create a vision and a common direction 3) Separate from the past 4) Create a sense of urgency 5) Support a strong leader role 6) Line up political sponsorship 7) Craft an implementation plan 8) Develop enabling structures 9) Communicate, involve people and be honest 10) Reinforce and institutionalise change	3) Developing a vision and Strategy 1) Establishing a sense of Urgency 2) Creating a guiding Coalition 5) Empowering broad-based action 4) Communicating the change vision 8) Anchoring new approaches in the culture 6) Generating short-term wins 7) Consolidating gains and producing more change	1) Mobilise energy and commitment through joint identification of business problems and their solutions 2) Develop a shared vision of how to organise and manage for competitiveness 3) Identify the leadership 6) Institutionalise success through formal policies, systems, and structures 4) Focus on results, not on activities 5) Start change at the periphery, then let it spread to other units without pushing it from the top 7) Monitor and adjust strategies in response to problems in the change process

Source: TODNEM .RUNE (2005).

The impact of HRM / Leadership Practices and Corporate Entrepreneurship on Enterprises Performance

The proposed model serves as a fundamental framework for researchers to understand the impact of HRM / Leadership towards corporate entrepreneurship and enterprises performance. First, it will be wise for enterprises to pay more attention on HRM practices because of its ability to transform manufacturing enterprises to be risk-takers and innovative.

Secondly, efficient leadership will improve HRM practices which guarantee enterprises success in strategizing itself to maintain certain innovative capabilities.

Thirdly, enterprises will benefit by practicing leadership styles which enhance entrepreneurship spirit in enterprises. By incorporating effective HRM / leadership, the enterprises will fare better in competitive environment.

So, HRM/ Leadership/Corporate entrepreneurship are the key elements in enterprises wishing to gain competitive advantage in the dynamic business environment. before, the studies have shown that Corporate entrepreneurship enhances enterprises capability in upgrading products, processes, services, strategies and even the whole organization.

New The practical Model Proposed

Our proposed Model identifies the relationship between HRM / Leadership/ entrepreneurship/ Organisational Change (Culture)/ Joint Venture/Innovation and its impacts on Enterprises Performance.

This suggested model will be useful for future projects and new enterprises because it explains the intersection between these elements in the Modern Enterprises.

And this model works as a circle for arriving to the performance. It begins by investing of HR Analytics (Big data) for Choosing and qualifying the efficient leadership, then the environment will promote the Corporate entrepreneurship that will encourage the organizational and cultural change in parallel with the Joint Venture/Innovation.

When this Circle works perfectly, the performance of the enterprises will be improved, and the enterprise will work in continuous development.

This Practical Model is showed such as:

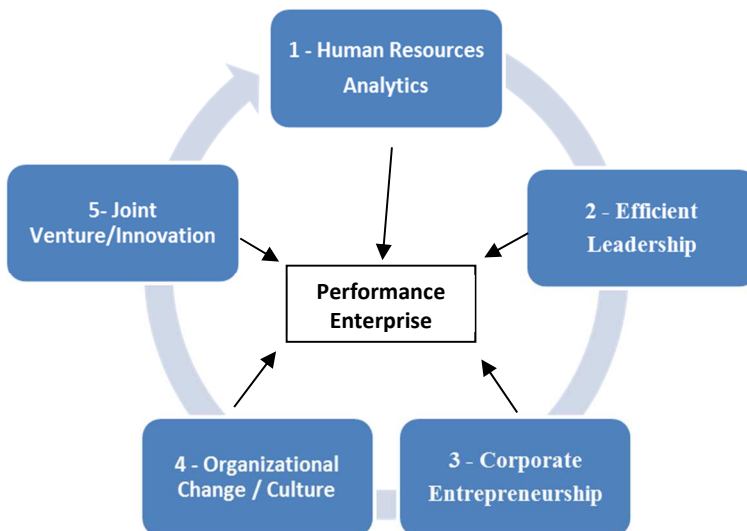


Figure 6. .(the practical Model of the relationship between HRM / Leadership/ entrepreneurship/ Organisational Change (Culture)/ Joint Venture/ Innovation and its impacts on Enterprises Performance)

Source: own elaboration.

RESULTS AND RECOMMENDATION

1- It is vital for new business Leaders to take in consideration the key elements relationships in new modern companies/ administrations.

2- The new leaders of modern enterprises must be interested in the crucial role of (HR Analytics / leadership / entrepreneurship / innovation / O venturing) on institutional performance.

3- The Director of HR Analytics are invited to take into account the impact of intersection relationship or the inter influence between (leadership / entrepreneurship / innovation / joint venturing) in new businesses.

4- The Practice Model proposed explains a new approach to manage the relationships between key elements mentioned above on performance in modern companies.

CONCLUSIONS

1- There are key Elements relationship between: (HR Analytics /Leadership/ Entrepreneurship / Joint Venture / Innovation/Performance).

2- The Importance of HR Analytics / Efficient Leadership / Organizational Change - culture / Corporate Entrepreneurship / Innovation / joint venture is crucial on the Performance in the Modern enterprises.

3-At the Practical level , there are intersection Impact of HR Analytics System on the (Leadership /*Entrepreneurship*/Organizational Culture / Joint Venture/Innovation) in the Modern enterprises.

4-There is interring influence of HR Analytics /Leadership / Organisational Change (Cul-ture) Management Entrepreneurship/corporate venturing / Innovation on the performance in the modern enterprises.

5-The practical Model proposed explains the new approach to manage the relationship between the key elements of (HR Analytics Leadership/Organisational Change - Culture Management /Entrepreneurship /corporate venturing / Innovation on the performance in the.

REFERENCES

- Adler & All: New Business Development (2002): A Challenge for Transformational Kwon, Bolino, Turnley, & Bloodgood,; Leana& Van Buren, 1999; Perry-Smith & Shalley, 2003. www.researchgate.net/publication/230284767_New_Business.
- Balkin & Gomez-Mejia(1987): New Perspectives On Compensation, , Unknown Binding, Published January 1st 1987 by Prentice Hall , 400 pages.
- Bamford and Forrester, 2003; Wilson,1992): (2003) "Managing planned and emergent change within an operations management environment", International Journal of Operations & Production Management, Vol. 23 Iss: 5, pp.546 - 564.
- Barney, J. (1986) - Organizational Culture, Organizational Culture: Can It Be a Source of Sustained Competitive Advantage? The Academy of Management Review, Vol. 11, No. 3 (Jul., 1986), pp. 656-665 Published by: Academy of Management Stable .
- Bernard Burnes (2003) : Managing change and changing managers from ABC to XYZ, Journal of Management Development , 2003/9/1.

- Block & MacMillan(1993): Corporate Venturing: Creating New Businesses Within the Firm by Block, Zenas, Macmillan, Ian C. (1993) Hardcover Hardcover
- BERSIN. J. (2012): Spotfire Blogging Team: 5 Important HR Analytics , 04 April 2012 by Spotfire Blogging Team in Advanced Analytics Data Analytics HR Analytics .
- Bolino et al, (2002), M.C. Bolino, W.H. Turnley, J.M. Bloodgood : Citizenship behavior and the creation of social capital in organizations , *Academy of Management Review*, 27 (4) (2002), pp. 505–522.
- Boxall .Peter, Purcell .John (2000) :Strategic human resource management- Where have we come from and where should we be going ?,Blackwell Publishers, *International Journal of Management Reviews*, vol.2, no.2, pp.183-203).
- Brigham .Keith H , De Castro .Julio O.(2003): ENTREPRENEURIAL FIT: THE ROLE OF COGNITIVE MISFIT, in Jerome A. Katz, Dean A. Shepherd (ed.) *Cognitive Approaches to Entrepreneurship Research (Advances in Entrepreneurship, Firm Emergence and Growth, Volume 6)* Emerald Group Publishing Limited, pp.37 - 71
- Brooks . Arthur C. (2009) : *Social Entrepreneurship: A Modern Approach to Social Value Creation* 1st Edition , Amazon's Arthur C. Brooks Page.
- Bygrave,W.D.(2004) :The entrepreneurial process, in W.D.Byrave and A.Zacharakis (Eds).*The portable MBA in Entrepreneurship*(p.3), Hoboken .NJ:John Wiley and Son .
- Chee-Yang Fong , Yin-Kuan Ng , Peter Sin-Howe Tan , Ai-Na Seow (2013) : Does Leadership and HRM Matter on Corporate Entrepreneurship?, *Human Resource Management Research* , p-ISSN: 2169-9607 e-ISSN: 2169-9666 , 2013; 3(1): 7-10 , Copyright © 2012 Scientific & Academic Publishing., Kampar, Malaysia.
- Cohen . William A(2006) : *The Entrepreneur & Small Business Problem Solver* by (3rd Edition, John Wiley & Sons, Inc. Page 1.
- Covin .J G, Miles. M P (1999) :Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice* “ , pp. 47-63;.
- David B. Balkin, Luis R. Gomez-Mejia(1984) :Determinants of R&D compensation strategies in the high tech industry, *Wiley Online Library, Personnel Psychology*, vol.37, no.4, pp.635–640.
- Delery, J.E. and Doty, D.H. (1996) Modes of Theorizing in Strategic Human Resource Management: Test of Universalistic, Contingency, and Configurational Performance Predictions. *Academy of Management Journal*, 39, 802-835, <http://dx.doi.org/10.2307/256713>.
- Domingo R. Soriano, José M. C. Martínez (2007) : Transmitting the entrepreneurial spirit to the work team in SMEs: The importance of leadership, Emerald Group Publishing Limited, *Management Decision*, vol.45, no.7, pp.1102-1122.
- Douglas Renwick, Christina M. Mac Neil (2002) : Line manager involvement in careers, MCB University Press, *Career Development International*, vol.7, no.7, pp.407-414.
- Eisenhardt. K.M. (1989): Building theories from case study research ,*Acad Manage Rev*, 14 (4) (1989), pp. 532–550 .
- Floyd & Wooldridge, 1999; McGrath, 2001; Zahra, Nielsen et al., 1999): Knowledge creation and social networks in corporate entrepreneurship: The renewal of organizational capability *Entrepreneurship Theory and Practice*, 23 (3) (1999), pp. 123–144
- Glenn Rowe .W (2001) : *Creating wealth in organizations - The role of strategic leadership*”, The IEEE Inc., *Academy of Management Executive*, vol.15, pp.81-94.
- Hayton . James C.(2004) : Strategic human capital management in SMEs: An empirical study of entrepreneurial performance , Article first published online, *Human Resource Management* , Volume 42, Issue 4, pages 375–391, Winter 2003.

- Heneman, R.L., J.W. Tansky and S. Camp(2000): Human Resource Management Practices in Small and Medium Sized Enterprises: Unanswered Questions and Future Research Perspectives, *Entrepreneurship Theory and Practice* 25: p.p11-26.
- Hornsby. Jeffrey S, Kuratko. Donald F, Montagno Ray V(1999) : Perception of internal factors for corporate entrepreneurship: A comparison of Canadian and U.S. managers, *Hankamer School of Business at Baylor University, Entrepreneurship Theory and Practice*, vol.24, no.2, pp.9–24.
- Howard . Anthony (2015) : Human-centred leadership puts people first, does what is right , *The Australian Business Review*.
- Howard . Anthony (2015) : Human-centred Leadership(Feb 24, 2015) , *Humanise: Why Human-Centred Leadership is the key to the 21st Century*.
- James C. Hayton. T : Promoting corporate entrepreneurship through human resource management practices: A review of empirical research James C. HaytonT - College of Business, Utah State University, 3555 Old Main Hill, Logan, UT 84322-3555, United States - *Human Resource Management Review* 15 (2005) 21–41.
- Janssen (Cory): company of Investopedia.com.
- Jockenhöfer . Manuel (2012) : How to promote entrepreneurship within established companies? *Human Resource Management and Corporate Entrepreneurship* , Bachelor Thesis, 2012, 60 Pages , *Business economics - Personnel and Organisation* , Compiled by the author, adapted to Schuler, 1986, p. 618.
- Kanter (1983, 1989), Kanter et al. (1992), Kotter (1996) Luecke (2003).: Kanter, R.M., Stein, B. A. and Jick, T.D (1992) *The Challenge of Organizational Change* (New York: The Free Press)
- Kanter, R. M. (1983) : *The Change Masters: Corporate Entrepreneurs at Work* (London: International Thomson Business Press)
- Kanter, R. M. (1989) : *When Giants Learn to Dance: Mastering the Challenges of Strategy, Management, and Careers in the 1990s* (London: Routledge).Kanter, R. M., Stein, B. A. and Jick, T. D. (1992) *The Challenge of Organizational Change* (New York: The Free Press).
- Katherine J. Kehler (2015) : *Nine Principles for Effective Leadership*, Personal Website .
- Kerr . Steven, Jermier .John M (1978) : *Substitutes for leadership: their meaning and measurement*, Elsevier, *Organizational Behaviour and Human Performance*, vol.22, pp.375–403, 1978.
- Laursen .Keld, Foss. Nicolai J.(2003): *New human resource management practices, complementarities and the impact on innovation performance*, Oxford University Press, *Cambridge Journal of Economics*, vol.27, pp.243-263.
- Luis R. Gomez-Mejia, David B. Balkin, Robert L. Cardy (2012) : *Management: People, Performance, Change*, Hardcover, 2nd edition, 836 pages, Published January 1st 2004 by McGraw-Hill Companies.
- McGraw-Hill (1995) : *Small Business Trends and Entrepreneurship: How Entrepreneurs Are Reshaping the Economy and What You Can Learn From Them* by The Editors of *Business Week* (1995) ,McGraw-Hill, Inc.
- Mohamed-Meri MERI (2015): *THE PERSPECTIVE OF HRM : FROM THE PYRAMID OF MOTIVATION TO HR ANALYTICS VALUE PYRAMID (A COMPARATIVE APPLICATION IN DEVELOPING AND EMERGING COUNTRIES)*, Gaziantep University, Faculty of Communications, ,Turkey . R5ME170 busn.
- Pettigrew . Andrew , Whipp. Richard (1993) : *Reviewed Work: Managing Change for Competitive Success* , Review by: Mariann Jelinek , *The Academy of Management Review* Vol. 18, No. 3 (Jul., 1993), pp. 572-576 , Published by: Academy of Management .
- Purcell .John (1999) : *Best practice and best fit: chimera or cul-de-sac*, *Industrial Relations Services, Human Resource Management Journal*, vol.9, no.3, pp.26-42).

- Rowena Barrett and Susan Mayson(2015): Introduction: at the intersection of entrepreneurship and human resource management – 9781845429263 Downloaded from Elgar Online at 08/07/2015 08:37:08AM via free access.
- Sang M. Lee, Daesung Chang, Seong-bae Lim(2005): Impact of entrepreneurship education: A comparative study of the US and Korea, Kluwer Academic Publishers, International Entrepreneurship and Management Journal, vol.1, pp.27-43, 2005.
- Soutaris, V. (2002) : Firm-specific competencies determining technological innovation: a survey in Greece, R&D Management, Vol. 32 No. 1, pp. 61-77.
- Steven J. Balla & Susan E. Dudley: Stakeholder Participation and Regulatory Policymaking in the United States , The George Washington University Regulatory Studies Center , Prepared for the Organisation for Economic Co-operation and Development. Report for the OECD , October 2014.
- Tayla N. Bauer, Stephen G. Green (1996) : Development of leader–member-exchange: A longitudinal test, Academy of Management, Academy of Management Journal, vol.39, pp.1538–1567.
- Timmons, Jeffrey, A.; Zacharakis, Andrew, and Spinelli, Stephen. (2004): Business Plans That Work: A Guide For Small Business. McGraw Hill.
- TODNEM .RUNE (2005) : Organisational Change Management: A Critical Review -Queen Margaret University College, Edinburgh, UK - Journal of Change Management Vol. 5, No. 4, 369–380, December 2005.
- Twomey Daniel F. , Harris , Drew L (2000) : FROM STRATEGY TO CORPORATE OUTCOMES: ALIGNING HUMAN RESOURCE MANAGEMENT SYSTEMS WITH ENTREPRENEURIAL INTENT, International Journal of Commerce and Management, Vol. 10 Iss: 3/4, pp.43 - 55 .
- Zahra .Shaker A , Neck . Heidi M , Kelley .Donna J (2004): INTERNATIONAL CORPORATE ENTREPRENEURSHIP AND THE EVOLUTION OF ORGANIZATIONAL COMPETENCE: A KNOWLEDGE-BASED PERSPECTIVE, in (ed.) Advances in Entrepreneurship, Firm Emergence and Growth (Advances in Entrepreneurship, Firm Emergence and Growth, Volume 7) Emerald Group Publishing Limited, pp.145-171.
- Zimmerman. Donya ,JD : Seven Myths of Being an Entrepreneur, Feb 24, 2015, <https://dzimmerman36.wordpress.com>.

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Backshoring in Light of the Concepts of Divestment and De-internationalization: Similarities and Differences

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Abstract

The purpose of this article is to evaluate the adequacy of the present theoretical knowledge relating to divestments and de-internationalization in the context of explaining the backshoring phenomenon – a relatively new, but gaining in importance specific behaviour of companies in the process of internationalization. The paper discusses various aspects of contemporary processes of internationalization. The employed research design is qualitative – the study has been based on conclusions drawn from critical literature studies. Although backshoring shares some common characteristics with the concepts of de-internationalization and international divestments, there are several noticeable differences: e.g. both de-internationalization and international divestments are rather related to wholly owned subsidiaries, while backshoring includes both activities outsourced to company's foreign suppliers and to its subsidiaries. It is necessary to develop new concepts that in a holistic way will define the decision-making process of enterprises which use de-internationalization and backshoring of business processes as part of their long-term internationalization strategies. The article indicates some dependencies and issues that must be considered in formulating new theoretical proposals.

Keywords: backshoring; reshoring; international divestment; internationalization process; de-internationalization

JEL codes: F21, F23, L21, L23

INTRODUCTION

International business (IB) literature contains multiplicity and diversity of theoretical explanations of motives, courses and consequences of internationalization of enterpris-

es. Such variety results from methodological and content-related reasons. Due to a great plurality of possible paths of internationalization, researchers can focus attention only on selected aspects of operations undertaken by the companies in international markets. Reasons for expansion into foreign markets should be sought in new phenomena in the macro- and competitive environment. Companies create their own, often completely new, development and competitive strategies, taking into account current and future external conditions. Consequently, there is no single universal theory of internationalization, but rather a bundle of complementary concepts that can be applied to explain the internationalization processes of different types of businesses.

First (traditional) theoretical approaches covered the internationalization of production and foreign direct investments, generally undertaken by companies with ownership advantages (resulting from the company's size, experience and possession of unique technology). The concepts which were developed in the last decades of the twentieth century perceived internationalization as a gradual process of increasing the companies' involvement in activities on foreign markets through systematic adequate adjustments in the area of used strategies, available resources and organizational structure (Mińska-Struzik & Nowara, 2014). A common feature of these theoretical concepts is the perception of growing internationalization as a one-way escalating process in which companies use various modes of entering foreign markets.

Meanwhile – as indicated by a number of studies – the economic crisis has forced many international companies to reduce the scale and scope of activities on foreign markets. This is not a new phenomenon – since the 70s companies have been making decisions of withdrawing from foreign operations or changing entry modes. However, the current reconfiguration of international business activities is connected with new factors and circumstances that are not fully inherent in previously known concepts of de-internationalization and international divestments. Simultaneously, backshoring – a specific behaviour of some TNCs (transnational corporations) in the process of internationalization, understood as a partial or total relocation of previously offshored companies' activities to their home countries, is gaining importance in recent years. Therefore, it seems crucial to answer the question to what extent the existing theoretical frameworks are useful to explain the trend of backshoring. Thus the main objective of the article is to evaluate the usefulness of concepts of international divestments and de-internationalization in explaining the backshoring phenomenon. The research has been based on conclusions drawn from in-depth study of literature.

The first section of the article describes the essential ideas of international divestment and de-internationalization. In addition, it presents the basic modes and typology of de-internationalization. Then, the main reasons for decision about de-internationalization are identified. In the next part of the paper different definitions of backshoring are compared and the main types of this phenomenon and motives are highlighted on the basis of the selected empirical research. The discussion section presents the main conclusions and points out the similarities and differences between the processes of divestment, de-internationalization and backshoring. The paper ends with some conclusions and implications for further research.

MATERIAL AND METHODS

The main aim of the article is to evaluate the adequacy of current theoretical knowledge relating to divestments and de-internationalization in the context of the possibility of explaining the backshoring phenomenon. Therefore, the paper focuses on the presentation and evaluation of these phenomena by thoroughly discussed definitions, conditions and motives. Identification of similarities and differences allows to assess the usefulness of concepts of international divestments and de-internationalization in explaining backshoring. Based on a review of literature, it can be concluded that although these theoretical concepts have some features in common, backshoring has some specific characteristics that suggest separate approach to this concept in IB field.

The article is of descriptive character. The most recognized concepts have been selected for the needs of this study. The literature review covers available literature on the subject (in particular academic articles), published before December 2015. Selected academic databases (EBSCO, Emerald, Scopus, Google Scholar), taking into consideration such keywords as: "divestment", "de-internationalization", "reshoring", "backshoring", "onshoring" were employed to identify relevant literature¹. Besides, considering the same keywords, proceedings of the most important international conferences in the area of international business (e.g. EIBA, AIB) have been analysed. Attention has been paid primarily to academic articles, which focused on the analysis of motives, governance structure of relocated activities and the level of voluntariness of companies that decided to implement these strategies.

LITERATURE REVIEW AND THEORY DEVELOPMENT

De-Internationalization and Divestments as the Specific Behaviours of Companies on International Markets

In the current economic reality companies are forced, more than ever, to make decisions regarding effective management of international operations' portfolio, including the reduction of activities in foreign markets. As early as in the 70s researchers' attention has been drawn to foreign divestments (Boddewyn, 1979). Since that moment, divestments have stopped to be perceived only as a failure in terms of conducting operations in foreign markets and have been used in the processes of adapting companies to the changes in their internal and external environment.

Multidimensionality of the processes and the variety of companies, industries and locations create a broad spectrum for studying the phenomenon of divestments (Chow & Hamilton, 1993). When considering divestments from the perspective of a corporate strategy, a portfolio of foreign operations is considered – the company is analysed in terms of its efficiency and strategic adjustment of resources and products. Operations that are unprofitable and deviating from the company's strategy should be immediately sold or liquidated (Duhaime & Grant, 1984). This indicates that the probability of divestment depends largely on the strategy adopted by the company in foreign markets. It is also important whether the company adapts and

¹ Analysis of a number of media articles referencing to reshoring/backshoring was conducted by Cranfield University (2015), and it indicates a dynamic increase of interest in this topic from 2010.

works on individual foreign markets as a part of a multinational strategy, or the branch is a part of an integrated production network belonging to the global company (it is assumed that foreign affiliates are more vulnerable to divestments).

A divestment may mean a partial reduction of activities in foreign markets or total withdrawal of companies from operations on the market through liquidation, sale of assets, or bankruptcy petition (Burt, Dawson & Sparks, 2003). In the case of sale, the owner changes, but the foreign branch continues its activities. Liquidation means that a foreign subsidiary of a company ceases to exist (Mata & Portugal, 2000). Divestments may also be the result of failures on the foreign market, adaptation or restructuring actions taken by the company (aimed at improving the functioning of the whole enterprise) or can be also imposed, e.g. in case of nationalization (Benito, 2005)².

Typology of divestment processes proposed by Simoes (2005) is based on the two approaches to this phenomena: the reduction of the degree of ownership and the reduction of assets held by the company and its activities. The author distinguished: (i) forced divestments / selling a branch / selling part of the shares (reduction of property, business is conducted with no changes), (ii) a decrease in production / decrease in importance of the branch (reduction of operations, the level of ownership remains unchanged), and (iii) liquidation of a foreign branch / sale of shares and reduction of company's activities (reduction of both the scope of operations and the level of ownership), and (iv) no divestments (no changes in the ownership and business activity).

The concept of de-internationalization has been outlined much later and introduced by Welch and Luostarinen (1988), who believed there was no guarantee that the company that started the process of internationalization would continue it in the future. Similarly, Fletcher (2001) challenges the traditional approach to internationalization as an incremental process, and examines the role of de-internationalization in view of long-term internationalization of the company. According to the author, this process is the opposite of gradual progression and should be analysed in the context of the problems identified during the initial implementation of the original internationalization strategy. A similar approach was presented by Calof and Beamish (1995), who claimed that internationalization is a continuous process to adapt the structure, strategies, resources, and other business operations to the conditions prevailing in the international environment, and de-internationalization is a deliberate reduction in the degree of involvement of companies in international markets.

Benito and Welch (1997), who first developed a conceptual model of de-internationalization, believe that this process applies to all activities, both voluntary and forced, which result in a reduction of activities in the international market. The authors have analysed de-internationalization from three theoretical perspectives: economics, strategic management and internationalization process management. From the perspective of economics, de-internationalization is examined as a rational response to changes in market and competitive conditions. From the perspective of strategic management,

² However, Boddewyn (1979) claims that foreign divestment is only a voluntary cessation of business activity or the sale of all or selected parts of the company. Besides, also the definition proposed by Mellahi (2003) is limited to de-internationalization as a voluntary engagement in the process of reducing foreign operations in response to the worsening organizational conditions in the local or international market. De-internationalization in this approach can be a mean to improve the overall profitability of TNCs.

the company decides to conduct de-internationalization on the basis of the analysis of product life cycle and portfolio of activities and resources. In turn, from the point of view of the internationalization process managing, authors point out that the ongoing internationalization process of the company is itself seen as a major barrier for de-internationalization (e.g. due to the increasing involvement of senior management in operations in the international markets).

Turcan (2011) created a typology of de-internationalization processes taking two criteria into account: the degree of de-internationalization and the final result of this process (Figure 1). However, this classification does not take into consideration scale and scope of the reduction of foreign operations and does not take into account the change in degree of ownership of existing activities.

		De-internationalization continuum	
		Total	Partial
Company activity	Still in business	Total withdrawal from international activities/ continuation of activities on the domestic market	partial withdrawal from activities on foreign markets
	Out of business	Total withdrawal from activities on foreign markets/ discontinued operations	non-empirical cell

Figure 1. Typology of de-internationalization

Source: on the basis of Turcan (2011, pp. 230-232).

Turcan (2011) added the issue of de-internationalization modes to the typology presented above. In accordance with the definition proposed by Benito, Petersen and Welch (2009), he also claimed that forms of conducting business activity in foreign markets include de-internationalization. If the company undertakes a partial de-internationalization, it can reduce the scale of operations in the market or change the form of conducting business to one that requires less workforce or capital commitment. Reduction of operations' scale can be done by reorganization, withdrawal of one of the brands from a given market, or production of older version of the product. In case of changing entry mode in the foreign market, a company may decide to de-invest, de-franchise or de-export. A company which decides to de-invest may in turn change the form of business activities, e.g. to franchising, contracting-out or assets sale.

The main difference between divestment and de-internationalization is the possibility to do a multi-dimensional analysis of the phenomenon of de-internationalization. Researches on foreign divestments (and withdrawal from export activities) focus basically on the form of activities, while the scope of the analysis of de-internationalization processes may include other aspects, e.g. a products portfolio or the attractiveness of individual foreign markets. Thus, in relation to the whole company, de-

internationalization seems to be a much wider concept³. Despite these differences, it must be noted that these two processes are characterized by: 1) a voluntary or forced reduction in the degree of company's involvement on foreign markets; 2) the complete withdrawal of a company from a foreign market or partial reduction of the involvement on a given market (Reiljan, 2004).

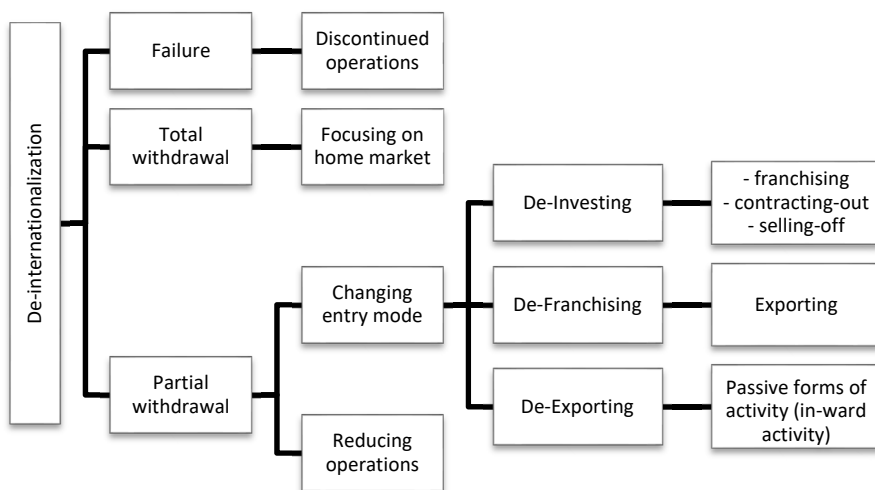


Figure 2. Modes of de-internationalization

Source: Turcan (2011, p. 42).

Motives of De-internationalization

Reiljan (2004) classified the reasons for de-internationalization basing on the analysis of empirical research on divestments and withdrawal of export activity. She also highlighted four groups of factors influencing the decision to reduce involvement in foreign markets. As she points out, the motives may result from lack of international experience, strategic changes, poor financial results or increase of costs and “other factors”.

The group of motives related to lack of experience include, *inter alia*, insufficient market analysis preceding the process of internationalization, too early / too late started expansion into the foreign markets, lack of information, wrong choice of target market or inappropriate entry mode. A lack of experience in foreign markets may also result in maladjustment of the product and insufficient adaptation to the foreign market requirements. A partial or complete de-internationalization can also result from changes in the business strategy, including, e.g. rationalizing company's activities, focusing on the key areas of company's activities, changes in management, the increase in demand on the domestic market, a shortage of necessary resources (including qualified staff) and consequently limited production capacity or changes in the operation in the given foreign market. In a group of reasons connected with poor financial results or an increase in

³ De-internationalization is sometimes a preparation to re-internationalization. Welch and Welch [2009], while exploring the issue of re-internationalization, have defined it as a process of internationalization of a company, with a temporary withdrawal from a foreign market, finished with a successful comeback.

incurred costs Reiljan (2004) has listed an advancing competitive pressure (in the country of origin, in the host country and in other countries), rising production costs, transportation costs and taxes. Among the "other reasons" the author has pointed out de-internationalization processes of related industries, external shocks, governmental interventions and ownership changes.

Reasons related to the lack of experience are most important at an early stage of expansion into international markets. At a later stage of internationalization, the most important reason for de-internationalization seems to be an increase in costs resulting for example from changes in the economic situation on foreign markets. At the most advanced stages of internationalization, a frequently occurring reason for de-internationalization is reorganization and a change of the company's strategy. As indicated by Mińska-Struzik and Nowara (2014), in the case of de-internationalization of activities resulting from financial or strategic motives, this process is not generally followed by reduction of the involvement in foreign markets, but rather by changes of host markets and/or entry modes.

Often, despite obvious reasons to conduct de-internationalization, the decision on withdrawal from operations in foreign markets is not ultimately adopted. The main reasons for postponing de-internationalization are reluctance to admit a defeat and a large connection of foreign branch with the other activities of the company. The fact is that the decision to withdraw from activities on the foreign market is not easy, especially when making it may be hindered by factors which constitute exit barriers (Porter, 1976).

In Search of the Definition and Motives of Backshoring

The IB literature have repeatedly called into question the benefits of captive offshoring and offshore outsourcing, noting a big difference between the value of savings initially estimated by the companies and their actual achieved profits (Leibl, Nischler, Morefield & Pfeiffer, 2009). The debate among researchers, business practitioners and politicians about the need for re-industrialization of developed countries is largely based on expectations that the return of manufacturing companies that have previously moved part of their operations to low-cost countries, will contribute to restoration of (industrial) competitiveness of developed countries (Ioia & Leirião, 2014).

Although the scale of re-industrialization remains limited, the number of companies that have decided to backshore is growing rapidly. It is difficult to accurately assess how common is this phenomenon, as there is no fully reliable data. The problem with estimating the scale of backshoring also stems from the fact that this concept is not clearly defined⁴. Basically, backshoring concerns transfer of business processes, production and services that have been transferred to an offshore (or nearshore) location, back to the country of origin (Arnbjørn & Mikkelsen, 2014). In other words, backshoring is a form of reshoring, which itself is a reversal of offshoring and can refer simply to change of the location (Gray, Skowronski, Esenduran & Rungtusanatham, 2013)⁵.

⁴ In the literature there are also other terms defining backshoring, e.g. „backsourcing“, „insourcing“, „inshoring“, „on-shoring“, „home-shoring“ or „repatriating manufacturing“ etc.

⁵ Fratocchi *et al.* (2014) divide reshoring into: back-reshoring – meaning a return to the home country, and near-reshoring – meaning a transfer of business processes to the location close to the home country.

The variety of definitions result from the concentration of authors on various aspects of this phenomenon, although almost all researchers accept that backshoring refers to the earlier delocalized manufacturing processes, regardless of the business model adopted on the foreign market (outsourcing or insourcing). Thus, backshoring covers the case of partial repatriation of offshored production processes⁶ (which may concern a whole foreign branch or some of company's functional areas). One of the basic conditions of backshoring is also the aim of the company to satisfy a demand in the home / local market from the point of view of the parent company⁷. Therefore, it can be generally assumed that backshoring means a strategic, voluntary decision to relocate previously delocalized modules of the value chain to its country of origin, regardless of whether these processes are or will be implemented under their ownership structures or through outsourcing. This phenomenon relates to a physical location, not the ownership itself, which is why manufacturing backshoring can be analysed from different perspectives, and as a result, four possible options of backshoring can be identified. The company can provide a demand for products on the domestic market by:

- Option 1: the transfer of production from its own foreign branch (captive offshoring) to the internal structures of the company on its home market (so-called “in-house backshoring”).
- Option 2: the transfer of production activities from its own foreign branch to an external supplier on its home market (backshoring for outsourcing).
- Option 3: the transfer of production activities from the foreign supplier (offshore outsourcing) to the internal structures of the company on its home market (backshoring for insourcing).
- Option 4: the transfer of production activities from the foreign supplier to an external supplier on its home market – the change relates only to geographical boundaries (outsourced backshoring) (Młody, 2015).

The literature indicates some factors that made some companies decide to reconsider their strategies of internationalization and eventually relocate (partially or totally) production processes to the country of origin. Although in recent years a whole range of studies on backshoring has appeared (Arlbjørn and Mikkelsen, 2014; Fratocchi, Di Mauro, Barbieri, Ancarani, Lapadre & Zanoni, 2014; Kinkel, 2012; Kinkel, 2014; Martínez-Mora & Merino, 2014; Tate, Ellram, Schoenherr & Petersen, 2014; Van den Bossche, Gupta, Gutierrez & Gupta, 2014), comprehensive empirical studies on this phenomenon are very limited.

Backshoring may be an operational action taken to correct previous decisions regarding the relocation of value chain activities, due to e.g. internal or external conditions, or as a part of a long-term strategy (Bals, Tate & Daum, 2015). According to Kinkel (2014), 80% of German backshoring activities are classified as operative corrections to managerial decisions whereas 20% are categorized as strategic adaptations to changing

⁶ The attention is paid most of all to the backshoring of production processes because of at least two reasons: 1) exit barriers for production processes are generally much higher than in the case of services, 2) offshoring of services, in contrast to offshoring of production, relates to a limited number of locations (India and East-Central Europe among others).

⁷ It is hard to imagine production relocation, targeted at Asian markets, from China to e.g. Western European countries for any economic reasons.

environmental conditions (Kinkel, 2014). However, current trend indicates moving away from managerial adaptations to strategic ones (Bals *et al.*, 2015).

It happens that companies carrying out production in foreign locations "forget" about the care of such important aspects as a high quality of products offered on the domestic market and their innovativeness (Arlbjørn & Mikkelsen, 2014; Van den Bossche *et al.*, 2014). Another important factor is also the *made in* effect, especially in the context of consumer ethnocentrism (Martínez-Mora & Merino, 2014; Tate *et al.*, 2014). The tendency of "lean" supply chains and quick reactions to consumers' needs, favours locating production close to the home markets (Kinkel, 2012). Besides, consumers expect quick delivery time, which in the case of transport from Asian countries is not possible, even more so if we consider the issue of minimum orders.

Characteristics of the host country are also often cited as the basis to undertake backshoring, not only because of the increase in cost, but due to such factors as: inadequate infrastructure in host countries, unavailability of skilled manpower, high cost of coordination and control, or low level of protection of intellectual property rights (Kinkel, 2014; Pearce, 2014). Another, sometimes overlooked aspects are the investment incentives in home countries⁸ (Gray *et al.*, 2014; Tate *et al.*, 2014).

In summary, there is a whole range of factors that can motivate managers to take decision to backshore production activities back to home countries. The frequency and strength of these determinants can be influenced by the company's size and financial health, international environment (e.g. oil prices, political stability), the attractiveness of the market of the host (including e.g. market capacity) and the possibility of restoration of a local supply base in close proximity to key customers.

DISCUSSION

The concepts of divestment, de-internationalization and backshoring presented in the article indicate the fact that company's international activities should be considered in a holistic way, by analysing the motives and conditions of the decisions taken in the context of both directions of internationalization processes. The company cannot introduce backshoring strategy of de-internationalization (effect) if its activities were not previously relocated (cause)⁹. Therefore, de-internationalization is a strategic business decision, aimed at optimizing company's operations. Similarly, backshoring can be interpreted as an action to *de facto* improve the functioning of the company in the long run.

Based on the above literature review, it can be concluded that backshoring shares some similarities with de-internationalization and international divestments. Given the broad definition of de-internationalization, understood as any action taken by the company (both forced and voluntary), which results in reduction of involvement in activities on foreign markets (Benito & Welch, 1997), backshoring may be considered even as a certain kind of de-internationalization. On the other hand, these concepts lack several key features of the backshoring phenomenon, such as

⁸ Examples of the investment incentives have been described in e.g. World Investment Report 2014 (UNCTAD, 2014, p. 109).

⁹ Benito and Welch (1997) have considered whether the particular factors, which cause the level of company's internationalization to rise, work also in the opposite direction, causing and enhancing processes of de-internationalization.

manufacturing outsourcing (Fratocchi *et al.*, 2015; Moradlou & Backhouse, 2015). Significant differences can be seen by analysing the motives of both processes (Table 1). Backshoring should be considered as individual strategic decision of the company, while de-internationalization can be either voluntary or forced (because of e.g. nationalization or government intervention in the host country). Reasons for backshoring may also have a non-financial nature, bound to political issues or consumer ethnocentrism. Factors that affect both de-internationalization, as well as backshoring are, *inter alia*, rising production costs in host countries, and the difficulty of coordinating operations in foreign markets. According to the analysis, companies, in the case of backshoring, pay close attention to quality, innovativeness and intellectual property protection in host countries – factors that did not constitute generally motives of de-internationalization. Besides, it is noteworthy that investment incentives for foreign operating companies in their home countries can in the future significantly contribute to remodelling of the international manufacturing system.

Table 1. Comparison of key determinants of de-internationalization and backshoring

<i>De-internationalization</i>	<i>Backshoring</i>
<p>Strategic and financial grounds:</p> <ul style="list-style-type: none"> - rationalization of business operations, - restructuring of the foreign operations portfolio / strategic repositioning, - low income derived from operations on a foreign market, - increase in the production / logistics costs, - financial losses / weak financial position of the company in comparison with competitors operating on the given market. 	<p>Strategic and financial grounds:</p> <ul style="list-style-type: none"> - innovativeness – higher in the home country, - improvement of products quality, - the ability to automate production, - reduction of supply chain risk, - increase the production / logistics costs in host countries, - improving the response to the demands of consumers / consumer proximity.
<p>Market and organizational motives:</p> <ul style="list-style-type: none"> - wrong choice of target market or the entry mode, - mismatch of products – insufficient adaptation to the foreign market/lack of market research and analyses, - the loss of a competitive advantage on the foreign market / increase in competitive pressures, - unfavourable prospects for development of the industry - lack of staff resources needed to conduct foreign operations, - lack of knowledge and experience, - insufficient control of foreign affiliates, - ownership changes, - government interventions in the host country. 	<p>Market and organizational motives / associated with the production site:</p> <ul style="list-style-type: none"> - investment incentives in home countries, - the <i>made in effect</i>, - inadequate infrastructure and adverse legal conditions in the host countries, - low level of intellectual property protection, - unavailability of skilled manpower in the host countries, - the high cost of coordination and control, - cultural distance.

Source: own elaboration on the basis of 1) de-internationalization (Benito, 2005; Benito & Welch, 1997; Boddewyn, 1979; Duhaime & Grant, 1984; Hamilton & Chow, 1993; Reiljan, 2004); 2) backshoring (Arlbjørn & Mikkelsen, 2014; Fratocchi *et al.*, 2014; Gray *et al.*, 2013; Kinkel, 2012; Kinkel, 2014; Martínez-Mora & Merino, 2014; Tate *et al.*, 2014; Van den Bossche *et al.*, 2014).

Moreover, while both de-internationalization and divestment refer to the case in which wholly dependent organizational units are partially or completely withdrawn from the market, backshoring may include actions both outsourced to foreign sup-

pliers and insourced within the subsidiaries. Research on de-internationalization does not also indicate a transfer of production processes to the company's home country, which is a fundamental condition of backshoring. In summary, it seems that backshoring, despite having some common characteristics with the other two concepts, is characterized by a larger range of other reasons, motives and distinct decision-making processes, and thus, it may constitute an individual concept. This is consistent with the opinion of Fratocchi *et. al.* (2015) who argue that concept of backshoring has some specific characteristics suggesting a separate conceptualization in the international business literature. Simultaneously, it does not correspond to the structure of equity of divestment proposed by UNCTAD (2013, p. 27), in which backshoring is considered as one of the forms of divestments.

CONCLUSIONS

The paper has focused on the processes of de-internationalization, divestments and backshoring, to present a multi-dimensional comparative analysis of motives, governance structure of relocated activities and the level of the company's voluntariness in the context of these three processes. Based on the literature studies, it can be concluded that both de-internationalization and backshoring are the next steps of internationalization which aim mainly for the optimization of company's operations. Reduction in the level of internationalization can in fact accelerate the overall development of the company and consequently result in stronger international involvement in long term (Turcan, 2011). Despite some similarities between these phenomena, the concept of de-internationalization (and divestments as a part of it) cannot, however, serve as an explanation of backshoring activities, because of the different scope and motives of enterprises and the level of voluntariness of relocation of manufacturing processes to home countries.

Limitations of the article are related to the still insufficient amount of empirical research on de-internationalization and backshoring, and despite some attempts in recent years to develop a holistic model of internationalization of enterprises the works on a concept, which would cover all current processes in international business are still rare. Future research should focus on the comparison of the motives and circumstances of both the initial relocation and, subsequently, backshoring / de-internationalization of production processes. In particular, these internal conditions, which make companies more susceptible to these processes should be taken into account. This could enable to define in detail the decision-making process in the context of a long-term strategy of internationalization. Besides, future studies should include analysis of dependencies between motives of companies' relocations (using categorisation such as Table 1.) and companies' characteristics like e.g. size of the company, the industry it operates in, governance mode and the specificity of home/host country. Little is also known about the impact of the decisions to backshore/de-internationalise, on the overall financial performance of the company – what are the real costs and profits. Research in this area will be a huge challenge for the scientists because of the necessity of a deep analysis of the broad network of dependencies in complicated paths of location decisions.

In the current economic reality, managers are forced to make strategic decisions on the effective management of portfolios of foreign operations, and therefore companies constantly adjust their structure, resources and strategies to rapidly changing conditions within the company and in its external environment. Hence the interest in this subject seems to be extremely important from the point of view of business practice, especially in the context of, among others, volatile international markets, rising wage costs in China and political pressures associated with the trend of re-industrialisation.

REFERENCES

- Arlbjørn, J.S., & Mikkelsen, O.S. (2014). Backshoring manufacturing: Notes on an important but under-researched theme. *Journal of Purchasing and Supply Management*, 20(2), 60-62.
- Bals, L., Daum, A., & Tate, W. (2015). From Offshoring to Rightshoring : Focus on the Backshoring Phenomenon. *Academy of International Business Insights*, 15(4), 3-8.
- Benito, G. (2005). Divestment and international business strategy. *Journal of Economic Geography*, 5(2), 235-251.
- Benito, G., & Welch, L. (1997). De-Internationalization. *Management International Review*, 37(2), 7-25.
- Benito, G., Petersen, B., & Welch, L. (2009). Towards More Realistic Conceptualisations of Foreign Operation Modes. *Journal of International Business Studies*, 40(9), 1455-1470.
- Boddewyn, J. (1979). Foreign divestment. Magnitude and factors. *Journal of International Business Studies*, 10(1), 21-27.
- Burt, S., Dawson, J., & Sparks, L. (2003). Failure in International Retailing: research propositions. *International Review of Retail Distribution and Consumer Research*, 13(4), 355-373.
- Calof, J., & Beamish, P. (1995). Adapting to Foreign Markets: Explaining Internationalization. *International Business Review*, 4(2), 115-131.
- Chow, Y.K., & Hamilton, R.T. (1993). *Corporate divestment: An overview*. *Journal of Managerial Psychology*, 8(5), 9-13.
- Cranfield University (2015). *An Analysis of the UK's Capability to Reshore Production*. A White Paper by Cranfield University.
- Duhaime, I.M., & Grant, J.H. (1984). Factors influencing divestment decision-making: Evidence from a field study. *Strategic Management Journal*, 5(4), 301-318.
- Fletcher, R. (2001). A holistic approach to internationalization. *International Business Review*. 10(1), 25-49.
- Fratocchi, L., Di Mauro, C., Barbieri, P., Ancarani, A., Lapadre, L., & Zanoni, A. (2014). Manufacturing Reshoring: Threat or opportunity for East Central Europe and Baltic Countries. In A. Zhuplev. & K. Liuhto (Ed.), *Geo-Regional Competitiveness in Central and Eastern Europe, the Baltic Countries, and Russia* (pp. 83-118). Hershey, PA: IGI Global.
- Fratocchi, L., Ancarani, A., Barbieri, P., Di Mauro, C., Nassimbeni, G., Sartor, M., Vignoli, M., & Zanoni, A. (2015). Manufacturing back-reshoring as a nonlinear internationalization process. In R. van Tulder, A. Verbeke & R. Drogendijk (Ed.), *The Future of Global Organizing (Progress in International Business Research* (pp. 365-403). Emerald Group Publishing Limited.
- Gray, J.V., Skowronski, K., Esenduran, G., & Rungtusanatham, J.M. (2013). The reshoring phenomenon: What supply chain academics ought to know and should do. *Journal of Supply Chain Management*, 49(2), 27-33.

- Ioza, E.M., & Leirião, J.C. (2014). *Opinion of the European Economic and Social Committee on the Reshoring of EU industries in the framework of reindustrialization*. Retrieved on January 10, 2016 from *European Economic and Social Committee*: <http://eur-lex.europa.eu>
- Kinkel, S. (2014). Future and impact of backshoring – Some conclusions from 15 years of research on German practices. *Journal of Purchasing and Supply Management*, 20(2), 63-65.
- Kinkel, S. (2012). Trends in production relocation and backshoring activities. *International Journal of Operations & Production Management*, 32(6), 696-720.
- Leibl, P., Nischler, C., Morefield, R., & Pfeiffer, R. (2009). An analysis of off-shoring manufacturing to reduce costs. *Journal of Business and Behavioural Sciences*, 21(1), 130-139.
- Martínez-Mora, C., & Merino, F. (2014). Offshoring in the Spanish footwear industry: a return journey?. *Journal of Purchasing & Supply Management*, 20(4), 225-237.
- Mata, J., & Portugal, P. (2000). Closure and Divestiture by Foreign Entrant: The Impact of Entry and Post-Entry Strategies. *Strategic Management Journal*, 21(5), 549-562.
- Mellahi, K. (2003). The De-internationalization Process: A Case Study of Marks and Spencer. In C. Wheeler, F. McDonald & I. Greaves (Ed.), *Internationalization: Firm Strategies and Management* (pp. 150–162). Palgrave Macmillan UK. doi: 10.1057/9780230514638
- Mińska-Struzik, E., & Nowara, W. (2014). Dylematy badań nad internacjonalizacją przedsiębiorstwa. *International Business and Global Economy*, 33, 394-405.
- Młody, M. (2015). Istota i motywy podejmowania przez przedsiębiorstwa strategii reshoringu. *Prace Naukowe Wyższej Szkoły Bankowej w Gdańsku*, 40, 209-223.
- Moradlou, H., & Backhouse, C. (2015). *Re-shoring UK Manufacturing Activities, Supply Chain Management & Postponement Issues*. Paper presented at the 18th Annual Cambridge International Manufacturing Symposium: Capturing value from global networks: implications for manufacturing, supply chains and industrial policy. Retrieved on January 10, 2016 from <http://www.ifm.eng.cam.ac.uk>
- Pearce, J.A. (2014). Why domestic outsourcing is leading America's reemergence in global manufacturing. *Business Horizons*, 57(1), 27-36.
- Porter, M.E. (1976). Please note location of nearest exit: Exit barriers and planning. *California Management Review*, 19(2), 21-33.
- Reiljan, E. (2004). *Reasons for de-internationalization: an analysis of Estonian manufacturing companies*. Workshop paper on 30th EIBA Annual Conference: Enlarged European Union: Challenges to International Business and Management, Ljubljana.
- Simoes, V.C. (2005). *Divestment by foreign-based companies: Portuguese experiences*. Paper presented at the conference: *Relocation of production and jobs to CEE countries – who gains and who loses?* Hamburg: Hamburg Institute of International Economics.
- Tate, W.L., Ellram, L.M., Schoenherr, T., & Petersen, K.J. (2014). Global competitive conditions driving the manufacturing location decision. *Business Horizons*, 57(3), 381-390.
- Turcan, R.V. (2011). *De-internationalization: A conceptualization*. Paper presented at AIB-UK & Ireland Chapter Conference: International Business: New challenges, new forms, new practices, Edinburgh, United Kingdom.
- UNCTAD (2013). *World Investment Report 2013: Global Value-Chains: Investment and Trade for Development*. New York and Geneva: UNCTAD.
- UNCTAD (2014). *World Investment Report 2014: Investing in the SDGs: An Action Plan*. New York and Geneva: UNCTAD.
- Van den Bossche, P., Gupta, P., Gutierrez, H., & Gupta, A. (2014). Solving the Reshoring Dilemma. *Supply Chain Management Review*, 18(1), 26-33.

- Welch, C., & Welch, L. (2009). Re-internationalization. Exploration and conceptualisation. *International Business Review*, 18(6), 567-577.
- Welch, L., & Luostarinen, R. (1988). Internationalization: Evolution of a Concept. *Journal of General Management*, 14(2), 34-55.

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Role of Entrepreneurship Education in Higher Education Institutions in the Process of Business Development in Poland

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Abstract

The aim of this article is to evaluate the range and methods of teaching entrepreneurship in higher institutions in Poland in fields of studies related to business, economics, finance, accounting, or management. The paper presents results of an analysis of curricula and of the carried out qualitative researches (FGI) among university students. Findings present that universities teach entrepreneurship on multiple types of courses and in different ways. Contents which shape entrepreneurial attitudes are taught in various courses. In curricula most courses teach entrepreneurship, by being applicable to particular spheres of business activities, but mostly shaping those competences that are useful in large firm environment. Recommendations suggest that higher education institutions should emphasize the teaching of practical skills, which support business development. Universities, through teaching entrepreneurship, are supposed to encourage their students to undertake business activities, including the ones which aim at opening own business by students which is why universities should emphasize the teaching of practical skills and entrepreneurship should be taught based on real-life examples.

Keywords: business studies; entrepreneurship; teaching; competences

JEL codes: I250

INTRODUCTION

Entrepreneurship is an element of the economy and it influences the level of innovation in the economy. The level of business development in a given country depends on many factors, but it also depends on the business attitude. A big role in building a positive attitude towards entrepreneurship is played by activity that promotes entrepreneurship and entrepreneurial attitudes, as well as by competences which are acquired during studies (Wach & Wojciechowski, 2016). According to the European Commission entrepreneurship is a skill which can be learned and therefore it is necessary to support this type of education in all EU countries (European Commission, 2016). European Commission has recognized entrepreneurship education as a basic feature of education system in Europe (European Commission, 2016; Sadowska, 2016).

Research conducted by the Amway and carried out together with the Technische Universität München (TUM) and the Institute GfK SE in several dozen of countries all over the world show that most of the respondents (in 2005, 3 out of 4 respondents in the world and 71% of the respondents in Poland) have a positive attitude towards entrepreneurship (Amway, 2015). At the same time, a little less of the respondents thought that entrepreneurship can be taught (among all the respondents it was 63% and 68% of Polish respondents). The respondents indicated that entrepreneurship should be taught by schools, including higher education institutions, but also that there should be special programmes led by non-profit organisations, chambers of commerce, or government and private companies (Amway, 2014).

The aim of this article is to evaluate the range and methods of teaching entrepreneurship in higher institutions in Poland with reference to the fields of studies which seem to be preparing for business practice, such as economics, finance and accounting, or management. The paper presents results of an analysis of curricula and qualitative research among university students.

ENTREPRENEURSHIP TEACHING IN HIGHER EDUCATION

Entrepreneurship is one of key competences which is being taught on different levels of education, including higher education. Teaching entrepreneurship in higher education institutions is supposed not to only develop various skills, but also to develop students' competences in the spectre of entrepreneurship, as well as it should inspire the business spirit (Komisja Europejska, 2008, pp. 8-9). The necessity of development of students' business competences and, related to that teaching of business in its' multiple aspects, is connected with the realization of several strategies accepted in the time perspective of 2020 within the European Union (Europe 2020) and within particular countries (in Poland the National Development Strategy 2020, the Strategy of Human Resources Development, the Social Capital Development Strategy, the Strategy of Innovation and Economic Efficiency), which highlight the significance of entrepreneurship with regard to socio-economic development of a country. Simultaneously, the National Qualifications Framework for Higher Education (NQF), determined by the Minister of Science and Higher Education by way of regulation in most of fields of study learning outcomes for the general academic profile and for practical profile on

first and second-degree studies show the outcomes that concern entrepreneurship (Rozporządzenie Ministra ..., 2011). In the NQF, the entrepreneurship education usually emerges among knowledge outcomes and in the frame of social competences. The first ones refer to the knowledge of rules of starting and developing different forms of enterprises, while the second ones refer to thinking and acting in an entrepreneurial way. In the rest of the descriptions of the discipline learning outcomes (in humanities, art, and in the description of engineering competences) do not include extended content regarding entrepreneurship. Entrepreneurship education is limited to the studied field and refer to running a business activity within that field (Nowak, 2016).

Entrepreneurship education, in particular education for entrepreneurship, seems to be strongly connected with teaching economics or business. However, entrepreneurship itself is of interdisciplinary character, and its research ranges of from economics, management, finance to sociology, psychology, pedagogy, law and other scientific disciplines (Wach, 2014, pp. 20-24).

ANALYSIS OF CURRICULA IN ECONOMICS FIELDS OF STUDIES

According to Valerio, Parton and Robb (2014) the field of studies and related profile of the graduate are the key factors affecting interest in entrepreneurship. Simultaneously a positive correlation between attending entrepreneurship courses and new venture creation was found. Thus a positive correlation between entrepreneurship education and future entrepreneurial behavior was determined (Valerio, Parton & Robb, 2014). For the above reasons this study is focused on the curricula of business studies. For the purpose of analysing the range of business studies in higher education in the economic fields of studies, 15 curricula were analysed in 5 higher education institutions, both public and private, on first and second-degree studies in management, economics, and finance and accounting. The researched sample covered:

- 2 curricula on first-degree studies in economics,
- 1 curriculum on second-degree studies in economics,
- 5 curricula on first-degree studies in management,
- 3 curricula on second-degree studies in management,
- 2 curricula on first-degree studies in finance and accounting,
- 2 curricula on second-degree studies in finance and accounting.

The conducted analysis found that all the analysed curricula provided knowledge and shaped competences connected with entrepreneurship education. On average, courses corresponding to entrepreneurship education constituted almost one fifth of all the courses taught in a given field of study and made it possible to gain 16 ECTS credits. Range of courses, form of classes and purpose of those courses were quite different. The smallest number of entrepreneurship courses was found in finance and accounting and in economics. In the curricula of finance and accounting and the ones of economics on both first and second-degree studies there were no courses directly connected with the entrepreneurship education, that is to say courses which would enable their students to gain knowledge in, for example, starting a business or which would shape entrepreneurial attitudes. Entrepreneurial competences were shaped, among others, during courses in the fields of:

- economics – management, accounting, market surveys, or business communication,
- finance and accounting – management, accounting, business finances, cost accounts, or risk management.

Those types of courses represented 17% of all the courses and enabled gaining 15% of ECTS credits in economics; in finance and accounting – 14% of courses and 11% of ECTS credits.

In management the situation was different. In this field of study, contents shaping business competences among students constituted around one fifth of both the number of all courses and the number of ECTS credits. At the same time, in the curricula of the universities having this field of study on first and second-degree studies, there was always at least one course that directly corresponded to the entrepreneurship education, such as business studies, introduction to business studies, or business training. Along these courses students were required to develop a small enterprise management or business-plan, which shapes skills that are helpful with newly established business activities. During those courses there are usually carried out such issues as, for example:

- role of entrepreneurship,
- pros and cons of owning an enterprise,
- entrepreneurial personality – qualities and predispositions of an entrepreneur,
- developing ideas for one's own business,
- shaping organization's identity,
- communication between an enterprise and the market,
- business resources,
- analysis of available sources of financing of new enterprises,
- making business-plans,
- starting an economic activity,
- organizational and legal forms of enterprises,
- taxation rules of economic entities.

In management programmes curricula include courses connected with management, human resources management, project management, accounting, enterprises' finances, economics, marketing, and marketing strategies, market research and analysis, civil and commercial law, leadership, creative thinking in an organization, motivating oneself and other people, communication, and negotiations.

Comparing these results with analyses by Płaziak and Rachwał (2014) for a non-economic study program (geography), one can conclude that the focus on entrepreneurship education in economic study programs is greater than in non-economic study programs. Nevertheless one must also admit that the scope of entrepreneurship education in study programs related to economics and business is small and insufficient for the development of entrepreneurship in Poland. Thus, changes are needed to overcome barriers which according to Pietrzykowski (2011) hinder the development of entrepreneurship education, particularly in economics and business oriented study programs.

ENTREPRENEURSHIP EDUCATION STUDIES IN HIGHER EDUCATION ACCORDING TO STUDENTS OF ECONOMIC FIELDS

The main purpose of the presented research was to identify the most important skills which should be possessed by students of economics and which will help them to start their own enterprises and to identify which forms of classes are best of use in teaching entrepreneurship. Furthermore, the influence of entrepreneurship education to students on shaping entrepreneurial attitudes and on supporting entrepreneurial initiatives undertaken by students on regional, national, or global level was diagnosed. Moreover, the purpose was to collect opinions and suggestions of changes that can be made by universities in order to better prepare young people for entrepreneurship. The research was conducted with qualitative research methodology, using the Focus Groups Interviews technique, which involves a discussion of respondents on a given topic. The research was conducted between June and September of 2015. The FGI scenario GGI was prepared in cooperation with experts from V4 countries and drawing upon literature in the field of entrepreneurship education (Cope, 2007; Shinnar, Pruett & Toney, 2009; Bell, 2015; Sirelkhatim & Gangi, 2015). 39 students of full and part-time economic studies met in a study of 4 focus groups in four Polish cities. Students of management and economics took part in the study. 4 students who are currently running their own enterprises took part in the study, as well as 3 students who help their relatives to run their enterprises. Other students were either common employees or unemployed (only studying).

In relation to the growing amount of voices speaking about the necessity of even greater commercialization of scientific research and their usage in business, it is natural that students of all the fields should be equipped with competences related to undertaking economic initiatives. There still is a lack of studies which would research the influence of the entrepreneurship education on the amount of new enterprises that are set up by university graduates who have passed a business course. However, such a dependence seems natural and this is why an attempt to diagnose that problem had been undertaken on few focus groups.

The tested students of economic studies, highlighted that business studies are necessary, especially in economics, because this field is studied by a group of students who is supposed to engage in business in the future. According to the respondents, entrepreneurship education should be treated as a priority at all the universities, because implementing knowledge of this kind in other fields of studies could result in greater supply of new enterprises. All the tested groups indicated that entrepreneurship education, even though it is taught as early as secondary schools, focuses mainly on learning different notions and rules, rather than on shaping an appropriate attitude among young people. According to the respondents, the same situation occurs during studies and although they are all studying economics, they do not share the feeling that they are being taught 'practical business studies'. This notion raised by two focus groups and the tested students understand it as knowledge and skills enabling them, after finishing the course entitled 'business studies', to start their own economic activity. The students indicate shortcomings in their competences and in their knowledge when it comes to filling in documents or tax and legal matters, which are indispensable when setting up a new enterprise. 'Even though we take up business studies as early as secondary school, I still

do not know what to do first when starting my own business. We are given different examples and definitions of particular legal forms, but if I was to start an online shop right now, I would not know where to start and this itself is an obstacle for me.'

Students who run their own economic activities indicated that it is necessary to teach entrepreneurship, because it is an only way to encourage new people to take up individual initiatives and to stimulate them towards greater economic activity. Entrepreneurship education should be present at every level of education and, as far as economic studies are concerned, it should be compulsory and universities' authorities should take special care of it, as on its level depends taking up decisions about starting own economic activities by students.

According to the respondents, knowledge about setting up your own enterprise is very important, as well as the skills to run it. The students underlined that they are taught with great detail on how to start an enterprise on different courses, but most of the students indicate lack practice connected to it. The students indicated that they do not know to which departments they have to go, which documents they have to fill in, where and who to ask for advises, or which form of activity to choose. A few other highlighted problems as planning of actions, analysing competitors' offers, product's or service's marketing operations, personnel and financial part.

Among the students who gave the aforementioned answers there were none who already run their enterprises, because the latter already knew the answers to the asked questions and they implicated that while setting up their businesses they used other people's help – they turned to external companies or to people who had already taken that road and who could be their guides and be of help. Most of the students indicated family help in this field. Among other answers concerning entrepreneurship education, some pointed to universities and professors as those who should guide, motivate, and strengthen them in aspirations to set up new businesses. In two groups there were suggestions that lecturers do not motivate their students to actions in real business, but very often just pass on their knowledge. Furthermore, the students often mentioned lecturers' purely theoretical preparation, pointing out that without practice in business, they are neither prepared to sufficiently interest students with that subject, nor to motivate them to set up own enterprises, because they themselves often have no such experiences. 'I should finish my studies and graduate being highly motivated, believing in my skills. Professors should guide students so that they leave the university and think: yes, I can do this, I am ready to have my own enterprise, I am strong, I can and I will be able to set it up.'

The respondents highlighted that the knowledge of management (of human resources, costs, revenues, and time), accounting, finance, or law fields is important, but the practical knowledge, through which observations can be drawn, is no less important. The students indicated that visiting companies, meeting successful people or people who have their own enterprises and are willing to share their experiences are all very valuable to them, because it provides practical knowledge and it teaches them how to act in various situations. The students pointed out that being successful on the market not only requires knowledge and ideas, but also time-planning skills, time management skills, creativity, ability to work in a group, stress management, and risk-taking. The students indicated that during their studies they had very few possibilities to practice the above-mentioned skills during courses, they indicated more theoretical character of their stud-

ies, where greater emphasis was put on definitions and calculations rather than on creative problem solving. The respondents pointed out lack of courses during which they could use their knowledge and skills from various other classes – what is, in fact, happening while setting up own business – ‘we manage people, finances, information, we do not act alone, but we cooperate or compete with our environment’. Each group paid attention to the risk connected with running an enterprise and to the responsibility for made decisions in the context of running a company. ‘An entrepreneurial person, when starting an economic activity, is aware of consequences resulting from it. And aware people also realize risks to which companies are exposed. That is why the feeling of responsibility is connected to business. A person running their own enterprise has to be responsible, they have to know that by becoming an employer they also take up the responsibility not only for themselves, but also for their employees, clients, and suppliers.’

Students who are currently running their own business activities stated that if they attended only business courses and if they took advantage only of them, they would not had made the decision to set up their enterprise. In their opinion, those courses only provide information, but they do not make it possible to practice the whole process. The information acquired during courses were, according to them, too theoretical and those courses did not explain step by step how from having an idea a person can start a business. The students also implicated that the number of course hours was insufficient to make such an exercise. Moreover, the subjects stated that the knowledge required to run a business is divided between several or even a dozen or so courses, but there were no courses which would put together all the information.

Most of the students, when asked about whether or not they are ready and whether or not they plan on setting up their enterprises after graduating, answered no. Among the arguments against starting an enterprise they indicated lack of appropriate finances, fear of the unknown, and the ‘easy way’ – it is better to work as someone’s employee and not to have any worries, to do the work and to have some free time. The students also mentioned that they do not have the support of their families or friends (who already have a full-time job), who advise them against taking up such initiatives. Some students responded that they are too young to run their own business, because they want to have the time to relax and to lead a social life. The presented attitudes point towards irrational excuses and resentment to take up a new initiative. Looking for disadvantages can be analysed as looking for an excuse for some kind of laziness, to which young people condemn themselves.

Respondents already running enterprises did not speak on that subject; they, however, discussed the arguments for and against setting up own enterprise. People who already run their companies pointed out the possibility to decide about themselves, to build something lasting for their families, the flexible working hours and the finances as the most important factors which motivated them before they started a business.

All the students who are currently helping their relatives with running a company were thinking about setting one up on their own. From among the tested group, 7 people want to start a business, but firstly they want to gain some experience while working for somebody else; part of them indicate that they want to save some money for their enterprises.

Students whose relatives or friends are running their businesses can count on help from their families and friends. Good practices and examples of people who were success-

ful with starting their companies and with running them are very motivating for the subjects. The latter very often indicated that they talk to and watch people run their enterprises and from those experiences they take the motivation to set up their own business. 'I consider starting my own enterprise, because my parents and my uncle have their own companies and I already have the basics to set one up (an idea and a plot). I am not afraid to analyse what would be if. I found an area which suits me in every aspect. The knowledge acquired at the university revealed an idea to start my own business.'

All students who do not run a business alone when asked if they have enough information to start a company answered no. As main information sources, where they would look for information on this subject, they indicated the Internet, books, workshops, courses, and training, as well as family and friends' experience. Only two groups answered they would contact their university lecturers while setting up a company.

Among the respondents, opinions about ideas on how to improve the entrepreneurship education at universities and how to inspire entrepreneurial spirit in students were divided. One group indicated a greater number of exercises which students should carry out on their own at the university in order to learn on 'live' examples how to work on particular tasks and how to make decisions, whose results they could discuss during classes. Another idea was to make a course about running a small enterprise, either in a paper form or in a form of a computer game. The second group mentioned making study visits in different companies and institutions, as well as meeting entrepreneurs who could talk about running a company, with the possibility to ask questions. 'There lacks a typical practice during classes, so that we could perform particular tasks on our own, and not only to listen, look at the blackboard, and write down the given solution.'

It seems that a combination of the two above-mentioned forms should give the best results when it comes to the entrepreneurship education. Students who would have a possibility to combine the theoretical knowledge with practice and exercise, supported by meetings with entrepreneurs, could take up initiatives concerning starting companies more eagerly. In reality, it is quite difficult to persuade good managers or companies' owners into sharing their experiences with students, because they are very busy and it is difficult for them to find some spare time for this kind of activities.

CONCLUSIONS

The results of the presented analysis of curricula and Focus Groups Interviews show that higher education institutions should emphasize the teaching of practical skills, which support business development. Courses dedicated to entrepreneurship education are a very good solution, but they have to be made more practical. Besides, a greater emphasis can be put on functioning of the aforementioned areas in small enterprises on different courses, such as planning, communication, negotiations, finance, accounting, marketing, or even management. It is recommended that all possible active forms and methods of teaching, which are focused on practice such as: meeting with successful entrepreneurs, lessons with experts from business, projects and simulation of fictitious business, case studies etc. should be applied. Moreover, entrepreneurship should be taught on real-life examples, maybe even in reference to the graduates who already set up their own business activities. Only thank to such actions and a proper motivation of students universities can, through their lecturers, motivate students to start companies

and to try their hands at business. Without a proper stimulation on the part of the university, the percentage of students (graduates) who will be willing to decide to set up their own enterprise will always be low. This is because according to substantial part of students they do not feel ready to become entrepreneurs. Young people will be full of fear of the unknown and instead of entrepreneurial students we will be educating students who are afraid of taking the risk to run a business. If someone is afraid of risk-taking, then their path onto their own company can be very long. University's great responsibility is to motivate their students to take up challenges connected with setting up new enterprises, and at the same time, to develop innovative solutions in business.

REFERENCES

- Amway (2014). Światowy raport na temat przedsiębiorczości. Czy przedsiębiorcą trzeba się urodzić? Retrieved from: <http://di.com.pl/amway-swiatowy-raport-na-temat-przedsiębiorczosci-czy-przedsiębiorca-trzeba-sie-urodzic-53699> (10.01.2016).
- Amway (2015). Czy Polacy mają ducha przedsiębiorczości. Światowy Raport Amway na temat przedsiębiorczości. Retrieved from: <http://alterbusiness.info/czy-polacy-maja-ducha-przedsiębiorczosci-swiatowy-raport-amway-na-temat-przedsiębiorczosci> (10.01.2016).
- Bell, R. (2015). Developing the next generation of entrepreneurs: Giving students the opportunity to gain experience and thrive. *The International Journal of Management Education*, 13, 37-47.
- Cope, J. (2007). Entrepreneurship Education, A Systematic Review of Evidence. *International Small Business Journal*, 25(5), 479-510.
- European Commission (2016). *Entrepreneurship education*. Retrieved from: https://ec.europa.eu/growth/smes/promoting-entrepreneurship/support/education/index_en.htm (10.01.2016).
- Komisja Europejska (2008). *Przedsiębiorczość w szkolnictwie wyższym, szczególnie na studiach nieekonomicznych*. Streszczenie sprawozdania końcowego grupy ekspertów. Retrieved from: http://ec.europa.eu/DocsRoom/documents/8969/attachments/1/translations/pl/renditions/native_10.01.2016.
- Nowak, H. (2016). The Role of the Polish Higher Education System in the Development of Entrepreneurship. *Entrepreneurial Business and Economics Review*, 4(1), 43-59
- Pietrzykowski, M.(2011). Entrepreneurship in Higher Education – the case of Poland. In: M. Dabić & M. Pietrzykowski (Eds.), *Fostering Education in Entrepreneurship* (pp. 113-128). Poznań: Wydawnictwo Naukowe Bogucki.
- Płaziak, M., & Rachwał, T. (2014). Kształcenie w zakresie przedsiębiorczości w polskich uniwersytetach na studiach nieekonomicznych (na przykładzie kierunku geografia). *Horyzonty Wychowania*, 13(26), 249-266.
- Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 2.11.2011 r. w sprawie Krajowych Ram Kwalifikacji dla Szkolnictwa Wyższego (Dz.U. Nr 253 z 2011 r. poz. 1520).
- Sadowska, M. (2016). Edukacja w zakresie przedsiębiorczości w polskim systemie kształcenia oraz w państwach europejskich. *Przedsiębiorczość Międzynarodowa*, 2(1), 149-164 [w: M. Kosąła, M. Urbaniec, A. Żur (red.), *Współczesne dylematy badań nad przedsiębiorczością*. Kraków: Uniwersytet Ekonomiczny w Krakowie].
- Shinnar, R., Pruett, M., & Toney, B. (2009). Entrepreneurship Education: Attitudes Across Campus. *Journal of Education for Business*, 84(3), 151-159.
- Sirelkhatim, F., & Gangi, Y. (2015). Entrepreneurship education: A systematic literature review of curricula contents and teaching methods. *Cogent Business & Management*, 2, 1-5.

- Valerio, A., Parton, B., & Robb, A. (2014). *Entrepreneurship education and Training Programs around the World*. Dimensions for Success. Washington B.C.: The World Bank, 70-82.
- Wach, K. (2014). Edukacja dla przedsiębiorczości: pomiędzy przedsiębiorczą pedagogiką a edukacją ekonomiczną i biznesową. *Horyzonty Wychowania*, 13(28), 11-32.
- Wach, K., & Wojciechowski, L. (2016). Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour. *Entrepreneurial Business and Economics Review*, 4(1), 83-94.

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Inspiring Role Models and Student Entrepreneurial Intentions

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Abstract

This paper addresses the question of the relevance of role models for entrepreneurial intentions of university students. It aims to establish whether and to what extent entrepreneurial self-efficacy and attitude mediate impact of role models on entrepreneurial intentions. This study is based on a survey conducted among university students at several Polish HEIs yielding a sample of over 400. PLS SEM is used to test direct and indirect impact of role models on entrepreneurial intentions. Indirect effect is tested with six mediators: attitude towards entrepreneurship as well as five sub-constructs of entrepreneurial self-efficacy. The study indicates that the key impact of role models occurs through their inspiring function with neutral observation not playing a significant role. While the indirect effect of inspiring role models occurs mainly via attitude towards entrepreneurship it is important to note that the strength of mediation effect for entrepreneurial self-efficacy depends strongly on the dimension of this construct. A significant mediation effect occurs via searching and marshalling self-efficacy with other mediation effects being non-significant. We consider and discuss the possible role of entrepreneurship education in exposing students to inspiring role models.

Keywords: entrepreneurial intentions; role models; entrepreneurial self-efficacy; attitude towards entrepreneurship; Poland

JEL codes: L26, D03

INTRODUCTION

Analysis of what leads people to undertake entrepreneurial activity has been the topic of research for over thirty years. Understanding of these mechanisms is important for creating a good policy-mix that supports start-up activity. Recently it has been increasingly

noticed that role models may constitute an important driver of decisions to start or expand entrepreneurial careers. Bosma et al (2012) find that over 50% of active entrepreneurs have a role model either before or after starting a company and one-third of entrepreneurs who had a role model at the time when they founded their company would not have founded it without this model. As role models are a source of learning for entrepreneurs they could be regarded also as an element of entrepreneurship education. It is therefore important to understand the process through which presence of role models affects decisions to enter entrepreneurial career. Such understanding would increase the possibility to use role models as an element of entrepreneurial education.

Studies concerned with drivers of entrepreneurial activity tend to focus on the impact of personality traits, family and entrepreneurial background as well as gender issues (Liñán & Fayolle 2015). For methodological reasons research focuses on the relationship between such drivers and entrepreneurial intentions. Although complete understanding of the relationship between entrepreneurial intentions and entrepreneurial action still requires research (Fayolle & Liñán 2014) it has been accepted that intentions are closely related to actions and some recent studies (Kautonen et al. 2013) confirm this relationship. The impact of role models on entrepreneurial intentions has been studied for a long time starting with Sherer et al (1989) although most of this research focuses on parental role models and only relatively recently other, non-family role models have been considered by researchers (Soutiris et al 2007, Radu and Loué 2008).

This study extends existing research on the relationship between role models and entrepreneurial intentions by referring to different sources of role models, including not only family, but also university and personal encounters with successful entrepreneurs, as well as by distinguishing between observational and inspirational impact of role models. Additionally it contributes to our knowledge of the process in which role models affect entrepreneurial intentions by studying whether different types of entrepreneurial self-efficacy and personal attitude towards entrepreneurship mediate the impact of role models on entrepreneurial intentions.

LITERATURE REVIEW

Our understanding of drivers behind decisions to start an entrepreneurial career is closely related to factors which affect entrepreneurial intentions. A number of theories try to explain them, with theory of planned behaviour TPB (Ajzen 1991) and the entrepreneurial event model EEM (Shapiro and Sokol 1982) being the most prominent. These are two competing but also overlapping theoretical approaches which explain formation of entrepreneurial intentions. EEM explains development of entrepreneurial intentions as resulting from a combination of people's perceptions concerning the entrepreneurial act and their propensity to act. These perceptions refer, on the one hand, to the positive view of entrepreneurial activity (desirability perceptions) and on the other to the assessment whether they are capable of this action (feasibility perceptions). TPB explains development of entrepreneurial intentions as stemming from a combination of personal attitude, subjective norms and perceived behavioural control. Personal attitude is related to possible positive implications to which entrepreneurial activity may lead. Subjective norms are related to what people important for decision maker think about the decision to be taken, in this case entrepreneurial activity. Perceived behavioural control overlaps conceptually

with self-efficacy. In this paper we concentrate on the impact of entrepreneurial self-efficacy along with attitude towards entrepreneurship on entrepreneurial intentions among students of HEIs, as mediators of entrepreneurial role models. We refer thus to the social learning theory (Bandura 1977) which links behavior with learning through observation, for example of role models. More specifically we test some of the propositions by Boyd and Vozikis (1994) who proposed that self-efficacy affects entrepreneurial intentions and that entrepreneurial role models affect self-efficacy.

Foundation of a new business is often regarded as a process. Mueller and Goic (2003) extending prior propositions by Stevenson et al. (1985) suggested that four phases of searching, planning, marshalling and implementing, can be distinguished. Prior research indicates that indeed searching, especially in a systematic manner, increases chances for founding a new venture (Patel and Fiet 2009). In turn findings concerning relevance of planning refer mostly to new venture success or closure and not founding, and they generate mixed results with some studies suggesting positive outcomes of planning (Delmar and Shane 2003) while others showing insignificant results (Honig and Samuelsson 2012). Recently Osmonalieva (2014) compared effects of self-efficacy in respect to planning and marshalling and their impact on discontinuation of business ideas. The author found that increased probability of business idea discontinuation was related to higher planning self-efficacy and lower marshalling self-efficacy. Urban (2012) studied in turn relationship between the five dimensions of entrepreneurial self-efficacy distinguished by McGee et al (2009) on the basis of Mueller and Goic's (2003) classification, on new venture competitiveness. The authors reported a positive and significant relationship for self-efficacy related to searching, planning, marshalling and implementing-people while no relationship for self-efficacy related to implementing-finances. This research indicates that different dimensions of entrepreneurial self-efficacy may affect chance of company foundation, discontinuation, performance and competitiveness. For the sake of our research, the issue of entrepreneurial intentions is key but we can to some extent extrapolate findings from other context to hypothesize about the impact of different types of entrepreneurial self-efficacy on entrepreneurial intentions. Relying on the reviewed studies we hypothesize following:

- H1a:** Entrepreneurial self-efficacy related to searching positively affects entrepreneurial intentions.
- H1b:** Entrepreneurial self-efficacy related to planning positively affects entrepreneurial intentions.
- H1c:** Entrepreneurial self-efficacy related to marshalling positively affects entrepreneurial intentions.
- H1d:** Entrepreneurial self-efficacy related to implementing-people positively affects entrepreneurial intentions.
- H1e:** Entrepreneurial self-efficacy related to implementing-finances positively affects entrepreneurial intentions.

Previous studies discussing TPB have indicated that that attitude toward the entrepreneurship can be expected to positively affect entrepreneurial intentions (Krueger and Carsrud 1993) and some prior empirical tests confirmed this assertion (Krueger et al 2000). Therefore we also hypothesize that:

H2: Attitude towards entrepreneurship positively influence entrepreneurial intention.

Role models can be considered as 'important others' who can exert social influence on individuals in developing intentions to become entrepreneurs (Krueger et al 2000). Entrepreneurial intentions are affected by diverse background factors, such as family background, entrepreneurial exposure, education, and last but not least role models (Liñán & Fayolle 2015). In the first place, role models can directly affect entrepreneurial intentions. Studies on the relationship between presence of role models and entrepreneurial intentions were carried out in different countries, showing generally a positive direct relationship between presence of role models and entrepreneurial intentions. For example, Scherer et al (1989) used a US sample to show that parental role models increase preference for entrepreneurial careers. Other studies looked at the issue in different contexts, both in terms of country and characteristics of studied group. In this respect, Van Auken et al (2006) find that family role models affect university student career intentions in both US and Mexico and that there was a positive impact of these role models on entrepreneurial intentions. Lerchundi et al (2015) find that parental entrepreneurial role models increase entrepreneurial intentions of technology students while parents who are civil servants decrease them. This relationship was also confirmed by Laspita et al (2012) who measured the impact of entrepreneurial experience of parent and grandparent on students' entrepreneurial intentions. Relying on the GUESS survey results a large, cross-country study, they found that the presence of such entrepreneurial role models increased students' entrepreneurial intentions. Thus, we can argue that a direct positive impact of role models on entrepreneurial intentions is a well established finding.

However, the impact of role models on entrepreneurial intentions or actions can be also indirect. Role models can affect individual's perceptions concerning their feasibility to carry out entrepreneurial activities (Krueger 1993, Liñán et al 2011) but also desirability of such activities (Krueger 1993, Nowinski and Rialp, forthcoming). Two recent studies tested separately the impact of role models and entrepreneurship exposure on entrepreneurial intentions via TPB. Mueller et al (2014) tested impact of role models exposure and entrepreneurship exposure on entrepreneurial intentions among German and Ethiopian students using the TPB model. They found that attitude and perceived behavioural control were significant mediators between role models and entrepreneurial intentions for Ethiopian students. The mediation for overall sample was in turn significant for subjective norm and attitude while for German students it was generally insignificant. Another study using a similar sample of German students (Zapkau et al 2015) found that perceived behavioural control does not mediate between parental role models and entrepreneurial intentions. In turn a study by BarNir et al (2011) on a sample of US students showed that exposure to entrepreneurial role models led to greater entrepreneurial intentions and that this was mediated by self-efficacy. The presented evidence suggests that the mechanism in which role models affect entrepreneurial intentions may vary depending on the location and context. Extension of these studies concerning mediation mechanisms to new locations is therefore needed. As entrepreneurship in Poland was constrained under the communist regime and entrepreneurial traditions have had to be rebuilt after 1990 we might expect that both entrepreneurial self-efficacy and attitude towards entrepreneurship might play a role in mediating the

impact of role models on entrepreneurial intentions. Therefore, and based on a multi-dimensional measure of entrepreneurial self-efficacy, we hypothesize that:

- H3a:** The impact of inspiring role models (on entrepreneurial intentions is mediated by searching self-efficacy.
- H3b:** The impact of neutral role models (on entrepreneurial intentions is mediated by searching self-efficacy.
- H4a:** The impact of inspiring role models on entrepreneurial intentions is mediated by planning self-efficacy.
- H4b:** The impact of neutral role models on entrepreneurial intentions is mediated by planning self-efficacy.
- H5a:** The impact of inspiring role models on entrepreneurial intentions is mediated by marshalling self-efficacy.
- H5b:** The impact of neutral role models on entrepreneurial intentions is mediated by marshalling self-efficacy.
- H6a:** The impact of inspiring role models on entrepreneurial intentions is mediated by self-efficacy related to implementing people.
- H6b:** The impact of neutral role models on entrepreneurial intentions is mediated by self-efficacy related to implementing people.
- H7a:** The impact of inspiring role models on entrepreneurial intentions is mediated by self-efficacy related to implementing finances.
- H7b:** The impact of neutral role models on entrepreneurial intentions is mediated by self-efficacy related to implementing finances.

Furthermore we expect that mediation effect will take place via impact of role models on attitude. Hence:

- H8a:** The impact of inspiring role models on entrepreneurial intentions is mediated by personal attitude towards entrepreneurship.
- H8b:** The impact of neutral role models on entrepreneurial intentions is mediated by personal attitude towards entrepreneurship.

MATERIAL AND METHODS

The study is based on a questionnaire survey of university students from Polish HEIs conducted in 2015. Respondents represent five HEIs, four of which were located in Wielkopolska (western Poland) and one in Malopolska region (southern Poland). Two of these HEIs were universities of applied sciences, one private and one public, while the remaining three were public academic universities. The survey was administered in paper form as well as online. We obtained 481 responses but after eliminating responses from students who declared that they were or are self-employed the size of the usable sample was 423.

Measures used in the survey in most cases follow previous research with some minor variations. Entrepreneurial intentions were measured after Liñán and Chen (2009) but on a 5 point and not 7-point Likert scale. As for mediating variables, we followed McGee et al (2009) both in case of entrepreneurial self-efficacy and attitude

towards entrepreneurship although, again a 5 point scale was applied. McGee et al. refined entrepreneurial self-efficacy as a multidimensional construct. As far as measurement of role models is concerned we applied two constructs, both of which are formative. The students were asked whether (1) they ever worked for a start-up (a newly formed small company) and (2) whether their parents, siblings or grandparents ever founded a new venture. . The other construct refers to inspiring aspect of role models. In this case we measured it via a slightly modified version of a question used by Souitaris et al (2006) asking the respondents about the extent to which events, such as among others, 'entrepreneur in the family', 'guest entrepreneur at the university' and 'personal encounter with a successful entrepreneur' made them seriously consider embarking on an entrepreneurial career. Respondents answered these questions on a 5 point scale. Again a formative measurement model was applied.

To check for common method bias, we used Harman's one-factor test. Through a principal component factor analysis, we found that the first single factor accounted for 36.70% of the total variances. Since this is less than the 50% threshold, it could be argued that there is no sign of major problem with common method bias (Lings et al., 2014).

Non-linear regression-based PLS-SEM using WarpPLS 5.0 software was applied to verify hypotheses (Kock, 2013). There are several justifications for the use of PLS SEM instead of covariance based SEM. We used formative measurement models for our independent variables (role models). Additionally, most of the constructs used in the model displayed non-normal distribution. Last but not least the contribution of this paper consists in determining the mediation effect between role models and entrepreneurial intentions through self-efficacy.

Since the role model variables were measured with a formative index, their measurement model is examined through the indicators' weights and the Variance Inflation Factor (VIF) (Hair et al., 2011; Schmiedel et al., 2014). As for the remaining reflective variables, these are examined through the individual reliability of all the indicators, Composite and Cronbach's Alpha coefficients to assess the constructs' reliability, and the Average Variance Extracted (AVE) as well as the squared roots of AVE to check convergent and discriminant validities respectively.

Table 1 illustrates that the indicators' weights and VIFs of all formative variables meet the thresholds, confirming the absence of redundancy issues (Kock 2012). Construct reliability for reflective measurement models is satisfactory as Cronbach's alpha for all reflective measurement models exceed 0,7 level while composite reliability exceed 0,8 (MacKenzie et al., 2011) (Table 1).

Table 1. Indicator weights, SE and VIFs for formative constructs

	Neutral Role Models	Inspiring Role Models	Type	SE	P value	VIF
A11	0.695	0	Formative	0.044	<0.001	1.001
A9	0.695	0	Formative	0.044	<0.001	1.001
C11	0	0.455	Formative	0.046	<0.001	1.212
C14	0	0.49	Formative	0.046	<0.001	1.278
C9	0	0.405	Formative	0.046	<0.001	1.126

Source: own calculations with WarpPLS 5.0.

Additionally, convergent validity was confirmed by AVE exceeding 0,5 threshold and combined loadings for reflective indicators exceeding 0,5 (Hair et al 2014). Discriminant validity was also established as square roots of AVE are greater than correlations between latent variables (Hulland, 1999; Ketkar, et al., 2012; Peng and Lai, 2012).

Table 2. Latent variable coefficients

	Attitude Towards Entrepreneurship	Entrepreneurial Intention	Searching Self-efficacy	Planning Self-efficacy	Marshalling Self-efficacy	Implementing-people Self-efficacy	Implementing-finances Self-efficacy
Composite reliability coefficients	0.900	0.963	0.888	0.886	0.876	0.933	0.934
Cronbach's alpha coefficients	0.832	0.953	0.810	0.828	0.787	0.914	0.893
Average variances extracted	0.749	0.813	0.726	0.660	0.701	0.699	0.824
Full collinearity VIFs	1.420	1.774	2.347	2.967	2.552	2.325	1.750

Source: own calculations with WarpPLS 5.0.

RESULTS AND DISCUSSION

Overall, the measurement model presents satisfactory values allowing the researchers to proceed to the analysis of the structural model (See Tables 1 and 2). Collinearity is not a problem as both Average block Variance Inflation Factor AVIF(at 1,377) and Average Full Variance Inflation Factor AFVIF values (at 1,956) are below the recommended threshold of 3,3 (Kock 2012, Kock and Lynn 2012). The explanatory power of the model can be regarded as medium, as Tenenhaus GoF indicator was 0,299, while Wetzel's et al (2009) suggest that GoF index of 0,25 and higher but below 0,36 denotes medium explanatory power (Kock 2012). Moving to the structural model, Table 3 presents the path coefficients (β), the p values and the R^2 values of the correlations hypothesized in this study.

The structural model provided the following results (see Table 3). First, entrepreneurial self-efficacies related to searching, marshalling and implementing finances had positive and significant effects on entrepreneurial intention. These two relationships both had small to medium effects ($f^2=0.07$ and 0.06 respectively). Hence, H1a, H1c and H1e are supported. Contrastingly, entrepreneurial self-efficacies related to planning and implementing-people had no significant influence on entrepreneurial intentions, thus rejecting H1b and H1d. Second, positive attitude towards entrepreneurship were also found to be significantly increasing entrepreneurial intention. With an f^2 of 0.19, its effect is considered to be moderate to large. As for the variations explained, we found that 37 per cent of the entrepreneurial intention's variations were explained by the attitude toward entrepreneurship and entrepreneurial self-efficacies related to both searching and marshalling.

Turning to the mediation analysis, this was done following Hair, et al's (2014) two-step approach. The first step has shown that while a positive and significant direct relationship exists between inspiring role models and entrepreneurial intentions (without the inclusion of the mediators), the direct link between neutral role models and entre-

preneurial intention was statistically non-significant ($p=0.29$). Therefore, our first conclusion indicates the absence of relationships (direct or indirect) between neutral role models and entrepreneurial intention; hence no mediation involving neutral role models can be tested¹. Consequently, H3a, H4b, H5b, H6b, H7b and H8b are rejected.

Table 3. Path coefficients and p values

Hypothesis	Hypothesized Path	Coefficient	Test
H1a	Searching ESE → EI	0.16**	Supported
H1b	Planning ESE → EI	0.00	Rejected
H1c	Marshalling ESE → EI	0.14**	Supported
H1d	Implementing-people ESE → EI	0.06	Rejected
H1e	Implementing-finances ESE → EI	0.07*	Supported
H2	Entrepreneurial Attitude → EI	0.37**	Supported
H3a	Inspiring RM → Searching ESE → EI	0.09**	Supported
H3b	Neutral RM → Searching ESE → EI	NA	Rejected
H4a	Inspiring RM → Planning ESE → EI	NA	Rejected
H4b	Neutral RM → Planning ESE → EI	NA	Rejected
H5a	Inspiring RM → Marshalling ESE → EI	0.09**	Supported
H5b	Neutral RM → Marshalling ESE → EI	NA	Rejected
H6a	Inspiring → Implementing-people ESE → EI	NA	Rejected
H6b	Neutral RM → Implementing-people ESE → EI	NA	Rejected
H7a	Inspiring RM → Implementing-finances ESE → EI	0.03	Rejected
H7b	Neutral RM → Implementing-finances → EI	NA	Rejected
H8a	Inspiring RM → Attitudes → EI	0.13***	Supported
H8b	Neutral RM → Attitudes → EI	NA	Rejected

ESE= Entrepreneurial Self-Efficacy; EI: Entrepreneurial Intention; RM: Role Models

^a Please note that this direct effect is tested with the inclusion of the mediating variable

* $p < .05$, ** $p < .01$, *** $p < .001$

NA: No mediation could be argued when one of the links in the mediating relationships is statistically non-significant

Source: own study.

As for the indirect link between the inspiring role models and the entrepreneurial intention, the following results were obtained. Entrepreneurial self-efficacies related to searching and marshalling as well as the attitude toward entrepreneurship partially mediate the link between inspiring role models and entrepreneurial intent (pindirect effect= 0.003, 0.003 and 0.001 respectively and Pdirect effect ≤ 0.01 for all three mediators). Hence, H3a, H5a, and H8a are all supported and H4a, H6a and H7a are rejected.

Additionally, to quantify how much effect the intervening variables mediated, the Variance Accounted For (VAF) was calculated. It could be argued that Entrepreneurial self-efficacies related to searching mediates 17% of the link between inspiring role model and entrepreneurial intention, whereas entrepreneurial self-efficacies related to mar-

¹ According to Hair et al (2014), the first step in a mediation analysis is to test the model without the inclusion of the mediators. If this relationship is statistically non-significant, the researchers should conclude that no mediation exists.

shalling mediates 17% and attitude toward entrepreneurship mediates approximately 27%. This means that about 61% of the inspiring role model's effect on entrepreneurial intention is explained by the increase in attitudes toward entrepreneurship and entrepreneurial self-efficacy related to searching and marshalling.

DISCUSSION AND CONCLUSIONS

Our study shows that the effect of role models matter for entrepreneurial intentions. Thus it is in line with previous studies which showed, that role models contribute to entrepreneurial intentions (Lasпита et al 2012, Van Auken 2006, Morris and Lewis 1995). More importantly we show that the character of role models matters. In fact, we found that only inspiring role models have a significant effect on entrepreneurial intentions. This suggests that positive motivation which role models can, but not always provide, is indispensable for their positive impact on entrepreneurial intentions. We do not find a positive impact of neutral observation of role models on entrepreneurial intentions. Thus, without the inspirational element, vicarious learning of entrepreneurial behaviour through observation may not be enough to develop entrepreneurial intentions. This notwithstanding, we need to keep in mind that our measures of neutral role models did not accommodate for the duration of role models observations or its intensity. Perhaps these two dimensions could moderate the impact of observation of entrepreneurial models on entrepreneurial self-efficacy and intentions. Furthermore, we find that the impact of inspiring role models on entrepreneurial intentions is both direct and indirect. The indirect effect takes place through students' self-efficacy (related to searching and marshalling) and their attitudes toward entrepreneurship, with attitudes being the factor mediating most of the effects. Thus we provide a positive verification of Boyd and Vizikis (1994), in line with previous findings of BarNir et al (2011) and additionally extend them by adding attitude towards entrepreneurship as another mediator.

Furthermore, we find that not all dimensions of entrepreneurial self-efficacy mediate the impact of inspiring role models on entrepreneurial intentions. Only three out of five sub-dimensions of entrepreneurial self-efficacy have a positive and significant impact on entrepreneurial intentions. These are self-efficacy related to searching, marshalling and implementing financial. Self-efficacy related to implementing people has a positive but insignificant impact while self-efficacy related to planning has no impact on entrepreneurial intentions, whatsoever. This finding adds to previous findings which show that high entrepreneurial self-efficacy accompanied by formal planning increases chances of quitting start-up efforts (Hechavarria et al 2011) and suggestions that overly rigid planning may negatively affect start-up process (Osmonalieva 2014). This suggests that effectuating approach to entrepreneurship (Saravathy 2009) is valid already at the stage of developing entrepreneurial intentions and contributes to these intentions more than a causal approach. Effectuation suggests that causal reasoning, a form of which is planning, is applicable to predictable circumstances. At the pre-nascent stage it is hard to speak of predictability, so the (self-perceptions of) skills applicable to predictable environments might offer little support to students when they consider embarking on unpredictable path. Another way of interpreting lack of relationship between planning self-efficacy and entrepreneurial intentions might suggest a more careful approach to start-up idea by students who are confident about typical business skills. Perhaps this could be attributed to their better understanding of chal-

lenges related to running a business. This interpretation might refer also to the positive but insignificant impact of implementing-people on entrepreneurial intentions.

REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11-39). Heidelberg: Springer.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- BarNir, A., Watson, W. E. and Hutchins, H. M. (2011), Mediation and Moderated Mediation in the Relationship Among Role Models, Self-Efficacy, Entrepreneurial Career Intention, and Gender. *Journal of Applied Social Psychology*, 41: 270-297.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410-424.
- Boyd, N.G & Vozikis, G.S. (1994). The Influence of Self-Efficacy on the development of entrepreneurial intentions, *Entrepreneurship Theory and Practice*, 18(4), 63-77.
- Delmar, F. and Shane, S. (2003), Does business planning facilitate the development of new ventures? *Strategic Management Journal*, 24(12), 1165-1185.
- Fayolle, A. & Liñán, F. (2014). The future of research on entrepreneurial intentions, *Journal of Business Research*, 67(5), 663-666.
- Guerrero, M., Rialp, J., & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1), 35-50.
- Hair, J. F., Ringle, C. M. & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal Of Marketing Theory And Practice*, 19(2), 139-152.
- Hair J.F. , Sarstedt, M., Hopkins, L. & Kuppelwieser, V.G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Hechavarria, D.M., Renko, M & Matthews, C.H. (2012). The nascent entrepreneurship hub: Goals, entrepreneurial self-efficacy and start-up outcomes. *Small Business Economics*, 39(3), 1-17.
- Honig, B. and Samuelsson, M. (2012), Planning and the Entrepreneur: A Longitudinal Examination of Nascent Entrepreneurs in Sweden. *Journal of Small Business Management*, 50(3), 365-388.
- Hulland J. (1999). "Use of partial least squares (PLS) in strategic management research: a review of four recent studies" *Strategic Management Journal* 20(2), 195-204.
- Karimi, S. Biemans, H.J.A., Lans, T. Chizar, M., Mulder, M. & Mahdei, K.N. (2013). Understanding role Models and Gender Influences on Entrepreneurial Intentions Among College Students. *Procedia - Social and Behavioral Sciences*, 93, 204-214.
- Kautonen, T, van Gelderen, M. & Tornikoski, E.T. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, 45(6), 697-707.
- Ketkar, S., Kock, N., Parente, R. & Verville, J. (2012). The Impact of Individualism on Buyer-Supplier Relationship Norms, Trust and Market Performance: An Analysis Of Data From Brazil And The U.S.A. *International Business Review*, 21(5), 782-793.
- Kock, N. (2012) WarpPLS 5.0 User Manual, available online at: http://cits.tamtu.edu/WarpPLS/UserManual_v_5_0.pdf, accessed 4 January 2016

- Kock, N., & Lynn, G.S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546-580.
- Kock, N. F. (2013). *Interdisciplinary Applications of Electronic Collaboration Approaches and Technologies*, Information Science Reference
- Krueger, N.F. Jr. & Carsrud, A.L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315-330.
- Krueger, N., Reilly, M.D., Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Krueger, N. (1993). The impact of prior entrepreneurial exposure on perceptions of New Venture Feasibility and Desirability, *Entrepreneurship Theory and Practice*, 18(1), 5-21.
- Laspita, S., Breugst, N., Heblich, S. & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414-435.
- Lerchundi, I.P, Morales-Alonso, G. & González-Tirados, R.M. (2015). Influences of parental occupation on occupational choices and professional values. *Journal of Business Research*. 68(7), 1645-1649.
- Liñán, F., Santos, F.J & Fernández, J. (2011). The influence of perceptions on potential entrepreneurs. *International Entrepreneurship and Management Journal*, 7(3), 373-390.
- Liñán, F. & Chen, Y.-W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Liñán, F. & Fayolle, A. (2015). A systematic literature review on Entrepreneurial Intentions: Citation, Thematic Analyses, and Research Agenda. *International Entrepreneurship and Management Journal*, 11(4), 907-933.
- Lings, I., Durden, G., Lee, N. & Cadogan, J. W. (2014). Socio-Emotional and Operational Demands On Service Employees. *Journal of Business Research*, 67(10), 2132-2138.
- Mackenzie, S. B., Podsakoff, P. M. & Podsakoff, N. P. (2011). Construct Measurement and Validation Procedures In Mis And Behavioral Research: Integrating New And Existing Techniques. *MIS Quarterly*, 3(2)5, 293-334.
- McGee, J. E., Peterson, M., Mueller, S. L. & Sequeira, J. M. (2009). Entrepreneurial Self-Efficacy: Refining the Measure. *Entrepreneurship Theory and Practice*, 33(4), 965-988.
- Morris, M and P Lewis (1995). The determinants of entrepreneurial activity. *European Journal of Marketing*, 29(7), 31-48.
- Mueller, S.L. & Goic, S. (2003). East-West differences in entrepreneurial self-efficacy: Implications for entrepreneurship education in transition economies. *International Journal of Entrepreneurship Education*, 1(4), 613-632.
- Nowiński, W. and Rialp, A. (2015), The Impact of Social Networks on Perceptions of International Opportunities. *Journal of Small Business Management*. doi: 10.1111/jsbm.12149
- Osmonalieva, Z. (2014). Does Entrepreneurial Self-Efficacy Predict Discontinuation of Venture Idea Development? (February 27, 2014). The ICER Working Paper Series on Entrepreneurship and Innovation WP7. Available at SSRN: <http://ssrn.com/abstract=2402224> or <http://dx.doi.org/10.2139/ssrn.2402224>
- Patel, P.C. & Fiet, J.O. (2009) Systematic Search and Its Relationship to Firm Founding, *Entrepreneurship Theory and Practice*, 33(2), 501-526.
- Peng, D. X. & Lai, F. (2012). Using Partial Least Squares in Operations Management Research: A Practical Guideline And Summary Of Past Research. *Journal of Operations Management*, 30(6), 467-480.

- Radu, M., & Loué, C. (2008). Motivational impact of role models as moderated by “ideal” vs. “ought selfguidesidentifications”. *Journal of Enterprising Culture*, 16(4), 441-465.
- Sarasvathy,S. (2009). *Effectuation: Elements of Entrepreneurial Expertise*. Northampton, MA: Edward Elgar Publishing.
- Scherer, R., Adams, J., Carley, S. and Wiebe, F. (1989). Role model performance effects on development of entrepreneurial career preferences. *Entrepreneurship Theory and Practice*, 13(3), 53-71.
- Schlaegel, C. and Koenig, M. (2014), Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, 38(2), 291-332.
- Schmiedel, T., Vom Brocke, J., & Recker, J. (2014). Development and validation of an instrument to measure organizational cultures’ support of Business Process Management. *Information & Management*, 51(1), 43-56.
- Shapero, A. and Sokol, L. (1982) *The social dimensions of entrepreneurship*. In C.Kent, D. Sexton and K. Vesper, (Eds.), *Encyclopaedia of entrepreneurship*, 72-90.
- Souitaris, V., Zerbinati,S. & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 22(4), 566-591.
- Stevenson, H.H., Roberts, M.J., & Grousbeck, H.I. (1985). *New business ventures and the entrepreneur*. Burr Ridge, IL: Richard D. Irwin.
- Van Auken, H., Stephens,P, Fry, F.L. & Silva, J. (2006). Role model influences on entrepreneurial intentions: A comparison between USA and Mexico, *The International Entrepreneurship and Management Journal*, 2(3), 325-336
- Urban, B. (2012), Tracking the venture creation phases in terms of entrepreneurial self-efficacy: links to competitiveness of South African ventures, *South African Journal of Economic and Management Sciences*, 15(4), 352-366.
- Wetzels, M., Odekerken-Schroder, G., & van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly*, 33(1), 177-196.
- Zapkau, F.B., Schwens, C., Steinmetz, H. & Kabst, R. (2014). Disentangling the effect of prior entrepreneurial exposure on entrepreneurial intention. *Journal of Business Research*, 68(3), 639-653.

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The Impact of Regional EU Policy on the Subregion as an Entrepreneurial Ecosystem

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Abstract

Reducing disproportions between the level of development of particular regions and an effort to control the regional development process have become the key challenges of the EU regional policy. In the case of Poland, the regional policy is developed by programme preconditions of the EU regional policy. It contains framework development directions which are executed at the level of provinces responsible for regional development and building regional competitiveness. From the point of view of local development, which determines conditions for enterprise environment and the general social needs executed using the local resources, it is specifically important to analyze particular subregions. In this thesis the author makes an attempt at approaching regional development from the point of view of activities undertaken within the scope of regional policies in relation to the selected regional development factors.

The author presents an analysis of selected programme documents as well as their impact on executing development policies at the local level while focusing on presence of systemised competitiveness factors. Furthermore, the author presents in the thesis the selected research results of local government units conducted in the Leszno subregion in the context of the pro-development activities undertaken at lower levels of public administration.

Keywords: Local government unit; endogenic; development; competitiveness; subregion

JEL codes: O18

INTRODUCTION

The characteristic feature of modern-day development is its spatial diversity. Significant differences may be observed between particular EU regions. It should be noted that the diversity between the NUTS 3 level which in the case of Poland means the level of subregions (a number of districts), is higher than between the NUTS 2 level, i.e. the level of provinces. Reducing the disproportions between the level of development of particular regions has become the priority of the regional EU policy. The policy specifies that the pace of development of the least wealthy regions should not be excessively slow. A re-orientation of aims takes place resulting from minimising the differences for obtaining benefits from the diversity using for instance, endogenic resources of development.

The aim of this article is to analyse the selected records of programme documents, results of empirical research of local government units and projects executed at the local level in the context of their impact on development and strengthening competition of the subregion. The analysis and comments do not relate to their entirety and are not an effort of their assessment. The aim of the considerations is to expand conclusions which relate to building competitiveness of subregions.

PROGRAMME PRECONDITIONS OF DEVELOPMENT AND STRENGTHENING COMPETITIVENESS OF REGIONS

Principles of Regional EU Policy

The principles of the EU policy indicating the direction of the cohesion policy for 2007-2013 have been included in the Lisbon Strategy from 2000 and supplemented in 2001 during the summit in Gothenburg. In 2005, the document which modified the Lisbon Strategy was adopted and its postulated were transferred to the next document: *Community Strategic Guidelines, 2007-2013* [<http://www.funduszeeuropejskie.gov.pl/dokumenty/wytyczneunijne/Strony/glowna.aspx>]. They have indicated the support areas and created frameworks for developing the national strategic reference frameworks as well as operating programmes for 2007-2013 [OJEU L 291/13 21 October 2006]. The basic principles of the regional EU policy which carry consequences for the member states include: (1) The principle of concentrating funds, efforts and expenses meaning that the most funds were provided to the least wealthy regions, the efforts were focused on investments guaranteeing economic growth and at the beginning of each programme period, annual resources were granted to be spend by the end of the second year from their granting. (2) Programming principle. The funds were granted for multi-year national programmes reflecting the EU priorities. (3) Partnership principle. Each programme was developed through consultations between European, regional and local institutions. (4) Additionality principle. EU financing did not replace financing obtained from national funds. The European Commission arranged the level of cost qualification with each EC country, for each expense period. [http://ec.europa.eu/regional_policy/how/principles/index_pl.cfm].

The main aim of the European Cohesion Policy, also called the regional policy, was to support activity which would lead to reducing economic and social differences between the EC regions. The policy executed the following aims: (1) convergence (cohesion) – supporting development of infrastructure as well as the human and economic potential,

(2) increasing competitiveness of regions and employment – supporting innovativeness, scientific research, training courses and sustainable development, (3) European territorial cooperation – supporting international projects on the entire territory of the EU. Within the framework of Convergence Objective the policy supports activities related to: research and development, innovation and entrepreneurship, information society, environmental protection, tourism, transport, energy, education and health. Maintaining objective 1 in its present form indicated the need to continue the support of activities such as in 2004-2006. Objective 2: Improvement of regional competitiveness and employment was a new goal supporting the implementation of the Lisbon Strategy. It signified a substantial change in EU policy, since earlier this objective was rather aimed at regional restructuring. [<http://www.funduszeuropejskie.gov.pl/wstepdofunduszyeuropejskich/strony/celepolitykispojnosci.aspx>].

In relation to the need for defining development goals for the upcoming decade, in 2010 the Europe 2020 Strategy has been approved. It determines such priorities as: (1) intelligent growth through developing knowledge-based economy, (2) competitive eco-friendly economy based on effective use of resources, (3) social inclusion, increase of employment and improvement of social and territorial cohesion. A significant change in relation to the provisions resulting from the previous documents is constituted by prioritised increase of competitiveness and strengthening knowledge-based economy, also at the expense of increasing the differences between EU regions [Pastuszka, 2012, p.148]. This means support for all regions regardless of the wealth. Another important element consists in strengthening the territorial approach which means an assessment of the effect of regional policies already at the level of NUTS 3 [Pastuszka, 2012, p. 133].

National and Regional Policies

The regional economic policy constitutes the interventional activities of a country at various levels of the administration which aim at correcting the spatial allocation developed by the market. Regional policy indicates intentional and targeted actions of public authority leading to socio-economic development in different areas that support optimal use of regional resources and improving the country's competitiveness. Its components include interregional policy managed by the government for the purpose of minimizing the development differences and increasing cohesion in the regional system as well as intraregional policy managed by provincial governments in order to achieve their own development goals [Szlachta, 1999, p. 14]. Reasons justifying carrying out regional policy include (1) the effective absorption of EU structural funds, (2) creation of new international and infrastructural links, (3) overcoming growth barriers in problematic areas, (4) maintenance of economic, social and political cohesion within the country, (5) concentration of resources on certain priorities (6) industry policies (agriculture, manufacturing, labor, transport) (7) and the need to strengthen and use of endogenous potential of regions (Gralak, 2006, p.30).

The first strategic document covering the period of planning between 2007 and 2013 was *The National Development Plan 2007-2013*. It included all activities leading to the development of the country, including activities in the field of regional development financed both from EU and national funds. The most important objectives of growth included (1) increasing competitiveness of regions through science, education and social capital development, research, technology, growth centers and networks established to promote development, (2) the use of endogenous development potential of regions, (3)

the variety of regions through economic specialization, competences, life models, the use of unique advantages and conservation of resources, (4) spatial economy and management of the environmental resources, (5) equalizing development opportunities leading to minimizing development variation in spatial system.

The document defined a significant change in regional development policy in relation to the policy from the period 2004-2006. Instead of strengthening physical capital it pointed to reinforcing growth factors such as human and social capital, technological innovation, organizational and economic specialization (2020 Wielkopolska Voivodeship Development Strategy).

According to the guidelines of the European Commission the name of the National Development Plan was replaced by the National Strategic Reference Framework 2007-2013. At the same time it was decided to create a master strategic document – National Development Strategy 2007-2013 – which was to define the tasks of regional policy in the 2007-2013 financial perspective.

Subsequently, Act on principles of development policy (Law Gazette No. 227/2006, pos. 1658) was passed constituting the legal basis for regional policy programming during the period 2007-2013 (Churski, 2008, p.38).

The National Development Strategy (Art. 10, Law Gazette No. 227/2006, pos. 1658, p. 11312) set out six priorities for action: (1) increase of competitiveness and innovation, among others, through entrepreneurship and the development of information society, (2) the improvement of technical and social infrastructure, (3) an increase in employment by adapting educational offer to the needs of the labor market and creating favorable conditions for entrepreneurship, (4) building of an integrated social community and its safety, among others, by supporting the self-organization of local communities, (5) rural development, (6) regional development and improvement of territorial cohesion.

The most important principles of the regional development policy for 2007-2013 included: (1) the subsidiarity principles (the regional policy is an aid policy towards local government activities), (2) the principle of equal opportunities for all provinces, (3) the principle of supporting endogenic development of provinces, (4) the principle of initiating long-term development, (5) the principle of coordinating the instruments of regional policy and other public development policies, (6) the principle of focusing on the priority problems of regional development, (7) the principle of effectiveness and highest quality of regional policy [Grosse, 2009, p. 17-20]. Spatial focus of regional policy was targeted at the poorly developed regions.

The most important document constituting the basis for implementing the EU policy was the National Cohesion Strategy for 2007-2013. It contained priorities and activities of the regional policy in the perspective of 2007-2013, constituting the Enforcement Plan of the Country Development Strategy. The strategic goal consisted in building a competitive knowledge-based economy and entrepreneurship from the basics, which were to ensure continuous increase of employment as well as social, economic and spatial cohesion. The majority of the funds supported undertakings within the scope of Objective 1 of the EU cohesion policy: convergence, and was obtained from the European Regional Development Fund, the European Social Fund and the European Cohesion Fund [Nowakowska, 2007, p. 220]. In the National Regional Development Strategy 2010-2020: Regions, Towns, Rural Areas, a change of the previous model of regional policy was planned, which con-

sists in a departure from the division into interregional and intraregional policies to the benefit of a common policy relating to a given territory determining the aims for all of its public entities [National Regional Development Strategy 2010-2020, 2010, p. 9]. The previous hierarchy model was replaced with a system of coordinating network connections involving public authorities, local organizations and various partnerships in order to use the funds in a more efficient way and increase the quality of public services [Hausner, 2001, p. 7]. The strategic aim consists in effective use of specific regional potentials in order to achieve an increase in employment and territorial cohesion of a country. The detailed aims include: supporting regional competitiveness, building territorial cohesion and creating conditions for efficient execution of development activities – effectiveness of regional policy [National Regional Development Strategy 2010-2020, 2010, p. 69]. The strategy also includes such provisions as: increasing the availability within the regions (area 1.2.1), supporting the significance of subregional towns (area 1.2.2) and supporting relations of subregional centers with the surrounding area (area 1.3.6) having their implications to create functional areas in subregions [Ageron Polska, 2014, p. 14].

In connection to the ineffectiveness of the existing equaling model justifying support for the weakest regions, a clear change is introduced by the new paradigm of regional policy which describes support of engines of development of the strongest development areas and creating conditions for distributing the effects of development to the peripheral areas [Szlachta, 2011, p. 27]. According to the polarisation and diffusional model, it is assumed to expand the effect of metropolises on the areas experiencing a relatively more difficult situation by proper infrastructure and strengthening the diffusional mechanisms from one side and creating conditions for absorbing such effects from the side of the surrounding areas using the resourced possessed by the same [Gauستا and Timpano 2010, p. 80]. Development strategy of the region is a long-term strategic plan of actions leading to its development, in the form of a written document containing procedures for achieving assumed objectives. It defines the conditions, sets goals and methods to achieve them. It's one of the fundamental tools of regional development policy conducted by regional government.

This strategy is a master document over the medium-term programming of the region, the development and implementation of provincial operational programs and sectorial policies (spatial policy, economic policy, social policy, etc.), entering into contracts with the government to implement joint development projects, budgeting voivodships and referring to the regional policy of the government and policies of other provinces. The primary benefits of the strategy include, among others (1) the continuity and sustainability of the activities of the regional authorities, regardless of evolving political conditions, (2) the possibility of applying for EU funds for development, (3) planning the region's future in the perspective of several years, (4) building partnering structures which engage inhabitants in the planning of future development, (5) extending the decision-making horizon for investors (Gralak, 2006, p. 32).

The basis for the creation of the provincial development strategy for 2007-2020 was the strategy adopted in 2000. On the basis of a social and economic diagnosis from 2009, in 2012 an Updated strategy of development for the Wielkopolska Province was adopted, applicable until 2020. It takes into account the provisions of the following national documents or their drafts: Long-term and Mid-term Country Development Strategy,

National Regional Development Strategy and the Concept of Spatial Development of the Country 2030. Furthermore, it results from a new management model contained in the document entitled "Assumption of the system for managing country development" from 2010 as well as the diffusional and absorption model contained therein, assuming support for all areas in the scope of their endogenic potentials and problems as well as the mutual positive effect of development centers and their surroundings. According to this model, metropolises should positively impact the environment which should draw benefits from metropolitan development. The territory is not treated as a space but as a functional system. The following provisions of the strategy have a specific meaning for development of subregions: increasing cohesion of the road network (operating objective 1.1.), strengthening the poles of growth in the subregions (operating objective 4.2.), support for local centers (operating objective 5.1.).

THE IMPACT OF REGIONAL EU POLICY ON SUBREGIONAL DEVELOPMENT IN LIGHT OF EMPIRICAL RESEARCH

Empirical Research of Local Government Units

This section will include a presentation of the author's own research results conducted in the Leszno subregion in the context of the impact of EU policies and national policies on its development and competitiveness. The research aim was to study the ability to compete with other regions, acquire resources in the form of external funding as well as to create partnerships and cooperation networks, a regional image and limitations relating to availability and communication infrastructure. The research was conducted in 2015 on a sample of 8 local government units (towns, communes and districts). The thesis includes a presentation of the selected results of the quality research conducted using the in-depth interview method.

Optimum development of the region requires support of the human and social capital as well as an institutional environment in order to create an interregional cooperation, improve effectiveness and save resources [Churski, 2008, p. 31-34]. The most frequently undertaken development projects in the case of the researched local government units in the last three years include: road modernization works, soft projects co-financed using external funding, improving residential services, improving material infrastructure, increasing the qualifications of personnel and improving the cultural and leisure offer for residents. In the subsequent years it was most frequently planned to additionally strengthen the image and support entrepreneurship. The most important factors leading to improving the competition of local government units include: reduction of debt, improvement of communication and ICT infrastructure as well as support of entrepreneurship development (compare with Figure 1).

The most important factor limiting development consisted in acquiring capital which resulted in limited investment potential. Also support in obtaining external resources was most often indicated as the area of desired external aid. All local government units used external funds: either national or EU funding, or funding obtained from other states. All of them also held agreements with other local government units as well as social and economic partners in the subregions as well as foreign contacts. The

most important features for the subregion which impacted its development consisted in social capital, human capital and entrepreneurship.

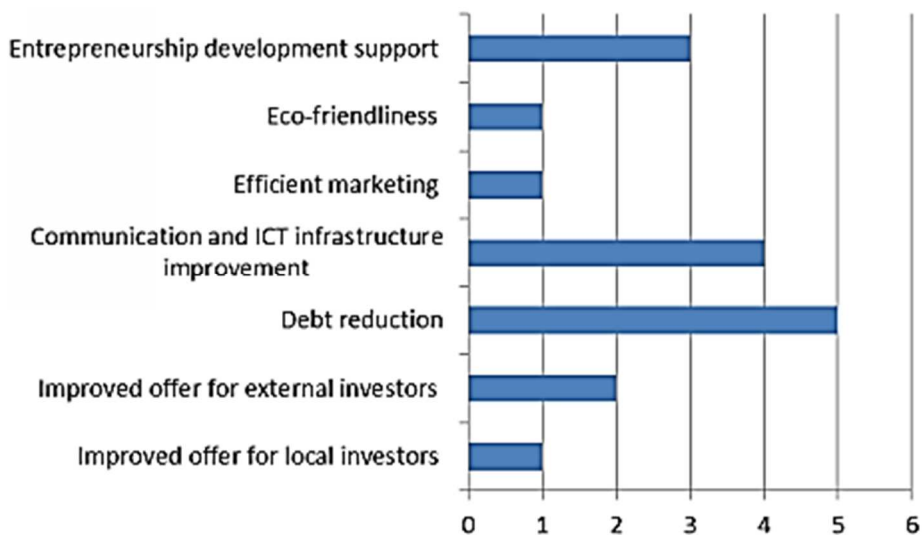


Figure 1. Factors leading to improving competitiveness

Source: own study.

The studied local government units did not notice any limitations in relation to the location, only every other unit indicated limitations related to telecommunications and transport infrastructure as well as media and market availability. The most important limitations of development in the region consisted in the lack of a support policy for towns, communes and districts provided by the provincial government. When it comes to the most important problems of the regional policy of the country, the research indicated the ineffective method of financing income which did not allow the desired development and financing of investments.

The further part includes a presentation of the project of strengthening the functional area in the Leszno subregion being the reflection of executing the regional development policy at the local level.

**OFAL PROJECT (OBSZAR FUNKCJONALNY AGLOMERACJI LESZCZYŃSKIEJ – POLISH
FOR 'FUNCTIONAL AREA OF THE LESZNO AGGLOMERATION')
AS AN EXAMPLE OF EXECUTING REGIONAL POLICIES IN THE SUBREGION**

In the weaker developed areas, one of the more significant factors of development consists in strengthening and supplementing infrastructure which should benefit improvement of the functional relations contributing to entrepreneurship and innovativeness [Vanthillo and Verhetsel, 2012, p. 3-4]. Interesting examples in this scope are provided by a project executed in the Leszno subregion entitled: "Partnership of the Functional Area for Strengthening Development as well as Social and Economic Cohesion of the Leszno Agglomeration", which consists in strengthening the potential of partnership to

undertake integrated activities leading to improvement of the social and economic situation. The project with the value of PLN 2,654,120 is executed in 2014-2016 and is co-financed using the EEA funds and national funds. The created partnership of the functional area includes: the town of Leszno including the neighbouring seven communes (belonging to three districts: Leszno, Wolsztyn and the town of Leszno with the rights of a district), the Leszno District as well as the social and economic partners: Regional Chamber of Industry and Commerce, Leszczyńskie Centrum Biznesu Sp. z o.o., Public College of Professional Education in Leszno as well as the Leszno-Region Tourist Organisation. The functional area covers 1,063 km² which constitutes 17.7% of the subregion area and 3.6% of the Wielkopolska Province area [http://ofal.leszno.pl/galeria/image/Strategia_gospodarcza.pdf].



Figure 1. Location of the OFAL area

Source: Ageron Polska, 2014.

The aim of the project is to strengthen endogenous development potential of the functional area of the Leszno Agglomeration and create integrated solutions for the most important social and economic problems occurring in the subregion such as insufficient communication infrastructure, lack of solutions leading to revitalizing the problematic areas as well as insufficiency of jobs and in particular high-performance and well-paid jobs. Within the project execution participated by the representatives of the civil society and external entities, numerous social consultations and meetings with the residents were held, leading to the creation of strategic documents of the functional area defined within the scope of the partnership: Strategy of the Social and Economic Development of OFAL, Study of Sustainable Development of OFAL Transport, Sustainable Development Strategy with a Development Plan for Investment Zones and Investor Acquisition as well as OFAL Revitalisation Strategy. At the further stage of project execution, planning and technical documents will be developed relating to particular investments specified by partners as the key documents for further development of functional relations of the agglomeration. These will include e.g. a detailed

construction design for the selected district roads on the territory of the Leszno District, a detailed design for the selected pedestrian and cycling routes on the territory of the Leszno District as well as a detailed construction design for the pedestrian and cycling routes on the territory of the Przemęt Commune defined as the key commune from the point of view of tourist development of the functional area. The project will simplify the application for external funding for executing the planned investments in the current financial perspective contributing to strengthening the development potential of the functional area [<http://www.ofal.leszno.pl/index.php/homepage>].

CONCLUSIONS

The contemporary researchers of regional economy attempt to optimize the regional policy using the endogenic concept of regional development. In this context, the internal bottom-up activities of local government units perceived as an entrepreneurial ecosystem which occur in the subregions become specifically important. The strategic guidelines relating to these activities can be found in numerous EU, national and regional documents. The analyzed programme documents however, refer to building competitiveness of subregions and creating functional areas only in a general way.

According to own research, the local government units in the subregion compensate for infrastructural shortages which consume significant financial means causing a large increase of debt while determining the competitive position in the region. This occurs despite the fact that half of the respondents do not notice the limitations related to telecommunications and transport infrastructure as well as media and market availability. Attention should be paid to the fact of appreciating human and social capital as well as noticing the need for supporting entrepreneurship for strengthening competitiveness of the subregion. Furthermore, the functional relations and creation of subregional partnerships as well as the numerous foreign contacts are important. The subregional policy and support of development provided by provincial authorities are negatively assessed similarly to the national policy relating to the methods of financing the income of local government units.

The OFAL project is a positive example of executing regional policies at the local level which aims at strengthening the functional relations in the subregion leading to better facilitation of internal resources, simplifying absorption of external funding as well as integrated social and economic problem solving.

REFERENCES

- Churski P., 2008, *Czynniki rozwoju regionalnego i polityka regionalna w Polsce w okresie integracji europejskiej*. Wydawnictwo naukowe UAM, Poznań.
- Gaustella G., Timpano F., 2010, *Spillovers Diffusion and Regional Convergence: A Gravity Approach*. Regional Science Inquiry Journal, II(2), p. 71-82.
- Gralak A., 2006, *Rozwój regionalny – zagadnienia ogólne*. Szkoła Główna Gospodarstwa Wiejskiego, Warszawa.
- Grosse T. G., 2009, *Cele i zasady polityki regionalnej państwa. Ekspertyza dla Ministerstwa Rozwoju Regionalnego na temat Krajowej Strategii Rozwoju Regionalnego*. Instytut Spraw Publicznych, Warszawa.
- Hausner J., 2001, *Modele polityki regionalnej w Polsce*. Studia Regionalne i Lokalne, no. 1(5), p. 5-24.

- Nowakowska A., 2007, *Planowanie strategiczne rozwoju regionalnego*, [in:] Chądzyński J., Nowakowska A., Przygodzki Z., (Ed.), 2007, *Region i jego rozwój w warunkach globalizacji*. CeDeWu Sp. z o.o, Warszawa.
- Pastuszka S., 2012, *Polityka regionalna Unii Europejskiej – cele, narzędzia, efekty*. Difin, Warszawa.
- Szlachta J., 1999, *Programowanie rozwoju regionalnego w Unii Europejskiej*. Polska Akademia Nauk, Komitet Przestrzennego Zagospodarowania Kraju, tom CV, PWN, Warszawa.
- Szlachta J., 2011, *Strategiczne programowanie rozwoju regionalnego, w kierunku krajowego systemu myśli strategicznej w sferze polityki regionalnej*, [in:] Kołczyński M., Żuber P. (Ed.), 2011, *Nowy paradygmat rozwoju – najnowsze trendy i perspektywy polityki regionalnej*. Ministerstwo Rozwoju Regionalnego, Warszawa.
- Vanthillo T., Verhetsel A., 2012, *Paradigm change in regional policy: towards smart specialisation? Lessons from Flanders (Belgium)*. Belgeo 1-2 (2012) (<http://belgeo.revues.org/7083>)
- Art. 10, Dz. U. nr 227/2006, poz. 1658, s. 11312
- OJEU L 291/13 21 October 2006
- Dz. U. nr 227/2006, poz. 1658
- Krajowa Strategia Rozwoju Regionalnego 2010-2020: Regiony, miasta, obszary wiejskie, 2010. Ministerstwo Rozwoju Regionalnego, Warszawa.
- Polska 2030. Wyzwania rozwojowe, 2009. Kancelaria Prezesa Rady Ministrów, Warszawa.
- Strategia Rozwoju Województwa Wielkopolskiego do 2020 roku, 2012. Zarząd Województwa Wielkopolskiego, Poznań.
- <http://www.funduszeuropejskie.gov.pl/dokumenty/wytyczneunijne/Strony/glowna.aspx> (22.09.2014)
- http://ec.europa.eu/regional_policy/how/principles/index_pl.cfm (23.09.2014)
- <http://www.ofal.leszno.pl/index.php/homepage> (19.05.2015)
- http://ofal.leszno.pl/galeria/image/Strategia_gospodarcza.pdf (20.05.2015)

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The Twofold Nature of Spontaneous Actions: Insights from Practice Turn in Management

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Abstract

The aim of the article is to explore the twofold nature of spontaneous actions in management. The thesis posits that spontaneity is an important category initiating changes in an enterprise in the course of reproduced practices. Research methods included an in-depth interview and non-participatory observations. The issue of spontaneity can be perceived through the aspect of daily routines as well as from the opportunistic perspective. Business practices constitute some institutional schemas that are recreated on a daily basis. The kind of institution determines the way entrepreneurs cope with the shifting logics of everyday business life. Therefore they recreate practices spontaneously and not in a discursive manner. On the other hand spontaneous actions may imply grasping opportunities. This is particularly important when an organisation operates in a turbulent market. The findings confirm the dual character of spontaneous activities in the everyday practice of enterprises. Unplanned processes may integrate and strengthen routines that are very important elements of “emerging” perpetuation in an enterprise. They are stimuli to innovation and the adoption of new practices. This processual perspective referring to management practices offers a new framework for an analysis of change and entrepreneurial practice in management.

Keywords: spontaneous actions; routines; Practice Turn; processual approach; institutionalisation

JEL codes: L20, L21, L26

INTRODUCTION

Practice turn in management brings a new cognitive insight into organisational change problems. In a very broad sense the processual stream of thought is aimed at unbundling the concept of change in terms of the past-present-future dimension. This kind of view

puts forward the notion of experience and organisational learning that captures human daily activities. The practice approach to management and organisations sees them as emergent categories caught in the flow of daily actions. The organisational world is in continuous motion, where some processes are routine and some of them are unplanned. It is presumed that “change is experienced by practitioners as an unfolding process (...). If we are to understand how change is actually accomplished [Eccles et al. 1992], change must be approached from within (...) as a performance enacted in time” [Tsoukas and Chia 2002, p. 572]. The practice research is thus aimed at observing the every-day coping with managerial problems and even completing the daily performance by workers and managers. This is usually related to the adoption of an ethnographic research strategy.

Organisational change may be foreseeable or spontaneous: “our immersion in the continuous flow of spontaneously responsive and expressive, bodily activity in the cultural life-world of our community is essential (...) to our acting and making sense of things in ways that those around us find intelligible and are prepared to treat as legitimate” [Shotter and Tsoukas 2011]. What is at stake in this proposition is not only a claim for the appraisal of spontaneity but also an interpretative approach to organisational change. It also poses the question of the nature of spontaneous organisational changes: they are continuous and preserve some past schemes whilst at the same time being fast and responsive.

The emergence of novelty in organisations may be based on improvisational processes [Garud et al. 2015]. Sawyer [2015] illuminates this problem by contrasting ritualized and improvised behaviours. Yanow [2015] theorises this issue within the framework of the reflective-practice approach. The aim of this article is to address the problem of the duality of spontaneous action in everyday managerial praxis. The thesis of this article states that spontaneity is an important factor in initiating change in an enterprise.

The article consists of two parts: theoretical and empirical. The theoretical part draws on the processual current in management science and explores issues related to spontaneous actions. The empirical part is based on a case study of an enterprise operating in the textile and apparel industry.

PROCESSUAL STREAM OF THOUGHT

The processual approach in management stems from the interest of ‘practice’ within social theory. In management science it is referred to as a practice-based approach, practice lens, the process theory of organisation¹ [Jarzabkowski 2005; Hernes 2014]. Practice theories are attributed to the unbundling of such notions as routines, activities and performance in terms of reproducing social structures and processes. Schatzki et al. [2005] imply a basic meaning of practice as the very category that composes the gaining of knowledge, human activities, power, language, and institutions [Schatzki et al. 2005, p. 2]. Practice has a great potential to allow the understanding of persistence, transformation and erosion of organisations, institutions, policies and processes. Recurrent practices thus reflect socially recognizable patterns of behaviour and response to new social arrangements. They are also carriers and components of these changing circumstances as far as there is clear duality of social structure and practice [Giddens 1984]. The prac-

¹ Note. A different understanding of the process theory in management is possible, referring to the TQM concept, Business Process Improvement, etc., and failing to distinguish it may lead to a misunderstanding in a literature review.

tice-based approach in management makes use of the structuration theory of A. Giddens to a large extent [1984], who noted that social structures and practices are recursively linked: they shape human practices and these practices create and reproduce social systems. Routines play an important role in the Giddensian view of social change. There is a continuous flow of human activities that constitute rules, meanings and artefacts. Giddens emphasises, however, that these forces are neither conscious and voluntarily purposive, nor determined by institutionalised structures [Shove et al. 2012, p. 3]. There are some structural categories instead, like rules and resources, that can be harnessed and (re)configured to constitute social life on a daily basis. In this sense, Reckwitz [2002, p. 256] introduces the concept of *homo practicus* that, as opposed to *homo economicus* (semi-rational decision-maker) and *homo sociologicus* (rule-follower), offers a new feature in management science, being “a carrier of practices, a body/mind who ‘carries’, but also ‘carries out’ practices”. In as far as organisations are a kind of social structure, structuration theory can be adapted to the observation of organisational change phenomena. The practice-based orientation is thus a “radical departure from traditional ways of understanding (...) organisations”. This is a theoretical view that can break old schemas of thought and bring a new point of departure [Nicolini 2012, p. 6; Schatzki 2002]. Nicolini postulates a few features of the new orientation:

1. The fundamental units of analysis are practices (also: routines, micro-activities, ‘mundane matters’ of everyday organisational life). The main objects of research attempts are entrepreneurial activities, not entrepreneurs themselves. Here, it comes like a ‘Copernican revolution’ [Nicolini 2012, p. 7].
2. *Practice Turn* in management is not limited to descriptive methods that just put simply what people do on a daily-basis. It aims to observe change phenomena in terms of ‘meaning-making, identity-forming, and order-producing’ [Nicolini 2012, p. 7]. Its main objective is the explanation of processes of creation and consolidation of the schemas of action which initiate change in an organisation. In a turbulent market environment it may be of crucial significance to management science.
3. *Practice Turn* may cut the Gordian knot within the traditional approach to managerial problems as it sees them as stemming from *practices* recreated by *practitioners* located in an organisational context and not from the point of view of their independent decisions.
4. There is discourse and sense-making in the everyday managerial flow of activities. This brings us closer to the interpretative frames of understanding typical of Weick [1979] and Sułkowski [2012].
5. The practice view in management is also rooted in institutional theories. There is a constant flow of organisational structures and institutions. When it comes to new institutionalism there are such assumptions as institutionalisation or deinstitutionalisation that can be traced within the frames of changing practices [Nicolini 2012; Lawrence et al. 2009].
6. *Practice Turn* in management postulates that we stop perceiving social phenomena in terms of the superiority of macro-structures over micro-structures [Knights 1997, p. 7-8]. It associates the problem of organisational change with bundles of interpenetrating activities as well as institutions that they temporarily impose. There is an exchange of practices and routines.

7. Summing up, the process theory in management can make an important contribution to the understanding of organisational problems, the notion of change in management as well as organisational actors and the way in which they cumulate and make use of knowledge and resources. Routines, artefacts, institutions, and other phenomena that may appear constant are in fact 'on the move'. However an attempt to observe that flow from the perspective of daily micro-activities and routines may not bring 'spectacular' effects in tracing radical change. Organisational changes are rather 'becoming' [Tsoukas and Chia 2002; Hernes 2014, p. 39-72]. So there is great cognitive pressure to observe managerial reality from the daily-routine level of analysis.

THE DUAL NATURE OF SPONTANEITY

The concept of spontaneous change in management has not been sufficiently explored. The issue is partially addressed by Tsoukas and Chia [2002] and Shotter and Tsoukas [2011]. These authors, however, do not deal with the structure of spontaneous change but the context in which it takes place as well as the cognitive value of an analysis of emergent changes. Tsoukas and Chia suggest that "what really exists is not things made but things in the making. Once made, they are dead and an infinite number of alternative conceptual decompositions can be used in defining them" [Tsoukas and Chia 2002]. The way the decomposing took place is dependent upon the tendency to rely on reproduced schemas of action. The process of recreating daily processes in an enterprise may be spontaneous in two distinct modes of acting. First of all, it may be a processual manifestation of tacit knowledge [Polanyi 1958] that is located in past experience and routines. Secondly, it may be akin to actions "performed without external influence or stimuli; extemporaneous, impromptu, spur-of-the-moment" [Tokarski 1971]. Thus, this very kind of spontaneity initiates change, sometimes radical and introduced contrary to the ordinary way of taking decisions and completing tasks in an enterprise.

Tsoukas is drawing on the Wittgensteinian stream of thought. He uses the concept of the inherited background [Tsoukas 2010, p. 51] that is very much similar to the concept of performative routines by Feldman and Pentland [2003] and technology-in-use by Orlikowski [2000]. Organisational routines are not "orchestrated from the top" [Tsoukas and Chia 2002, p. 567]. They are "grounded in the ongoing practices of organisational actors and out of their accommodations to and experiments with the everyday contingencies, breakdowns, exceptions, opportunities, and unintended consequences they encounter" [Orlikowski 1996, p. 65]. From the cognitive psychology perspective it may seem that routines, when derived from explicit knowledge, are performed automatically [Beck 1976]. Nevertheless they may be changed if done reflexively. Lazaric uses an analogy with the cognitive approach in order to unbundle the mechanisms of routine change. The acquisition of procedural knowledge together with the ability to apply it and of declarative knowledge always entails a certain cognitive effort, thinking, and processing information in an intentional and conscious way [Lazaric 2010, p. 205-227]. This is why one should distinguish between a tendency to automatically reproduce repetitive actions and the ability to introduce deliberate changes in the way they are performed. Thus it can be assumed that routines are processual categories that can be modified in-use. Then if these modifications are unplanned to a relatively negligible extent and are hard to control they may be understood as reproduction of practice (Fig. 1). Spontaneity is thus based on

automatic and, at the same time, reflexive reproduction of daily activities. Practices are collective categories that shape organisational processual schemas. Shared understanding [Schau et al. 2009, p. 31] is thus an additional aspect of changeability of daily routines. Interactions and participation as well as ties of relationships determine what is and what is not purposive within the daily organisational activity. Practice is based on routines which comprise repetitiveness and adaptation to norms, rules and resources [Giddens 1984]. The emergence of everyday practice may be linked to product alterations and modifications but it turns out to be bound by procedures and explicit control mechanisms.

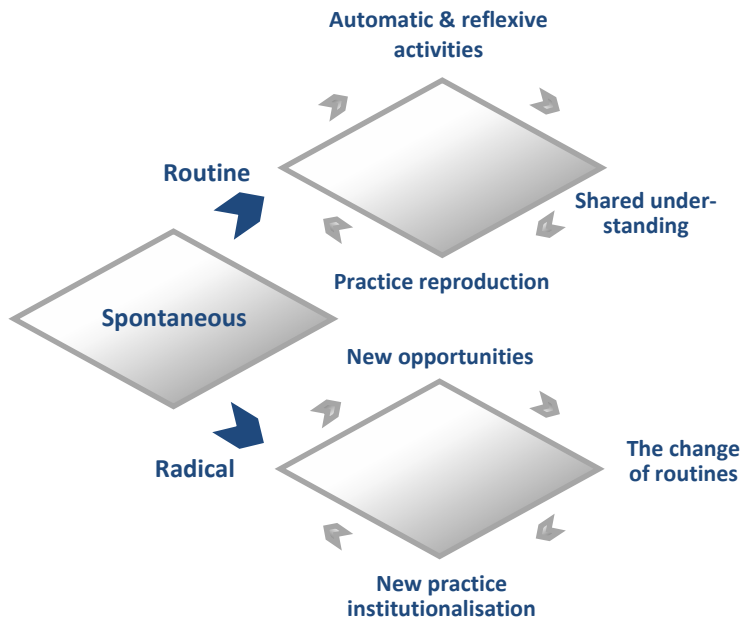


Figure 1. A schema of spontaneous actions' duality

Source: own study.

However, spontaneity cannot be reduced to reproduction of everyday practice. It manifests itself in the process of initiating radical changes. Sawyer [2015] refers to emergent improvised performances which occur "every day in all human organisations, even those that are highly structured and designed" [Sawyer 2015, p. 200]. Informal organisations, informal relationships and social networks are important determinants of achieving or impeding the achievement of business goals. However these complex relational structures are hard or even impossible to control, and according to Sawyer [2015], studying the links between improvisational activities provides a cognitive insight into the integration of formal and informal organisational structures. Creative and innovative organisations are to a certain extent built on spontaneity and improvisation. The very concept of change is a vivid issue in the neo-institutional approach within the organisation theory. Scott [2008] argues that institutionalism is nowadays more about the change than enduring processes. Thus institutionalisation is the process of "the emergence of orderly, stable, socially integrating patterns out of unstable, loosely organised, or narrowly technical activities" [Selz-

nik 1996, p. 271, see: Patora-Wysocka 2014]. Institutions gain processual characteristics. However this is still a process of developing relatively solid social categories closely associated with the notion of human actions. "Institutions are comprised of regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life" [Scott 2008, p. 48, see Patora-Wysocka 2014]. It may be presumed that there are institutionalisation processes in the realm of spontaneous changes within the everyday practice reproduced (Fig. 1). New practice emerges as part of the unplanned process of relatively radical change.

Sawyer [2015] puts forward four properties of organisations that are of higher-level emergent character:

1. Relatively large resources of individuals and sub-systems that interact in related networks;
2. Diffusion of organisational and managerial functions through various levels of the structure;
3. Difficulty breaking down an organisation into clearly defined sub-systems;
4. Inner organisational interactions are based on complex communication tools and language [Sawyer 2015, p. 201].

Loosely structured business organisations are more open to innovation and they are impetuously yet purposively reactive to new opportunities. The ability to grow in the realm of a turbulent environment depends on the adjustment of an organisation to the pace of market change. Observing organisational changes from the point of view of spontaneous actions encourages a new insight into managerial problems.

METHODOLOGY AND SAMPLE SELECTION

The article presents the results of a comparative case study. The study was conducted based on the case study method and non-participatory observations. The case study is perceived as purposeful in the realm of practice-based orientation in management [Gherardi 2012]. Thus the processual approach may be deemed congruent with the interpretative paradigm that draws on the methodology of qualitative research [Sułkowski, 2012]. It may seem that the study of practices and routines aimed only at their description would be limited to quantitative enumerating. However any attempt to observe the change of practices and routines "from the outside" [Gherardi 2012] requires an approach explaining "how, in what way, and why?", and answers to such questions can be obtained as a result of a case study analysis. Textile and apparel enterprises were selected for the study. The sample selection was purposive and its aim was to compare cases characterised by different business models. It was done based on the researcher's knowledge of the specific nature of local companies operating in this field, acquired thanks to formal and informal relationships with people connected with the fashion industry.

The study included three semi-structured interviews supplemented with the observation of work in a tights' factory and a fashion shop. Documents and online sources such as sample books, catalogues, online shops, press releases, promotional videos and interviews available on youtube.com were analysed. Interview parameters covered the same issues, including the characteristic and context of the foundation of companies, the process of product development in a seasonal cycle, the way

opportunities are seized and marketing activities (as far as they are key areas in the fashion business). The interviews were recorded and supplemented with notes. Those interviewed were a company owner, its manager and the chief engineer in the case of Alfa, and a co-owner in the case of the Beta company.

REPRODUCTION OF PRACTICE VS. NEW PRACTICE EMERGENCE

As a result of the study it was possible to show key categories of differentiating spontaneous actions. In the case of routine spontaneous actions there were: automatic and reflexive activities; shared understanding; practice reproduction. In the case of radical spontaneous actions there were: new opportunities; the change of routines; new practice institutionalisation (Table 1, Table 2). As shown in Figure 1, this is comparable with the preliminary model shown in Figure 1.

Alfa is a company that has been active in the tights' market for a long time. The company was set up in the 1980s when the market was different and not so varied as it is today. It has deliberately renewed its brand using a new communication-based marketing model. This resulted in the refreshment of the company's image on the market. Some of Alfa's marketing campaigns are very similar to the controversial Benetton commercials. The Beta company is a young, highly-renowned fashion brand in the market which does not rely on in-house production, however, it controls the product development process and designs its collections. The company was started in Łódź but it operates all over Poland and has made early attempts at internationalisation. Its brand identity is based on Polish design of the 1960s and the 1980s. Formally the company has been operating since 2009, however, the brand concept had been conceived earlier. The leading product of the brand is a T-shirt with a characteristic imprint. Its target group includes inhabitants of large cities aged 18-34. Both companies are vulnerable to fashion trends and market changes [see Patora-Wysocka 2015a].

The product development process is grounded in the reproduction of practice that is reflexively recreated by knowledgeable humans. There are small technological changes introduced but they are related to the way technology is used and not to the fundamental issues connected with the way the final product is manufactured. Routines emerge in the course of daily activities and this is a factor allowing organisations to survive and develop. In the process of practice reproduction, shared understanding of organisational values, purposes and identity is of crucial significance. This understanding is not imposed from the top or the bottom but diffuses through the structure. Interactions between experienced workers set business aims more clearly and more vividly. There are some experiments, improvements and exceptions, however, they are customised in a routine way by mechanic in order to produce the required quantity. Spontaneity is thus of an automatic and, at the same time, reflexive character. Daily practices are then categories that give rise to processual schemas.

Table 1. Key categories of routine spontaneous actions taken from the Alfa company

Key categories	Respondent's opinion
<p>Automatic and reflexive activities (orders filled by the company are very changeable, which can concern patterns, texture, composition and each time this entails the necessity to reflexively reproduce actions by the chief engineer and the knitter staff. In this case change was related to the tights' design – the manufacturing of an untypical design, cut. However the product development process remains unchanged: the use of the product is routinely verified and it is presented in a routine way.)</p>	<p>"(...) the chief engineer needs to tell me, well, he needs to tell me... and then, you know, there are tests using different materials... and we check it out, right? We check the characteristics of tights because it's not that we only get it from the dyeworks and that's it. No."</p> <p>"And I'll give you a nice example now, because we do the so-called perforated tights and we have to mull over it a lot. This is the question of stitching. The big toe has to be separated from the other toes. They have to be, I mean the strip that stays on toes can't be too wide because this has to look good in shoes. This has to look good, for example, when you take the shoe off. And now the photographer... And we've produced these tights. And now the photographer is to send us some sample photos: with a bare foot and a foot with a shoe on."</p>
<p>Shared understanding (emergent routines diffuse through to the crew. Cooperation and understanding of purpose are overarching throughout the organisational structure. Moreover in unexpected situations, the company's staff swing into action in order to fill an order.)</p>	<p>"A: Step by step: when an order is placed, it is sent to the production, right? ZP-W: To the chief engineer and the production manager.</p> <p>A: That's right. And they need to make some decisions. I'm not talking about classics that are standard, but they have to say whether we're able to produce it, right? Then samples are worked on, and if the product is completely new, this should also be reflected by the delivery date. They manufacture these tights, and then the products go through all stages." "So nearly all of us here... Engineers worked on the machines together with knitters and they reconfigured the machines... Reconfiguration means putting a diskette into the machine, and there is a programme to be set, parameters, so it doesn't take a few moments to reconfigure virtually the whole production (...) That's what the whole operation looked like."</p>
<p>Practice reproduction (daily routines within the product development process are crucial for the reproduction of practice. The cycle is two-weeks long and it is compatible with fashion market trends. Quantity is the company's priority – big orders make it possible to maintain business operations on a daily basis.</p>	<p>"If, for example, a customer comes today (...) calls us and says he would like to place an order for such and such tights, then we say: you know, if we have them in stock... there are certain models that are constantly available to customers who buy two, three pairs, right? (...) [In the case of a new product:] Let's assume... it all takes two weeks from threading the needle to the end of the process. So we say: you know, we can manufacture this series in two weeks. That's what it looks like (...). Our priority is the customer who orders a lot, and not the one who picks two pairs at a time, right?"</p>

Source: own study.

Table 2. Key categories of radical spontaneous actions taken from Beta company

Key categories	Respondent's opinion
New opportunities (based on the creation of a new situational context, voluntary arrangement and new circumstances that are very different from previous experience, opportunism – using Internet, fairs. Specific foreign markets are still unknown.)	<p>“ZP-W: And what gave you the idea that this could also include abroad? B: You know, this is only a kind of a plan, it's not that, that (...) it's only a plan, for, let's say, the next two years. ZP-W: But you already have some contacts that will make it easier or some kind of a situational context? B: No, no, we don't. In fact, we do everything on our own, you know, we try (...) ZP-W: And what are the potential foreign markets? B: Well, I don't know yet, we'll see how it goes... ZP-W: Over the Internet? B: Yes, yes, yes, but perhaps there will be some distribution ... ZP-W: Physical. B: Yes. Definitely some physical distribution. ZP-W: And what about this Bread and Butter fair? B: Well, Bread and Butter, Bright, fairs of this kind.”</p>
The change of routines (the main product is reoriented and redesigned. There is readiness to resign from the consolidated methods of communication based on the Polish language and to look for new graphical elements that could become recognisable abroad.)	<p>“At the moment we need to produce more versatile things but everything can be done, for example, we now have those tank tops, a kind of T-shirt with soup vegetables or cucumbers which don't include any signs in Polish.”</p>
New practice institutionalisation (the company has been operating for a relatively short period in a very dynamic industry, so it's impossible to indicate any events that initiated the internationalisation process. The company changes as fast as the market .)	<p>“We don't write any business plans, we don't perform any, you know, analyses, we just follow our nose. (...) You know, this is only a kind of a plan. It's not that we... This is a plan for, let's say, the next two years.”</p>

Source: own study and Patora-Wysocka, Z. 2015b.

CONCLUSIONS

The process of reproducing daily activities in an enterprise is of cognitive importance in management. Its analysis comes down to understanding organisational change: institutionalisation, perpetuation, and the disappearance of processes. It seems that spontaneous activities generate creativity as well as daily practice reproduction. Thus ongoing practice is a category comprised of knowledge, competences, norms, values, resources and meaning and therefore it should be the subject of more in-depth research. Practice is reflected in daily activities. Some of them may seem to be of negligible importance. However an attempt at unbundling their inner structure may surprisingly result in the conceptualisation of organisational transitions in a turbulent market. Nowadays social change is complex. Observing the fundamentals of organisational processes may impose a discourse on the constituents and the inner aspects

of change. The research presented in this article pinpoints the role and dual character of spontaneous activities in the everyday practice of enterprises. Unplanned processes may integrate and strengthen routines that are very important elements of “emerging” perpetuation in an enterprise. They are stimuli to innovation and the adoption of new practices. Summing up, spontaneous actions determine the way entrepreneurs explore new opportunities as well as everyday challenges in the realm of the shifting logics of everyday business life.

This study is an exemplification of the phenomena observed. It is of comparative character but it is limited to a relatively small area of everyday practice. Transformation and perpetuation of an organisation may be analysed on various levels of daily activities. I think that any indication of the directions for further research conducted within the processual current should postulate that the research focuses on the observation of actions, resources and norms. On the one hand, this would be an explicit reference to the structuration theory [Giddens, 1984], whilst on the other this would ensure a holistic and explanatory look at the relationships between recreated practices and the structure of an organisation, its identity and change mechanisms.

REFERENCES

- Beck, A.T., 1976, *Cognitive Therapy and the Emotional Disorders*, New American Library, New York.
- Eccles, R.G., Nohria, N., Berkley, J.D., 1992, *Beyond the Hype*, Harvard Business Scholl Press Boston, MA.
- Feldman, M.S., Pentland, B., 2003, *Re-theorizing organizational routines as a source of flexibility and change*, *Administrative Science Quarterly*, Vol. 48, No. 1, p. 94-118.
- Garud, R., Simpson, B., Langley, A., Tsoukas, H. (Eds.), 2015, *The Emergence of Novelty in Organizations*, Oxford University Press, Oxford.
- Gherardi, S., 2012, *How to Conduct a Practice-based Study Problems and Methods*, Edward Elgar, Cheltenham.
- Giddens, A., 1984, *The constitution of society: Outline of the theory of structuration*, California University Press, Berkeley.
- Hernes, T., 2014, *A Process Theory of Organization*, Oxford University Press, Oxford.
- Jarzabkowski, P., 2005, *Strategy as practice. An activity based approach*, SAGE Strategy Series, London.
- Knights, D., 1997, *Organization Theory in the Age of Deconstruction: Dualism, Gender and Post-modernism Revisited*, *Organization Studies*, Vol. 18, No. 1, p. 1-19.
- Lawrence, T., Suddaby, B., Leca, R.B., 2009, *Institutional work: actors and agency in institutional studies of organizations*, Cambridge University Press, Cambridge.
- Lazarcic, N., 2010, Routines and routinization: an exploration of some micro-cognitive foundations, in: M.C. Becker (Ed.), *Hanbook of Organizational Routines*, Edward Elgar, Cheltenham, Northampton, p. 205-227.
- Nicolini, D., 2012, *Practice Theory, Work, and Organization. An Introduction*, Oxford University Press, Oxford.
- Orlikowski, W., 1996, *Improvising Organizational Transformation Over Time: A Situated Change Perspective*, *Information Systems Research*, Vol. 7, No. 1, p. 63-92.
- Orlikowski, W., 2000, *Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations*, *Organization Science*, Vol. 11, No. 4, p. 404-428.
- Patora-Wysocka, Z., 2014, The Institutionalization of Spontaneous Changes in Enterprises: a Processual Perspective. *Contemporary Management Quarterly, The Journal of scientific community and business leaders*, Vol. 13, No. 3, p. 41-52.

- Patora-Wysocka, Z., 2015a, *Spontaneous Action and Everyday Practice in the Fashion Business*, FIBRES & TEXTILES in Eastern Europe, Vol. 23, No. 4(112), p. 8-13.
- Patora-Wysocka, Z., 2015b, *Instytucjonalizacja zmian spontanicznych w procesie umiędzynarodawiania przedsiębiorstw*, Problemy Zarządzania, accepted for publication.
- Polanyi, M., 1958, *Personal Knowledge: Towards a Post-Critical Philosophy*, University of Chicago Press, Chicago.
- Reckwitz, A., 2002, *Toward a theory of social practices: a developmet in culturalist theorizing*, European Journal of Social Theory, Vol. 5, No. 2, p. 243-263.
- Sawyer, R.K., 2015, *How Organizational Innovation Emerges Through Improvisational Processes*, in: R. Garud, B. Simpson, A. Langley, H. Tsoukas (Eds.), *The Emergence of Novelty in Organizations*, Oxford University Press, Oxford.
- Schatzki, T.R., 2002, *The Site of the Social: A philosophical account of the constitution of social life and change*, Pennsylvania State University Press, University Park, PA.
- Schatzki, T.R., Cetina, K.K., Von Savigny, E., 2005, *The practice turn in contemporary*, Routledge, London.
- Schau, H.J., Muñiz Jr., A.M., Arnould, E.J., 2009, *How Brand Community Practices Create Value*, Journal of Marketing, Vol. 73, p. 30-51.
- Scott, W.R., 2008, *Institutions and Organizations. Ideas and Interest*, 3rd ed., Sage Publications, Thousand Oaks.
- Selznik, P., 1996, *Institutionalism "Old" and "New"*, Administrative Science Quarterly, Vol. 41, No. 2, p. 270-277.
- Shotter, J., Tsoukas, H., 2011, *Theory as Therapy: Wittgensteinian Reminders for Reflective Theorizing in Organization and Management Theory*, Research in the Sociology of Organizations, Vol. 02, No. 32, p. 311-342.
- Shove, E., Pantazar, M., Watson, M., 2012, *The Dynamics of Social Practice*, SAGE Publications, London.
- Sułkowski, Ł., 2012, *Epistemologia i metodologia zarządzania*, PWE, Warszawa.
- Tokarski, J. (ed.), 1977), *Słownik wyrazów obcych*, PWN, Warszawa.
- Tsoukas, H., 2010, *Practice, strategy making and intentionality: a Heideggerian onto-epistemology for Strategy as Practice*, in: D. Golsorkhi et al., *Cambridge Handbook of Strategy as Practice*, Cambridge University Press, Cambridge, p. 47-62.
- Tsoukas, H., Chia, R., 2002, *On Organizational Becoming: Rethinking Organizational Change*, Organization Science, Vol. 13, No. 5, p. 567-582.
- Weick, K., 1979, *The Social Psychology of Organising*, Reading, Mass, Addison-Wesley.
- Wittgenstein, L., 1979, *On Certainty*, Blackwell, Oxford.
- Yanow, D., 2015, *After Mastery: Insights from Practice Theorizing*, in: R. Garud, B. Simpson, A. Langley, H. Tsoukas (Eds.), *The Emergence of Novelty in Organizations*, Oxford University Press, Oxford.

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Enhancing SMEs' Growth by Investing in Organizational Capital

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Abstract

The objective of this paper is to verify the relationship between the share of investments in organizational capital (OC) within the total amount of investments and key performance indicators of SMEs. Quantitative research based on the author's theoretical model and was conducted on a group of 180 Polish SMEs with the use of a structured questionnaire. To verify the hypothesis measures of dispersion as well as correlation were used. The share of investments in OC vary at particular growth stages and the highest is in decline stage. Investigated firms invest mostly in 'brand' and 'IT systems'. Investing in OC seems to be important mostly for SMEs that are in the prime stage. In this stage the share of investments in OC is correlated with almost all performance indicators. It suggests that OC can be treated as a source of competitive advantage and firms' performance. The appropriate share of investments in particular resources positively impact the effectiveness of decisions aimed at enhancing SMEs growth. Guidelines in what to invest help managers to plan their activities, especially while operating in a rapidly changing environment. The study contributes to the stream of research devoted to SME growth factors. Despite the fact that there already are publications on the impact of particular resources on organisations' success or failure, complex studies, including those concerning Polish SMEs, are much needed.

Keywords: SMEs; small and medium-sized enterprises; growth models; organizational capital; investments; resources

JEL codes: L21, L25, L26

INTRODUCTION

Increasing competition among small and medium enterprises (SMEs) and between their large competitors, as well as an opportunity to act on international markets cause that companies operating in SMEs sector have to build their competitive advantage on the basis of resources that cannot be easily imitated by other firms. One of such resources is organizational capital (OC) which consists of processes, procedures, brand creation, management systems and structures. Because it is firm-specific it may play an important role in building sustainable competitive advantage. However, because firms change over their life cycle, the shape of processes and structures has to be modified as well and investments in organizational capital should be made. According to Maritan (2001) there is not much research focusing on the mechanism of building organizational capabilities by investing in resources.

This article is aimed at verifying if there is a relationship between investments in organizational capital and SMEs growth. In the first part a literature review concerning resource-based view of the firm and organisation growth theories is conducted. It is followed by a presentation of a theoretical model and results of conducted research. Conclusions are drawn on the basis of the data gathered from a 179 random sample of Polish SMEs. In the research structured questionnaire was used and correlations between the share of investments in OC and growth stages were verified. In conclusions main findings, referring to the article's main goal are presented and implications of investing in OC for SMEs growth are summed up.

LITERATURE REVIEW

Organizational Capital as a Source of SMEs Competitive Advantage

A firm may achieve and sustain a competitive advantage when it is built on the basis of resources that can be characterised as valuable, rare, inimitable and nonsubstitutable (VRIN attributes) (Barney, 1991). Such an advantage may stem from physical capital resources, human capital but also from organizational capital which is defined as internal processes and systems that refer to planning, coordinating, structure and informal relations among employees (Barney, 1991). On the basis of resource-based view of the firm Galbreath (2005) in his research used more detailed categories referring also to tangible and intangible resources. According to Galbreath's (2005, p. 980) conceptual framework "resources can be divided into:

1. Tangible resources which include (a) financial assets and (b) physical assets.
2. Intangible resources that are assets which include (a) intellectual property assets, (b) organizational assets and (c) reputational assets.
3. Intangible resources that are skills which include capabilities."

In this model organizational assets refer to factors that impact firms' performance and allow to manage all other resources. These assets should be planned and developed as they consist of such important components as structure and human resource policies (Galbreath, 2005). Similarly, Ćwik (2011, p. 35) claims that competitive advantage stems from five fundamental resources that are:

1. Human resources – especially knowledge, skills, attitudes and abilities;
2. Relational resources – relationships with stakeholders;
3. Tangible resources – real estates, materials, machines;
4. Financial resources – cash, deposits and equities that can be transferred into cash;
5. Organizational resources – that include brand, image, know-how, strategies, procedures and internal systems.

The resource-based-view of the firm focuses on factors that organisations have and may use in order to achieve appropriate level of competitiveness (Eisenhardt & Martin, 2000). The structure, quality and quantity of these resources as well as the way organisations use them is a foothold for market position. Taking into account SMEs' characteristics it should be added that they have fewer tangible and financial assets than their larger counterparts (Berends, Jelinek, Reymen & Stultiëns, 2013), which causes that their competitive advantage may stem mostly from intangible assets. Moreover, SMEs' owners do not have an access to many important market analyses and data or do not implement appropriate control systems (Voss & Brettel, 2013), which make them more vulnerable to environmental changes (Surma, 2010, p. 52). That is why organizational capital which refers to the way firms are organised, to processes they implement and to the schemes they follow, is so important in achieving appropriate level of performance. OC includes tasks that affect firms' functioning and refer to setting goals and developing strategies, planning, defining tasks, coordinating and communicating decisions to employees (Squicciarini & Le Mouel, 2012, p. 7). It can be divided into structural capital (organizational structure, IT systems and licenses), operational processes capital (procedures, guidelines, methods, schemes) and innovative capital (R&D activities, patents) (Beyer, 2010, p. 175). On the basis of the definition cited, it is assumed in this study that OC includes brand, IT systems, management systems and know-how that organisation may use in order to achieve competitive performance or act effectively. According to Flamholtz (1995) factors corresponding directly to organizational capital are the foundations of firms' performance. The development of operational systems, management systems and corporate culture impact directly the level of goal achievement. However, the importance of these factors is not the same along firms' lifecycle. That is why, organisations should analyse changes in their functioning and analyse what changes they should implement and in which components of organizational capital they should invest.

Organisations' Growth Theories

Organisations' growth is a widely discussed issue in scientific papers. Many researchers have developed their own models presenting the path organisations follow from their initial phase. The multiplicity of approaches stems mostly from the diversity of SMEs which operate in different branches and on different markets. Moreover, the number of such enterprises makes it difficult to capture similarities which makes researchers try to generalise focusing on different issues. Such models characterise precisely changes that appear in the market position, size, level of incomes, but also in the shape and complexity of internal processes and systems. According to Hugo and Garnsey (2005) firms' growth is very often analysed with the use of firm size, market share and sales revenue figures. Internal changes and resources development are less frequently discussed. That

is why, in this part, examples of most commonly cited organisation growth models are presented through the lens of changes in internal systems.

One of the most commonly cited model developed by Churchil and Lewis (1983) consists of five stages: existence, survival, success, take-off and resource maturity. The authors claim that SMEs growth is determined by factors related to the enterprise and to the owner. Those referring to the enterprise directly correspond to OC because they consist of management style, organizational structure, extent of formal systems, major strategic goals (Churchil & Lewis, 1983). As the organisation grows they have to introduce operating schemes, control systems, build their brand, design communication channels and plan their goals. Moreover, changes in organizational structure should be implemented and SMEs should switch from simple, owner-managed firms into decentralised, and functionally divided ones.

In the model of Scott and Bruce (1987) (similarly to Churchil & Lewis, 1983) five stages were defined: inception, survival, growth, expansion and maturity. In each of these stages, requirements for change in internal processes were drawn. In the beginning, in the inception, firms should concentrate mostly on formalizing basic processes and financial issues. Following their growth they should change their managing style by delegating supervisory tasks and focusing on coordination. While SMEs grow the pressure for implementing effective information and communication systems appears, and advanced control systems should be introduced. In the following stage SMEs should focus on administrative issues enabling to control and coordinate wide and complex processes, but firms should be aware of possible red-tape crisis. In the mature stages organisations should also pay more attention to marketing and brand creation, which can be important in sustaining the market position (Scott & Bruce, 1987).

Hanks, Watson, Jansen and Chandler (1993) based their model on detailed analyses of a number of organizational levels, specialised functions, formalization and average percentage of sales revenues and employment growth. In the subsequent stages that are: start-up, expansion, maturity, diversification, the number of: organizational levels vary from 2.2 to 5.7; specialised functions from 1.5 to 15.3; sales revenue growth vary from 91% (in start-ups), 297% (in expansion) to 37% in diversification (Hanks *et al.*, 1993). All these figures clearly state that there are ongoing changes in internal systems and processes on the growth path of enterprises.

Greiner (1998) built his model on the basis of crises that refer to managerial problems. These problems are connected with changes on markets as well as with the increasing size and complexity of firms. In the model five stages were described (creativity, direction, delegation, coordination, collaboration) and each of these stages forces the owner to implement changes in management style, communication system, decision making, planning and organizational structure.

The development of internal systems and processes is also discussed or can be drawn from the models of Jackson and Morgan (1982), Mintzberg (1984), Adizes (2004), Matejun (2013), Miller and Friensen (2014). Despite the fact that there are many differences in organisations' growth models, that stem from the approach adopted by the authors, each of them presents a coherent model of organisation features at subsequent stages. On the basis of such characteristics a unified model presenting changes in the internal systems of the SMEs can be drawn. According to Floren

(2011) a firm’s growth extorts changes in the structure, planning and formalization level. Such a situation cause a dilemma whether to remain small and flexible or to introduce more structuralised solutions in order to reach higher effectiveness. Nevertheless, SMEs should invest in organizational capital in order to create conditions that enable reaching desired levels of performance.

Theoretical Model and Hypotheses

On the basis of organisations’ growth theories it is assumed that over their life cycle SMEs follow a path that consists of five main stages: survival, take-off, prime, maturity and decline. In each of the stages a combination of resources, crucial for achieving goals and reaching appropriate level of performance, can be described. One of these resources is organizational capital which refers to the scope, extent and complexity of internal systems. The way SMEs are organised and how they run their internal processes is crucial due to their limited financial and tangible resources. If internal systems are implemented properly organisations can achieve superior performance. The theoretical foundation of the research is presented in Figure 1.

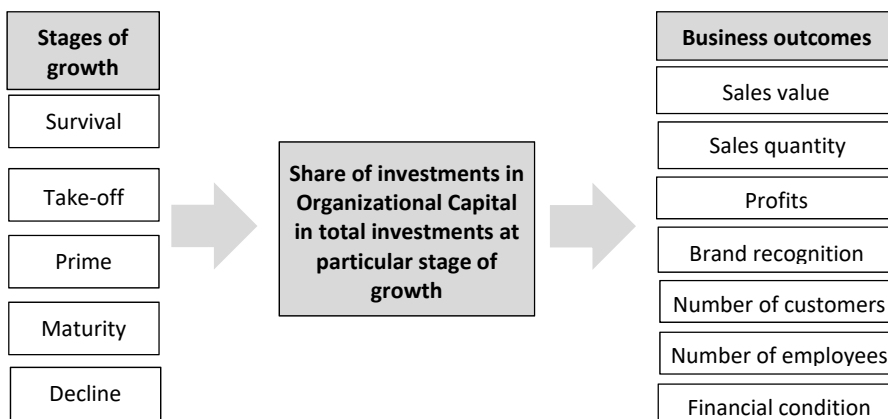


Figure 1. Impact of the share of organizational capital investments on business outcomes at growth stages

Source: own research.

According to the developed model SMEs set different goals at particular stages of their growth which refer to their potential and market position. This is why they require different resources in order to achieve desired performance. Thus, it can be hypothesized that:

H1: The share of investments in organizational capital in total investments differs in subsequent growth stages.

As SMEs grow they require different solutions enhancing their efficiency and they have to adapt to changing market conditions. Thus, the structure of investments in organizational capital should not be the same at all stages. It can be hypothesized that:

H2: The structure of investments in particular components of organizational capital differs in subsequent growth stages.

Because the shape, extent and complexity of internal processes affect efficiency it will also impact SMEs business outcomes. Thus, it can be hypothesized that:

H3: The share of investments in organizational capital within total investments impact SMEs' business outcomes at particular growth stages.

Business outcomes can be measured by the means of sales value, sales quantity, profits, brand recognition, number of customers, and overall financial condition.

MATERIAL AND METHODS

The research was conducted on a group of 470 Polish SMEs in the years 2014 and 2015. In the study the definition of SMEs provided by the Polish government (that refers to EU regulations) was implied. Only the organisations that employ between 9 and 249 employees, and have incomes up to 43 million euros (*Ustawa ...*, 2004) were taken into account. Following Churchill and Lewis (1983) and Hanks *et al.* (1993) it was assumed in the study that SMEs may go through all the subsequent stages of growth, not becoming large organisation. It implies that even a small firm may face threats referring to decline stage, because of shrinking market or mismatch between managerial decisions and market conditions.

Respondents were chosen randomly from a database consisting of 1950 items, which had been built with the use of the information from Polish Statistical Office. While selecting SMEs, stratified sampling, including geographical density of companies in regions was applied. Despite the fact that the sample corresponded to the number of companies in a particular region, it was not representative because the number of investigated companies did not correlate with the total number of SMEs in Poland. While collecting data, PAPI technique was used and the owners or managers were asked to answer questions listed in a questionnaire. During the interviews, some respondents refused to give answers to particular questions concerning the value of investments in particular resources, the sales value, profits or business outcomes. That is why, in this paper information from only 180 questionnaires was used. In most cases investigated SMEs had only one profile and services (43%) were dominant. The share of companies that act in the production and sales branch was similar (Table 1).

The first step of analytical procedure was aimed at evaluating the growth stage. On the basis of literature study and developed model, indicators of the following eight areas: products and services, distribution, technology, management, finance, customers, brand and relations with stakeholders, were investigated. For each area three to six questions were asked, giving respondents a possibility to choose an answer corresponding to the particular stage of growth. Provided options, were based on (1) quantity (for example the number of introduced innovations, range of products and services, number of distribution channels, and facilities for customers), (2) formality/complexity (for example in the 'management system' area the scope of answers to the question concerning job description was from 'we do not have job descriptions or tasks specifications', to 'we have detailed job descriptions, formalized functional relationships, and listed tasks executed while fulfilling roles', (3) relationships with stakeholders (for example, share of occasional and regular customers, stability in cooperation with suppliers and subcontractors, involvement in CSR activities, and cooperation with partners). On the basis of pro-

vided answers and with the use of modal value the stage of growth was described on a five-grade scale where '1' stands for 'survival', '2' for 'take off', '3' for 'prime', '4' for 'maturity', and '5' for 'decline'. The share of companies in particular growth stages is presented in Table 1.

Table 1. Sample characteristics

Profile (in %)	Services (A)		Production (B)		Sales (C)	A+ B+ C	A + B	A + C	B + C
	43		17		15	5	4	6	9
Market (in %)	Local	Regional	National	International	no answers				
	31	29	18	17	5				
Growth stage (in %)	Survival		Take-off		Prime	Maturity		Decline	
	16		34		28	16		5	

Source: own elaboration on the basis of data gathered.

The next step was to calculate the mean value of the share of investments in organizational capital. The data was divided into four main components: *brand*, *know-how*, *IT systems* and *management systems*. Respondents were asked to provide information about monetary value of such investments. However, they were also informed that if some activities connected with a particular component are executed by employees and are treated/regarded as an investment, respondents should provide estimated cost of such investments by calculating them on the basis of employees' salary and time spent on the activity. The share of investments in organizational capital was calculated by summing up all expenditures and dividing them by the value of all investments made by a particular company. As a result the share and the structure of investments in organizational capital was calculated. The share of investments in organizational capital in total investments represented by a value falling into a <0;1> range is presented in Figure 2. It was followed by analyses of the structure of investments in organizational capital at subsequent stages, which is presented in Figure 3.

The last stage of analytical procedure was testing the relationship between: (i) the share of investments in organizational capital and the stage of growth, (ii) the structure of OC investments and the stage of growth, and (iii) between the share of investments in OC and business outcomes. As indicators of performance nine variables, referring to: (a) quantity of products' sale, (b) quantity of services' sale, (c) value of products' sale, (d) value of services' sale, (e) profits, (f) number of customers, (g) number of employees, (h) overall financial condition and (i) brand recognition were chosen. To evaluate performance a five-grade scale was used. On the basis of business outcomes respondents achieved in the last three years, they were to specify if a given indicator: definitely decreased, decreased, remained stable, increased or definitely increased. As the variables 'stage of growth' as well as 'business outcomes' were discrete (represented by values 1-5), it was necessary to rank the variable 'share of investments in organizational capital' to verify the correlation with the use of the Spearman method. Rank '1' was granted to companies with the lowest share of investments in organizational capital.

All interviews were conducted in March and April which made it possible to provide up-to-date answers based on previous year annual statements. The results of correlation testing are presented in Table 3. However, due to the fact that only nine companies fell into the group of companies in the decline stage.

RESULTS AND DISCUSSION

Share of OC Investments in Total Investments

The average share of investments in OC in SMEs is almost at the level of one third of all investments expenditures (Figure 2). Improving internal systems and procedures is perceived by organisations as an important activity enhancing their performance. More detailed analyses of the OC investments at growth stages shows that starting from the take-off the share of spending on internal development is rising.

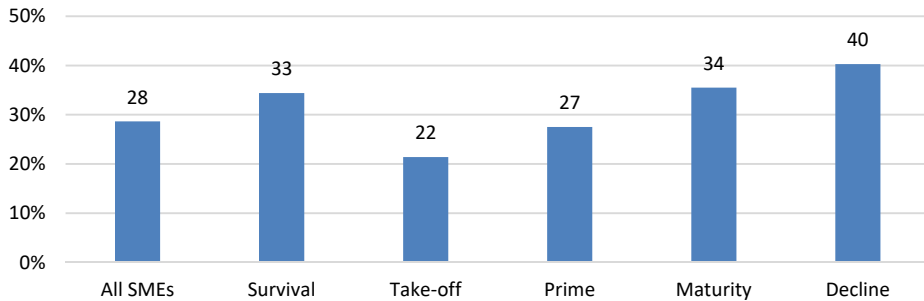


Figure 2. The share of investments in OC in total investments at subsequent growth stages (in %) ($n = 180$)

Source: own research.

However, it should be added that companies at the survival stage allocate more than one third of their funds in OC. Such a high share at the initial stage may stem from the necessity to organise all basic processes enabling SMEs to exist on the market and run the business. At the take-off stage, when companies focus mostly on market and search for selling opportunities, more funds are spent on other activities such as building relations with customers and business partners or investing in tangible resources. Organisations which achieve an appropriate market position at the take-off start their rapid growth that can be observed in prime stage. An increasing number of customers, new markets and business partners cause that there is a need to modify and upgrade processes and the way SMEs are managed. This is why the share of investments in OC in total expenditures is increasing. Following the growth path at the maturity stage firms are stable, with a good market position so they can pay less attention to external issues and concentrate on internal ones which generates a higher level of investments in OC. At the decline stage, as profits and market share are decreasing, companies try to reorganise their processes in order to cut off costs and reduce unnecessary activities. Such actions require funds for reengineering business processes. Despite the fact that the share of OC investments and its changes in investigated SMEs are in accordance with theoretical foundations the correlation between this variable and stage of growth was not verified statistically. Thus, it should be concluded that the first hypothesis is not supported.

Structure of OC Investments

The structure of investments in OC changes at subsequent stages. Initially, SMEs invest mostly in IT systems and in the brand (Figure 3 and Table 2). Following the growth path it can be seen that the share of investments in IT systems decreases while the ratio of brand investments rises. The correlation between these two areas and growth stages is supported statistically (Table 2). There are also changes in the share of other areas of investments. Taking into account management systems, it can be seen that SMEs do not invest in them almost at all at the survival stage. It can stem from a belief that owners or managers are able to cope with all duties or from the low complexity of internal processes that do not require advanced tools or methods. At the two subsequent stages (take-off and prime) changes in SMEs position and scope of activities may initiate investments that enhance the quality of management processes. Introduced solutions at prime stage may fit organisations, and make the share of such investments lower in the last two stages.

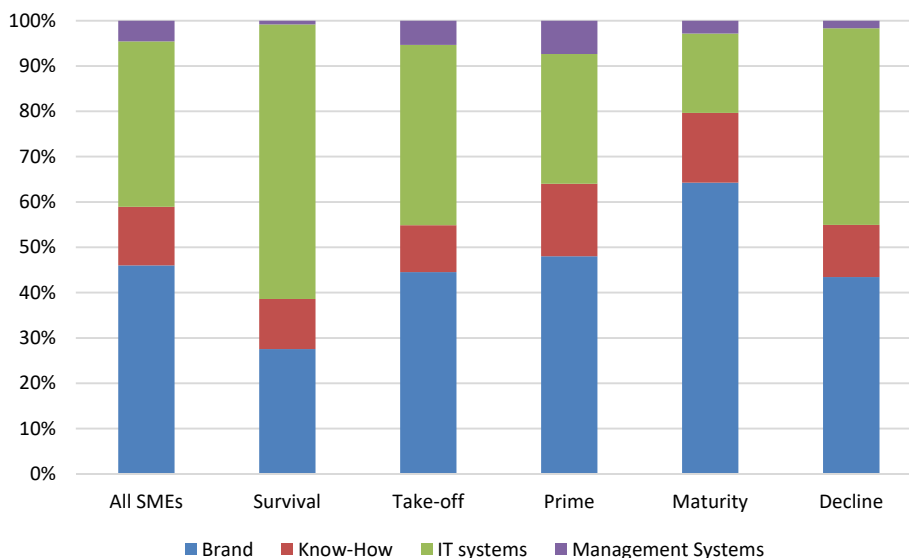


Figure 3. The structure of investments in OC at subsequent growth stages (n = 180)

Source: own research.

The share of investments in know-how is at almost the same level at survival, take-off and decline stage (Figure 3 and Table 2). However, SMEs seem to invest more in know-how at prime and maturity. It may result from the market position and firms' potential. At the prime stage companies achieve high level of incomes, profits and their market share increases rapidly. It makes them search for new products or services and they become more eager to invest in know-how. Similar causes may refer to maturity stage. A stable market position and brand recognition create conditions in which companies willing to renew their offer invest in know-how which helps them launch new products or services. In some cases higher share of investments in know-

how may also stem from the lowering level of incomes and shrinking markets. Managers or owners of SMEs, invest in new technologies or new solutions and try to prevent organisations from falling into the decline stage.

On the basis of conducted analyses it can be concluded that the structure of investments in organizational capital varies in accordance with a particular stage of growth. Due to the fact that not all correlations were verified statistically it can be concluded that the second hypothesis is partly supported.

Table 2. Structure of OC investments at subsequent stages (as a percent of total OC investments)

Area of investments/ Growth stage	All SMEs	Survival	Take-off	Prime	Maturity	Decline
Brand (0.241828*)	46.0	27.6	44.5	48.0	64.3	43.4
Know-How	12.9	11.0	10.3	16.0	15.4	11.5
IT systems (-0.254671*)	36.5	60.6	39.8	28.6	17.5	43.4
Management systems	4.6	0.8	5.3	7.3	2.8	1.7

* Spearman's Rank Correlation significance for $p = 0,05$

Source: own research.

OC Investments and Business Outcomes

Organizational capital can be treated as a source of sustainable competitive advantage because of its VRIN attributes. Thus, investments in OC should impact SMEs' business outcomes. According to the model to evaluate the relationship between such investments and business outcomes the changes in nine performance indicators were analysed. In Table 3 the correlations between the share of investments in OC and performance indicators are presented. In the cases where the relationship is verified statistically (with $p = 0.05$) the value of the coefficient appears in the fourth column.

Table 3. Correlation between share of investments in OC and business outcomes indicators

Variables	All SMEs (n = 180)	Survival stage (n = 28)	Take-off stage (n = 48)	Prime stage (n = 48)	Maturity stage (n = 28)	Decline stage (n = 9)
Share of investments in OC	1	1	1	1	1	1
Quantity of products' sale	–	–	–	0.333449*	–	–
Quantity of services' sale	–	–	–	–	–	–
Value of products' sale	–	–	–	0.337769*	–	–
Value of services' sale	–	–	–	0.295658*	–	–
Profits	–	–	–	0.366323*	0.366839*	0.366839*
Number of customers	–	–	–	0.392860*	–	–
Number of employees	–	–	–	–	–	–
Overall financial condition	0.17802*	–	–	0.551985*	0.387029*	0.387029*
Brand recognition	0.20429*	–	–	0.498291*	–	–

* Spearman's Rank Correlation significant codes: 0.05

Source: own calculations in Statistica.

Taking into account all companies (regardless of the growth stage) there is a correlation only between the share of investments in OC and the overall financial condition or brand recognition. Despite the fact that the relationship is supported in the case of two out of nine indicators it can be stated that the overall financial condition seems to be the

most important for SMEs. In the case of all other indicators other resources, for example tangible assets, human capital or relational capital, have to be of higher importance.

There is no correlation between the share of OC investments in total investments and business outcomes in companies in the survival stage. Such organisations are exposed to so many environmental threats and have so few resources that the relationship between actions taken and performance is not constituted.

In the take-off and maturity stage there is a relationship between OC investments and one performance indicator. When SMEs are growing investments in OC are negatively correlated with value of products' sale. The requirements of shaping the way the business is organised and managed after the survival stage, cause that SMEs have to spend more funds on internal processes. At the same time the brand is not widely recognised yet and the number of customers is not increasing relatively to the owners' expectations. It may cause that the value of products' sale is much lower than expected.

At the maturity stage OC investments correlate with profits. SMEs have a stable market position and their products or services meet customers' expectations. Actions taken in order to improve or modify internal processes are aimed at increasing efficiency which may result in lowering general costs. Lower costs and high sale value may result in profits rise.

The highest impact of OC investments on business outcomes can be observed at the prime stage. The correlation is statistically important in the case of six out of nine indicators. The higher the share of OC investments is the more frequently an increase in value of products and services sale can be observed. There is also a rise in the number of customers and brand recognition which may result from introducing marketing and promotion schemes and processes. What is more, there is a positive relationship between the share of OC investments and profits or overall financial condition. Such a correlation may stem both from better brand recognition as well as from increasing efficiency of internal processes and management systems.

On the basis of conducted analysis it can be concluded that the share of investments in OC impacts business outcomes mostly at the prime stage. At other stages there is no correlation or OC investments impact only one indicator. Thus, it can be stated that the third hypothesis is partly supported.

CONCLUSIONS

Organizational capital which is firm specific, difficult to imitate and substitute is treated as a source of sustainable competitive advantage. In the case of SMEs which have fewer financial and tangible assets than their large competitors, such a resource can play a crucial role in achieving a success. Despite the fact that firms build their organizational capital from the initial phase by changing the way they act and by implementing modifications in internal processes, it can be stated (on the basis of conducted research) that it does not have the same impact on business outcomes at every stage of SMEs growth.

Investments in organizational capital seem to be the most important at the prime stage in which SMEs face a rapid growth. Lack of investments in OC may create constraints that lower SMEs' potential and cause a decrease in their performance. Thus, it is very important for managers and owners to provide conditions for incremental growth at this stage. It is also important that in general, investments in OC impact the overall financial condition and brand recognition. Taking into account

all investigated SMEs, regardless of their stage of growth, size and profile, the correlation between these variables was statistically verified. It suggests that OC can be treated as a source of competitive advantage and firms' performance.

Despite the fact that there was no statistical correlation between the share of OC investments and the particular stage of growth, SMEs seem to follow schemes presented in the theory of organisation growth. The share of OC investments in total investments is high at the survival stage which results from the necessity to initiate all activities. At the take-off stage it drops and investments in other resources, for example tangible assets or relationships with stakeholders, are made. Starting from the take-off stage there is an increase in the share of OC investments which is associated with the rising complexity of internal processes and the size of the firm. Such findings might be important for managers and owners because of their applicability. They should make their investment decisions on the basis of an in-depth analysis of the firms' functioning and not to implement the same schemes of investments all the time.

On the basis of conducted research it should also be concluded that managers and owners should invest more in the brand on subsequent stages. The more developed an organisation is the more attention should be paid to promotion and building the organisation's image. Diverse conclusion could be drawn while taking into account IT systems. The share of IT investments decreases on subsequent stages. It can be concluded that appropriate investments at the initial stages can support SMEs functioning throughout their lifecycle.

Despite the fact that the research provides data to draw conclusions concerning investments in OC and SMEs growth, it has several limitations. First of all, the sample consists of only Polish SMEs which makes it impossible to generalize about the findings and apply them also to companies that operate in other countries. Secondly, taking into account the total number of existing SMEs, the sample size of 470 companies initially interviewed, and 180 finally taken into account for statistical analyses, is relatively small. Although SMEs were selected randomly from a database including 1950 items, the results cannot be applied as a representative because of three main reasons: (i) the sample consists of Polish enterprises only, (ii) the sample is relatively small in comparison to the number of existing SMEs, (iii) the sample was not homogenous – SMEs operating in different branches and having different profiles were analysed. Thirdly, in the sample SMEs in their decline stage were underrepresented which made it necessary to implement stratified sampling in the further study. Fourthly, information concerning investment expenditures referred only to the data included in financial statements for 2013 or 2014. In order to analyse the impact of investments on performance and growth it is necessary to compare collected data with those referring to a longer scope of time, especially whilst analysing investments in organizational capital. Finally, some changes in methodology can be implemented. They may refer to evaluation of a growth stage, as a modal value could not be sufficient enough to classify particular SME into an adequate stage of growth. Moreover, some econometrical models describing relationships between investments in OC and performance could be applied in further research. Having verified statistical correlation between investments in OC and some performance indicators at particular growth stages, despite the limitations the research is a foothold for further studies that could be conducted in more homogenous groups of SMEs.

REFERENCES

- Adizes, I. (2004). *Managing corporate lifecycles*. Carpinieria: Adizes Institute Publications.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Bayer, K. (2010). Kapitał intelektualny jako zasób przedsiębiorstwa – koncepcja i modele zarządzania (intellectual capital as a resource in enterprise – conception and models of management). *Studia i Prace WNEiZ*, 17, 171-182.
- Berends, H., Jelinek, M., Reymen, I., & Stultiëns, R. (2014). Product Innovation Processes in Small Firms: Combining Entrepreneurial Effectuation and Managerial Causation. *Journal of Product Innovation Management*, 31(3), 616–635.
- Churchil, N.C., & Lewis, V.L. (1983). The five stages of small business growth. *Harvard Business Review*, 61(3), 30-50.
- Ćwik, K. (2011). Zachowania strategiczne małych przedsiębiorstw i ich uwarunkowania w aspekcie teoretycznym (Strategic behaviours of SMEs and their determinants in the theoretical aspect). In S. Lachiewicz, & M. Matejun (Eds.), *Zarządzanie rozwojem małych i średnich przedsiębiorstw (SMEs growth management)* (pp. 26-43). Warszawa: Oficyna Wolters Kluwer Business.
- Eisenhardt, K.M., & Martin, J.A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121.
- Flamholtz, E. (1995). Managing Organizational Transitions: Implications For Corporate and Human Resource Management. *European Management Journal*, 13(1), 39-51.
- Floren, H. (2011). Organising small-firm growth. In S.-Å. Hörte (Ed.), *Research on Technology, Innovation and Marketing Management 2009-2011: Introducing the Research Area of Innovation Science* (pp. 117-133). Halmstad: Högskolan i Halmstad.
- Galbreath, J. (2005). Which resources matter the most to firm success? An exploratory study of resource-based theory. *Technovation*, 25(9), 979-987.
- Greiner, L.E. (1998). Evolution and revolution as organizations growth. *Harvard Business Review*, 76(3), 55-68.
- Hanks, S., Watson, C., Jansen, E., & Chandler, G. (1993). Tightening the life-cycle construct: A taxonomic study of growth stage configurations in high-technology organisations. *Entrepreneurship Theory and Practice*, 18(2), 5-29.
- Hugo, O., & Garnsey, E. (2005). Problem-Solving and Competence Creation in the Early Development of New Firms. *Managerial and Decision Economics*, 26(2), 139-148.
- Jackson, J.H., & Morgan, C.P. (1982). *Organization Theory. A Macro Perspective for Management*. London: Prentice Hall.
- Maritan, C.A. (2001). Capital Investments as investing in organizational capabilities: an empirically grounded process model. *The Academy of management Journal*, 44(3), 513-531.
- Matejun, M. (2013). Instruments Supporting Development in the Life Cycle of Small and Medium-Sized Enterprises. *International Journal of Economic Sciences*, 11(1), 40–60.
- Miller, D., & Friessen, P.H. (2014). A longitudinal Study of the corporate lifecycles. *Management Science*, 30(10), 1161-1183.
- Mintzberg, H. (1984). Power and organization life cycles. *Academy of Management Review*, 9(2), 207-224.
- Scott, M., & Bruce, R. (1987). Five stages of growth in small business. *Long Range planning*, 20(3), 45-52.
- Squicciarini, M., & Le Mouel, M. (2012). *Defining and Measuring Investment in Organizational Capital: Using US Microdata to Develop a Task-based Approach*. OECD Science, Technology

and Industry Working Papers, 2012/05. Paris: OECD Publishing. doi: <http://dx.doi.org/10.1787/5k92n2t3045b-en>

Surma, J. (2010). *Rola analogii w podejmowaniu decyzji w zarządzaniu strategicznym małymi i średnimi przedsiębiorstwami*. Warszawa: Oficyna Wydawnicza SGH.

Ustawa z dnia 2 lipca 2004 r. o swobodzie działalności gospodarczej (*Economic Freedom Act*), Dz. U. Nr 173, poz. 1807.

Voss, U., & Brettel, M. (2014). The Effectiveness of Management Control in Small Firms: Perspectives from Resource Dependence Theory. *Journal of Small Business Management*, 52(3), 569-587.

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The Effectual Approach in Born Global Firms: Current State of Research

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Abstract

The aim of this paper is to systematise the existing research at the intersection of international entrepreneurship and effectuation theories and propose the future research directions in this area. The research was carried out with the help of the literature review, where the articles reviewed were mostly published within the last decade (2005-2015) and come from scientific journals specialising in entrepreneurship research. The theoretical contribution of the study is the summary and critical analysis of the existing research on the application of effectuation logic in the international entrepreneurship field and propositions for further research. The results of the study are exploratory and there is a need for future empirical research at the intersection of international entrepreneurship and effectuation research. The research highlighted the division of the existing literature into two streams – papers which claim that international entrepreneurs use causation logic and the ones that argue on the application of effectuation theory. The paper suggests the areas of further research within those literature streams.

Keywords: born globals; international entrepreneurship; internationalisation; effectuation; effectuation logic

JEL codes: F23

INTRODUCTION

Company internationalisation became a subject of interest for researchers at the end of the 20th century. Those studies focused on the attitudes and behaviour of firms in the process of going international (Li & Cavusgil, 1995). Despite dissimilarities in definitions, researchers mainly agreed that the internationalisation process has several consecutive stages. Stage internationalisation theories (Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1977) were mainly based on large multinational corporations which developed from large,

mature domestic companies (Oviatt & McDougall, 1994). Later international entrepreneurship researchers (McDougall & Oviatt, 2000; Zahra & George, 2002) examined the possibilities to conduct business activities globally with limited resources. Since then, rapidly internationalising firms or “*born globals*” (Rennie, 1993; Knight & Cavusgil, 1996) became a very popular research subject. Such firms are defined as business organisations that, from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries (Oviatt & McDougall, 1994, p. 49).

There are many research papers trying to explain the key determinants of the international expansion of born globals. Most of the researchers show the combination of external factors, internal factors and factors related to the entrepreneur (Zahra & George, 2002). External factors are mainly associated with the market characteristics, as sectoral or regional export culture, international trade incentives or demand characteristics. Internal, organisational reasons of going international are niche products, global strategy and resource availability (Pawęta & Zbierowski, 2015). Entrepreneur-related reasons, however, are found to be fundamental in the internationalisation of a company.

The recent stream of research on effectuation logic applied in international entrepreneurship deepens the significance of entrepreneurial approach in born global companies. Several studies connecting international orientation of companies with the effectual way of thinking have appeared within the last decade (Bhowmick, 2008; Mainela & Puhakka, 2008; Schweizer, Vahlne, & Johansson, 2010; Sarasvathy, Kumar, York, & Bhagavatula, 2014; Galkina & Chetty, 2015). The theory of effectuation, entrepreneurial way of thinking and making decisions in situations of uncertainty, first introduced in 2001 by Saras Sarasvathy, includes considering available means, keeping in mind what is affordable to lose, then seeking strategic partnerships and exploiting contingencies to control the unpredictable future (Sarasvathy, 2001). According to Sarasvathy, effectual thinking is the prevalent logic among expert entrepreneurs in uncertain environments. Rapid internationalisation of born global companies is a highly uncertain environment for a novice entrepreneur. Therefore, effectual thinking is considered to be one of the key entrepreneur-related constructs determining the early internationalisation of firms (Pawęta, 2015).

This paper aims to systematise the existing research on the effectual approach in born global firms through the critical literature review and to present implications for further research within this area. The research is based on the systematic literature review (Pawęta, 2015) conducted on the sample of 94 articles from 41 scientific journals, which showed that the effectual approach is one of the main constructs determining the early internationalisation of born global companies. This paper discusses the literature stream which connects effectuation with international entrepreneurship and presents insights for future research (Mainela & Puhakka, 2008; Schweizer, Vahlne & Johanson, 2010; Sarasvathy et al., 2014). The paper demonstrates that there is a potential for future investigation of the effectual approach in born global firms.

The first part of the paper describes the theoretical background of the effectuation concept in entrepreneurship studies, the next part presents the methodology used in the study. The third section elaborates on the findings of the literature review. The last part presents final remarks, research limitations and suggestions for further research.

LITERATURE REVIEW

The theory of effectuation, entrepreneurial way of thinking and making decisions in situations of uncertainty was introduced in 2001 by Sarasvathy. She introduced two distinct types

of logic used in decision-making processes – causation and effectuation. Causation refers to typical managerial rational behaviour, where decisions are based on searching the ways to reach a distinct goal. Causation usually starts with a given goal, then focusing on expected returns and competitive analysis and finally assembling means to achieve the given goal. Effectuation includes a set of decision-making behaviours which are employed in the situations of uncertainty, when future is unpredictable, goals are not clearly known and there is no independent environment that serves as the ultimate selection mechanism. Effectual thinking includes considering available means, keeping in mind what is affordable to lose, then seeking for strategic partnerships and exploiting contingencies to control the unpredictable future (Sarasvathy, 2001). According to Sarasvathy, effectual thinking is the prevailing logic among expert entrepreneurs in uncertain environments. Rapid internationalisation of born global companies is a highly uncertain environment for a novice entrepreneur.

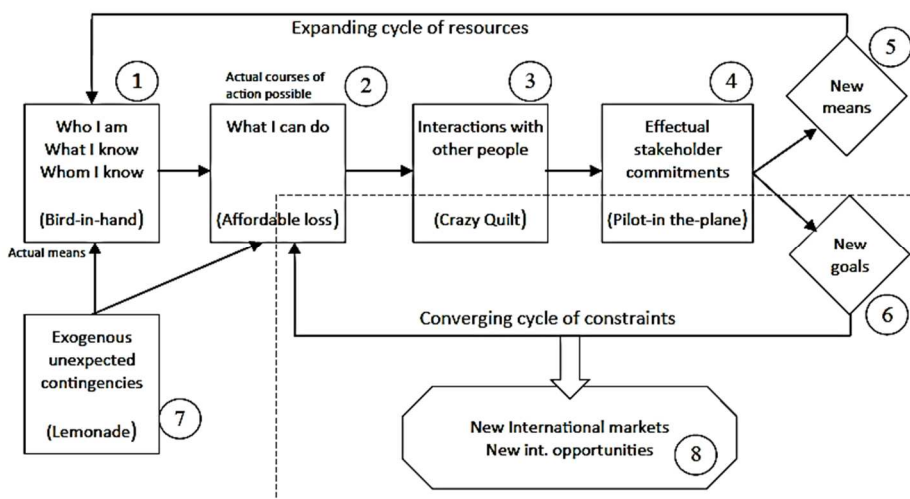


Figure 1. Effectuation theory
Source: Sarasvathy, 2008.

The main effectuation principles introduced by Sarasvathy (2008) are called bird-in-hand, affordable loss, crazy quilt, lemonade and pilot-in-the-plane (Figure 1).

Bird-in-hand

Before starting any activity, an entrepreneur analyses the means he or she has associated with identity (who I am), knowledge (what I know) and networks (whom I know). This analysis helps the entrepreneur to focus on what he can do rather than what he should or wants to do. Such a means-based approach helps to generate potential opportunities. According to Sarasvathy et al. (2014), by relying on means rather than on ends, effectuation encourages entrepreneurs to be open to new possibilities and to be finely attuned to their own capabilities.

Affordable loss

It is impossible to predict the future returns while acting in an uncertain environment. Therefore, expert entrepreneurs focus on what they can afford to lose, but not on what

they can gain (Dew et al, 2009; Sarasvathy, 2008). This part of effectuation strategy reduces time engaged in strategic planning, as affordable loss can be calculated relatively quickly, and eliminates the need to predict the future returns.

Crazy quilt

According to the effectual approach, partnerships are the central method to expand resources (Sarasvathy et al., 2014). The effectual approach suggests that entrepreneurs do not search for specific stakeholders based on their strategic goals and preselected targets, but they engage in conversations with a variety of people they already know and by that they find stakeholders with whom they end up making commitments to a new venture. Effectual entrepreneurs tend to create possibilities for stakeholders who risk their assets because they see an opportunity in cocreating the venture with the entrepreneur (Kurzewska, 2012). Chandler, DeTienne, McKelvie and Mumford (2011) notes that entrepreneurs may build relationships, but only when both parties share the risk of the venture and benefit from the success of the venture, they constitute effectual partnership.

Lemonade

The effectual approach suggests that entrepreneurs “turn lemons to lemonade”, which means that they treat surprises as opportunities and by that may control uncertain situations to some extent. The “lemonade” principle allows to benefit from embracing unexpected situations rather than following a goal-oriented process that requires stability and no deviations from the plan (Chandler et al., 2011). There is empirical evidence that embracing surprises strategy has a positive impact on the R&D output in highly innovative research settings (Brettel, Mauer, Engelen, & Kuepper, 2012).

Pilot-in-the-plane

The pilot-in-the-plane principle emphasises the role of human beings rather than trends in determining the shape of future events (Sarasvathy, 2008). In the uncertain environment effectual entrepreneurs do not seek to learn more about it by extensive market research or estimating upcoming trends, but they intervene in the event space, transform and reshape it themselves or with the help of other effectual actors (Sarasvathy et al., 2013). Effectual entrepreneurs do not see events running on autopilot, but consider themselves one of the co-pilots of the ongoing events.

METHODOLOGY

The author’s previous systematic literature review on the main entrepreneur-related factors which influence rapid internationalisation (Pawęta, 2015) set the theoretical framework and defined methodological choices for further in-depth research on effectuation logic as one of the main constructs in early internationalisation studies. In this paper 6 main constructs were revealed within the systematic review of 94 articles from 41 scientific journals. Those constructs are: innovation and technology, entrepreneurial/managerial knowledge, entrepreneurial orientation, effectuation logic, international networks and dynamic capabilities of an entrepreneur. The systematic literature review presented above became a basis for the further research on effectual approach in born global firms.

In order to describe the current state of knowledge within the application of the effectuation theory in international entrepreneurship, the literature review was carried out. The articles reviewed were mostly published within the last decade (2005-2015) and come from the international scientific journals specialising in entrepreneurship research, such as "Entrepreneurship: Theory and Practice", "Journal of International Entrepreneurship", "Management International Review". The articles were chosen with the use of the methodology applied for the previous research (Pawęta, 2015) using a three-stage procedure:

1. Using bibliographic database Web of Science which allows to access the most significant international scientific journals in the fields of social sciences, art and humanities. The following keywords in different combinations were used: "effectuation", "effectual logic", "born global", "internationalisation", "entrepreneurial orientation".
2. Analysing references of the articles found, especially literature reviews and conceptual papers.
3. Screening the articles in order to check their relevance to the research and selecting the final sample.

The final sample includes scientific papers which can be divided into two main categories – conceptual papers or literature reviews and empirical research on the effectuation influence on rapid internationalisation of companies. The main observations which emerged within the literature review are presented and discussed in the following section.

RESULTS AND DISCUSSION

The review of the international entrepreneurship literature and its connection with effectuation logic was aimed at defining the current state of research at the intersection of those two fields of study. The literature reviewed starts with the first work of Sarasvathy (2001) on effectuation logic, includes further papers on effectuation in international entrepreneurship (Mainela & Puhakka, 2008; Schweizer, Vahlne & Johansson, 2010) and the latest insights on this topic (Sarasvathy et al., 2014; Galkina & Chetty, 2015). The key findings and methodological aspects of the papers reviewed are presented in Table 1, which shows the key findings and methodological choices of the authors researching the effectual approach in born global companies.

Table 1 presents the articles which focus on the effectual orientation of the entrepreneur in born global firms. However, several researchers stress that born global entrepreneurs use a planned and analytical approach to business, which contradicts the effectual approach (Brewer, 2007, cited in Harms & Schiele, 2012). For example, the research by Brouthers & Nakos (2005) showed that exporters use a systematic international market selection to outperform others, which illustrates the causation-based approach. That was followed by Gruber's (2007) argumentation that an expert entrepreneur may need both causation and effectuation ways of thinking when developing a new venture. This duality can be observed in the literature on international entrepreneurship. On the one hand, authors state that international entrepreneurs use the networking approach to build strategic international partnerships (Harris, Wheeler, 2005), that in the initial years the growth of the enterprise occurs without a formal or planned marketing effort (Frishammar & Andersson, 2009), which reflects the effectual logic of entrepreneurs. On the other hand, several papers state that there is evidence from the export literature showing a positive relationship between export planning and export performance (Brouthers & Nakos, 2005;

Lucas, Whitewell & Hill, 2007). However, Harms and Schiele (2012) suggest that born global entrepreneurs do not have much time for strategic planning, conscientious research and analysis of global markets in the dynamic uncertain environment they operate in.

Table 1. The effectual approach in born global companies in the international literature

Author, Year	Sample	Research method	Main results
Bhowmick, 2008	4 case studies	Qualitative	The internationalisation process is a combination of enactment and effectuation. The enactment concept is quite similar to effectuation, it means that entrepreneurs, being a part of the situation they face, act without the entire knowledge of the situation, though both the situation and the decisions are often rationalised in retrospect.
Mainela & Puhakka, 2008	1 case study of IJV	Qualitative	International entrepreneurship is a complicated process which requires a set of means which are – effectuation logic, proactiveness and partnering strategies.
Chandra, Styles & Wilkinson, 2009	8 case studies of SMEs operating in knowledge-based industries	Qualitative	Companies with no prior international experience tend to use opportunities rather than apply systematic research. However, firms with international knowledge apply information from their networks and discover international opportunities using pre-existing means (resources, skills, technologies).
Schweizer et al., 2010	1 case study	Qualitative	The authors updated their conceptual model from 1977 and 2009 and included entrepreneurial aspects, like the effectuation principle. Their updated model includes the “exploiting contingencies” variable leading to progress in the internationalisation process. The authors agree that effectuation logic can strongly contribute to internationalisation of firms.
Anderson, 2011	2 case study	Qualitative	Effectuation introduces a pro-active entrepreneurial perspective that better describes the firm’s development than earlier theories used to analyse born globals’ internationalisation.
Harms & Schiele, 2012	65 rapidly growing SMEs	Quantitative	Entrepreneurs tend to apply effectuation rather than causation. The author stresses the importance of the individual level of analysis in international entrepreneurship research.
Sarasvathy et al., 2014	1 case study	Qualitative	The effectual approach can resolve conflicts and knowledge gaps in two reviews of IE. The authors offer four possibilities for future research at the intersection of IE and the effectuation research.
Galkina & Chetty, 2015	7 case studies	Qualitative	International entrepreneurs network with interested partners, instead of careful selection of international partners.

Source: Own study, based on (Pawęta, 2015).

The studies presented in Table 1 suggest that effectual logic is prevailing among born global entrepreneurs. The first one to use the effectuation theory within the international entrepreneurship research was Bhowmick (2008). He describes the internationalisation process as a combination of enactment and effectuation. The enactment concept is quite similar to effectuation, it means that entrepreneurs, being a part of the situation they face, act without the entire knowledge of the situation, though both the situation and the decisions are often rationalised in retrospect (Bhowmick, 2008). Bhowmick proposes a model called the “enactment-effectuation dance”, which illustrates that high levels of both enactment and effectuation can be a key to the international success. Mainela and Puhakka (2008) show that international entrepreneurship is a complicated process which requires a set of means which are – effectuation logic, proactiveness and partnering strategies. The connection between effectuation and entrepreneurial orientation was also suggested by Chandra et al. (2009) in the study which says that the aggressive way of exploiting contingencies during internationalisation is similar to effectuation logic proposed by Sarasvathy (2001).

In 2010 Schweizer, Vahlne and Johanson proposed an update for the famous U-model from 1977, where they suggested that networks are crucial for successful internationalisation. They stated that the business environment is a web of relationships, a network, and they suggested that the effectuation principle is consistent with their model. Therefore, the authors updated their conceptual model and included entrepreneurial aspects, among all the effectuation principle. They state that “such a view of rationality corresponds better with, often unintentional, internationalisation of a company as a result of managerial or entrepreneurial efforts – the view taken in this paper” (Schweizer, Vahlne, & Johanson, 2010). Their updated model, presented in Figure 2, includes the “exploiting contingencies” variable leading to progress in the internationalisation process. The authors agree that effectuation logic can strongly contribute to the internationalisation of firms.

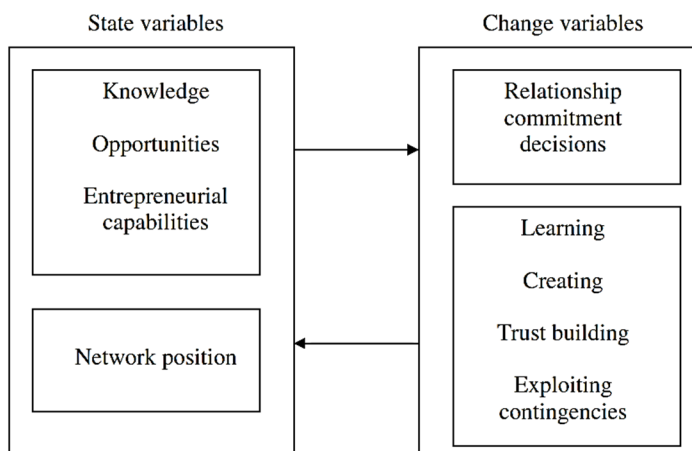


Figure 2. Internationalisation as an entrepreneurial process.
Updated model of the 1977 Uppsala internationalisation model

Source: Schweizer et al., 2010.

An approach integrating effectuation into the international entrepreneurship theory was introduced by Sarasvathy et al. (2014). The authors state that their new model

(Schweizer et al., 2010) “strongly and explicitly emphasizes the role of effectuation in the internationalization process” (Sarasvathy et al., 2014, p.79) and suggest ways to expand the international entrepreneurship research by combining it with effectuation research. The three characteristics of cross-border business presented by Sarasvathy et al. (2014, p. 76) justify the application of the effectuation theory in born global research: (1) cross-border uncertainty, (2) limited resources and (3) network dynamics.

The effectuation theory has gained attention among the international entrepreneurship researchers because internationalisation is an entrepreneurial process of decision-making under uncertainty (Harms & Schiele, 2012; Sarasvathy et al., 2014). Furthermore, the importance of the individual level of analysis in international entrepreneurship research is stressed. Andersson (2011) proposes to focus on decision making in the internationalisation context. Using a case study method, the author analyses born global entrepreneurial decisions using the effectuation theory. According to Andersson, effectuation introduces “a proactive entrepreneurial perspective that better describes the firm’s development than earlier theories used to analyse born globals’ internationalisation” (2011, p. 637). The effectuation theory and earlier research on born globals use the resource-based view and the network approach, therefore, according to Andersson, effectuation should be included in future research on born globals. He also recommends further research on individual entrepreneur’s behaviour in the context of born global internationalisation.

The results of the research show that there is a need to focus on individual-level analysis of international entrepreneurship (Andersson, 2011). That justifies the application of the effectuation theory in born global firms research. High uncertainty on the global markets and limited initial resources push born global entrepreneurs towards the effectual way of making decisions.

CONCLUSIONS

The aim of this paper was to systematise the existing research on the effectual approach in born global firms. The research was based on the systematic literature review (Pawęta, 2015) conducted on the sample of 94 articles on the international entrepreneurship topic, which showed that the effectual approach is one of the main constructs determining the early internationalisation of born global companies.

This article presents work which connects effectuation with international entrepreneurship and suggests insights for future research. The research presented suggests that the effectuation theory can explain the entrepreneurial behaviour of born global entrepreneurs. It is stressed by Sarasvathy et al. (2014), whereas born global activity involves cross-border uncertainty, limited resources and network dynamics, which is coherent with the effectuation logic characteristics. There is evidence that causation logic is also applied by international entrepreneurs (Brouthers & Nakos, 2005; Lucas, Whitewell & Hill, 2007), however, there is an increasing trend in the research on internationalisation, which shows that effectual logic is prevailing among born global entrepreneurs.

There are certain research limitations which do not allow to conduct a broader analysis. Mainly, they are based on the limited amount of literature and research on this topic. As the effectuation analysis and its application in international entrepreneurship has been shaping during the last decade, there is still no defined conceptual framework and there is a lack of advanced empirical studies.

The paper shows that there is a potential for future investigation of the effectual approach in born global firms. The study summarises the existing research on the application of effectuation logic in the international entrepreneurship field. However, the results of the study are exploratory and there is a need for future empirical research at the intersection of international entrepreneurship and effectuation research. The results of the literature review are a starting point for further detailed analysis on effectual logic applied by born global entrepreneurs and its impact on internationalisation speed and scope.

REFERENCES

- Andersson, S. (2011). International entrepreneurship, born globals and the theory of effectuation. *Journal of Small Business and Enterprise Development*, 18(3), 627-643.
- Bhowmick, S. (2008). Internationalisation of entrepreneurial firms: an enactment-effectuation dance. Proceedings of the 5th AGSE International Entrepreneurship Research Exchange, Melbourne, Feb 2008, 785-974.
- Brettel, M., Mauer, R., Engelen, A., & Kuepper, D. (2012). Corporate effectuation: Entrepreneurial action and its impact on R&D project performance. *Journal of Business Venturing*, 27(2), 167-184.
- Brewer, P.A. (2007). Operationalizing Psychic Distance: A Revised Approach. *Journal of International Marketing*, 15(1), 44-66.
- Brouthers, L. E., & Nakos, G. (2005). The Role of Systematic International Market Selection on Small Firms' Export Performance. *Journal of Small Business Management*, 43(4), 363-381.
- Chandler, G.N., DeTienne, D.R., McKelvie, A., & Mumford, T.V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 26(3), 375-390.
- Chandra, Y., Styles, C., & Wilkinson, I. (2009). The recognition of first time international entrepreneurial opportunities. *International Marketing Review*, 26(1), 30-61.
- Czinkota, M.R. (1982). *Export Development Strategies US Promotion Policies*, Praeger Special Studies: New York.
- Dew, N., Sarasvathy, S., Read, S., & Wiltbank, R. (2009). Affordable loss: Behavioral economic aspects of the plunge decision. *Strategic Entrepreneurship Journal*, 3(2), 105-126.
- Frishammar, J., & Andersson, S. (2009). The overestimated role of strategic orientations for international performance in smaller firms. *Journal of International Entrepreneurship*, 7(1), 57-77.
- Galkina, T., & Chetty, S. (2015). Effectuation and networking of internationalizing SMEs. *Management International Review*, 55(5), 647-676.
- Gruber, M. (2007). Uncovering the value of planning in a new venture creation: A process and contingency perspective. *Journal of Business Venturing*, 22(6), 782-807.
- Harms, R., & Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of International Entrepreneurship*, 10(2), 95-116.
- Harris, S., & Wheeler, C. (2005). Entrepreneurs' relationships for internationalization: functions, origins and strategies. *International Business Review*, 14(2), 187-207.
- Johanson, J., & Wiedersheim-Paul, F. (1975). The Internationalization of the Firm – Four Swedish Cases. *Journal of Management Studies*, 12(3), 305-322.
- Johanson, J., & Vahlne, J.E. (1977). The Internationalisation Process of the Firm. *Journal of International Business Studies*, 8(1), 23-32.
- Li, T., & Cavusgil, S.T. (1995). A Classification and Assessment of Research Streams in International Marketing. *International Business Review*, 4(3), 251-277.
- Knight, G.A., & Cavusgil, S.T. (1996). The Born Global Firm: A Challenge to Traditional Internationalization Theory, in: S.T. Cavusgil, T.Madsen (eds.), *Advances in International Marketing*, 8, 11-26.
- Kurczewska, A. (2012). W jaki sposób myślą przedsiębiorcy – czyli „Jeśli mogę kontrolować przyszłość, nie muszę jej przewidywać”. *E-mentor*, 5(47).

- Lukas, B.A., Whitwell, G.J., & Hill, P. (2007). Export planning orientation and its antecedents: Evidence from exporting IT products. *Journal of Business Research*, 60(12), 1282-1289.
- Mainela, T., & Puhakka, V. (2008). Organising new business in a turbulent context: Opportunity discovery and effectuation for IJV development in transition markets. *Journal of International Entrepreneurship*, 7(2), 111-134.
- McDougall, P.P., & Oviatt, B.M. (2000). International Entrepreneurship: The Intersection of Two Research Paths. *Academy of Management Journal*, 43(5), 902-906.
- Oviatt, B.M., & McDougall, P.P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 44-64.
- Pawęta, E. (2015). Entrepreneur-Related Constructs Explaining the Emergence of Born Global Firms: A Systematic Literature Review. *Entrepreneurial Business and Economics Review*, 3(4), 11-36.
- Pawęta, E., & Zbierowski, P. (2015). Individual-level determinants of international orientation of a firm: A study based on Global Entrepreneurship Monitor data. *Journal of Intercultural Management*, 7(1), 43-58.
- Rennie, M.W. (1993). Global Competitiveness: Born Global. *The McKinsey Quarterly*, 4.
- Sarasvathy, S.D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243-263.
- Sarasvathy, S.D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Cheltenham, U.K.: Edward Elgar.
- Sarasvathy, S., Kumar, K., York, J.G., & Bhagavatula, S. (2014). An effectual approach to international entrepreneurship: Overlaps, challenges, and provocative possibilities. *Entrepreneurship, Theory and Practice*, 38(11), 71-93.
- Sarasvathy, S.D., Menon, A.R., & Kuechle, G. (2013). Failing firms and successful entrepreneurs: Serial entrepreneurship as a temporal portfolio. *Small Business Economics*, 40(2), 417-434.
- Schweizer, R., Vahlne, J.E., & Johanson, J. (2010). Internationalization as an entrepreneurial process. *Journal of International Entrepreneurship*, 8(4), 343-370.
- Zahra, S.A., & George, G. (2002). International Entrepreneurship, The Current Status of the field and Future Research Agenda. In: M.A. Hitt, R.D.Ireland, S.M.Camp, D.L.Sexton, *Strategic entrepreneurship: Creating a New Mindset*, Oxford: Blackwell Publishers.

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Internet as a Tool in Making Trading Decisions by Gender

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Abstract

Internet, making shopping easy for consumers, represents a challenge for entrepreneurs seeking to ensure internet users transparent, easy to navigate websites and applications. They note, however, that gender is considered to be one of the factors differentiating consumer attitudes. Gender marketing is a relatively new concept developing mainly in Anglo-Saxon countries. It focuses mainly on women, who are seen as picking up the predominant part of purchase decisions. Moreover, female consumers are recognized as looking for the perfect product, focused on the opinions of others and seeking to contact. These features is believed to be different from men – purchasing thoughtful and in an independent manner. The article attempts to identify the importance of the role of the Internet as a tool of entrepreneurs in making decisions. Juxtaposing beliefs about the needs of consumer representatives both kinds of facts about online sales. The authors analyzed the differences in the behavior of entrepreneurship, namely online among Polish women and men And put them in the context of current assumptions about consumer attitudes of both types.

Keywords: gender differences; consumer behaviour; gender; segmentation

JEL codes: J16

INTRODUCTION

The experience of consumers as a homogeneous group is often analyzed in social studies. Similar actions in consumer research, consisting of neglecting the feminine voice, would lead to a biased picture of reality, if only for this reason, that women constitute half of the population and it is estimated that they are responsible for up to 80 % of purchase deci-

sions [6, p. 34]. That fact led in the 90s to seek answers to the question of whether the needs of women consumers are different from men, and if so, how these consumer needs can be met by entities offering products and services. Answers to this question are of particular importance in the context of online commerce sales, which is the subject undertaken in this article. The aim was to present current research findings in the context of behavior, characteristics and attitudes of consumer of both sexes in Poland.

GENDER AS A BIOLOGICAL AND CULTURAL CATEGORY

Sex it can be recognized as a biological, psychological and socio-cultural category. Biological sex is determined on the basis of owned chromosomes, anatomy and performed procreational function. Alongside biological sex we can talk about the existence of gender. Gender is sex, which manifests itself in the behavior of the individual, is reflected in the way one is dressing, grooming, verbal and nonverbal messages [15]. Gender is a kind of cultural construct, a result of the impact of social norms and may undergo changes along with the changes of do's and don'ts associated with the functioning of a particular sex.

As a result of the interaction of biological and social factors a psychological gender is being formed. Gender is a system of mental personality traits that are formed in the body from childhood [S. L. Bem, too: 1]. The process of becoming a woman or a man in a psychological sense depends on the culture, that defines the preferred abilities. In shaping personality traits one recognizes the important role of cultural and civilizational factors.

The mental gender is closely related to gender identity, which enables the individual to self-determination of personality traits and self-perception in terms of femininity and masculinity [see 10]. Self-identification to a specific kind – male or female connects to the fulfillment of gender roles and is the result of social learning [Zimbardo, Ruch, 1988, for: 1]. The role of gender is a culturally specific provision, which expresses societal expectations regarding behavior, characteristics, attitudes, functions of men and women.

The basis for the formulation of social requirements are different biological capacities and functions of men and women. Women's activity is associated with the actions of caring and men of providing financial security for the family [see 10]. The basis of the feminine role are the characteristics of community and male activity is the one promoting gainful employment [5]. Women's properties come to the roles played by them home, and men's from the role of a social nature. The properties crucial for the fulfillment of gender roles revolve around two categories: the expression of feelings (as a characteristic of women) and instrumental characteristics (as associated with men).

Gender is a social category, which means, it affects on the perception and so is a kind of information on the individual, helping people to take certain behavior and form an opinion. The dominant contemporary approach to gender as a social category leads to determine the differences between men and women with regard to their prestige, position and power, and hence the importance and functions in society. How an entity thinks, feels and behaves is not biologically determined, but depends on the impact from the society [2].

Acquiring social norms regarding masculinity and femininity also results in the formation of gender schema. It is developed in children due to two factors. The first is the impact of the environment which, through dress, made professions, chosen activities provides to a strong and easy to identify diversity of agents of both types. The second factor initiating the formation of the scheme sex is a natural tendency to categorize the

child's information coming of the society. Assimilation scheme of boy or girl makes the child prefers a certain type of behavior is interested in specific information and is willing to draw conclusions consistent with it. In addition, the child shall be continuous assessment of the appropriateness of its behavior and characteristics while selecting those appropriate for their gender of the many dimensions of personality [S. L. Bem, too: 1].

MASCULINITY AND FEMINITY IN THE CONTEXT OF NEEDS

Gender marketing focuses mainly on women, because it is believed that they are an underestimated market segment with great potential. Earnings and education of women are increasingly at higher and higher levels. Furthermore women manage not only their own resources, but also those of their partners. Therefore, it is reasonable to focus on them as a group of consumers of products and services and recognition of the needs of the dominant motives and behavior. Effective marketing message aimed at women should be an answer to the need for perfection (see Table 1). It means that women make decisions about purchasing long as they do not seek an “enough” good product, but a perfect one [13].

Table 1. The needs of women and men in the context of marketing (own analysis based on [13])

Women	Men
<ul style="list-style-type: none"> – perfection, – collectivism, – cooperation and empathy, – care for the environment (comfort, safety), – care for yourself and your image, – meticulous planning, attention to detail, – seeking maximum satisfaction, – multitasking, – maximizing efficiency, – relationships based on trust, 	<ul style="list-style-type: none"> – achievements and domination, – focus on individual success, – competition and influence, – care for exposing the material status symbols, – promotion of own qualities and devaluation of virtues at others, – concern about what is general, – search for the “enough” good product, – linearity, – hierarchy of importance, – relationship based on strengthening their position in the hierarchy,

Source: own study.

Modern marketing largely communicates referring to men's needs. The dominant themes are success and prosperity that are associated with buying a particular product or service. Messages sent directly to women often have a masculine nature, and, for example, rely on bullying (especially cleaners commercials) or presenting women as dominant over men, which rarely enjoys the approval of the women themselves. Marketing directed to the female sex should have a different face: refer to a woman's need for support when shopping, communicating with others and concern for their opinions [13].

The female consumers striving for perfection of the selected product or service means that marketing should focus on the appropriate presentation of the advantages of the products and services – mainly their usefulness and aesthetics. Products should be presented in the context of how they can improve life and make it more enjoyable for the buyer and her family. Parameters and features that increase user status are important in the male marketing, but do not have significance for women. Female consum-

ers while making purchases want to have the possibilities to dispose of the time and energy for others. The needs of women are associated with the ability to touch, see, listen, to experience the product or service with the maximum amount of the senses.

In the case of Internet sales the realization of this need is greatly reduced. Similarly this happens with women's desire for contact with the second human being – dealer. A consumer expects this not only at the moment of purchase, but also in connection with the handling of complaints or in case of other problems associated with the use of the product. Communication with the customer becomes therefore of particular importance and a new dimension in the context of the opportunities created by the Internet. It is a convenient form increasingly used by women. The usability of websites influences purchasing decisions of female consumers.

EQUITY AND DIVERSITY? CHARACTERISTICS, ATTITUDES, BEHAVIOR OF CONSUMERS OF BOTH SEXES

Marketing emphasizes the special role of women, who account for three-quarters of recipients of mass marketing communication, while in their responsibility is making of 90% of purchase decisions [8]. That's why marketing message should be constructed according to the codes of communication being preferred by a particular sex [8]. Communication code is a way of communication, which includes among other things a gesture, a word or a picture. To make possible to tailor one's message to the recipient it is necessary to get to know the consumer behavior, its core characteristics and perceptions of women and men. The awareness of marketing messages using codes of communication tailored to the preferences of each sex is not too large [8].

According to the idea of gender, marketing communication with the buyer should be tailored to her or his interests and preferences and not merely refer to gender stereotypes [8]. To make this possible, it is necessary to carry out thorough investigation enabling to determine the status quo and separating fact from common beliefs.

Characteristics of women who shape their attitudes as a female consumers are [8]:

- understanding,
- care of someone or something,
- loyalty to the people, e.g. store employees,
- sensitivity and passion,
- less price sensitivity,
- multitasking,
- devotes purchases more time than men,
- buys for the pleasure of buying.

Women-properties as consumers is reflected in their perception as follows:

- looks at a product with all the senses,
- focuses on people (eg. more on staff rather than on objects),
- careful in the receipt of marketing messages; attentive to the form, color, aesthetics, environment, details affecting negatively on the receipt of the message (e.g. unpleasant smell, the shop assistant's dirty hair),
- commercials sensitive to emotional stimulus.

Features of male consumers are [8]:

- assertiveness,
- rivalry,
- focus on achieving independence,
- strong personality,
- brand loyalty (only interested in the features and benefits of the offer and not in the added value).

Features of male consumers determine their perception. Men are characterized by:

- focus on the product rather than on customer service,
- focus on the product functionality, practicality, price, quality, performance,
- focus on the simplicity of the product and the quality of its service,
- commercials sensitivity to transmission of rational information (facts, figures, test results), and freedom of choice (ad may not impose anything on him).

Female consumers are guided by different principles than men. Even buying bolts they pay attention to aesthetics and choose the most beautiful, while men – the strongest ones [6]. Existing differences between the attitudes of men and women are presented in Table 2. These attitudes are also being reflected in the way we make purchases online by representatives of both sexes.

Table 2. Main differences between the attitudes of men and women [Barletta in 6]

	Men	Women
Individualistic/collectivist	Individualistic- men's perspective is the "I". Results in report talk.	Collective concerns women perspective is the "we". Results in rapport talk
Object or people centered	Object centered	People centered
Approaches to tasks	Accomplishes a single task at a time	Multi-task (when shopping, will try and accomplish as many tasks as possible)
Attitude to priorities	Will focus on the top priorities	All points will be priorities
Detail	Likes minimal details about a product	Likes copious information on a product and will not buy until her wish list is satisfied. She is a perfectionist
Product features/benefits	Interested in how product features work	Interested in what produkt features do

Source: own study.

There are many areas in which one tends to equalize opportunities for women and men. So it is with earnings, access to promotions, professions etc. It turns out that also during the shopping-process women may experience specific discrimination when the goods are seen as typically male. Three-quarters of women experience worse treatment when they buy goods such as electronics and 40% of them say that it was better served when they did this type of shopping in the company of a man [6, p. 38]. What is interest-

ing even 61% of buying decisions on the DIY market are made by women, while traditionally the sale of these products is addressed to men.

WOMEN AND MEN SHOPPING ONLINE

The test results by McMahan, Hovland, Mcmillan indicate that men and women differ in terms of Internet usage and time spent on the use of various types of interactive features available on the websites of corporations [3]. These findings should encourage further research on gender differences in terms of the type of interactivity and match format online advertising for different groups of consumers. Although the time spent on the use of different types of features on the website is different for men and women, the overall time spent on shopping doesn't significantly differentiate these two groups. The direction of further research of gender marketing specialists should be clarifying the impact of interactive features to representatives of both types.

Current trends show that the Internet as an advertising medium is well used, although advertising should relate to a greater extent to the individual consumer factors such as gender. Understanding the specifics of the functioning of the consumer is crucial to understanding how to customize the advertising messages. Men and women perceive online advertising differently, especially in relation to specific actions in the context of human-computer interactivity (for example, downloading, viewing, customizing products).

Marketers and advertisers should adjust their online advertising and websites to enable online shopping for various activities preferred by men and women. Marketers should recognize that it is not about the number of interactive features, which surely are important, but rather the types preferred by female and male consumers. For example, a website may have too many interactive features and hamper the efforts of online communication. Especially in the context of a difficult economy, marketers need to keep in mind that the interactive features have to facilitate building constructive relationships with customers and the same contribute to the benefits [3].

When it comes to e-commerce, the research landscape is just beginning to explore the differences in the way of shopping intentions of consumers of different sexes. Increasingly one explores how women engage in online shopping. Such patterns of behavior related to sex should be identified and taken into account when designing the web site's features. In offline retail, women influence more than two-thirds of household expenditure. Even if in online sales this level of influence currently does not exist yet, it seems likely that it will come close to this point in the near future [7]. In contrast to previous studies, it turns out that it is not so that women make purchases online and communicate using only simple functions, which would characterize them as having limited powers of technology [16].

Increasingly, women increase their purchases using complex functions, such as downloading and mobile shopping. Marketers should start to customize and personalize the online shopping experience by designing features on websites that would satisfy women's needs.

It is clear that the increased presence of women on the Internet has made significantly to the development of eCommerce. Therefore, recognizing the increased participation of women on the internet, examine in particular, what they expect from online merchandisers and why they use this medium in order to go shopping.

The ability to respond quickly and meet the needs of women will be an important key to success in online advertising and eCommerce.

In recent years, women have significantly increased technological capabilities and confidence, which increased their purchases online to the extent that in some cases they even exceeded the number of men [14].

Women have a significant share among consumers of online advertising, which may mean that marketers and advertisers should pay attention to emotions as the primary factor influencing the behavior [9]. Online shopping should be an emotional experience, because such a transfer is considered to be effective in influencing women. Marketers should guide different messages to male and female consumers. Such a focus on the e-customer's gender can be achieved by deliberately chosen ways of communicating and customizing content of online advertising to consumer needs.

WOMEN AND MEN AS ONLINE CONSUMERS IN POLAND

The results of a study conducted on a group of 1,500 Polish Internet users shows that women account for 53% of the buyers on the global network. In the study group, 55% of the Internet users purchased online in the past. Mostly it were people aged up to 34 years with secondary or higher education, living in cities, declaring a good financial situation [12]. The study of spontaneous awareness of e-shopping sites, which was to list the names of sites related to shopping online, emerges as the most popular:

- Allegro (77% of women and 75% men),
- OLX (29% of women and 27% men),
- Zalando (18% of women and 7%),
- Ebay (10% women and 15% men).

Women are distinguished by awareness of services associated with the sale of clothing. In addition, women are less likely than men to buy on foreign websites. Representatives of both sexes did not differ in the dominant motivation for shopping online. They agree that it is available around the clock (87% of women and 89% men). Moreover they appreciate the lack of necessity of going to the store (86% of women and 80% men) and more attractive prices than traditional stores (78% of women and 74% men).

Men and women differ significantly in terms of the following motivation for shopping online [12]:

- looking for more information about the products (40% women, 54% men),
- opportunity to buy used / collectible goods (35% women, 44% men).

Women are slightly more likely to appreciate the possibility to go shopping without leaving home (86% of women and 80% men). It can be expected that it is related to their greater involvement in parenting functions, especially related to the care of young children. Men often appreciate the opportunity to compare the offers (74% women, 79% men).

Respondents were also asked which forms of delivery of the goods most encourages them to shop on the Internet. Regardless of gender subjects make it clear that this is the courier delivery directly to the home or work (71% of women and 74% men) [12]. Women more often prefer the delivery by mail to home / work (72% of women and 63% men), while men choose to download directly from the websites (eg. ebooks, music) – (20% women and

28% men), reception at the branch store / at the mall (click & collect) – (28% of women and 33% men). This may prove a greater mobility of men and online retailers should have this in mind by offering products targeted to the representatives of the male gender.

When buying over the internet men often choose traditional forms of payment like payment for pick up at the courier (39% of women and 49% men) and traditional transfer (of entering account number) (32% women and 43% men) [12].

The factors motivating more frequent shopping on the Internet were determined: men more often than women pay attention to such aspects as:

- faster delivery (39% women, 45% men),
- a more detailed description of the products (35% of women and 41% men),
- more information about the products in the eShop's description (26% of women and 39% men).

Women are more likely to pay attention to special discounts to buyers via the Internet (58% of women and 53% men) [12].

According to A. Niedzielska's research, using websites, blogs, fanpage's directed to specific gender is common for 44, 8% of women and 38.9% men. Women most frequently looked up for fashion blogs, culinary, cosmetic, clothing online stores, pages about healthy nutrition, workout and gossip portals. Men preferred automotive and sports websites [8].

Polish consumers research shows that women are more likely to buy clothing, cosmetics, jewelry, footwear, furniture, food products, and the men electronic equipment, software, cars, insurance. Women are not only more often to buy, but also spend more on clothes and accessories (the average monthly expenditure is 75 PLN, and for women 86 PLN) (see [12]). Women also spend more than men on tickets to the cinema or theater, but interestingly, they spend only a little more on footwear [12]. According to the results of other studies men spend more on television, radio and domestic electrical appliances, telephones, smartphones, tablets. Men are slightly more likely than women to estimate that their spending on online purchases in the coming year will increase [12].

The most common device used to conduct online purchases are computers. Among the other types of devices mobile phones, smartphones and tablets are used more frequently by men than women. Men pay more attention to this way of shopping more often, emphasizing that the filling of forms is inconvenient and the websites are not responsive, what means, they are unsuited for easy navigation on mobile devices.

The same survey extended to offline shoppers shows that women tend to manifest the need for physical contact with the product, concerned about the safety of payments or problems with the delivery of purchased goods [12]. In addition, women in this group more often than men declare that lower product prices, faster delivery and better own financial situation would encourage them to e-shopping.

SUMMARY

Entrepreneurs need to focus on Gender Marketing, taking into consideration its value for their eCommerce activities. By today's range and technical sophistication of web analytics tools entrepreneurship on the internet just needs to take into account one of the most basic criteria for differentiating potential customers – sex and deliver content expressed to specific gender. This should include not only landing

pages optimization, but the whole attitude in content creation and curation, especially in emphasizing gender-specific advantages in product descriptions.

Women, despite the fact that they are not a homogenous group (as different because of their age, gender, education, place of residence, income and many other factors), marketing professionals should seek a separate code, which would enable effective communication with women. As a consumer, they are sensitive to the message that hit their current needs. They have, however, some universal characteristics that influence their purchasing decisions. These are the attitude of people, high sensitivity emotional, concentration on detail. In the context of online sales of paramount importance has the capability and means of communication, because women like to talk, share and get to know the opinions of others.

Purchasing decisions will therefore be supported e.g. by social media. Marketers are not always willing to take advantage of the specificity of women, creating profiles and concentrating on increasing the number of likes. Women are not an easy target for marketers, because an in-depth understanding of their motivation and communication adequate to the kind of product are necessary.

It is not easy to recognize the needs of women as consumers, even because they have more of them than men.

Of course, the marketing message is directed also to men, who reveal their preferences for the products they buy, even if the purchase is being done by their partner. In addition, men appreciate the freedom of choice, convenience of purchase and accurate information about product specifications. The differences between women and men should become a basis for differentiation messages when planning sales strategies online.

REFERENCES

- Dakowicz A, Płeć psychiczna w poziom samoaktualizacji, Białystok, Wydawnictwo TRANS HUMANA.
- Mandall E., Pojmowanie fenomenu płciowości w psychologii, w: A. Kuczyńska, E.K. Dzikowska (red), Zrozumieć płeć. Studia interdyscyplinarne II, Wrocław, Wydawnictwo Uniwersytetu Wrocławskiego.
- McMahan C., Hovland R., McMaillan S., Online Marketing Communications: Exploring Online Consumer Behavior by Examining Gender Differences and Interactivity within Internet Advertising, in: Journal of Interactive Advertising Vol. 10, No. 1 Fall 2009.
- Miluska J. (red.), Boski P. (red.), Męskość-kobiecość w perspektywie indywidualnej i kulturowej, Warszawa, Wydawnictwo Instytutu Psychologii PAN, 1999.
- Miluska J., Tożsamość kobiety i mężczyzny w cyklu życia, Poznań, Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza, 1996.
- Moss, Gender Design and Marketing. How Gender Drives our Perception of Design and Marketing, 2009.
- Murrow, D., New eMarketer Study Sees Women Exerting a Larger Influence Online, in: Market Wire, April 2005.
- Niedzielska A, Gendermarketing w świadomości wybranej grupy młodych konsumentów na podstawie badań, w: „Marketing przyszłości. Trendy, strategie, instrumenty. Konsument na tle zmian zachodzących w otoczeniu”, G. Rosa, A. Smalec (red.), Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2015.
- Rogers, Shelly, Harris M.A., Gender and e-Commerce: An Exploratory Study, Journal of Advertising Research, 43 (3), p. 322-330, 2003.
- Siemieniak P., Self-Presentation Dilemmas of Women on Managerial Positions in the Context of Gender Stereotypes, Poznań, Wydawnictwo Politechniki Poznańskiej, 2011.
- Signauw J.A., Honeycutt E.D. Jr., An Examination of Gender Differences in Selling Behaviors and Job Attitudes, in: Industrial Marketing Management, Vol. 24, Issue 1, January 1995, p. 45-52.

- Staniszewska P., Gordon M., E-Commerce w Polsce, Gemis dla e-Commerce Polska, 2015.
- Wasilewska E., Płeć kulturowa a zachowania konsumenckie, w: Studies & Proceedings of Polish Association for Knowledge Management, Nr 52, 2011.
- Wasserman I.M., Richmond-Abbott M., Gender and the Internet: Causes of Variation in Access, Level and Scope of Use, in: Social Science Quarterly, 86 (1), 2005, p. 252-270
- Waszyńska K., Rękoś M., Tożsamość płciowa i czynniki ją warunkujące, in: A. Kuczyńska, E.K. Dzikowska (red.), Zrozumieć płęć. Studia interdyscyplinarne, II, Wydawnictwo Uniwersytetu Wrocławskiego, Wrocław, 2004.
- Weiser E.B., Gender Differences in Internet Use Patterns and Internet Application Preferences: A Two Sample Comparison, CyberPsychology and Behaviour, 3 (2), 2000, p. 167-178.

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Entrepreneurial Activities of Communes in Creation of Competitive Advantages at regional Investment Markets: Case Studies from Poland

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Abstract

The objective of this paper is to present examples of local regions represented by Polish communes that demonstrate entrepreneurial activities within competition for investors, tourists, and inhabitants at regional investment markets. I will present local regions of different location, size, functional type, and potential investment attractiveness that were the best in their class within the research sample studied.

I decided to perform multilayer research on 50 communes in Poland using electronic audit research method, mystery client research method, and benchmarking of communes within their subpopulation types. Within the research 10 communes that are the best in their class have been selected. Identified activities of the best in class communes are presented and enable to form recommendations of applicable character for local regions aiming to improve their competitiveness in attraction, and retention of investors, tourists, and inhabitants.

Keywords: local administration; benchmarking; competitiveness; competitive advantage; local development

JEL codes: H11, O38, R58

INTRODUCTION

The objective of the paper is to present local regions represented by Polish communes that demonstrate entrepreneurial activities within competition for investors, tourists, and inhabitants at regional investment markets. Presented local regions provide applicable examples of entrepreneurial activities possible to implement by local administration in the territorial units they are responsible for. Local development studies outline the

role of competitive advantages needed for effective competition of territorial units such as local regions, and continuous competition of local regions in attracting investors, tourists and inhabitants. This kind of competition is partially stimulated by the benchmarking, which in form of local region rankings impact on the perception of local regions by their stakeholders. R. Giffinger et al. (2010) points out possibilities of institutional learning basing on the best practices identification and dissemination in benchmarking context.

Creation of entrepreneurial activities of local regions is additionally stimulated by modern discourse relating to public sector reform paradigms, which outline new role of public administration within the schools of new public management, market-based public administration, and entrepreneurial government (Zalewski et al., 2007). Contemporary research relating to entrepreneurial activities of local regions in Poland is rather limited. Wide and regular studies of this phenomenon with publications in form of reports with data evidence and examples of applicable character have been conducted since 2011 by Academic Club of Entrepreneurship and Regional Analyses at Warsaw School of Economics (Kasprowicz et al., 2014).

To fulfill the knowledge gap identified within researched area I performed a multilayer research on 50 communes in Poland using set of both non-reactive and reactive research methods. Methods used included electronic audit research of official website portals of communes and their Bulletins of Public Information, surveys with representatives of communes using structured questionnaire, mystery client research method, and benchmarking.

Within the Literature Review section of the paper I present modern context of competition at regional investment markets, role of benchmarking in stimulation of dissemination of the best practices, and modern discourse of entrepreneurial activities of local regions. In Materials and Methods section I elaborate on approach toward research sample selection and research performed in Poland in years 2013-2014. In Results and Discussion section I provide analysis of 10 local regions represented by Polish communes of different size, functional type, and potential investment attractiveness. I conclude the paper with implications of the study for economic practice, and indication for further research.

LITERATURE REVIEW

Competitive Advantage at Regional Investment Market

Contemporary literature on local development points out the role of competitive advantages in attraction of development resources at regional investment market. Inflow of development resources is considered the basic condition of new investments, which contribute to local development process. Development resources enabling new investments in local regions include: investors, tourists, inhabitants, and financial and non-financial capital they bring to local regions (Olszewska, 2001).

Investors, tourists and inhabitants create the supply side of the regional investment market, whereas the demand side is created by local regions creating advantages of a place in context of attracting investors, tourists and inhabitants (Godlewska-Majkowska et al., 2013).

In such characterized regional investment market local regions develop and demonstrate competition ability that is a long term ability to be able to match competition from the other market participants (Olczyk, 2008). For the purpose of research performed I proposed own conceptualization of competitive advantage of local regions at regional

investment market narrowing above concept described in the literature. Within the study preformed competitive advantage at regional investment market was conceptualized as long term ability of local regions to attract and retain investors, tourists and inhabitants with better results in comparison to other market regional investment market participants.

Contemporary discourse on competitiveness of economic entities relates in particular to the private sector (Y. Doz and M. Kosonen. 2008) In relation to this modern public sector reform paradigms – such as new public governance paradigm, neo-weberian state paradigm, networks and joining-up paradigm, or governance paradigm outline the process of learning from private sector practices within the public administration transformation, including local region administration transformation (Pollitt & Bouckaert, 2011).

Role of Benchmarking in Creation and Dissemination of the Best Practices

Activities aimed at the attraction of investors, tourists, and inhabitants are additionally stimulated by preparation and publication of rankings benchmarking local regions toward their attractiveness for business activity, quality of life, or other measures. Such rankings are prepared both in academic and business environment. The most popular rankings' criteria, taken into account in local regions benchmarking, refer to quantitative statistical data, and also qualitative interviews, for example, with business sector representatives assessing local investment's climate. Rankings benchmarking local regions that are prepared and published in academic environment include "European Competitiveness Index" by University of Cardiff, „Europas attraktivstes Metropolen fur Manger" by University of Mannheim, or "EU Regional Competitiveness Index" prepared by Joint Research Institute affiliated with the European Commission. Rankings benchmarking local regions that are prepared by business environment include "The Atlas of Regional Competitiveness" prepared by Eurochambers, "European Cities & Regions of the Future" by fDi Intelligence, "Hot Spots" by Economist Intelligence, "How the world views its cities" by Anholt City Brands, and "Canada's most sustainable Cities" issued by Corporate Knights – Canadian magazine for responsible business (Godlewska-Majkowska et al., 2011).

Common quality of rankings prepared by both academic and business environment is differentiation of research methods used that may result in different position of the same local region in different rankings. Although the empirical approach is far from consistent, rankings might provide inspiration for redesigning the approach of local regions (Giffinger et al., 2010).

Entrepreneurial Activities of Communes in Contemporary Discourse

Attracting development resources by the local regions, and incorporating activities typical for private sector gained significance in recent decades. Researchers of local entrepreneurship (Lakshmann & Chatterjee, 2009) argue that entrepreneurial representatives of local public administration need to gain new economic and political competences to create and maintain their competitiveness, which includes using knowledge that would enable local goods and services to conquer global markets and attract capital to the regions. Researchers also outline the need for stimulation of entrepreneurship by public administration at local region's level, which is a part of market-based public administration and entrepreneurial government (Audretsch et al., 2012). Local region stakeholders expect local public administration, which uses modern communication technologies of information era, to minimise information asymmetry related to possibilities available in the local region (Pi-

otrowski et al., 2009), and to foster cooperation and network structures connecting various local development stakeholders (Pollitt & Bouckaert, 2011). Taking above arguments into account, in relation to own definition of competitive advantage proposed in Literature Review section above, I decided to indicate the most important aggregates impacting on its creation by attraction and retention of investors, tourists and inhabitants.

In this study they relate to (1) lower costs of setting up and conducting economic activity, (2) advantages of economy of scale (access to additional markets, and investment locations), and (3) advantages of economy of scope (access to goods, and services, and potential of satisfaction of differentiated demand of local region stakeholders).

I define entrepreneurial activities of local regions as the activities taken up by local public administration that line with legal acts underlying spectrum of local administration responsibilities, but require additional, internal effort or resources. Entrepreneurial activities researched in this study relate to the spheres discussed in modern local development and public sector reform discourse, which impact on creation of competitive advantage of local regions elaborated above. These activities include: (1) management of information and knowledge, (2) creation and promotion of investment, tourism and residential product, (3) stimulation of local entrepreneurship, and (4) support of cooperation and creation of network organizations.

Basing on my own study of 50 local regions in Poland I selected 10 that that are the best in their respective class of regions with similar size, functional type, and potential investment attractiveness. My study, which is based on examples of Polish communes, examines whether and how local regions, demonstrate activities identified within modern local development and public sector reform discourse and create competitive advantages that could be a reference point for the other territorial units.

MATERIAL AND METHODS

In the research part I focused on local regions, which are NUTS V level classification territorial units in the system of spatial hierarchy in European Union. Local regions are the smallest territorial units officially classified in spatial hierarchy of the European Union. In case of Poland, in which local regions were researched, there were 2479 local regions located within 16 regional investment markets.

I decided on multilayer selection of research sample to make identification of local regions demonstrating entrepreneurial activities more probable. To narrow down the population of 2479 local regions in Poland existing at the time of research I decided on two additional premises that needed to be fulfilled in order for the local region to be included in the sample. Each local region I selected needed to cooperate and create networks with their stakeholders, and also create and promote its investment product, defined as a location ready for inflow of investors looking for greenfield or brownfield investment possibilities.

To perform above mentioned selection I used two external central government databases registering local region activities in Poland. For selection of local regions fulfilling the premise of cooperation and creation networks with their stakeholders I used the National Information System of Monitoring and Financial Control of Structural Funds and Cohesion Funds (NIS SIMIK) 2007-2013 database. NIS SIMIK registers all local regions undertaking investment projects with external funds of European Funds, including part-

nership investments in particular. Within the NIS SIMIK database I looked for local regions that as of 30th June 2013 had the status of being beneficiary of investment project delivered in form of local regions partnership, or local regions association. I identified 166 local regions fulfilling this premise. Next I decided to investigate which of these 166 local regions fulfill the second premise, which was to demonstrate activities related to creation and promotion of its investment product. For selection of such local regions I used a database of Polish Information and Foreign Investment Agency. The database is of national character, and gathers non-clustered information on all available investment products of Polish local regions to promote them among potential investors, including international investors as the database in English.

Out of 166 local regions identified using first selection criterion, there were 50 local regions informing about at least one investment product as for 27th of August 2013. Final research sample included 50 local regions fulfilling 2 indicated sample selection conditions. Geographic distribution, and names of local regions in the sample had been presented in the below (Figure 1).



Figure 1. Research sample of Polish local regions in their regional investment markets selected for the study
Source: Own elaboration based on research sample selection criteria.

In relation to the administration type of local regions in the research sample there were 18 rural, 18 urban-rural, and 16 urban local regions. Considering the number of inhabitants, 30 local regions were of small size (up to 20 000 inhabitants), 14 local regions

were of medium size (above 20 000 up to 100 000 inhabitants), and 6 local regions represented big size category (above 100 000 inhabitants). In terms of potential investment attractiveness I used potential investment attractiveness taxonomy prepared by College of Business Administration at Warsaw School of Economics (Godlewska-Majkowska et al., 2011). Used taxonomy based on classless of potential investment attractiveness measured by aggregates of sets of measures of Polish Central Statistical Office According to the last version of taxonomy available at the time of research, 20 local regions were of high, 21 of medium, and 9 of low potential investment attractiveness. Details of the local regions in the sample had been presented in the below (Table 1).

Basing on above table I identified the following 9 subpopulation types by which local regions have been ranked in context of demonstrated entrepreneurial activities and presented in the next section of the paper.

A set of reactive and non-reactive research methods and techniques had been used. In relation to researching entrepreneurial activities of local regions I assumed that in the second decade of 21st century, the basic, comprehensive and trustworthy source of complex information for local region stakeholders is the official website of the local region, together with online Bulletin of Public Information, which existence for each local region is required in Poland by the law.

Thus the electronic audit method basing on structured questionnaire for each official website of local region in the sample was applied (structured questionnaire consisted of 20 questions). I analysed content available at official websites of the communes, including archives of sections dedicated to commune current news for the period of 12 consecutive months preceding the day of electronic audit.

In the study I had also used mystery client method in form of sending electronic communication to the local region public administration from the position of potential investor interested in setting up economic activity, asking specific questions and expecting support (electronic correspondence with ask for investment offer, investment incentives available, factors distinguishing local region among other of similar size in regional investment market, and possibility of direct meeting). Within this method the response time, and quality of the answers received were measured. Another reactive research method was a survey, basing on a formal questionnaire, sent to official representatives of local regions (questionnaire consisting of 8 questions of open character)¹. Results achieved within above mentioned methods were the subject of identified examples analysis, including their descriptive aspects and applicable aspects related to mechanism they based on. Timeline of research performed refers to the following stages: (1) electronic audit research of official website portals of communes and their Bulletins of Public Information – 7th of October 2013 – 3rd of November 2013, (2) mystery client method research – 1st of September 2014 – 15th of September 2014, (3) survey with representatives of local regions using structured questionnaire – 25th of August 2014 – 3rd of November 2014. Within electronic audit research all official websites of 50 local regions were analysed. In mystery client method research 19 letters of potential investor were replied². In survey with representatives of local regions 8 surveys were filled in by local administration representatives.

¹ Filled surveys were received from Białystok, Katowice, Krakow, Kutno, Olsztyn, Pila, Rybnik, and Strykow.

² Replies in mystery client research method were sent by Białystok, Bodzanow, Debica.

Table 1. Name, size, functional type, and potential investment attractiveness category of local regions in the research sample

No.	Name of local region	Size of local region as per Local Data Bank of Polish Central Statistical Office B - big, S - small, M - medium	Functional type of local region as per TERYT typology – U - urban, R - rural, or U-R- urban-rural	Potential investment attractiveness taxonomy of researched communes in form of classes from A (for the highest) to F (for the lowest) as per taxonomy used in research of Collegium of Business Administration at Warsaw School of Economics basing on data for 31.12.2011
1	Krakow	B	U	A
2	Strykow	S	U-R	B
3	Piła	M	U	A
4	Białystok	B	U	A
5	Rybnik	B	U	A
6	Wegorzyno	S	U-R	E
7	Swinoujście	M	U	A
8	Katowice	B	U	A
9	Kutno	M	U	A
10	Wolin	S	U-R	C
11	Olsztyn	B	U	A
12	Polkowice	M	U-R	A
13	Krynica-Zdroj	S	U-R	A
14	Nowogard	M	U-R	A
15	Jastrzebie-Zdroj	M	U	A
16	Kamien Pomorski	S	U-R	B
17	Budzyn	S	R	C
18	Szczurowa	S	R	E
19	Ryki	M	U-R	C
20	Koszalin	B	U	A
21	Gryfice	M	U-R	C
22	Drwinia	S	R	E
23	Medyka	S	R	C
24	Przemysl	M	U	A
25	Pszczolki	S	R	C
26	Konskie	M	U-R	C
27	Karnice	S	R	E
28	Zychlin	S	U-R	D
29	Ilow	S	R	E
30	Dzialdowo	M	U	A
31	Brzezno	S	R	D
32	Ujscie	S	U-R	C
33	Golczewo	S	U-R	D
34	Debica	M	U	A
35	Turosn Koscielna	S	R	D
36	Trabki Wielkie	S	R	D
37	Zblewo	S	R	D
38	Dabrowka	S	R	D
39	Ploty	S	U-R	D
40	Krosniewice	S	U-R	C
41	Wysoka	S	U-R	D
42	Lagow	S	R	E
43	Przemkow	S	U-R	B
44	Jaslo	M	U	A
45	Orly	S	R	C
46	Slubice	S	R	E
47	Bodzanow	S	R	E
48	Bełzyce	M	U-R	C
49	Moszczenica	S	R	D
50	Przybiernow	S	R	E

Source: Own elaboration based on research sample selection criteria, Local Data Bank of Polish Central Statistical Office for 31st of December 2012, and data of Collegium of Business Administration at Warsaw School of Economics. for 31st of December 2011.

My research hypotheses were the following: (1) Local regions demonstrate nature and intensity of entrepreneurial activities within their subpopulation types of similar size, functional type and potential attractiveness to create competitive advantages at regional investment market of the following nature: management of information and knowledge, creation and promotion of investment, tourism and residential product, stimulation of local entrepreneurship and support cooperation and creation of network organizations; (2) Basing on intensity of entrepreneurial activities demonstrated by local regions in their subpopulation types of similar size, functional type and potential investment attractiveness a benchmarks with the best practices of entrepreneurial activities can be created.

RESULTS AND DISCUSSION

Distribution of intensity of entrepreneurial activities within the 9 studied subpopulation types together with local region with highest number of demonstrated entrepreneurial activities lead to conclusion on conscious creation of competitive advantages and concentration on their particular type.

Below I present detailed analysis of entrepreneurial activities of distinguishing character demonstrated by local regions with the best in class position in their subpopulation including best in class and average for adequate subpopulation intensity of entrepreneurial activities of local regions studied was the following (with minimum score possible of 0 and maximum score of 28).

Budzyn – the Best Local Region in Class of Local Regions of Small Size, Rural Functional Type, and Medium Potential Investment Attractiveness

Budzyn is located in Wielkopolskie Voivodeship in the west part of Poland. Budzyn demonstrated 16 examples of entrepreneurial activities identified for average number of 8,99 in compared subpopulation. The majority of entrepreneurial activities of Budzyn were demonstrated in stimulation of local entrepreneurship. Budzyn informed about economic entities localized within the local region via its official website portal serving role of intermediary between economic entities and their stakeholders, including local entrepreneurs and investors. Budzyn enabled for local economic entities to upload information at local region's official website free of charge and served as local business support communication board. Budzyn organized learning and development initiatives directed to its inhabitants such as workshops on setting up and financing economic activity, or promoting learning process ("Days of Foreign Languages").

Pila – the Best Local Region in Class of Medium Size, Urban Functional Type, and High Potential Investment Attractiveness

Pila is located in Wielkopolskie Voivodeship in the west part of Poland. Pila demonstrated 13 examples of entrepreneurial activities identified for average number of 8,3 in compared subpopulation. The most intensive entrepreneurial activities of Pila related to supporting cooperation and creation of network organizations. Pila engaged in organization of World Days of Innovation, numerous international science-technology conferences, and days of open education engaging various local stakeholders. Pila was also distinguished in the field of informing about investment and development possibilities by efficient and value adding reply in the mystery client research. Pila replied electronically to potential investor present-

ing comprehensive investment offer, including promotional folders with local investment products. Creation and promotion of local investment, tourism and residential product of Pila was also demonstrated by active presence within social media.

Pila prepared and promoted dedicated residential offer for potential students considering Pila as destination of tertiary education, including information on dedicated internships for students in Pila. Promotion of investment, tourism, and investment product was complemented by brand promise created and communicated by Pila.

Szczurowa – the Best Local Region in Class of Local Regions of Small Size, Rural Functional Type, and Low Potential Investment Attractiveness

Szczurowa is located in Malopolskie Voivodeship in south-east part of Poland. Szczurowa demonstrated 12 examples of entrepreneurial activities identified for average number of 8,02 in compared subpopulation. Szczurowa demonstrated numerous entrepreneurial activities related to creation and promotion of local investment, tourism and residential product. Szczurowa led professional public relations section on its official website to inform its stakeholders on the presence of Szczurowa in public discourse, and nurtured its own audio-visual materials promoting its area via social media such as Youtube portal. Szczurowa informed about economic entities localized within its location via official website portal of Szczurowa. Not only the names, locations and addresses of such entities were provided, but also direct contact details to people in particular entities. Szczurowa informed on financing of economic activity, and workshops dedicated to preparation of business plans and applying for external investment funds. Szczurowa effectively replied to potential investor within mystery client research. Within the cooperation with other local regions Szczurowa offered vocational trainings for its inhabitants.

Wolin – the Best Local Region in Class of Small Size, Urban-Rural Functional Type, and Medium Potential Investment Attractiveness

Wolin is located in Zachodniopomorskie Voivodeship, in north-west part of Poland near the border with Germany. Wolin demonstrated 13 examples of entrepreneurial activities identified for average number of 8,3 in compared subpopulation Wolin was distinguished for its support of cooperation and creation of network organizations with local regions located in Germany (Kalkar and Usedom), France (Venesault), Russia (Zelenogradsk) or Sweden (Stafanstrom). Wolin stimulated cooperation and creation of networks by organizing international scientific events, including fora for academics and international competitions for students.

Wolin also created and promoted local investment, tourism and residential product aimed at investors, tourists and residents from Germany, actively competing for development resources with local regions there. Wolin actively organized local competitions with entrepreneurial attitude recognition award, and organized yearly a local event – St. Jacob Fair, that additionally stimulated promotion of local region and economic exchange.

Krakow – the Best Local Region in Class of Big Size, Urban Functional Type and High Potential Investment Attractiveness

Kraków is located in Malopolskie Voivodeship in south-east part of Poland, it is the capital of voivodeship. Krakow demonstrated 19 examples of entrepreneurial activities identified for average number of 8,3 in compared subpopulation. Krakow was distinguished in field of informing about investment and development possibilities because of comprehensive

reply in 1 working day in the mystery client research. Krakow represented many cost-intensive and complex entrepreneurial activities, including organization of international job fairs, leading local job offers portal within the official website of Krakow, or engagement in stimulation of entrepreneurship among students by regular presentations of investment and employment offer of Krakow in tertiary schools located in its area.

Till 30th of May of 2014 representatives of public administration of Krakow delivered 318 presentations for 7864 students. In terms of preparing and sharing non-obligatory documents supporting decision-making process of local development stakeholders Krakow was the only one local region that had its up-to-date local development strategy published at official website both in Polish and in English. Krakow led its own Geographic Information System (GIS) called "Observatory" aimed to minimize asymmetry of information for potential investors in Krakow. Krakow regularly prepared and issued its own virtual magazine available on the official website, and 13 folders promoting selected tourism aspects of Krakow available in 6 different language versions. On the top of that Krakow offered mobile application enabling its users to access practical information about Krakow, for example information enriching tourism experience by informing on location of selected landmarks, or public communication supporting tourism visits. In the field of supporting cooperation and creating networks Krakow partnered 22 local regions with official partner status, 9 development oriented organizations, and was a local region with most intensive cooperation network within whole sample researched.

Strykow – the Best Local Region in Class of Small Size, Urban-Rural Functional Type and Medium Potential Investment Attractiveness

Strykow is located in Lodzkie Voivodeship in central part of Poland. Strykow demonstrated 21 examples of entrepreneurial activities identified for average number of 12,51 in compared subpopulation. Within the study Strykow was distinguished by intensive support cooperation and creation of network organizations. Representatives of public administration of Strykow participated in my survey, and comprehensive reply in mystery client research method was sent within 1 day, including information on available investment products and investment incentives with proposition for sending additional promotion materials via traditional post. Strykow cooperated with central government in preparation and execution of economic visits and international economic missions aimed at promotion of its investment products for investors. Strykow led open dialogue by preparing local strategic documents, and encouraged its stakeholders to actively engage and contribute in this process by regular meetings and collaboration with local public authorities.

Ryki – the Best Local Region in Class of Medium Size, Urban-Rural Functional Type and Medium Potential Investment Attractiveness

Ryki is located in Lubelskie Voivodeship in the east part of Poland. Ryki demonstrated 13 examples of entrepreneurial activities identified for average number of 10,5 in compared subpopulation. Ryki was distinguished by entrepreneurial activities in informing about external financing possibilities of economic activity for its local stakeholders, including informing on opportunities not directly located within Ryki. Ryki informed about educational initiatives (including "universities of third age" leading activities for elderly), and job fairs taking places in neighborhood locations, which proves its openness and ability to derive from possibilities taking place not only in the region, but also in its direct vicinity.

Polkowice and Nowogard – the Best Local Regions in Class of Medium Size, Urban-Rural Functional Type and High Potential Investment Attractiveness

Polkowice is located in Dolnoslaskie Voivodeship in south-west part of Poland, and Nowogard is located in Zachodniopomorskie Voivodeship in north-west part of Poland. Polkowice and Nowogard both demonstrated 14 examples of entrepreneurial activities identified for average number of 14 in compared subpopulation.

Polkowice was stimulating local entrepreneurship by organizing local initiative related to promotion of history, tradition and current activity of local entrepreneurs and companies located within its area. The activity was aimed to reward the attitudes worth to follow, and promote it among Polkowice stakeholders. Polkowice informed about internships and job offers within its location, and also abroad in cooperation with abroad job offices. Polkowice as the only local region in the study had local low emission strategy aimed at increase of its energy efficiency, and local development strategy oriented on sustainable development.

Nowogard, as a local region in the same class with the same number of entrepreneurial activities identified, was distinguished by its intensive support of cooperation and creation of network connections by interactions with 8 local regions of official partner status (including local regions from Macedonia, Germany, Serbia, Sweden, and the Ukraine), promoting its investment product and informing on advantages related to locating new economic activity within its area.

Wegorzyno – the Best Local Region in Class of Medium Size, Urban-Rural Functional Type and Low Potential Investment Attractiveness

Wegorzyno is located in Zachodniopomorskie Voivodeship in north-west part of Poland. Wegorzyno demonstrated 16 examples of entrepreneurial activities identified for average number of 16 in compared subpopulation. Wegorzyno intensively created and promoted its local investment, tourism and residential product. Wegorzyno offered folders with investment offer available in electronic format on its official website, folder with attractions for tourists visiting its area, including description of biking paths and tours proposals, or maps with local lakes dedicated for the enthusiasts of fishing, including biking paths leading to the most attractive fishing places. Wegorzyno was also active in stimulation of local entrepreneurship and organized for its stakeholders workshops on preparation of investment projects' financing applications and applying for external investment projects' financing.

CONCLUSIONS

Basing on performed research sample of 50 communes, presented examples of Polish local regions representing various locations, size, functional type, and potential investment attractiveness prove that demonstration of entrepreneurial activities is not determined by these factors, and can have cost efficient character.

Examples of the best in class local regions might provide a reference point on possibilities in increase of investment attractiveness for local regions of similar location, size, functional type and potential investment attractiveness. Identified entrepreneurial activities impact on costs of setting up and conducting economic activity by minimizing transaction costs of access to the information, advantages of economy of scale by

enabling access to additional markets through networks created by local regions, and advantages of economy of scope by intermediating in offer of goods and services of economic entities located within local region. Presented examples of small and medium size local regions prove that in context of limited resources and lack of market leader status a local region does not need to focus on all entrepreneurial activities possible, but rather to concentrate on one or a couple of its types to create competitive advantages and differentiate from local region of similar size, functionality type, and potential investment attractiveness at regional investment market.

Intensity of entrepreneurial activities demonstrated by local regions in their subpopulation types of similar size, functional type and potential investment attractiveness enables creation of benchmarks with the best practices of entrepreneurial activities providing arguments, which might be supportive in diagnosis, planning and implementing of activities related to conscious increase of attractiveness and competitiveness at regional investment market by local regions. Presented results complement to studies performed by other researchers (Kasprowicz et al., 2014) by providing detailed examples of entrepreneurial activities of communes of different types, and toward broader range of local regions stakeholders.

Due to the intentionally narrowed in the study types of studied entrepreneurial activities, and local regions I recognize the need of further, qualitative, in-depth studies focused on understanding mechanisms of entrepreneurial activities leading to creation of concrete competitive advantages, their resilience and impact on real investment attractiveness over time measured with comprehensive and comparable statistical data.

REFERENCES

- Audretsch, D.B., Falck, O., Feldman M.P., Heblich S. (2012). Local Entrepreneurship in context. *Regional Studies*, 46(3), 379-389.
- Colombo, E., Michelangeli, A., Stanca, L. (2014). La Dolce Vita: Hedonic estimates of quality of life in Italian cities. *Regional Studies*, 48(8), 1404-1418.
- Doz, Y., Kosonen, M. (2008). *Fast Strategy. How strategic agility will help you stay ahead of the game*. Great Britain: Pearson Education Limited.
- Giffinger, R., Haindlmaier, G., Kramar, H. (2010). The role of rankings in growing city competition, *Urban Research & Practice*, 3(3), 299-312.
- Godlewska-Majkowska, H. et al. (2011.). *Atrakcyjność inwestycyjna a przedsiębiorczość regionalna w Polsce [Investment attractiveness and regional regional entrepreneurship in Poland]*. Szkoła Główna Handlowa.
- Kasprowicz, K. et al. (2014) (2016, 4 January). *Gmina na piatkę! Dobre praktyki w obsłudze przedsiębiorców [Report on the best practices in investors attraction by Polish communes]*. Warszawa. Szkoła Główna Handlowa. Retrieved from http://kolegia.sgh.waw.pl/pl/KNoP/struktura/IP/wspolpraca/skn/Documents/Gmina_na_5_2014.pdf
- Krugman P. (2011). The New Economic Geography, Now Middle-aged. *Regional Studies*, 45(1), 1-7.
- Lakshmanan, T.R., Chatterjee, L., (2009). New governance institutions in the entrepreneurial urban region. *The European Journal of Social Science Research*, 22(3), 371-391.
- Mongkol K. (2011). The critical review of new public management model and its criticism. *Research Journal of Business Management* 5(1), 35-43.

- Olczyk, M., (2008). *Konkurencyjność. Teoria i Praktyka [Competitiveness. Theory and Practice]*. Warszawa: CeDeWu.
- Olszewska, J. (2001). Strategia kreowania wizerunku gminy turystycznej [Strategy of creating the image of tourist commune]. *Ekonomia*, 3, 147-158.
- Piotrowski, S.J., Zhang, Y., Lin, W., Yu, W. (2009). *Key Issues for Implementation of Chinese Open Government Information Regulations. Public Administration Review*, Vol. 69, Supplement to Volume 69: Comparative Chinese/American Public Administration, 129-135.
- Pollitt, C., Bouckaert, G. (2011). *Public Management Reform. A Comparative Analysis – New Public Management, Governance, and the Neo-Weberian State*. New York: Oxford University Press.
- Regionalny rynek inwestycyjny a przedsiębiorczość [Regional investment market and entrepreneurship]. *Kwartalnik Nauk o Przedsiębiorstwie [Enterprise Science Quarterly]* (2013), 26, 15-29.
- Sheng L., (2011). Regional competition and sustainable development: a game theory model for tourism destinations, *European Planning Studies*, 19(4), 669-681.
- Zalewski, A. et al. (2007). *Nowe zarządzanie publiczne w polskim samorządzie terytorialnym [New public management in polish territorial self-government]*. Szkoła Główna Handlowa.

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Entrepreneurial Activities of Communes in Creation of Competitive Advantages at Regional Investment Markets: Entrepreneurial Organization Model

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Abstract

The objective of this paper is to present entrepreneurial activities of local regions represented by communes (local regions in Poland) that enable to create competitive advantages at regional investment markets resulting in increase of local regions' attractiveness for investors, tourists, and inhabitants. It was decided to perform multi-layer research on 50 communes in Poland: electronic audit research of official website portals and Bulletins of Public Information of the communes; surveys with representatives of the communes using a structured questionnaire, mystery client research method, and case study method. 565 entrepreneurial activities of Polish communes were identified within 50 electronic audits performed, 19 mystery client method replies received, 8 surveys filled in by communes' representatives. Identified activities were represented by communes of different type and investment resources. Basing on identified activities an entrepreneurial organization model for local regions was proposed. The model indicates activities possible to implement by local regions of different location, size, administration type, potential investment attractiveness, and investment resources. The originality of this work lies in economically practical character of the research results, which might support local public administration.

Keywords: competitive advantage; competitiveness; local development; local government; public sector reform

JEL codes: H11, O38, R58

INTRODUCTION

The objective of the paper is to present entrepreneurial activities of local regions, represented in the study by Polish communes that enable to create competitive advantages at regional investment markets resulting in an increase of local regions' attractiveness for investors, tourists, and inhabitants. Local development studies outline the role of competitive advantages needed for effective competition of territorial units such as local regions. Competitive advantages of local regions enable them to stimulate internal resources and to attract external resources interested in regional investment market, what is the basic condition of local development process (Osborne & Gaebler, 1992; Pollitt & Bouckaert, 2011).

To present entrepreneurial activities of local regions in the paper, a multilayer research on 50 communes in Poland was performed with usage of both non-reactive and reactive research methods. Methods included electronic audit research of official website portals and Bulletins of Public Information of the communes; surveys with representatives of communes using a structured questionnaire; a mystery client research method, and the case study method.

The first section presents state of the art literature that covers the discourse relating to public sector reform paradigms, transaction cost economics, new institutional economics, and aspects of local regions management deriving from private sector domain. Later, empirical research methodology has been presented, describing the approach toward research sample selection and research performed in Poland in years 2013-2014. Results and Discussion section provides synthesis of research performed presented in form of typology of entrepreneurial activities of local regions with concrete, possibly practical examples. Paper concludes with implications of the study for the economic practice, and indications for further research.

LITERATURE REVIEW AND THEORY DEVELOPMENT

Public Sector Reform Paradigms

Attracting resources by the local regions and impact of new investments on their development is the topic that gained on significance in recent decades due to increasing efforts of local regions in attracting new investors, tourists, and inhabitants to their locations. Scott (1998) argues that contemporary local development requires the existence of a complex coordination and control system consisting of public sector representatives, private entities, non-government bodies, public-private, and public-social partnerships.

Pollitt and Bouckaert (2011) elaborate on contemporary discussed public sector reform paradigms relating to local development, which in terms of competitiveness implies learning from the private sector practice. For example in the new public governance paradigm focus is on the stakeholder, and implementation of private sector operations method in public sector unit is underlined. In the neo-Weberian state paradigm a particular focus is given to lean and modest approach in creation of formal rules and hierarchic organizational culture in order to respond to organization's stakeholders effectively. Networks and joining-up paradigm indicates on the need for participation in networks with other organizations representing various sectors of the economy to be flexible and inclusive in globalising

world. The last – governance paradigm indicates that effective decision making process requires inclusion of wide spectrum of organization's stakeholders.

In the 21st century in order to achieve competitive advantages it is essential to be able to adjust to evolving organizational environment quickly, while minimizing organizational losses at the same time. This argument, made by Doz and Kosonen (2008), relates to private sector entities, and inspired questions whether and how the local regions governed by public sector units can achieve competitive advantages while competing for investors, tourists, and inhabitants that will bring financial, and non-financial resources to the communes.

Implications of Transaction Cost Economics for Local Regions

In the context of economics, local regions attracting new development resources such as external investors can be analysed within the transaction costs theory, also known as transaction costs economics, which is a modern economics school that had been developed, among others, by Williamson (1979, 1981), Klein, Crawford and Alchian (1978). Within the transaction costs economics transaction costs are costs incurred in making economic exchange. They usually increase the total costs of transactions. Transaction costs within this theory include costs of search and information, which relate to determination of availability, costs of goods and services looked for; costs of negotiations of the contract, which relate to establishing acceptable agreement by exchange parties; and costs of contract enforcement, which relate to securing fulfilment of the terms of the contract by transaction parties. Considering the competition for development resources between local regions the theory has particular implications for new market entrance and search for new investment location by the investors.

Availability of information about costs of goods and services looked for by the parties of economic transaction is impacted by asymmetry, and imperfect nature of information for both sides of the transaction. Such information disequilibrium impacts costs, time needed to finalize a transaction, and general attractiveness of the exchange. They might be equalized by an intermediary - local government - using traditional and modern information policy tools to communicate with external stakeholders, and to provide information looked for. Level of transaction costs of economic entities in the local region depend on information management and approach toward public communication of local region administration. Subject-matter literature indicates Internet as the main mean of communication of local region administration with local region stakeholders, because of its global reach, interactivity enabling two way communication and dialogue, low costs of usage, and speed (Piotrowski *et al.*, 2009). Therefore entrepreneurial activities of local regions related to management of information need to be classified as one of the basic factors impacting creation of their competitive advantages.

Implications of New Institutional Economics for Local Regions

New institutional economics is a school that indicates the role of policy making process, public sector institutions, legal, and cultural system on economic development. North defines institutions in economics context as formal rules (including constitutions, laws, and property rights), but also informal constraints impacting economic exchange, such as sanctions, customs, traditions, or cultural taboos (North, 1991). New institutional economics extends the perspective of economics on institutions enumerated by North, and underlines that economic activity is impacted by institutions existing prior to circumstances and context

of parties interested in economic exchange. It also opens a research ground for comparative institutional analysis focused on comparison on defined institutional aspects impacting potential transactions to formulate concrete recommendations for economy improvement (Coase, 1960). In differentiation to classic economics, new institutional economics provide additional spectrum explaining transactions related to decision making process.

In new institutional economics, the entities taking up decisions not always take only the rational, or effectiveness-related criteria into account. New institutional economics complements transaction costs economics, and explains that if the costs of access to information exceed the costs of economic entity operations, the economic activity can be stopped or ended. In that context new institutional economics examine the role of institutions in nurturing or preventing economic growth.

In this paper, the institutions are intentionally narrowed down to domain of local region administration, including local policy making process, local legal and tax system, and public sector institutions per se, including its official website portals, which in the era of information are the first sources of information looked for by local region stakeholders.

Competitive Advantage at Regional Investment Market

Contemporary literature on local development points out the role of competitive advantages in creation of competitive advantage at regional investments market. Inflow of development resources is considered as the basic conditions of new investments, which initiate and contribute to local development process. Development resources enabling new investments in local regions include: investors, tourists, inhabitants, and financial and non-financial capital they bring with them to local regions (Olszewska, 2001). These resources create the supply side of the regional investment market, whereas the demand side is created by local regions creating advantages of a place in context of attracting investors, tourists and inhabitants (Godlewska-Majkowska *et al.*, 2013). In such regional investment markets, local regions develop and demonstrate competition ability that is a long term ability to be able to match and outperform other regions (Olczyk, 2008). Modern public sector reform paradigms - such as new public governance paradigm, neo-Weberian state paradigm, networks and joining-up paradigm, or governance paradigm – outline the process of learning from private sector by the public administration, including the administration of local regions in context of their competition (Pollitt & Bouckaert, 2011).

Contemporary activities aimed at attracting investors, tourists, and inhabitants by local regions are additionally stimulated by preparation and publication of rankings benchmarking local regions toward their attractiveness for business activity, quality of life, or other measures. Griffinger *et al.* (2010, p. 310) in the discourse of publication of rankings referring to local regions represented by cities argues that "(...) it is highly recommended that cities should learn from cities that are relatively similar in their strengths and weaknesses." Rankings benchmarking local regions that are prepared and published in academic environment include "European Competitiveness Index" by University of Cardiff, „Europas attraktivstes Metropolen fur Manger" by University of Mannheim, or "EU Regional Competitiveness Index" prepared by Joint Research Institute affiliated with the European Commission. Rankings benchmarking local regions that are prepared by business environment, which conduct the research with investments focus, include "The Atlas of Regional Competitiveness" prepared by Eurochambers, "European Cities & Regions of the Future" by fDi Intelligence, "Hot Spots" by Economist Intelligence, "How the

world views its cities” by Anholt City Brands, and “Canada’s most sustainable Cities” issued by Corporate Knights – Canadian magazine for responsible business (Godlewska-Majkowska *et al.*, 2013). Common quality of rankings prepared by both academic and business environment differs in research methods used and result in different position of the same local region in different rankings. Although the empirical approach is far from consistent, rankings stimulate competitiveness at regional investment market, and might provide inspiration for redesigning the approach of local regions (Giffinger *et al.*, 2010).

Entrepreneurial Organization in the Public Sector

The concept of entrepreneurial organization in public sector has emerged in the middle of 20th century. One of its definitions has been proposed by Harbison, who calls entrepreneurial organization “an organization which comprises all of the people required to perform entrepreneurial functions (...) The functions of modern entrepreneurial organization, whether it be privately or publicly owned, may be categorized as follows: (1) the undertaking or managing of risk and the handling of economic uncertainty; (2) planning and innovation; (3) co-ordination, administration and control; and (4) routine supervision” (Harbison, 1956: 365). The author suggests that entrepreneurial activity of local region administration focused on local development process exceeds its role and responsibility clearly defined by the legal domain. It is argued that local regions that undertake additional activities which are in line with legal regulations, but require additional, effort, and/or resources can widen the offer of local region toward its stakeholders, create competitive advantage needed to attract new resources for local development.

In defining the role of institutions of local region administration in context of attracting new development resources, it is proposed to take from J. Schumpeter, who defined entrepreneurial activity as showing initiative, searching and implementing solutions perceived as new, unconventional, or risky when compared to general solutions functioning in the reference group (Schumpeter, 1934). The objective of taking up entrepreneurial activities by the local region administration is to achieve competitive advantage over other local regions; to become a more attractive place for investments, visits and accommodation. Entrepreneurial activities of the local region should be referred to the sphere of local administration activities, not the local region itself, which as an abstract term, cannot be personified.

The most important competitive advantages of local region for their stakeholders relate to (1) costs of setting up and conducting economic activity, (2) advantages of economy of scale (access to additional markets, and investment locations), and (3) advantages of economy of scope (access to goods, and services, and possibility of satisfaction of differentiated demand of many market participants). These are the classic, competitive advantages in the position school of strategy, and resources and competences school of strategy in the theory of organization that, because of competitive positions of local regions, can be related to them (Obłój, 2007; Porter, 1998).

In relation to public sector reform paradigm, implications of transaction cost economics, and new institutional economics for the purpose of this study it was decided to search in local region activities for entrepreneurial activities of the following nature: (1) management of information and knowledge, (2) creation and promotion of investment, tourism and residential product, (3) stimulation of local entrepreneurship, and (4) support of cooperation and creation of network organizations resulting in emergence of competitive advantages at regional investment market. Based on these measures a syn-

thesis of researched entrepreneurial activities can form a model, which as a hypothetic, phenomena-simplifying construct can provide practical arguments on improving competitive position by local regions of different location, size, administration type, potential investment attractiveness, and investment resources.

This study examines whether and how local regions, based on examples of Polish communes, demonstrate the activities identified within public sector reform paradigms, attract development resources, and create own, unique competitive advantages. It is examined how in context of conclusions of transaction cost economics new institutional economics, and competition at regional investment markets local regions respond to market failures, and inefficiencies relating to its imperfect self-regulation mechanisms.

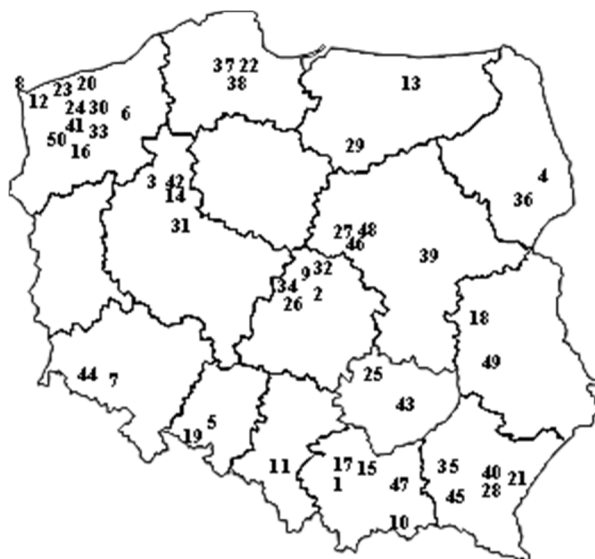
MATERIAL AND METHODS

During the research the focus was given to local regions, which are NUTS V level classification territorial units within the system of spatial hierarchy in European Union. Local regions are the smallest territorial units in spatial hierarchy of the European Union. In Poland they are represented by communes (in Polish – “gminy”), in Austria by “Gemeinden”, in Denmark by “sogne”, in Portugal by “freugesias”, whereas in Italy by “comuni”. By regional investment market are understood NUTS II level classification territorial units, which are called basic regions (in Polish – “województwa” translated as voivodeships)¹. In case of Poland, there are 2479 local regions located within 16 regional investment markets.

It was decided to perform a multilayer selection of the research sample to identify local regions demonstrating entrepreneurial activities. Therefore to narrow down the population of 2479 local regions in Poland it was decided that two additional conditions were needed to be demonstrated by a local region to be included in the sample. Each local region selected to the sample needed to cooperate and create networks with their stakeholders; and also create and promote its investment product, defined as location, and its advantages ready for inflow of investors looking for greenfield or brownfield investment possibilities. To perform above mentioned selection two external, central government databases registering local region activities in Poland were used: National Information System of Monitoring and Financial Control of Structural Funds and Cohesion Funds (NIS SIMIK) 2007-2013. NIS SIMIK registers all local regions undertaking investment projects with external funds of European Funds, including partnership investments in particular. Within the NIS SIMIK database it was looked for local regions that as of 30th of June 2013 had the status of being beneficiary of investment project delivered in form of local regions partnerships or local regions associations. At this stage 166 local regions fulfilling this criteria were identified. Next it was decided to investigate which of those 166 local regions demonstrate activities related to creation and promotion of its

¹ System of spatial hierarchy in European Union (in French - Nomenclatures des Unites Territoriales Statistique) enumerates the following types of territorial units: (1) macroregions – (NUTS I level), which are the biggest units of territorial division, (2) mezzoregions – (NUTS II level), which are also called basic regions, in case of Poland the mezzoregions are voivodeships (16 major administrative territorial units), (3) submezzoregions – (NUTS III level), which are also called subregions, (4) microregions – (NUTS IV level), and (5) locoregions – (NUTS V level), which are called local regions, their example in case of Poland are communes. Within the system units of higher rank include the units of lower rank. For example mezzoregion (NUTS II) includes several submezzoregions (NUTS III), (Pilewicz, 2013).

investment product. For selection of such local regions the database of Polish Information and Foreign Investment Agency was used. The database is of national character, and gathers non-clustered information on all available investment products of Polish local regions to promote them among potential investors, including international investors, as the database is led in English. Out of 166 local regions identified using first selection criterion, there were 50 local regions informing about at least one investment product as for 27th of August 2013. Final research sample included 50 local regions fulfilling 2 indicated sample selection conditions. Geographic distribution, and names of local regions in the sample are presented below (Figure 1).



1. Krakow	11. Katowice	21. Medyka	31. Ujscie	41. Ploty
2. Strykow	12. Wolin	22. Pszczolki	32. Zychlin	42. Wysoka
3. Pila	13. Olsztyn	23. Kamien Pomorski	33. Golczewo	43. Lagow
4. Bialystok	14. Budzyn	24. Gryfice	34. Krosniewice	44. Przemkow
5. Rybnik	15. Szczurowa	25. Konskie	35. Debica	45. Jaslo
6. Wegorzyno	16. Nowogard	26. Karnice	36. Turosn Koscielna	46. Slubice
7. Polkowice	17. Drwinia	27. Ilow	37. Trabki Wielkie	47. Moszczenica
8. Swinoujscie	18. Ryki	28. Przemysl	38. Zblewo	48. Bodzanow
9. Kutno	19. Jastrzebie-Zdroj	29. Dzialdowo	39. Dabrowka	49. Belzyce
10. Krynica-Zdroj	20. Koszalin	30. Brzezno	40. Orly	50. Przybiernow

Figure 1. Research sample of Polish local regions in their regional investment markets selected for the study

Source: own elaboration based on research sample selection criteria.

In relation to the administration type of local regions within the research sample there were 18 rural, 18 urban-rural, and 16 urban local regions. Considering the number of inhabitants, 30 local regions were of small size (up to 20 000 inhabitants), 14 local

regions were of medium size (above 20 000 up to 100 000 inhabitants), and 6 local regions represented a large size category (above 100 000 inhabitants). In terms of potential investment attractiveness measured by potential investment attractiveness indicator prepared by College of Business Administration at Warsaw Scholl of Economics, 20 local regions were of high, 21 of medium, and 9 of low potential investment attractiveness. Details of the local regions in the sample had been presented in the below (Table 1).

A set of reactive and non-reactive research methods and techniques had been used. In relation to researching entrepreneurial activities of local regions I assumed that in the second decade of 21st century, the basic, comprehensive and trustworthy source of complex information for local region stakeholders is the official website of the local region, together with online Bulletin of Public Information, which existence for each local region is required in Poland by law. Thus the electronic audit method basing on structured questionnaire for each official website of local region in the sample was applied (structured questionnaire consisted of 20 questions). Content available at official websites of the communes was analysed, including archives of sections dedicated to commune current news for the period of 12 consecutive months prior to the day of the electronic audit.

Within the study mystery client method was also used in form of sending electronic communication to the local region public administration from the position of potential investor interested in setting up economic activity, asking specific questions and expecting support (electronic correspondence regarding investment offer, investment incentives available, factors distinguishing local region among other of similar size in regional investment market, and possibility of direct meeting). Response time, and quality of the answers received were measured.

Another reactive research method was a survey questionnaire, sent to official representatives of local regions (questionnaire consisting of 8 open questions)².

Timeline of research performed refers to the following stages: (1) electronic audit research of official website portals of communes and their Bulletins of Public Information – 7th of October 2013 – 3rd of November 2013, (2) mystery client method research – 1st of September 2014 – 15th of September 2014, (3) survey with representatives of local regions using structured questionnaire – 25th of August 2014 – 3rd of November 2014. Within electronic audit research all official websites of 50 local regions were analysed. In mystery client method research 19 letters of potential investor were replied³. In survey with representatives of local regions 8 surveys were filled in by local administration representatives. The research objective is to explore, classify and present entrepreneurial activities of local regions that might result in creation of competitive advantages at regional investment market of the following nature: (1) management of information and knowledge; (2) creation and promotion of investment, tourism, and residential product; (3) stimulation of local entrepreneurship, and (4) support of cooperation and creation of network organizations. It is planned to identify both cost-efficient and cost-intensive entrepreneurial activities and present them in the manner reflecting the costs absorption.

² Filled surveys were received from Białystok, Katowice, Krakow, Kutno, Olsztyn, Pila, Rybnik, and Strykow.

³ Replies in mystery client research method were sent by Białystok, Bodzanow, Debica, Działdowo, Kamien Pomorski, Koszalin, Krakow, Krosniewice, Lagow, Pila, Przemysl, Przybiernow, Pszczolnik, Rybnik, Strykow, Szczurowa, Ujście, Zblewo, and Zychlin.

Table 1. Name, size, functional type, and potential investment attractiveness category of local regions within the research sample

No.	Name of local region	Size of local region as per Local Data Bank of Polish Central Statistical Office	Functional type of local region as per TERYT typology	Potential investment attractiveness class from A (for the highest) to F (for the lowest)*
1	Krakow	big	urban	A
2	Strykow	small	urban-rural	B
3	Pila	medium	urban	A
4	Bialystok	big	urban	A
5	Rybnik	big	urban	A
6	Wegorzyno	small	urban-rural	E
7	Swinoujscie	medium	urban	A
8	Katowice	big	urban	A
9	Kutno	medium	urban	A
10	Wolin	small	urban-rural	C
11	Olsztyn	big	urban	A
12	Polkowice	medium	urban-rural	A
13	Krynica-Zdroj	small	urban-rural	A
14	Nowogard	medium	urban-rural	A
15	Jastrzebie-Zdroj	medium	urban	A
16	Kamien Pomorski	small	urban-rural	B
17	Budzyn	small	rural	C
18	Szczurowa	small	rural	E
19	Ryki	medium	urban-rural	C
20	Koszalin	big	urban	A
21	Gryfice	medium	urban-rural	C
22	Drwinia	small	rural	E
23	Medyka	small	rural	C
24	Przemysl	medium	urban	A
25	Pszczolki	small	rural	C
26	Konskie	medium	urban-rural	C
27	Karnice	small	rural	E
28	Zychlin	small	urban-rural	D
29	Ilow	small	rural	E
30	Dzialdowo	medium	urban	A
31	Brzezno	small	rural	D
32	Ujscie	small	urban-rural	C
33	Golczewo	small	urban-rural	D
34	Debica	medium	urban	A
35	Turosn Koscielna	small	rural	D
36	Trabki Wielkie	small	rural	D
37	Zblewo	small	rural	D
38	Dabrowka	small	rural	D
39	Ploty	small	urban-rural	D
40	Krosniewice	small	urban-rural	C
41	Wysoka	small	urban-rural	D
42	Lagow	small	rural	E
43	Przemkow	small	urban-rural	B
44	Jaslo	medium	urban	A
45	Orly	small	rural	C
46	Slubice	small	rural	E
47	Bodzanow	small	rural	E
48	Betzyce	medium	urban-rural	C
49	Moszczenica	small	rural	D
50	Przybiernow	small	rural	E

* Indicator constructed by Collegium of Business Administration at Warsaw School of Economics
Source: Own elaboration based on research sample selection criteria, Local Data Bank of Polish Central Statistical Office for 31st of December 2012, and data of Collegium of Business Administration at Warsaw School of Economics. for 31st of December 2011.

RESEARCH FINDINGS

As a result of the research on sample of 50 Polish local regions following examples of entrepreneurial activities have been identified: (1) 145 examples of entrepreneurial activities related to informing about investment and development possibilities; (2) 122 examples of entrepreneurial activities related to creation and promotion of local investment, tourism and residential product; (3) 173 examples of entrepreneurial activities related to stimulation of local entrepreneurship; (4) 125 examples of entrepreneurial activities related to support of cooperation and creation of network organizations.

Detailed analysis of identified activities led to creation of entrepreneurial activities catalogues classifying activities possible from cost-effective to cost-intensive ones, which altogether create a model of entrepreneurial organization at regional investment market.

Entrepreneurial Activities Related to Management of Information and Knowledge

Entrepreneurial activities focused on management of information and knowledge aim at equalizing the asymmetry of information looked for by local regions stakeholders that impact transaction costs of the exchange at regional investment market, and therefore impact attractiveness of local regions. Within this study the following frequently demonstrated activities of management of information and knowledge by local regions have been identified:

- regular publication of information relevant for stakeholders of local region in official website of the local region, including information on events and initiatives taking place outside the location of the local region, but possibly relevant for the stakeholders, as in case of vocational trainings, or investment project's financing initiatives. Examples of local regions with more than 500 communicates published within 12 consecutive months at their official websites: Swinoujście, Jastrzebie Zdroj, Krakow, Polkowice, Kamień Pomorski, Nowogard;
- providing information to the stakeholders of the communes in reply to electronic correspondence sent by them in possibly time-effective, and content-wise manner. Examples of local regions, which replied to electronic correspondence of potential investor in less than 5 working days, and were included content asked for: Krakow, Stryków, Zblewo, Białystok;
- providing electronic geographic information system (GIS) supporting decisions related to new investments, tourism, or residential activity on official website of the local region. Examples of local regions providing GIS services for their stakeholders: Rybnik ("Rybnik Geographical Information System"), Krakow ("The Observatory");
- communication of local development plan or local development strategy through the official website of the local region (for example by locating electronic version of the document in official website of the local region). Examples of local regions sharing their development plans or strategies with their stakeholders via their official websites: Krakow (Development Strategy of Krakow), Przemyśl (Strategy of Success of City of Przemyśl), Krynica-Zdroj (Strategy of Promotion of Krynica-Zdroj);
- organization of initiatives supporting self-development of local region stakeholders, including usage of knowledge sourcing tools available in local region, for example by organization of information meetings on how to use resources (including knowledge sources) made available by the local region. Example of local region organizing such initiatives – Krakow;

- organization of direct information meetings with potential investors in reply to their need for information related to potential investments, for example by initiation of direct meetings in reply to electronic correspondence sent by potential investor. Examples of local regions engaging external stakeholders in that approach – Bialystok Pila, Strykow, Zblewo, Kamien Pomorski. Kamien Pomorski provided distinguished example on how to build and nurture the relationships with potential investors. Although the local region did not have any investment land at the time of mystery client research, local administration proposed a direct meeting in order to learn the investor's needs better, and to possibly propose an investment product in neighbouring location.

Entrepreneurial Activities Related to Creation and Promotion of Investment, Tourism and Residential Product

Activities related to creation and promotion of investment, tourism, and residential product at local regions derive from private sector practice. In context of local region its basic good offered to its stakeholders is the location, which perceived qualities, and usefulness can be actively shaped by the local administration. Number of regularly demonstrated activities related to creation and promotion of investment, tourism and residential product were identified. The catalogue of activities identified included:

- identification and inventory of information on existing or future local investment, tourism, and residential product, and communicating it via official website of the local region. Example of local region actively identifying, inventorying, and communicating their investment, tourism, and residential products for different type of stakeholders: Katowice, Pila;
- providing information to stakeholders of local region in reply to electronic correspondence relating to investment, tourism and residential product, including attachment of promotion materials and local contact data. Examples of local regions providing tailored investment offers in reply to electronic communication sent: Krakow, Bialystok, Strykow, Pila;
- promotion of local region investment, tourism, and residential offer by dedicated place in official website of the local region, for example by dedicated sections. Examples of local regions demonstrating this activity: Grudziadz, Krynica-Zdroj, Katowice, Krakow;
- promotion of local region investment, tourism, and residential offer through electronic profile of the local region in electronic social media, including popular at the time of research electronic social media Facebook, Youtube or Twitter. Examples of communes using social media for promotion of their investment, tourism, and residential products: Swionoujscie, Nowogard, Olsztyn, Pila, Rybnik, Szczurowa, Zychlin, Strykow;
- creation of individual local region promotion and stakeholder engagement products such as electronic post card, which local region stakeholders can send from the official website of the local region, virtual walks presenting the view of the location from perspective of location visitors from the level of official website of the local region, or own mobile applications engaging into discovery of local region created by the local region. Examples of local regions creating own local region promotion and stakeholder engagement products: Wgorzyno (electronic post card), Koszalin (virtual walk), Bialystok (mobile application);
- promotion of the local region by professional public relations activity, including public relations dedicated section in the official website of the local region. Example – Strykow;

- participation of local administration in national and international events promoting territorial units investment offers. Examples of local regions actively exhibiting their investment, tourism, and residential offer within such event – Swinoujście, Katowice, Konskie, Rybnik;
- promotion activities using big format advertisements (such as billboards in promotion of tourism products). Example of local region promoting their offer through billboards – Rybnik;
- activities focused on creation and promotion of the brand of local region, and the brand promise. Examples of local regions creating, and promoting their brand and brand promise – Kutno (brand “City of roses”), Pila (brand “Here visions assume concrete shape”), Rybnik (brand “Rybnik – city with spawn”), Białystok (brand “Rising Białystok”), and Krakow (brand “Magic Krakow”);
- activities related to direct promotion adjusted to needs and expectations of local region stakeholders by creation of dedicated local region promotion unit within the local public administration structures. Example: Kutno, and activity related to delivery of bunches of fresh roses to women entrepreneurs by Kutno promotion unit representatives at the occasion of International Women’s Day.

Entrepreneurial Activities Related to Stimulation of Local Entrepreneurship

Activities related to stimulation of local entrepreneurship by local region administration exceed their responsibilities (as it often is the domain of territorial units of higher rank), however they directly impact economic situation, created tax base, and therefore local development process of the local region. Number of regularly demonstrated activities related to stimulation of local entrepreneurship was identified within the study. Activities identified form the following catalogue:

- promotion of information on job places created by economic entities located in the local region through official website of the local region (for example via dedicated section within the official website of the local region, and being a job intermediary by local region between employers and employees additionally to other job intermediation bodies). Example of local region leading local region job portal – Krakow, example of local region informing on local job offers and foreign internships for local students – Polkowice;
- organization of competitions promoting entrepreneurial attitude aiming at stimulation of local economic entities (for example through competitions for the best business plan). Examples of local regions organizing such competitions – Dąbrowka, Kamień Pomorski, Golczewo, Medyka, Pszczółki;
- organization of trainings dedicated to founding, financing and increasing competitiveness of economic activity (often as a reward in competition promoting entrepreneurial attitude). Examples of local regions providing trainings on above subject: Pila, Ryki, Szczurowa;
- activities relating to creation of local administration incentives for setting up and conducting economic activity – for example in form of creation and publication in official website of the local region a guidance on setting up and conducting economic activity, or provision of new investments advisor within the local region administration unit. Example of local region demonstrating this kind of activity – Krakow.

Entrepreneurial Activities Related to Support of Cooperation and Creation of Network Organizations

Activities focused on support of cooperation and creation of network organization are essential in one of modern public sector reform paradigms, which is networks and joining up paradigm. According to M. Castells (Pollitt & Bouckaert, 2011) in economy basic on knowledge and times of rapid changes economic entities are able to function effectively if they function as network enterprises, build connections, and participate in networks enabling them to minimize economic risks and maximize their utility. Within the entrepreneurial activities related to support of cooperation and creation of network organizations number of activities were identified within this study. Activities identified include:

- continuous identification of needs and expectations of local region stakeholders in order to react appropriately, for example in form of electronic survey, or pool available for local region stakeholders available in its official website. Example of local region leading continuous survey, or pool on needs and expectations of their stakeholders: Bodzanow, Budzyn, Drwinia, Gryfice, Ilow, Konskie, Koszalin, Kutno, Przemysl, Strykow, Swinoujscie;
- organization of regular, specific-topic-dedicated meetings or by local region administration and stakeholders of specific needs, for example local investors. Examples of local regions organizing regular investors' needs dedicated meetings – Pila, Strykow;
- developing cooperation incl. exchange of knowledge, know-how, and best practices by local administration with local region stakeholders, for example in form of memoranda of understanding or declarations of cooperation with other local regions, economic entities or expert organization. Examples of local region demonstrating such activity: Pszczolki (declaration of educational cooperation with higher education institutions in Gdansk for inhabitants of Pszczolki), Krynica-Zdroj (declaration of educational cooperation with local public library on open foreign languages educational courses for inhabitants of Krynica-Zdroj);
- developing cooperation based on declarations for pursuing common economic goal by local administration and its development stakeholders, for example by applying together with other local regions, or private stakeholders for external funds for investment of common interest. Examples are Trabki Wielkie cooperating with local region Uhlefeld from Germany to increase the know-how of their crisis management authorities both on Polish and German side, or Polkowice cooperating with local region Bischofschofen from Germany to increase the know-how and qualifications of employees from Poland working in Germany.

Entrepreneurial Organization Model of Local Region

Findings of this study are of novel character, as identified that studies of similar methodology approach (electronic audit, mystery client method), and research focus (local regions in Poland) had not been performed before. Entrepreneurial activities presented within this section enable to propose original, general entrepreneurial organization model, which might be supportive in diagnosis, planning and implementing of activities related to increasing attractiveness and competitiveness at regional investment market by local regions. The model has been presented below (Figure 2). Sets of detailed activities possible are enlisted together with examples of concrete local regions within detailed sub-sections of this section.

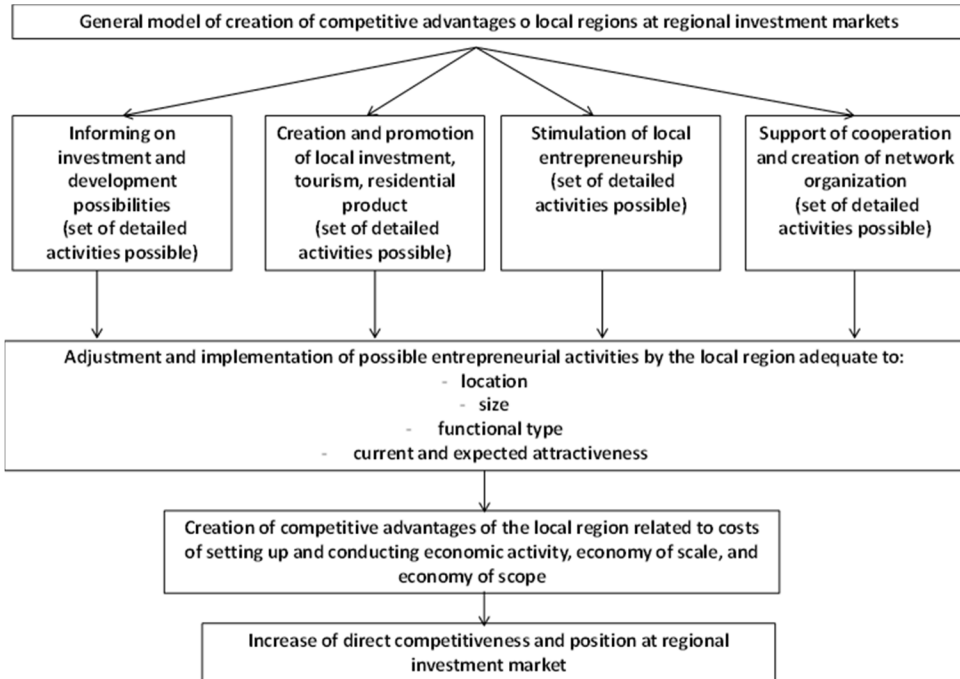


Figure 2. General model of creation of competitive advantages of local region at regional investment market

Source: own study.

CONCLUSIONS

Analysed modern public sector reform paradigms, implications of transaction cost economics, and new institutional economy and contemporary literature in competition of local regions at regional investment markets led to conclusion that activities exceeding traditional role and responsibilities of local region public administration are justified. Performed research proved that entrepreneurial activities, defined as additional activities of local regions in line with legal regulations, but requiring additional, internal effort are demonstrated by numerous local regions effectively. Identification of 565 examples of entrepreneurial activities based on the research of 50 Polish local regions (communes), including electronic audit, mystery client, survey, and case study method enabled to classify identified activities and propose typologies related to: (1) informing about investment and development possibilities, (2) creating and promoting local investment, tourism and residential product, (3) stimulating of local entrepreneurship, and (4) support of cooperation and creation of network organizations. Identified entrepreneurial activities impact the costs of setting up and conducting economic activity, take advantage of economy of scale and advantage of economy of scope. In effect they increase perceived attractiveness of local region at regional investment market. Identified activities were undertaken by local regions of different location, size, functional type and

potential investment attractiveness proving that taking up additional activities by local administration is not determined by these factors. It has been observed that size of local region in terms of number of its inhabitants impacts on type of entrepreneurial activities demonstrated. In case of local regions of small size in terms of number of inhabitants the most popular entrepreneurial activities were related to informing about investment and development possibilities and stimulating of local entrepreneurship. In local regions of medium and big size in terms of number of inhabitants the most popular entrepreneurial activities were related to creating and promoting local investment, tourism and residential product support of cooperation and creation of network organization. The latter type of entrepreneurial activities is also more cost-intensive.

Each typology of entrepreneurial activities presented starts from the activities, which are cost-effective and end with the ones, which are cost-intensive, and which implementation might depend on additional resources of local region. The findings present both cost-efficient and cost-intensive entrepreneurial activities, starting from the cost-efficient and ending with cost-efficient one, what complemented the main objective of the research, which was to explore, classify and present entrepreneurial activities of local regions that might result in creation of competitive advantages at regional investment market.

Position school of strategy, and school of resources and competences provides an argument that in context of limited resources and lack of market leader status a local region should not focus on the all entrepreneurial activities possible, but rather concentrate on one or a couple of them to create competitive advantages and differentiate from local region of similar size, functionality type, and potential investment attractiveness at regional investment market. The proposed general model of creation of competitive advantages of local region at regional investment market together with detailed sets of activities possible might support both preparation and execution of strategy, and operations of local region administration aiming to improve their competitive position. Basing on selection of the sample and entrepreneurial activities identified, results of the study might be particularly supportive for the local regions of small and medium size, as majority of them were represented in the study.

Due to the intentionally narrowed in the study types of examined entrepreneurial activities of local regions and major focus on non-reactive research method related to electronic audit of official website portals of local regions, and activities related to management of information, and knowledge further direction of the studies are proposed. In view of exploration of research theme of entrepreneurial activities of local regions require quantitative, and qualitative, in-depth studies focused on their effectiveness on attraction and maintenance over time development resources of local regions such as investors, tourists and inhabitants. It also seems to be justified to study the impact of entrepreneurial activities on potential, and also real investment attractiveness of local regions over time, reflected by new investments, inflow of tourists, and inhabitants, which might supported with official, and comparable statistical data.

REFERENCES

- Coase, R.H. (1960). The Problem of Social Cost. *Journal of Law and Economics*, 3, 1-44.
- Doz, Y., & Kosonen, M. (2008). *Fast Strategy. How strategic agility will help you stay ahead of the game*. Great Britain: Pearson Education Limited.

- Giffinger, R., Haindlmaier, G., & Kramar, H. (2010). The role of rankings in growing city competition. *Urban Research & Practice*, 3(3), 299-312.
- Godlewska-Majkowska, H. (2013). Regionalny rynek inwestycyjny a przedsiębiorczość. *Kwartalnik Nauk o Przedsiębiorstwie*, 1/2013(26), 15-29.
- Harbison F. (1956). Entrepreneurial organization as factor in economic development. *The Quarterly Journal of Economics*, 70(3), 364-379.
- Klein, B., Crawford, R.G., & Alchian, A. A. (1978). Vertical integration, appropriable rents, and the competitive contracting process. *The Journal of Law and Economics*, (21), 297-326.
- North, D.C. (1991). Institutions. *Journal of Economic Perspectives*, 5(1), 97-112.
- Obłój, K. (2007). *Strategia organizacji*. Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Olczyk, M. (2008). *Konkurencyjność. Teoria i Praktyka*. Warszawa: CeDeWu.
- Olszewska, J. (2001). Strategia kreowania wizerunku gminy turystycznej. *Ekonomia*, 3, 147-158.
- Osborne, D., & Gaebler, T. (1992). *Reinventing Government*, Addison-Wesley Publ. Co.
- Pilewicz, T. (2013). The Role of Subregions in Modelling Regional Competitiveness – a Case Study of the West Subregion in Śląskie Voivodship. *Barometr Regionalny. Analizy i prognozy*, 11(2), 77-87.
- Piotrowski, S.J., Zhang, Y., Lin, W., & Yu, W. (2009). Key Issues for Implementation of Chinese Open Government Information Regulations. *Public Administration Review*, Supplement to Volume 69: Comparative Chinese/American Public Administration, 129-135.
- Pollitt, C., & Bouckaert, G. (2011). *Public Management Reform. A Comparative Analysis – New Public Management, Governance, and the Neo-Weberian State*. New York: Oxford University Press.
- Porter, M.E. (1998). *The Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Schumpeter, J.A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge, MA.: Harvard University Press.
- Scott, A.J. (1998). *Regions and the world economy: the coming shape of global production, competition and political order*. New York: Oxford Unity Press.
- Williamson, O.E. (1979). Transaction-Cost Economics: The Governance of Contractual Relations. *Journal of Law and Economics*, 22(2), 233-261.
- Williamson, O.E. (1981). The Economics of Organization: The Transaction Cost Approach. *American Journal of Sociology*, 87(3), 548-577.

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CSR in Polish SMEs: From Perception to Love: Examples of Socially Engaged Firms from Pomeranian Region

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Abstract

Notwithstanding the worldwide increasing awareness of the importance of social issues in nowadays business management, Polish small and medium enterprises seem to remain in the group of followers, certainly not leaders of corporate social responsibility (CSR) movement, and this despite an important dissemination efforts by numerous institutions. The aim of this paper is to present the bumpy road to the implementation, still incomplete, of CSR by Polish SMEs but also to demonstrate a possible shift in the attitude of Polish entrepreneurs. The research is based on available statistical and qualitative data from recent reports and official policies. The cases issued from a regional contest are completing the whole picture.

Keywords: Corporate Social Responsibility, CSR, social commitment, small and medium enterprises, SMEs

JEL codes: L20

INTRODUCTION

In the last two decades, we have experienced an increasing interest in sustainability issues and their importance for the strategic business management (Donaldson and Preston 1995, Shrivastava and Hart 1996, Hart 1997, Martinet et Reynaud 2001). These issues are today mostly known as Corporate Social Responsibility (CSR). Nevertheless, the degree of interest in CSR is not the same for all sizes and all types of businesses (Martinet et Reynaud 2004). It oscillates, in fact, between the lack of interest in this phenomenon and some very proactive approaches to its implementation, and it shows a huge variety in the forms of its occurrence in business practice (Starnawska, Popowska 2010).

The factor of size, and thus, the strength of the market and the impact on the environment, seems to be one of the most important traits of the involvement of SMEs in

CSR activities. Their primary stakeholders are the nearest network environment members, the local community in which SMEs operate. Although, the micro and small enterprises are strongly associated with this local community having clearly defined needs, and they respect the rules prevailing in this close environment (Spence et al 2003), their actions are rather fragmented and of informal character. On the other hand, a strong leadership can easier convey socially responsible principles to all employees in owner-managed SMEs (Jenkins and Hines 2002, Lepoutre and Heene 2006). Therefore, the personal beliefs and ethics of both, owners and employees, are equally important. Being less formal and more intuitive, small business focuses more on being reliable to customers and the local community, trying to improve the closest environment rather than spending fortunes on mass-media advertising.

At the same time, more and more SMEs owners/managers instinctually feel that social responsibility can pay off in longer term, and every effort made in this direction is something that could bring an important competitive advantage, which is nothing but step ahead of their competitors. Therefore, the implementation of CSR methods in Poland is the object of growing interest from both entrepreneurs and society. Although certain aspects of business ethics were present in Poland before World War Two, when referring to CSR during the extended time of communist regime, this term appears to be degenerated, since the business rarely belonged to individuals and was largely controlled by the state. People were simply not interested in corporate social responsibility as they struggled to make their living. Over the last two decades, the idea of CSR became more and more popular due to change of political system, and in the last ten years, due to Poland accession to EU and initiatives and politics associated with this membership.

This paper is aimed at presenting the development of the popularity of CSR approach among Polish small and medium-sized enterprises, based on national data, with particular emphasis on changes visible in Pomeranian region. The statistics regarding this topic are still relatively poor, rather irregular and discontinuous. So we will present also a qualitative study based on one of the regional CSR contests for SMEs.

EVOLUTION OF CSR CONCEPT IN POLAND

The implementation of the responsible behaviour in Polish companies has been a complicated process and went through few steps, resulting from the socialist heritage of this country. Mainly due to the word “social” in its name, entrepreneurs in former socialist countries frequently saw CSR as some form of socialist renaissance, considered as dangerous as for the transition to market economy. However, apart from this very general negative opinion that could be found at different levels among all the CEECs, there were some specific aspects and a particularly strong opposition against the concept and the visions of CSR. Despite some encouraging signals starting in the early 2000 and moving around the complex concept of business ethics – the Polish Association for Business Ethics was set up in 2001 (Gasparski 2007, 2013) – the situation did not really change. Still young at that time, Polish companies of all sizes were extremely reluctant even to consider the softest approach to this issue. This attitude discouraged international organizations involved in the diffusion of CSR discourse. Despite an early study by UNDP (2007) showing the difficulties in approaching the topic in this country, Poland was not even included in UNIDO programs for the implementation of CSR, nor it was invited to the Forums organized by the same

organization in 2007 and 2008 among some CEECs (UNIDO). However, this is not so surprising when considering that "How to do business in Poland", a guide for foreign investors published in 2004, in cooperation with Deloitte, by the Polish Information and Foreign Investments Agency did not spend one single word on CSR (PAIZ-Deloitte 2004). Consequently, the transition period has been a very turbulent one, demanding fast and frequent changes, so inappropriate for the long-term thinking required when building the CSR strategies. Very schematically the whole CSR implementation process may be divided into five stages starting with the refusal of any "social" aspect of business activity in the early 90s, through indifference et reluctance (1997-2002) to the interest and even creation of links between different socially oriented management projects (Popowska 2015).

One of the very important push factors for the implementation of CSR behaviours in Polish SMEs has been the phenomenon of foreign direct investments and in particular the German ones (Bechert & Gorynia-Pfeffer 2008). Even the Polish government recognized in recent times that the development of CSR from the beginning of this century was closely associated with the influx of foreign investors (Ministry of Economy 2012).

Another problem, often raised in the first decade of the third millennium, was the weak institutional environment, in particular the intricate regulations (World Bank 2009), the instability and unpredictability of law, which does not allow SMEs to plan long-term and to have a long term approach, not to mention the reflection on the concept of CSR, which in this context may appear as an idea rather eccentric and for some happy few. Additionally, it is worth to mention that Polish consumers, despite their declarations, in their purchasing choices were rarely guided by ethical attitude of the suppliers (World Bank 2005, Gasparski, 2005). Furthermore, also NGOs were rather immature and could not provide SMEs with a reliable partnership. Finally, media were considered as rather irresponsible, often unable to promote the idea of responsible business in the community or unwilling to do it because of their undeclared but powerful links with the business community or their too strong relationship with governmental agencies (World Bank 2005). The same report also points out the small number of stakeholders, limited to three actors (shareholders, customers and employees), that significantly narrows the responsible entrepreneur's possible scope of action. Polish entrepreneurs do not perceive communication with stakeholder groups, public relations, and actions aimed at eliminating social disparities as actions falling within the CSR.

Considering all these elements, several actions directed at promoting CSR in Poland were undertaken from 2009 onward. Gradually, the operational and theoretical boundaries of CSR for Poland were set up, and Polish government is implementing them constantly and systematically. That resulted, among others, in a growing involvement of media in promoting this concept: in 2008 have been published 829 articles, in 2009 1512, in 2010 2248, in 2011 2527, in 2012 3342, in 2013 5591, and in 2014 11644 (FOB, 2009, 2010, 2011, 2012, 2013, 2014). The total number of articles associated with the subject of CSR in 2014, both in paper and virtual media, was fourteen times higher than in 2008. It is a great progress despite the fact that the most of those sources provide only a basic knowledge about the discussed concept (Wołczek 2015).

Additionally, the governmental directive issued in May 2009 founded a special CSR team, under the direct control of the Polish Prime Minister. The team's structure was based on four different working groups (CSR Promotion, Socially Responsible

Investments, CSR in education, CSR sustainable consumption). The conclusions of CSR team have been included in the Guidelines of the National Development Strategy 2020. The Ministry of Economy would be also responsible for the implementation of a systemic CSR project (Republic of Poland 2012). Additionally, the Polish Ministry of Economy, in response to companies' needs, in 2013 has issued the guidebook on business sustainability and CSR tools allowing gaining competitive advantage with special emphasis on SMEs (Gasiński & Piskalski 2013).

EVOLUTION OF CSR R CONCEPT AMONG POLISH SMES- PERCEPTIONS AND REAL RESPONSIBLE ENTREPRENEURSHIP

One of the actions to promote CSR among Polish enterprises, including SMEs, is the Report "Responsible Business in Poland" run by the Responsible Business Forum from 2010. In the initial years (2010-11), there are only few good practices registered in the annual reports provided by only 17 SMEs, versus respectively 80-100 large enterprises. Good practices are there classified into several categories, namely: workplace, environment, social commitment, corporate governance, consumer relationship, fair operating practices and human rights. Most of the registered SMEs in 2010-11 declared the best practices in the category called "environment", which proves that this dimension of CSR was the easiest and the most natural to perceive in this group of enterprises.

Table 1. The number of SMEs which registered their best practices in the reports "Responsible Business in Poland" in the years 2010-14

Size/Year	2010	2011	2012	2013	2014
micro	2	4	2	15	6
small	9	3	4	10	13
medium	6	10	15	21	13
SME Total	17	17	21	46	32

Source: own study based on Raport. Odpowiedzialny Biznes w Polsce 2014, 2013, 2012, 2011, 2010.

In all consecutive years (2012-14) most of the registered good practices occur in the field of social commitment and development of the local community, which is followed by the above mentioned environmental commitment. There is almost no representation in the field of practices addressing consumers. Numerous SMEs are represented in several fields of CSR activity, very often for more than one year. Notwithstanding, in 2014, only two firms (Blue Media S.A. and Horus Innowacyjne Materiały Przemysłowe Sp. z o.o.) are on the list of companies involved in CSR activities for many years.

The study conducted in Western Poland in 2011 by Millward Brown SMG/KRC and PwC at the request of Polish Agency for Enterprise Development (PARP) showed that only 14% of SMEs were familiar with the CSR term. Among those who claimed to be familiar with what CSR is, the most important aspect of being socially responsible were proper relations with clients, co-workers and employees (22% of respondents), carrying for environmental issues (21%), honesty (19%), employee's welfare (15%) and local society-based activities (12%). The CSR standards most known among respondents were ISO 14000 (51%), ISO 26000 (30%) and Global Impact (18%). Interesting findings offers also the analysis of the relation between the implementation of CSR and the age of the

company. According to this study, 80% of the companies that have been operating for more than 15 years were implementing socially responsible practices. Quite a strong value attached by enterprises to the environmental dimension of CSR is also confirmed by the results of the national and regional surveys (POG 2013, FOB 2013, RespEn 2010) which show that in around 30% of SMEs which are familiar with the concept of CSR, the majority associates it rather with the environmental protection and ignores its social dimension. At the same time only 27,8% of the surveyed enterprises confirm impact of their activity on environment. The same sources say that 14% of SMEs in Poland deny having stakeholders and only 42% testify the commitment to the local community. Additionally, according to the fourth edition of the Pomeranian Economic Observatory (POG 2013), most of the respondents (60%) perceive CSR practices negatively, mostly as an unnecessary cost or just fashionable term (Zięba 2015).

Another action designed to encourage SMEs to behave responsibly, and therefore enabling to conclude on the growing popularity of CSR activities in Polish SMEs, was the project "Enhancement of Regional Competitiveness through Corporate Social Responsibility (CSR)" carried out by Polish Agency for Enterprise Development (PARP) in 2012-2015, embedding an important contest for the financial support for implementation of CSR in the SMEs with two consecutive calls for applications: in May and in December 2013. On 108 applications submitted for the first edition 53 enterprises received financing and on 322 applications in the second call, 133 were granted funds (Stawicka 2015). The greatest interest in obtaining that financial support for the implementation of CSR activities was shown by SMEs from western and central parts of Poland. Those entrepreneurs were also much more aware of the CSR principles than their counterparts from eastern Poland.

POMERANIAN REGION AND SMES RECENT ACHIEVEMENTS

One of the interesting new initiatives organised in 2015 in the Pomeranian region is the second time contest "Enterprise from the Pomeranian Sector SME socially engaged"¹. This competition is carried out by Forum Inicjowania Rozwoju, Radio Gdańsk and Gazeta Wyborcza. The generic aim of the contest is to promote socially responsible activities pursued by the Pomeranian companies from the SME sector in the area of social involvement, implemented to raise the level of social capital in Pomerania. A more specific goal is to select and promote the biggest and best CSR practices, implemented in the field of social involvement by SMEs from the province of Pomerania. This field is one of the seven key areas of social responsibility by ISO 26000. The practices may concern in particular: education and culture, job creation and competences development, development and access to technologies, wealth creation, health, social investments and many others.

The first edition of the contest was organised in 2014. In this pilot edition took part only few companies and the only winner was the company of the medium size (100 employees) AMBRA Sp. z o.o., which provides comprehensive services in the field of cleaning the inside and outside of office, retail and service and manufacturing buildings. This company is consequently building its CSR strategy covering many important fields and containing, among other elements, the Code of Ecologic Practices. Those activities are partially financed with the support provided by PARP within Swiss found-

¹ Firma Zaangażowana Społecznie Pomorskiego Sektora MSP

ing. One of the announced strategic goals of the company is: *“We want to support our local community involvement in solving current social problems in cooperation with non-governmental organizations, offering employment and creating jobs suitable for people from disadvantaged groups”*. This is not an empty announcement – the company is developing several activities confirming its real social commitment.

The second edition, carried out in 2015 attracted much more participants (13) and emerged three winners. The first one is Hydro-Naval Sp. z o.o., employing 150 workers, located in the Słupsk economic zone and specializing in the construction of equipment for the offshore industry. At the end of 2014, Hydro-Naval in cooperation with two local high schools, initiated the creation of special classes as an answer to the demand of the local market employers in the metal industry. This company also provides support to young people in gaining education supported by the practice, desired by employers. Representatives of Hydro-Naval believe that by investing in these activities, they promote the proper approach to technical education of young people. Thus, at the same time, they support the local community by promoting education and providing students with the modern and desired knowledge and skills. This is not the only CSR activity of Hydro-Naval, since this company is engaged in numerous initiatives of philanthropic character for many years: organization of artistic events (theatre for One Smile for children), of festivals and holiday camps for children, sponsoring the activities of local sport clubs and teaching materials for local schools and kindergartens. The second prize was awarded to the company Blue Media S.A. (around 100 workers), founded in 1999 in Sopot, providing solutions for electronic transactions services and supporting online sales. For the sake of the environment, as well as workers' health, Blue Media promotes and supports driving to work by bike – paying a penny per kilometre driven way to work by bike. Like the previously presented company, Blue Media is strongly involved in many socially responsible activities in the area of natural environment protection (refusing paper invoicing, using renewable energy sources), and also in the field of social and business environment (charity and sponsoring, supporting start-ups) etc. Blue Media is regarded in the local market as honest and caring about employees – all the internet testimonies confirm this general appraisal. The third winner was Solwit S.A. from Gdansk. This firm is implementing and testing software solutions, and providing related services for different industries. As part of the support program for schools, universities and organizations espousing the knowledge of the IT industry, the company regularly carries out activities aimed at supporting schools in achieving their educational tasks in a manner consistent with current market requirements and improving the qualifications of prospective and current employees of the IT sector and thereby strengthen their competitive position in the labour market. In both, the vision and the mission statement of the company stresses the importance of values to build and deliver to its main shareholders. The owners of the company state: *“Our values define who we are and how we act as employees and as a company. More than simply words, they are something that speaks to everyone and something we live by each day”*.

It is worth to mention that only one out of four Pomeranian companies (Blue Media S.A.) presented above registered its CSR practices in the last FOB report, which proves that there is still a huge work of dissemination of CSR knowledge to do, especially in terms of reporting possibilities.

CONCLUSIONS

The awareness on CSR among Polish entrepreneurs, despite the growing number of information provided by numerous institutions at national and regional level, is still quite limited. Also the perception of this concept seems not always positive. Many entrepreneurs affirm applying some of the CSR practices, without being aware on the possibility of reporting on them. Many others do not believe that CSR may bring positive, even financial benefits, instead of being only a cost generating factor.

On the other hand, there are many firms, like those presented above, which are young and aware of all the advantages connected with responsible management and that underline the importance of the values they want to convey and share with their stakeholders. These values often result from individual beliefs and expectations of managers of these companies, and in that case CSR draws only a framework and becomes a tool for their more efficient implementation. This is a new, now raising, generation of entrepreneurs, devoid of accretions of socialist time, and trying to build more sustainable business for themselves and their local environment. The generation Y maybe even more successful in this sustainability race.

REFERENCES

- [PAIZ-Deloitte] Polska Agencja Informacji i Inwestycji Zagranicznych-Deloitte. 2004. How to do Business. Investors Guide Poland. Available from: <http://ccifp.pl/8222-how-to-do-business-investors-8217-guide-8211-poland/>.
- [POG] Pomorskie Obserwatorium Gospodarcze. 2013. Raport. Sektor MSP na Pomorzu w warunkach spowolnienia tempa wzrostu gospodarczego: 39.
- [UNDP] United Nations Development Program. 2007. Baseline study on CSR practices in the EU new member states and the candidate states. Available from: http://europeandcis.undp.org/uploads/public1/files/BASELINE_STUDY_ON.pdf
- [UNIDO] United Nations Industrial Development Organisation. 2014. Available from: <http://www.unido.org/en/what-we-do/trade/csr/csr-projects/regional-projects/csr-in-central-eastern-europe.html>.
- Bechert S., Gorynia-Pfeffer N.: Polsko-niemieckie przedsiębiorstwa oraz wymagania ich Stakeholder. Rekomendacje na temat społecznej odpowiedzialności biznesu. Impressum, Eschborn, 2008.
- Donaldson T., Preston L.E.: The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. "The Academy of Management Review", no 20 (1): 65-91, 1995.
- Forum Odpowiedzialnego Biznesu. Raport. Odpowiedzialny Biznes w Polsce. Dobre praktyki, Warszawa, 2010.
- Forum Odpowiedzialnego Biznesu. Raport. Odpowiedzialny Biznes w Polsce. Dobre praktyki, Warszawa, 2011.
- Forum Odpowiedzialnego Biznesu. Raport. Odpowiedzialny Biznes w Polsce. Dobre praktyki, Warszawa, 2012.
- Forum Odpowiedzialnego Biznesu. Raport. Odpowiedzialny Biznes w Polsce. Dobre praktyki, Warszawa, 2013.
- Forum Odpowiedzialnego Biznesu. Raport. Odpowiedzialny Biznes w Polsce. Dobre praktyki, Warszawa, 2014.
- Gasiński T., Piskalski G.: Zrównoważony Biznes, Podręcznik dla Małych i Średnich Przedsiębiorstw. Publikacja na zlecenie Ministerstwa Gospodarki. Available from: http://www.csr.szczecin.pl/images/stories/zrownowazony_biznes.pdf, 2013.
- Gasparski W.: Poland: Business Expectations Beyond Profit, in Corporate Social Responsibility Across Europe, ed. André Habisch et al., Springer, Berlin, 2005.

- Gasparski W.: *Biznes, Etyka, Odpowiedzialność*. Podręcznik Akademicki. Wydawnictwo Naukowe PWN, Warszawa, 2013.
- Jenkins H., Hines F.: *Shouldering the burden of Corporate Social Responsibility: what makes business get committed?* Paper presented at the 10th International Conference of the Greening of Industry Network, Gothenburg, Sweden, June 23-26, 2002.
- Lepoutre J., Heene A.: *Investigating the impact of firm size on small business social responsibility: A critical review*, *Journal of Business Ethics*: 257-273, Springer, 2006.
- Martinet A.C., Reynaud E.: *Entre Shareholders et Stakeholders: la stratégie; une illustration par le management environnemental d'Evian-Danone*. « *Revue Française de Gestion* », Novembre-Décembre, pp. 12-25, 2001.
- MillwardBrown. PwC, RAPORT: *Ocena stanu wdrażania standardów społecznej odpowiedzialności biznesu – Zestaw wskaźników społecznej odpowiedzialności w mikro, małych, średnich oraz dużych przedsiębiorstwach*. Available from: <http://badania.parp.gov.pl/files/74/75/77/13079.pdf>, 2011.
- Popowska M.: *CSR and Small Business from International and National Perspective*. “*Research Papers of Wrocław University of Economics, Social Responsibility of Organizations, Changes and Their Directions*” no 387, pp. 136-148, 2015.
- Republic of Poland, National Reform Program, Europe 2020, Updated 2012-13. Available from: http://ec.europa.eu/europe2020/pdf/nrp/nrp_poland_en.pdf
- RespEn. *Polish And Swedish SMEs towards CSR Challenges*. Available from: http://www.responsiblesme.eu/public/files/pl_respen.pdf, 2010.
- Shrivastava P., Hart S.: *Demain l'entreprise durable?* “*Revue Française de Gestion*”, no 108, pp. 110-122, 1996.
- Spence L.J., Schmidpeter R., Habisch A.: *Assessing Social Capital: Small and Medium-sized Enterprises in Germany and the UK*. “*Journal of Business Ethics*” no 47(1), pp. 1-5, 2003.
- Starnawska M., Popowska M.: *Rozwiązywanie problemów społecznych jako przestrzeń dla sektora małych firm*. “*Zeszyty Naukowe Uniwersytetu Szczecińskiego*”, nr 585, pp. 309-316, 2010.
- Stawicka E.: *Corporate Social Responsibility in the SME Sector. An Analysis of the Key Aspects and Pillars of Developing the CSR Strategy*. “*Research Papers of Wrocław University of Economics, Social Responsibility of Organizations, Changes and Their Directions*” no 387, pp. 170-178, 2015.
- Wołczek P.: *Development of the CSR Concept in Poland- Progress or Stagnation?* “*Research Papers of Wrocław University of Economics, Social Responsibility of Organizations, Changes and Their Directions*” no 387, pp. 200-213, 2015.
- World Bank. *Public expectation for Corporate Social responsibility in Poland*. Warsaw the World Bank Communication Division at the World Bank Warsaw Country Office, 2005.
- Zięba K.: *CSR Knowledge and Perception in Polish SMEs: Evidence from the Region of Pomerania*. “*Research Papers of Wrocław University of Economics, Social Responsibility of Organizations, Changes and Their Directions*”, no 387, pp. 240-250, 2015.

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Entrepreneurship Ecosystem Evolution Strategy of Saudi Arabia¹

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Abstract

In majority of times when a potential start-up strikes a brilliant business idea, he/she has little knowledge of 'how to move from there'. They lack information on the stakeholders of entrepreneurship ecosystem who can help and assist these startups in numerous ways and help them materialize their concepts. Availability of this information will help the ecosystem stakeholders to avoid replication and duplication of efforts. Similarly, knowledge of status quo helps identify opportunities and supports plan development to endeavor through right strategy for the start-up. Critical review of existing initiatives of Saudi Arabia for entrepreneurship growth and identification of the existing stakeholders of the entrepreneurship in the country is conducted. Similarly their work and potential for practicable interventions to further entrepreneurship reflecting country's economic development process is examined. This paper benefits from a cross sectional basic study of Saudi Arabia that utilized primary and secondary sources to discover the initiatives, understand entrepreneurship growth and then map the national entrepreneurship ecosystem. A number of interviews from CEO's, General Managers and other senior executives were carried out to know the role of the different organizations in entrepreneurship growth.

Keywords: entrepreneurship; ecosystem; ecosystem evolution; strategy; startups; Saudi Arabia

JEL codes: L26, M13, Q57

¹ This study is based on Rahatullah (2013). There have been numerous changes since that study and this paper incorporates a variety of new literature, information, stakeholders and their activities besides others, providing evidence of the evolution of entrepreneurship ecosystem in Saudi Arabia. The initial period of study had been September 2012 to June 2013. Then the study for the current work spanned from July 2014 to September 2014. However, there could be a case that a particular stakeholders on map is missing it is because of the research period or the non-availability of secondary data.

INTRODUCTION

This section familiarizes with the concept of eco system strategy for entrepreneurship growth and its practice in different parts of the world. It also refers to the purpose and the research questions based on the gaps and helps understand the contribution of the paper to both academia and the practice.

The aim of this paper is to identify the existence of an entrepreneurship ecosystem as well as to show that the use of this ecosystem helps energize and organize the sector and explore a deliberate or otherwise strategy of Saudi Arabia to strengthen the eco and enable entrepreneurship. The paper further endorses a need for an entrepreneurship ecosystem map and shows the evolution of Saudi Arabian map and its evolution over years. It underscores an entrepreneurship ecosystem development strategy to address some of the less stressed upon issues and policies essential to toughen entrepreneurship and generate economic development. It is pertinent here to understand the status quo and identify the evolution of the ecosystem by mapping the role of different stakeholders of entrepreneurship in the kingdom. This would help in understanding the strategy and then becoming an example for the mapping strategy itself. The maps provide a one page snap shot of the ecosystem at the respective level. It will provide the understanding of evolution through a map of both strategic and institutional levels since 2013. It will then point out the changes that have happened over the years. The achievements of the strategic level's strategy become clearer as we move on to conclusion. It is a cross sectional basic study and through the help of secondary sources maps the ecosystem of Saudi Arabia and then identifies the evolution of the ecosystem over three years.

LITERATURE REVIEW

Zimmerman (2007) suggests that "Entrepreneurship is the recognition or creation of an opportunity, coupled with action by an individual or group of individuals, to form a social, intrapreneurial, lifestyle, middle-market, or highly-liquid venture".

Looking at the importance of SME and entrepreneurs it is evident through the management academics and practitioners that successful new ventures contribute to employment, political and social stability, innovation, and competition (Dunkelberg, 1995; Hoffman *et al.*, 1998; Zedtwitz, 2003; Thurik & Wennekers, 2004). Similarly the success of SME's is also largely attributed to entrepreneurs' abilities and role of different organizations and institutions to enable the entrepreneurship (Covin & Slevin, 1989; Szabo, 2006; Dyer & Ha-Brookshire, 2008 Isenberg, 2011).

Malhi (2004) contends that the Government of Canada underlines the important contributions made by entrepreneurs and distinguishes them as a dynamic group vital to the progress and growth of the country, hence puts the emphasis on entrepreneurs. He also suggests that the entrepreneurs are the backbone of the Canadian economy and generate employment opportunities for thousands of job seekers. He further identifies that there is a need to further foster the entrepreneurial activity by the government initiatives as it is a positive force contributing to the economy. The Canadian success is tangled with that of entrepreneurs.

On the other side in the UK, its secretary for the business, enterprise and regulatory reform (2007) argues that number of businesses in UK has grown by more than half a million as a result of the entrepreneurial activity guaranteeing thousands of jobs. This helped the UK remain Europe's leading destination for inward investment. Its competition regime has been ranked third in world while welcoming the creation of a department to equip Britain to seize new opportunities in the changing global economy. Across the Atlantic Congressional documents report on entrepreneurship for 2012 provided by the Kauffman Foundation suggest that fast-growing nascent firms comprise less than 1% of all companies but generate roughly 10% of new jobs in any given year. Over the last three decades, young firms less than five years old have created 40 million new jobs.

America's booming entrepreneurial sector is responsible for much of today's economic prosperity and the largest economy of the world (Abid, 2007) provides the entrepreneurs' opportunities to take advantage of new wealth-creating prospects that regularly arise from constant change. This phenomenon of "creating opportunity from change" has been part of the American culture since the 19th century Industrial Revolution. Zimmerman (2007) argues that today, an entrepreneurial renaissance is transforming American business and society.

This discussion has evidenced that the governments of developed countries emphasize the entrepreneurship and SME development and distinguish them as growth engines. Governments evidently stride and promulgate business friendly laws, rules and regulations. It identifies the underlying importance of entrepreneurship in creating prosperity and developing living conditions of the society.

UNDERSTANDING AN ECOSYSTEM

The oxford dictionary at describes ecosystem as a complex network or interconnected system. In general, we can distinguish:

- Biological ecosystem – In the new shorter oxford English dictionary (1993) a biological ecosystem is explained as "a system of organisms occupying a habitat, together with those aspects of the physical environment with which they interact". Whereas, the Merriam-Webster Third New International Dictionary of the English Language (1986) defines biological ecosystem as "a community of living organisms with air, water and other resources". This definition underlines and emphasizing the community aspect of an ecosystem. However, furthering this definition the World Resources Institute (2000) adds that ecosystems do change. Kauffman's stipulated similarly, saying that cells, ecosystems and economic systems are also "real equilibrium systems" and thus behave in ways that are their "own shortest descriptions" (Kauffman, 1995, p. 22).
- Business ecosystem – Peltoniemi and Vuori (2004) define business eco system as "a dynamic structure consisting of an interconnected population of organizations". They suggest that these organizations could be of any size, business sector or public or private in nature and influencing the system. They further argue that business ecosystem develops through self-organization, emergence and co-evolution and provides it much needed adaptability, hence in such a system there is both competition and cooperation prevailing.
- Entrepreneurship ecosystem – Wiklund *et al.* (2008, p. 5) underscores that producing entrepreneurship firm growth is a complex phenomenon and cannot be completed as standalone but needs support of numerous players in the economy. They require a se-

rious and cohesive action for its growth and development. Complexity research tries to find applications in social and economic systems (Peltoniemi & Vuori, 2004).

The literature on entrepreneurship ecosystems and entrepreneurship ecosystem strategy is scarce. There has been very little information available on the ecosystem. Rahatullah (2013) provides a comprehensive look at the ecosystem strategy and maps the Saudi Arabian entrepreneurship ecosystem. This provides an initial and pioneering look and evidence that ecosystems in entrepreneurship do exist. However, there are seminal work carried out in the entrepreneurship and its growth and development like Zimmerman (2007), Szabo (2005, 2006) and Isenberg (2011).

PIONEERING MAP OF ENTREPRENEURSHIP ECOSYSTEM OF SAUDI ARABIA

Rahatullah (2013) provides a detailed look at the mapping of an entrepreneurship ecosystem. The study develops an understanding of the entrepreneurship and its role in economic development. Then deliberating on the Szabo (2006) and Isenberg (2011) studies on the levels and domains of entrepreneurship ecosystem the study develops a measurement in line with levels and domains narrated by the Szabo and Isenberg in a cross sectional basic study.

Szabo (2005, 1995) and Isenberg (2011) assert that public / government leaders including the elected representatives, professional and private sector responsible to work cohesively and on several inter-related principles to form an ecosystem for entrepreneurship growth.

In Szabo (2005, 2006) and United Nations Economic Commission for Europe (UNECE) suggested that development of the SME's in the countries in transition materializes with the activities and assistance from an integrated and three distinct levels. These levels they argue are 1) strategic level (*policy making*); 2) institutional level (*support institutions*) and 3) enterprise level (*entrepreneurs and business entities*). Szabo studies on "Business Incubation as Element of Business Service Institution and SME Development Infrastructure for Creation of New Enterprises in CITs" provided a more comprehensive account of these three levels. These are adapted in table 1.

Isenberg (2011) on the other hand identifies 3 domains of ecosystem adding to Szabo perspective. The domains show that the ecosystem requires stakeholders who can develop certain skills and services for enterprise growth arguing for Culture, Support Services and Strategic Domains. The support activities of the Isenberg include the expertise and networking opportunities at the market level made available and possible through the governmental policies. These are shown in table 2 below.

Szabo (2005, 2006) and UNECE 1997 report accounts the public or government leaders including the elected representatives, professional and private sector responsible to work cohesively and on several inter-related principles to form an ecosystem for entrepreneurship growth. He also suggests an ecosystem strategy to addresses some of the less stressed upon issues and policies essential to toughen entrepreneurship and generate economic development. Isenberg identifies 3 domains of ecosystem forming a little different perspective than Szabo. He argues for Culture, Support Services and Strategic Domains of the ecosystem.

Rahatullah (2013) reported furthering Szabo and Isenberg's studies and suggested the following flow in ecosystem.

Table 1. Levels of entrepreneurship ecosystems

Level, Responsibility and Requirements	Why
<p>Strategic level</p> <ul style="list-style-type: none"> - Governments are responsible for execution of this level where a clear Government policy is required - Creating a conducive political environment which is favorable to accept private business undertaking 	<p>To Develop Sustainable Environment and to promote and then creating the entrepreneurial activity through SME development and growth. It requires the following:</p> <ol style="list-style-type: none"> 1. Legal entrepreneurship instrument 2. SME Support programs by the governments <p>Government sponsored financial resource commitments</p>
<p>Institutional level</p> <p>The following are responsible to enable enterprise</p> <ol style="list-style-type: none"> 1. Government institutions. 2. Chambers of commerce. 3. Professional and trade associations. 4. Training institutions. 5. Enterprise development agencies at both the national and regional levels. 6. Banks and financial intermediaries, and 7. Non-governmental organizations including professional bodies, consultants and universities etc. <p>Information on how to start up a business is required.</p>	<p>To promote SMEs by providing effective business support services including support and information on:</p> <ol style="list-style-type: none"> 1. how to prepare business plans 2. Organization and dissemination of information on business formation and licensing etc. 3. Marketing intelligence 4. Access to financial resources and credit guarantees 5. Human resources 6. Real estate 7. innovation and facilitating cooperation
<p>Enterprise level</p> <p>Entrepreneurs and enterprise is responsible</p> <p>Strengthening entrepreneurial and managerial skills is required</p>	<p>It will require practical interventions such as</p> <ol style="list-style-type: none"> 1. Consulting Services 2. Business Information Hubs and Centers 3. Incubators, techno-parks and industrial estates. 4. Access to technology and technology transfer. 5. Quality awareness 6. Management systems 7. Awareness for consumer protection. 8. Intellectual property right. <p>SME internationalizing</p>

Source: adapted from <http://www.unecce.org/indust/sme/sme-role.htm> (13.01.2012).

Based on these findings from literature a cross sectional basic study was carried out in 2012-2013 (Rahatullah, 2013) and here it continues to understand the evolution and reporting in real time.

In Rahatullah (2013) each of the levels and domains is identified with different types of organizations and at each level required for enterprise development. Hence all the services, actors and stakeholders of entrepreneurship fit at these different levels. The study maps the services of the strategic level organizations which necessarily are the government institutions and explains their work. Similarly, it then identifies the services provided by different companies to entrepreneurs, including incubators, accelerators, research, skill

development, copyrighting and patenting and many more and identifies that who provides these services. Once that is provided the study mapped the organizations of both the strategic and institutional levels to their organizations and services respectively.

Table 2. Isenberg’s domains of entrepreneurship ecosystem

Strategic		Support			Culture
Policy	Human Capital	Markets	Finance	Support Services	
Government Institutions: - Financial Support - Laws and rules, e.g. tax benefits - Developing research institutions - Business friendly laws - Contract enforcement, - Labor rights	Labor: - Skilled and Unskilled - Serial Entrepreneurs - Colleges and Universities - Entrepreneurship Training	Expertise: Expert knowledge and information for dissemination to enterprise	Micro loans: Essential loans for survival of micro scale businesses that generate jobs	Infrastructure: - Telecoms - Transportation - Energy - Industrial zones - Incubators - Clusters	Success Stories: - Visible Success - Wealth generation - for founders - International - reputation
Leadership: - Clear support - Society support by recognizing the - SME/Micro business as viable and respectable work		Networks: - Personal networks of entrepreneurs - Diaspora networks around the markets - Multinational corporations	Investment (by): - Angel investors - Crowd Investors - Institutional Investors - Venture Capital - Private Equity - Pubic Capital - Markets	Support Professions: - Legal - Accounting - Investment - Advisors Non-Government Institutions: - Business planning contests - Conferences	Societal Norms: - Tolerance of Risks, Failures and mistakes - Innovation, Creativity and Experimentation - Social Status of Entrepreneur - Wealth Creation - Ambition, Drive, Hunger

Source: adapted from Rahatullah (2013).

Then taking through the ecosystems it maps Saudi Arabian entrepreneurship Ecosystem based on Szabo (2006) and Isenberg (2011) levels and domains of entrepreneurship ecosystem respectively.



Figure 1. Ecosystem proposal
 Source: own elaboration.

THE EVOLUTION OF ENTREPRENEURSHIP ECOSYSTEM OF SAUDI ARABIA

This section will examine the entrepreneurship and SME growth initiatives and activities in the Kingdom of Saudi Arabia on the basis of Szabo (2006), United Nations Economic Commission for Europe (UNECE), Isenberg (2011) and Rahatullah (2013) mapping of ecosystem.

Background of Saudi Arabia

Saudi Arabia has been the home of business leaders since pre-Islam era. Word Jeddah (economic hub of the kingdom) means ‘ancestral’. It remained center of international trade

and a notable business route between Europe, Mediterranean and Africa. The Prophet Muhammad and many of his early supporters were international traders and merchants. Khadija, his wife, was a highly successful businesswoman even before she met the Prophet.

The SMEs' play increasingly vital role in Saudi Arabia's economic growth by helping to diversify its economy, generate employment, contribute to Saudization (a term used where majority of workforce would be Saudi). Currently there are more than 8.8 million expatriates working in the country; whereas total population is around 29 million) trigger regional development, enhance technical innovation and expanding the export market. According to the CIA world-fact book, Saudi Arabia has a population of 26,534,504 (July 2012 est.) including 8 million expatriates. It has a GDP per capita of \$24,000 (2011 est.) and country comparison to the world is 55. With an unemployment rate at almost 11% the sectorial composition of GDP is 2.1% coming from agriculture whereas, 67.6 and 20.4 is generated by industry and services sectors respectively. The country ranks 17 in global competitiveness index (SUSRIS, 2011) and provides crucial data regarding the SMEs in Saudi Arabia. It shows that though Saudi Arabia is the largest economy in the GCC and over the last eight years, the country's budget has risen from \$69 billion to \$170 billion. Despite this growth, SMEs contribute mere 25% of total employment and only 33% to the country's GDP, though the SMEs makeup 92% of the businesses in the country (National U.S.-Arab Chamber of Commerce, 2016). This is in stark contrast to most developed economies like in Spain SMEs contribute to 64.3% of GDP, or Austria with SMEs contribution of 44%. Realizing the importance of the SMEs sector the government has taken numerous steps to boost the entrepreneurial activity to trigger economic growth.

Saudi Arabia is the largest economy in the GCC and over the last eight years, the country's budget has risen from \$69 billion to \$170 billion. Despite this growth, SMEs contribute to only 25% of total employment and only 33% to the country's GDP, though the SMEs makeup 92% of the businesses in the country. It is in stark contrast to Spain SMEs contribute to 64.3% of GDP or even Austria where S MEs contribute 44%. Results of following table 3 show that Saudi Arabia is well placed on selected indicators for economic growth when ranked on different initiatives.

In the figure 2 some selected indicators relating to entrepreneurship assistance, economic growth and Saudi Arabia's position viz-a-viz other countries is shown.

The index placements for the KSA is in stark contrast to most developed economies. In Spain for example SMEs contribute to more than 64% of its GDP. In Austria SMEs contribute 44%. Saudi Arabia and its ranking in different initiatives is also revealing. The results by no means are discouraging and Saudi Arabia is well placed against many other countries. The above discussion shows that there is some basic information available regarding the Saudi Arabian initiatives on entrepreneurship growth based on some indicators and initial studies. However, there is a lack of detailed information on the entrepreneurship ecosystem that is contemporary strategy for the growth of the entrepreneurship in the world. Therefore, following questions are raised.

1. What is the status quo of the entrepreneurship eco system and who are the stakeholders in this eco?
2. In order to further the ecosystem what initiatives the Government of Saudi Arabia has taken? Identifying the strategy.
3. How is the eco-system evolving?

Table 3. Some distinct features of Saudi Arabian entrepreneurship and business sector

Ease of Doing Business 2011*	Global Competitive Index 2010/11 (GCI)	Economic Freedom Score 2010	Information and Communication Technology Index (ICT) 2009	Innovation System Index 2009	Human Development Index (HDI) Value 2010	Education and Human Resources Index 2009	Knowledge Economy Index (KEI) 2009
12	21	64.1	6.43	3.97	0.752	4.89	5.31
1 Ranked among 183 Economies http://www.doingbusiness.org/rankings accessed on March 11, 2012							
2 GCI Index - ranked among 139 Economies							
3 Economic Freedom Score - 0 to 100, where 100 represents the maximum freedom							
4 The ICT value falls on a scale of 0-10 and is calculated from three key indicators: number of telephone lines per thousand of the population, number of computers per thousand of the population, and number of internet users per thousand of the population. The top 10 per cent of states score in the range 9-10, the next highest 10 per cent of states score in the range 8-9 and so on.							
5 Innovation System Index - The index value falls on a scale of 0-10 and is calculated from three key indicators: Total royalty payments and receipts in US\$ per person, number of patent applications granted by the US Patent and Trademark Office per million people, and the number of scientific and technical journal articles published per million people.							
6 HDI - Calculated based on data from UNDESA (2009d), Barro and Lee (2010), UNESCO Institute for Statistics (2010a), World Bank (2010g) and IMF (2010a).							
7 Education and Human Resources Score - The index value falls on a scale of 0-10 and is calculated from three key indicators: adult literacy rate, secondary enrolment, and tertiary enrolment							
8 The Knowledge Economy ranking index ranks the countries endeavoring to build the knowledge economies on a scale of 0-10							

Source: : Selected indicators of economic attraction & stability for entrepreneurship growth; adapted from http://en.wikipedia.org/wiki/Entrepreneurship_Policies_in_Saudi_Arabia and World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/> (23.01.2016).

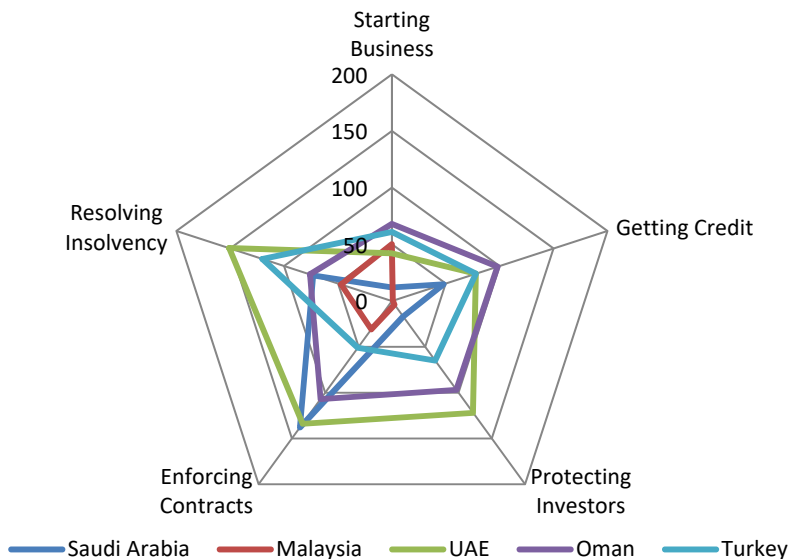


Figure 2. Selected indicators relating to entrepreneurship assistance and economic growth in Saudi Arabia

Source: adapted from Wikipedia (2016), The World Factbook (2016), National U.S.-Arab Chamber of Commerce (2016).

GAPS, Questions and Possible Contributions

Once the above questions are answered and the gap is filled in, there would be a set of recommendations developed to address the gaps that exist in the entrepreneurship ecosystem of Saudi Arabia. There would be a set of recommendations made.

The map of the latest ecosystem showing the status quo and identifying the evolution by showing the changes that have occurred over years and recommendations would help understand and identify the strategies and policies required in order to have an evolved and fuller ecosystem for the cohesive growth of entrepreneurship in any country. However, one important factor has to be kept in mind that some of the ecosystem contributors could be culture or country specific, whereas, others would be applicable universally.

This should assist the strategic, institutional and enterprise level stakeholders of Saudi Arabia immensely in knowing the challenges and developing strategies to defy issues and difficulties.

The following methodology is adopted in order to answer these questions.

METHODOLOGY AND DEVELOPING THE MAPPING STRUCTURE AND THE MEASUREMENT

This section identifies in detail the research methodology used, and develops the entrepreneurship ecosystem map structure based on the ecosystem components as envisaged by the literature. Keeping the above information in view it is evident that Saudi Arabia has huge potential for the growth of SME sector and entrepreneurship can play massive role. In order to explore the Saudi Arabian entrepreneurship ecosystem a cross sectional basic study for a cluster investigation through primary and secondary resources is adopted. Zimmerman (2007) suggests that "Entrepreneurship is the recognition or creation of an opportunity, coupled with action by an individual or group of individuals, to form a social, intrapreneurial, lifestyle, middle-market, or highly-liquid venture".

All the organizations and services provided by the organizations that fall under the levels and domains envisaged by Szabo and Isenberg are classified and categorized under specific services, hence these become constituents under each level. In order to identify and understand the numerous services that the strategic and institutional level stakeholders provide to entrepreneurs at different levels a rich body of literature exists. The services identification forms the basic measurement. The examination of this seminal work by numerous scholars such as Praag and Versloot (2007), Koga (2005), Acs and Audretsch (2005), Acs and Varga (2005) were conducted. They posit the importance of the research and development facilities to foster innovation in entrepreneurial firms. Hence it formed an element of measurement in the study. Numerous studies including Mohamed and Alexandre (2010), Moensted (2010), Maritz (2010) or Klyver and Grant (2010) narrate the need for the networking as important tool for SME and entrepreneurship growth. These works also highlight the innovativeness the networking and networking opportunities bring about. Rahatullah (2014) also posited that the networking of the potential partners is important for success. Therefore, the networking opportunities available to stakeholders were be examined.

Various studies of both female and male business startups put the mentoring and coaching programs by the governmental and private stakeholders of entrepreneurship

growth under perspective. These studies include but are not limited to Chautin (2011) and King (2010). They identify the importance of mentoring programs by professionals and existing successful entrepreneurs and suggest that such programs play vital role in the success of the startups. Otto (2005) identifies numerous planning activities as essential in building an effective strategic plan. These include components such as Business drivers-why is this being undertaken?, objectives and scope of business, underlying assumptions, quality assurance plan, issue resolution plan, change management plan, risk management plan, project milestones and dates, project cost estimates, risk/benefit analysis, resource requirements. Whereas, Nickols (2006) puts forward a goals grid to effective planning and providing direction to the business. These are consulting services providing expert services (Isenberg 2011) by professional firms. Szabo (2006) also laid emphasis on this institutional support. This study will identify role of such firms if any. Mazanai and Fatoki (2011) argue that the business development services including the business startup are essential for entrepreneurship growth and survival of such forms for longer term. Similarly, Drnovsek *et al.* (2010) suggest that entrepreneurial self-efficacy is related to business startup assistance. Szabo (2006) and Isenberg (2011) also identified business startup assistance and role of such organizations providing the service as critical and important. Green & Ouellette (2007) showed that intellectual capital is positively linked to start-up company success, market value, innovativeness, marketplace agility and adaptability. They concluded that value creation potential is enhanced by incubators and they play vital role to assist start-ups by diffusing knowledge, ideas, technologies, etc.

Groups like Small Business and entrepreneurship Council exist (Covel & Kelly, 2009). Ahl (2011) suggests importance and success of lobbying. The U.S. boasts a tradition of supporting small businesses where the Small Business Administration (SBA) was created in 1953. The National Association of Women Business Owners (NAWBO) was formed in 1975 by a number of women entrepreneurs. As a result of the association's successful lobbying, in 1979 President Carter created the Office of Women's Business Ownership in the SBA (Weeks, 2002; Ahl, 2006). The National Women's Business Council (NWBC) was established in 1998. Its 15 members are appointed by the Small Business Association (SBA), and its chairman is appointed by the U.S. president. Special assistance for women in business was initiated in 1994. There are 160 local and regional resource centers for women (Ahl, 2011). Importance of lobbying and creating awareness for welfare of members is reinforced. A study of business services incubators led to websites of numerous incubators operating across the world. In order to identify services of these incubators and to explore whether the stakeholders in Saudi Arabia offer the similar services or not, a number of incubator services were randomly identified from across the world and their services examined. These incubator services can be categorized into following four areas as shown in figure 3 below.

A two part map structure was created, i.e. strategic and Institutional (Rahatullah, 2013). Through secondary research organizations were identified for each of these levels. Then these were mapped on respective level. A particular color is assigned to each service to strategic level organizations. Whereas, the institutional level services discussed above were placed column wise and organizations providing particular services were color coded under them row wise. For example, in strategic level Human Resource Development Fund (HRDF) provides five services whereas, some services of Centennial Fund and Ministry of Industries overlap. On the other hand

a number of institutional level organizations provide similar services, e.g. start-up assistance is provided by more than 6 different companies.

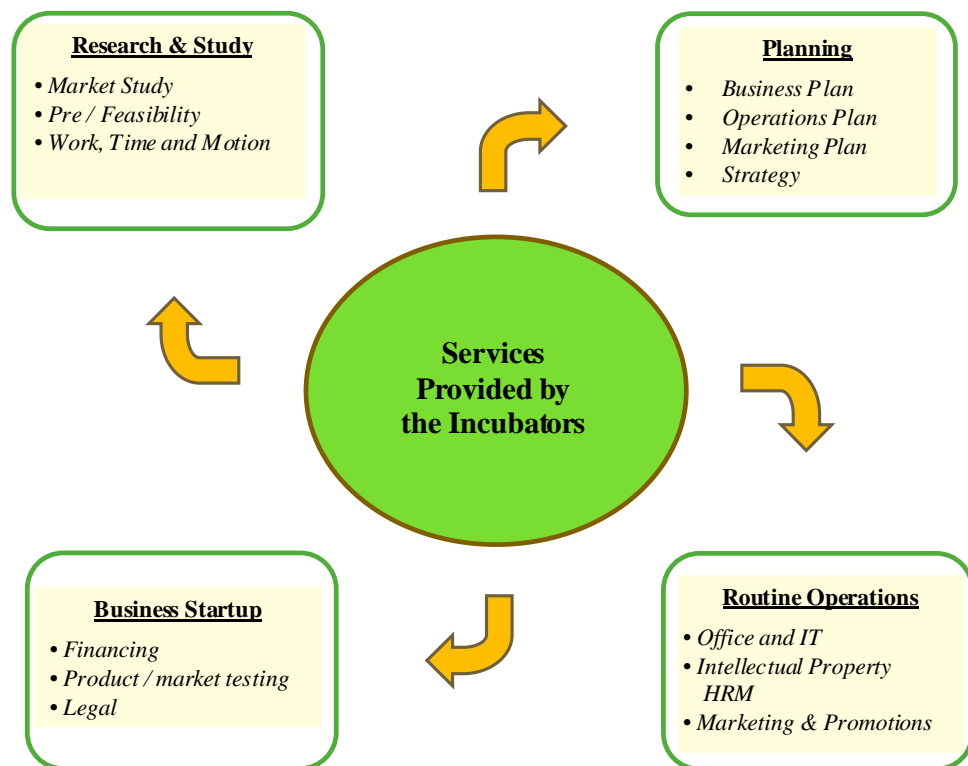


Figure 3. Business soft skills incubator services

Source: own elaboration based on the literature discussed above.

This map helps to recognize the efforts of strategic and institutional stakeholders to develop a sustainable environment of entrepreneurship growth, business support services and progress of SME's to trigger entrepreneurship augmentation. In the first instance the websites of different organizations working for the entrepreneurship growth were identified and thoroughly investigated, wherever information was not complete an effort was made to contact relevant manager / head of the organization to secure more inputs.

Keeping all these studies in view, the services at the strategic and institutional level consist of following services as revealed in table 4.

In the first study 48 organizations were identified and formal / informal interviews with the managers, general managers, or other senior executives of 21 stakeholder institutions of Entrepreneurship and SME development in Saudi Arabia were carried out. More than 100 magazines, periodicals and academic and managerial literature were sifted to complete the mapping. Then 5 interviews were conducted to verify the results and two workshops of the stakeholders were attended where the secondary data was presented, was discussed and substantiated. In 2014 num-

ber of organizations identified and in 2015 the services at the institutional level increased. The number of service providers swelled as well.

Table 4. Isenberg's domains of entrepreneurship ecosystem

Strategic Level Services		Institutional Level Services	
Celebrating Entrepreneurs	SIC classifications	SME networking opportunities	Collaboration services
Regulating the competition	Helping international partnerships	Coaching and Mentoring	Training and Education
National & Int'l Collaborations	Laws related to institutional level support organizations	Business Consulting	Research
Financial Assistance	Laws relating to construction, Properties, Investor security, contracts, Insolvency etc.	Market Research for Data accumulation (R&D)	Financing and Investment Banks
Developing Law, Policies and Regulations for Business	Research and Development	Start-up Development Skills	Web based -Enterprise & SME Development Platforms
Industrial Surveys	Developing technical incubators	Lobbying, Soliciting, Awareness	Venture Capitalists and Funds
		Soft skills	Incubators and Accelerators
		Market Research for start-ups	
		Technical Consulting	

Source: Szabo (2005, 2006), Isenberg (2011), Rahatullah (2013).

This mixed methodology including qualitative and quantitative means was used intentionally to achieve better results and triangulation. The information from news sources and websites was also collated to realize the role of the government at strategic level in the economy. Analysis of the information available was also conducted. Secondary sources used were public sources such as websites of the organizations. On the other hand the commercial sources included the use of ABI/INFORM Global websites. The names of officers interviewed and their affiliations will not be divulged as the permission was not granted.

THE EVOLUTION: 2013 TO 2015 STRATEGIC LEVEL OF THE SAUDI ARABIA ENTREPRENEURSHIP ECOSYSTEM

The evolution of strategic and institutional levels would be discussed separately year wise.

In 2013 study it was evident that there were 9 strategic level organizations working (Figure 4). However, it was also seen that some of the work of the institutional level as asserted by the literature was being carried out by the strategic level. For example, the HRDF was providing salaries to the individuals who were planning to start a business for a specific period of time. This was to help startups consolidate and establish the business without feeling the financial burdens. However, the modus operandi could be altered and funds paid to entrepreneurs through banking channels. Similarly, the Kafala (SIDF)

and SCSB had been holding events to establish collaborations and hold events and seminars. This also signifies that in the absence of the institutional level support the responsibility was shouldered by the strategic level thus showing a more proactive role.

SAGIA	HRDF	SIDF	SCSB	WAED	MOL	MOI	CF	KACST
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	WAED Aramco	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdullah City of Science and Technology
SFG100 – To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing		Ecosystem development	Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR – The technical and engineering incubator
NCC – National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars		Prefunding support to entrepreneurs	Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency		Business Stratup Training	R & D
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations		Post funding support to entrepreneurs	National and International Collaborations			Research Grants
Business Stratup Training		Industrial Survey			Lobbying, Soliciting and Creating Awareness			
Lobbying, Soliciting and Creating Awareness								

Figure 4. The 2013 Strategic level of entrepreneurship ecosystem in Saudi Arabia
 Source: own elaboration and map development.

The 2014 strategic level reveals that the WAED – Aramco was shifted from strategic to institutional level owing to their mandate and having further understanding of the

ecosystem. The number of services was also increased by many organizations like MOI, MOL, KACST, HRDF and SAGIA. KACST started to develop policies and training for the ecosystem, whereas, CF embarked to develop international collaborations and implementing the governmental policies and systems. SDF and SCSB commenced the policy drafting and recommendation and HRDF initiated the work on the policy development regarding the human capital development in the kingdom (Figure 5).

Strategic Level of Entrepreneurship Ecosystem of Saudi Arabia							
SAGIA	HRDF	SIDF	SCSB	MOL	MOI	CF	KACST
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdul-lah City of Science and Technology
SFG100 – To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing		Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR The technical and engineering incubator
NCC – National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars		Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency		Business Stratup Training	R&D and Grants for research
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations		National and International Collaborations	New Laws, rules and regulations to develop the entrepreneurial businesses	SME Net-working	Policies Development
Business Stratup Training	Pay salary to startups till they succeed	Industrial Survey	Research and Dissemination of Information to all stakeholders	Lobbying, Soliciting and Creating Awareness	SME Support Programs	International Collaborations	Training
Lobbying, Soliciting and Creating Awareness	Develop Policies regarding the Human Resource development in the Kingdom	Policy Recommendations		Development of enablers	Policy implementation		R&D and Grants for research
Develop new and enable the institutions to provide more and more services to diverse range of entrepreneurs and startups							

Figure 5. The 2014 Strategic Level of entrepreneurship ecosystem in Saudi Arabia
 Source: own elaboration and map development.

SAGIA	HRDF	SIDF	SCSB	MOL	MOI	CF	KACST	CSC	MODON	GASME
Saudi Arabian General Investment Authority	Human Resource Development Fund	Small Industries Development Fund	Saudi Credit and Savings Bank	Ministry of Labour	Ministry of Industry	Centennial Fund	King Abdullah City of Science and Technology	Council of Saudi Chambers	Saudi Industrial Property Authority	Public Authority for Small and Medium Enterprises
SFG100 - To recognize the SME Entrepreneurs	Financial assistance to entrepreneurs till they succeed	Financing	Law for Saudization, Training and Skills development	Business Support Regulations	Financing	BADIR - The technical and engineering incubator	Bar coding services	Development of industrial cities with integrated infrastructure & services	New Laws, rules & regulations to develop business	
NCC - National Competitiveness Center	Training and development support for entrepreneurs	Workshops and Seminars	Laws relating to Business startup, Construction, Utilities, Property, Credit, Investor protection and Insolvency	Business Stratup Training	R&D and Grants for research	Export Development	Multi stakeholder coordination			
National and International Collaborations	Strengthening institutions to provide entrepreneurial support	National and International Collaborations	National and International Collaborations	New Laws, rules & regulations to develop business	SME Networking	Policies Development	SME Development	Creating the ideal environment for growth and development of technology zones		
Business Stratup Training	Pay salary to startups till they succeed	Industrial Survey	Research & Dissemination of Information to stakeholders	Lobbying, Soliciting and Creating Awareness	SME Support Programs	International Collaborations	Training	Family Facilities	Oversee the SME growth and Development	
Lobbying, Soliciting and Creating Awareness	Develop Policies regarding the Human Resource development in the Kingdom	Policy Recommendations	Development of enablers	Policy implementation	R&D and Grants for research	Conferences & Research				
Develop new and enable the institutions to provide more and more services to diverse range of entrepreneurs and startups										

Figure 6. 2015 Strategic level of entrepreneurship ecosystem in Saudi Arabia

Source: own elaboration and map development.

A high end engineering incubator 'BADIR' has been developed by Kacst. It serves the engineering and technology startups from across the kingdom. BADIR also provides the technical assistance to the startups and office space and other facilities cater to the growing needs of the startups. A massive shift in the governmental policy has been witnessed in the year 2015 where three more organizations have either been established or existing institutions have been granted further responsibilities (Figure 6). Long awaited SME authority has been established which will oversee the SME growth and development in the Kingdom. It will develop coordination among numerous stakeholder and identify the challenges and develop solutions through new laws, policies and regulations. It seems that future might witness this authority taking over these tasks from other organizations.

THE EVOLUTION: 2013 TO 2015 INSTITUTIONAL LEVEL OF THE SAUDI ARABIA ENTREPRENEURSHIP ECOSYSTEM

In 2013 few of the services required to be carried out at institutional level were being provided by even fewer organizations (Figure 7). The eco at this stage seemed to be in its infancy where the private sector seemed to start to embrace the challenge of the consolidating and sustenance of the eco. The soft skills development initiatives were limited and so was the effort in the teaching and training. However, the number of organizations was notable comparatively in the areas of research and creating awareness. Effat university became the first university in the kingdom to offer an entrepreneurship degree at the bachelors' level and conduct research in the domains of women enterprise, startups, family businesses, challenges etc.

The year 2014 witnessed the eco grow considerably, new organizations started to mushroom up and brand new services introduced (Figure 8). The universities understanding the requirement and obligation launched their own programs. Many organizations expanded the portfolio of their services and a number of new organizations started brand new services. More investors started to come but the environment remained hazy to their classification. It seemed that many organizations started many services without specializing in some and or developing niches. This is quite understandable as the transition and transformation of the sector had been happening. Strategic level and Institutional level organizations started to build coordination.

However, with in next one year, 2014 to 2015 a huge transformation of the eco took place. New services added, eco became more filled up and almost started to provide all services. A number of more organizations filled in the gaps in the support services and expansion took place both qualitatively and quantitatively. It became easier to categorize the funding services into banking, venture capitalists and funds. Web based services and groups also launched services and specialized organizations to hold events and competitions etc. emerged. Existing stakeholders like Bab Rizk Jameel entered into collaboration with Grameen bank and large public and private sector organizations like Saudi Telecom, Mobily, SEDCO and Dallah Al Baraka begin assistance through their CSR and other community development projects (Figure 9).

One very special strategic level organization has been noted and that the mandate of HRDF is extraordinary and the literature lacks many such examples of an elaborate, unique and comprehensive program for potential entrepreneurs in a developing economy as it is in Saudi Arabia.

Institutional Level of Entrepreneurship Ecosystem of Saudi Arabia											
SME Networking	Coaching and Mentoring	Business and Technical Consulting	Startup Training	Lobbying, Soliciting and creating Awareness	Soft Skills	Market Research	Collaborations	Incubator - Accelerator	Training and Education	Research	Financing / Investment
Chambers of Commerce & Industry	Injaz	RIM (Research in Motion with SAGIA only for IT related projects)	Chambers of Commerce & Industry	Chambers of Commerce & Industry	Injaz	AlZamil Group - Feasibility and Recruitment Women business database	Chambers of Commerce and Industry	ARAMCO-Shoaibi Group, Kaufman Foundation - R&D Hub at Khobar	NCB PC Labs, Educational Development and Job Opportunities	King Saud University	SIDF
	Khadija Bint Khuwailed										Price Water House Coopers
MILE Madinah Munawwara	Chambers of Commerce - Trainings, conferences, workshops, seminars and exhibitions etc				Qotuf	Chambers of Commerce & Industry	NCB CSR Department	BADIR	Chambers of Commerce & Industry	KFUPM	Al Jazira Bank
NCB CSR Department	Qotuf	Deloitte	NCB CSR department		NCB CSR Department						KAUST
KAUST	Riyadah	Alvarez & Marsal	Riyadah	CCIs Young Businessmen	Effat University	WAED - Aramco	KAUST	KFUPM	Effat University	WAED - Aramco	Prince Sultan Fund
WAED - Aramco	Bab Rizk Jameel	Arthur D Little	Bab Rizk Jameel	CCIs Young Business Women	SIDF	Umm AL Qura University	Qotuf	RIM - SAGIA	Umm Al Quraa University	Qotuf	
Wadi Jeddah	KAUST	Charles River Associates	Effat University	WAED - Aramco			KFUPM	KAUST	BADIR	KFUPM	
	WAED - Aramco	Ernest & Young	Qotuf		KAUST	Umm AL Qura University			Princess Noura University		Al Zamil Holding
	Umm AL Qura University	BADIR			Riyadah	KFUPM			WAED - Aramco		
	KFUPM	KAUST							KAUST		

Figure 7. 2014 institutional level of entrepreneurship ecosystem in Saudi Arabia

Source: own elaboration and map development.

SME Networking	Coaching and Mentoring	Business and Technical Consulting	Startup development Skills	Lobbying, Soliciting and creating Awareness	Soft Skills	Market Research	Collaborations	R&D Incubator)	Training and Education	Research	Financing / Investment by Banks	Web based - Enterprise & SME Development Platforms	Venture Capitalists and Venture Funds
Chambers of Commerce & Industry	Injaz	RIM (Research in Motion with SAGIA only for IT related projects)		Chambers of Commerce & Industry	Injaz	AIZamil Group - Feasibility and Recruitment	Chambers of Commerce and Industry	ARAMCO-Shoalbi Group, Kaufman Foundation - R&D Hub at Khobar	NCB PC Labs, Educational Development and Job Opportunities	King Saud University	SIDF	Angel Investors network	Amwal AlKhaleej
	Business Development Centers and different committees at CCLs	Price Water House Coopers	Injaz										Bab Rizk Jameel
Khadija Bint Khuwailed				Khadija Bint Khuwailed							NCB		Siraj Capital
											SCSB		KAUST
											Centennial Fund		Jadwa investment
MILE Madinah Munawwara	Chambers of Commerce - Trainings, conferences, workshops, seminars and exhibitions etc				Qotuf	Chambers of Commerce & Industry	NCB CSR Department	BADIR	Chambers of Commerce & Industry	KFUPM	Al Jazira Bank	iMENA	Aramco Energy Ventures
											Umm Al Quraa University		Princess Noura University
NCB CSR Department	Effat University	Deloitte	NCB CSR department	CCIs SME Dev. Centers	NCB CSR Department						Venture Capital Bank		Mobily Ventures
KAUST	Riyadah	Alvarez & Marsal	Riyadah	CCIs Young Businessmen	Effat University		KAUST		Bab Rizk Jameel				Prince Sultan Fund
WAED - Aramco	Bab Rizk Jameel	Arthur D Little	Bab Rizk Jameel	CCIs Young Business Women	SIDF		Umm AL Qura University	King Saud University	RIM - SAGIA	Umm Al Quraa University			STC Ventures
Wadi Jeddah	KAUST	Charles River Associates	Effat University	WAED - Aramco			KFUPM	KAUST	BADIR	KFUPM			CGI Capital
	WAED - Aramco	Ernest & Young	Qotuf	Effat University	KAUST	Umm AL Qura University	Wadi Jeddah	SIDF		Wadi Jeddah			Wadi Jeddah
	Umm AL Qura University	BADIR			Wadi Jeddah	KFUPM		Qotuf					Al Zamil Holding
	KFUPM	KAUST	Effat University		Riyadah								Grameen-Jameel
													Malaz Capital
													MBC Ventures

Figure 8. 2015 institutional level of entrepreneurship ecosystem in Saudi Arabia
Source: own elaboration and map development.

Saudi Arabia has registered 147 patents in 2011 and tops the Arab countries (Market Information Trading, 2012). However, there seems dearth of innovation houses. If a country can produce such number of patents without state of the art facilities spread across country it may perform better with a number of high tech labs available throughout the kingdom.

According to Isenberg (2011) the research institutions are important and fall under the Policy domain and Governmental initiatives. Similarly, Szabo (2006) also underlines the importance of research institutions at Enterprise level. Literature also argued for information centers development, access to and increase in technology use and awareness, developing consumer protection and intellectual property rights. Organizations like KACST, Waed and KAUST provide such facilities in the kingdom. This shows another huge potential activity for the kingdom.

As regards the SME networking both Isenberg (2011) and Szabo (2006) establish the need for networking. Isenberg identified three factors, i.e. entrepreneurs', scattered but organized and multinational networks. Whereas, Szabo taking a more qualitative look argue for networking at enterprise level. This study points out to chambers of commerce and SAGIA providing these opportunities at national level even if the number of such events may be less though. Khadija Bint Khuwailed center at JCCI create opportunities for Saudi women and help them with their routine operational problems and issue.

The importance of coaching and mentoring, business consulting and startup training has been a centre point of entrepreneurial development. The findings reveal that these services are provided by some of organizations in Saudi Arabia. These include Centennial Fund which provides business startup training through its partner organizations. Research in Motion (USA) and SAGIA will provide this training to potential IT entrepreneurs. KAUST offers the services to potential technology and engineering industry entrepreneurs. In the private sector chambers of commerce, BADIR, Al Zamil group and Bank Al Ahli's CSR department have programs for startup training. However, business consulting is provided by the chambers of commerce, private sector consulting firms and RIM. KAUST and Chambers of commerce have coaching and mentoring programs.

Lobbying, soliciting and creating awareness are considered important tools and mechanisms to solicit to the governmental bodies for grant of rights, privileges and ease of laws etc. to boost a particular sector. The Kingdom has taken initiatives in this regard. However, there are not enough number of associations and representative bodies who can effectively put up their stand point to the relevant authorities and help create networks and raise exposure of its members.

According to Isenberg (2011) the research institutions are important and fall under the Policy domain and Governmental initiatives. Similarly, Szabo (2006) also underlines the importance of research institutions at Enterprise level where the information centers, access to technology, consumer protection and intellectual property rights play vital role. However, the findings have revealed that KACST and KAUST provide these facilities. Whereas, the private and governmental universities are now commencing such nurturing activities.

As regards the SME networking both Isenberg (2011) and Szabo (2006) establish the need for networking. Isenberg lays importance on entrepreneurs', Diaspora and multinational networks. On the other hand Szabo lays importance of networking at enterprise level. The findings reveal that the chambers of commerce and SAGIA pro-

vide such opportunities at national level. The number of events may be limited though. Khadija Bint Khuwailed center at the JCCI provides opportunities for Saudi women. However, these initiatives may be enough in short term but will require more concerted effort to realize the goals of the government.

The research shows that SIDF, KAUST, Bab Rizk Jameel, Khadija Bin Khuwailed Centre, BADIR and Injaz provide some selected services of business incubation. However, none of the organizations provide complete and full services as envisaged by the academic, applied and practice literature and discussed in methodology above. These efforts along with other endeavors seem fragmented and there seems a clear need to help the potential entrepreneur.

CONCLUSIONS

The paper has met the aim of its study by providing a comprehensive look and understanding on the entrepreneurship ecosystem, its need, evolution and strategy implications. It has shown as the following conclusions reveal that an ecosystem exists of entrepreneurship development exists. The organisms for development are the stakeholders both at the strategic and institutional levels. The knowledge of existence of an eco energizes all stakeholders as we witness the change in the eco and new institutional stakeholder additions offering new services to stage 1 and 2 entrepreneurs. The evolution also provides evidence that there is a deliberate or otherwise strategy of the Saudi government to strengthen the ecosystem.

The findings were also discussed with five industry experts and senior academics to validate the findings and understand their perspective. The names and titles are not revealed as per advice of the interviewees. The discussion below is also then generalized as researcher was not allowed to divulge personal information of the experts.

The question related to understanding the status quo has been amply answered and it shows the existing status of both the strategic and institutional levels of the ecosystem. The work has also underlined that the Saudi Arabian government has taken huge steps diligently and effectively. A deliberate effort of the institutions development both at the strategic and institutional levels of the ecosystem seems to be in place. The ecosystem is evolving rapidly evidencing that the eco is responding to dynamic needs of the enterprise, startups and entrepreneurs of first, second and or the third stage. All these answers to the questions are discussed in more detail below and further conclusions are drawn.

The government of Saudi Arabia and the private sector together have taken numerous steps in keeping with the national priority of generating employment for young Saudis in particular and create economic activity and private wealth. The findings and discussion reveal a potential to further develop of institutions and create planned interventions needed at strategic, institutional and enterprise levels. This will develop a movement to further the entrepreneurship growth with snowball effects and put on mass. It is estimated that this will assist in institutionalizing the policy, human capital development, support professions, culture, markets and, micro loans, angel investors networks, financing, venture capital and public capital markets which are essential for enterprise growth.

However, an issue has come to surface, i.e. some organizations at strategic level are providing services that they are perhaps not supposed to and fall under institutional. This is may be because of the lack of and potential in institutional capabilities strengthening. For example a very important stakeholder, Centennial fund, providing coaching and mentoring

and trainings to their loaned customers. They might not have had to invest time, effort and money if there were enough private sector organizations existing and offering these services. It shows that ecosystem requires specialist institutions for each of the 10 services including incubators. The strategic level financial institutions work for the entrepreneurs, SMEs, and provide financing to any level / stage entrepreneurs. Their services range from business consulting and conducting the research and providing the feedbacks. Here also it is evident that some of these banks provide loan facilities at comparable terms and conditions. There are banks and other financial institutions that do not specify the loan limits and leave it to percentages of their own equity that can jeopardize the liquidity situation of the concerned bank when they need to finance very large-scale projects.

It can be concluded that such studies should be carried out on continual basis and ecosystems evolution mapping be carried out in other countries so that the deficiencies, efficiencies and proficiencies in the ecosystem could be identified and necessary action could be taken accordingly.

It is also inferred that there should be a virtual entrepreneurship ecosystem evolution observatory that maps the eco in real time. The stakeholders should be able to update their details by logging on to a virtual observatory. Whereas, the entrepreneurs at different stages, by looking at the maps and clicking can get access to the required organization(s). The observatory is further explained below.

In the study websites of more than one hundred and fifty organizations were identified and searched again to identify any changes from previous maps. Based on the new study a new website is being developed www.affatuniversity.edu.sa/entrepreneurship_ecosystem. This will house a virtual observatory and store the yearly updated maps. Any stage entrepreneur may log into the website and search for suitable organization(s) to get assistance from.

It has been seen that when the potential startups struck an idea and are in initial, early or later stages of the startup development, majority of times they do not know where to get what kind of assistance. Similarly, they have little idea on the sources of funding, intellectual property rights and legal framework of the country. At times they get trapped and sometimes due to difficulty in finding the right organization for assistance they simply give up the idea.

Therefore, in order to make informed effective decisions it is important to have a knowledge of the prevailing conditions in the marketplace of the essentials of the startups. These include, coaching, mentoring, venture capital, training and development, consulting, personal development, soft skills, incubator or accelerator facilities required, research and development, patent and copyrighting, legal and others. This will avoid replication and duplication of efforts. Similarly, knowledge of status quo helps identify opportunities and supports plan development to endeavor through right strategy.

The names of organizations on the maps are clickable and the upon the click a brief profile opens up showing the services and contact details thus helping the start-up and later stage entrepreneurs to reach to the concerned stakeholder more efficiently. It also provides a marketplace for the companies to compete on the basis of services provided.

Like any other research this investigation also had limitations as outlined below:

- It is a tough ask to conduct the research in the kingdom as the culture is developing for investigation and there is a huge scope for it.

- As the national language is Arabic, majority of websites are in Arabic and a number of other organizations do not have the internet presence, making it difficult to reach out to the information.
- It is difficult and time consuming to get the information not available on the websites from different sources within organizations.

SME authority is a great initiative introduced at the strategic level and would notably enhance the SME sector in the Kingdom and act as catalyst of entrepreneurship growth in Saudi Arabia. It is recommended the authority works to:

- Start support professions' training and development programs needed and help them implement these programs nationwide.
- Celebrate entrepreneurship to encourage and motivate the first stage entrepreneurs to turn their ideas into reality.
- Develop Business Format Franchising in the Kingdom.
- Develop Soft Skills incubators at educational institutions.
- Develop Consulting organizations in Financing and Feasibility studies.
- Develop and implement programs for jailed inmates.
- Develop research to propose recommendations for energy, business, engineering, medicine, business research, SME development cities and SME industrial zones to the Government.
- Develop Common Facilities Centers.
- Develop and implement awards for outstanding entrepreneurs in.
- Launch Business research at educational institutions.
- Launch and market academic and applied journals and periodicals.
- Organize and launch academic and applied conferences.
- Organize and implement networking conferences on Social business, Women related businesses, Medicine and engineering

This catalyst should also:

- Develop and encourage associations of different industrial sectors.
- Develop and initially supervise franchise association. Upon completion of memberships and enforcing the laws, let it become an independent institution.
- Develop Innovation enablers.
- Develop patents and copy righting institutions.
- Carry out regular SME Census.
- Develop and implement business friendly laws on partnerships specially between local and international, forex repatriation, employment in a company where shareholding is also held by foreigners.
- Classify the businesses according to SIC codes.

REFERENCES

- Abid, A. (2007). The world's largest economy is in worse shape than it cares to admit. *Noticias Financiers*, (1).
- Acs, Z.J., & Audretsch, D.B. (2005). Entrepreneurship, Innovation and Technological Change. *Foundations and Trends in Entrepreneurship*, 1(4), 1-65.
- Acs, Z.J., & Varga, A. (2005). Entrepreneurship, agglomeration and technological change. *Small Business Economics*, 24(3), 323–334.

- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30, 595-621.
- Ahl, H. (2011). *Women's enterprise – a boost or a detriment to the Scandinavian welfare system?* International Council for Small Business (ICSB). World Conference Proceedings.
- Chautin, J. (2011). Biz Voices: Vets turn to entrepreneurship: Mentoring program helps young veterans start small businesses. Jobless rate for military a factor in transition. *The Atlanta Journal*, D.2
- Covel, S., & Kelly, K. (2009). U.S. proposal aims to aid smaller companies – some owners are skeptical, say plan focused on SBA loans targets narrow segment of small-business community. *Wall Street Journal*, B.5.
- Covin, J.G., & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10, 75-87.
- Drnovsek, M., Wincent, J., & Cardon, M.S. (2010). Entrepreneurial self-efficacy and business start-up: developing a multi-dimensional definition. *International Journal of Entrepreneurial Behavior & Research*, 16(4), 329-348.
- Dunkelberg, W. (1995). Presidential address: Small business and the U.S. economy. *Business Economics*, 30(1), 13-18.
- Dyer, B., & Ha-Brookshire, J. (2008). Apparel import intermediaries' secrets to success: redefining success in a hyper-dynamic environment. *Journal of Fashion Marketing and Management*, 12(1), 51-67.
- Green, G., & Ouellette, R.P. (2007). *Value creation in business incubation networks: The impact of innovation diffusion on intellectual capital development in start-up companies*. University of Maryland University College.
- Hoffman, K., Parejo, M., Bessant, J., & Perren, L. (1998). Small firms, R&D, technology and innovation in the UK: A Literature review. *Technovation*, 18(1), 39-55.
- Isenberg, D. (2011). Introducing the Entrepreneurship Ecosystem: Four Defining Characteristics. *Forbes*, May 25. Retrieved from: <http://www.forbes.com/sites/danisenberg/2011/05/25/introducing-the-entrepreneurship-ecosystem-four-defining-characteristics> (10.06.2016).
- Kauffman, S. (1995). *At home in the universe: The search for the laws of self-organization and complexity*. Oxford: Oxford University Press.
- King, M. (2010). Giving women economic freedom; loans circles like the aurora business project provide training, mentoring and microcredit for start-ups. *The Gazette*, A.16.
- Klyver, K., & Grant, S. (2010). Gender differences in entrepreneurial networking and participation. *International Journal of Gender and Entrepreneurship*, 2(3), 213-227.
- Koga, T. (2005). R&D subsidy and self-financed R&D: The case of Japanese high-technology start-ups. *Small Business Economics*, 24(1), 53-62.
- Malhi, G. (2004). Entrepreneurs are the backbone of Canadian economy: My new job is to support and remote entrepreneurship in the Canadian economy. *The Hill Times*, 23.
- Market Information Trading (2012). *Saudi Arabia tops 2011 Arab patent list*. Retrieved from: <http://www.emiratesfactories.com/industry-news/middle-east/56617/saudi-arabia-tops-2011-arab-patent-list> (15.02.2012).
- Martiz, A. (2010). Networking, entrepreneurship and productivity in universities. *Innovation: Management, Policy & Practice*, 12(1), 18-25.
- Mazanai, M., & Fatoki, O. (2011). The effectiveness of business development services providers (BDS) in improving access to debt finance by start-up SMEs in South Africa. *International Journal of Economics and Finance*, 3(4), 208-216.

- Moensted, M. (2010). Networking and Entrepreneurship in Small High-Tech European Firms: An Empirical Study. *International Journal of Management*, 27(1), 16-30.
- Mohamed, A., Alexandre, R., & Freitag, F. (2010). Internationalization of small- and medium-sized enterprises: a multi case study. *European Business Review*, 22(6), 608-623.
- National U.S.-Arab Chamber of Commerce (2016). Retrieved from: <http://www.us-arabchamber.org> (23.01.2016).
- Nickols, F., & Ledgerwood, R. (2006). The goals grid as a tool for strategic planning. *Consulting to Management*, 17(1), 36-38.
- Otto, F. (2005). Help your clients create a useful strategic plan. *Consulting to Management*, 16(3), 11-12.
- Peltoniemi, M., & Vuori E.K. (2004). Business Ecosystem as the new approach to complex adaptive business environments. *Proceedings of eBusiness research forum*, 267-281.
- Praag, M.V., & Versloot, P.H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, 29, 351-382.
- Rahatullah M.K. (2013). Mapping entrepreneurship ecosystem of Saudi Arabia. *World Journal of Entrepreneurship, Management and Sustainable Development*, 9(1), 28-54. doi: 10.1108/20425961311315700.
- Rahatullah, M.K. (2014). Role of Trust and Commitment in Building Successful Franchise Business Relationships. *International Journal of Knowledge, Innovation and Entrepreneurship*, 2(1), 90-107.
- Saudi Arabian General Investment Authority (2016). Retrieved from: <http://www.sagia.gov.sa/en/Why-Saudi-Arabia/A-Commitment-To-The-Best/National-Competitiveness-Center> (10.06.2016).
- SUSRIS (Saudi-US Relations Information Service) (2011). A "SME" authority for Saudi Arabia. Retrieved from: <http://www.saudibrit.com/2011/02/04/a-sme-authority-for-saudi-arabia/> (10.06.2016).
- Szabó, A. (1995). *The role of small and medium-sized enterprises in countries is transition and how to promote them*. ECE Advisory Workshop on Industrial Restructuring.
- Szabó, A. (2005). *Business incubation as element of business service institution and SME development infrastructure for creation of new enterprises in CITs report on entrepreneurship and SMEs in Hungary*. Retrieved from: <http://www.erenet.org/papers/bsi.pdf> (10.06.2016).
- Szabó, A. (2006). *Business incubation as element of business service institution and SME development infrastructure for creation of new enterprises in CITs*. Retrieved from: <http://www.erenet.org/papers/bsi.pdf> (10.06.2016).
- The World Factbook (2016). *Saudi Arabia*. Retrieved from: <https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html> (23.01.2016).
- Thurik, R., & Wennekers, S. (2004). Entrepreneurship, small business and economic growth. *Journal of Small Business and Enterprise Development*, 11(1), 140-149.
- United Nations Economic Commission for Europe (2016). Retrieved from: <http://www.uncece.org/indust/sme/sme-role.htm> (10.06.2016).
- Weeks, J.R. (2002). Support for women's enterprise in the United States: lessons learned. Retrieved from: <http://www.uncece.org/fileadmin/DAM/Gender/enterp/women/documents/weeks2.pdf> (10.06.2016).
- Wikipedia (2016). *Entrepreneurship Policies in Saudi Arabia*. Retrieved from: http://en.wikipedia.org/wiki/Entrepreneurship_Policies_in_Saudi_Arabia (23.01.2016).
- Wiklund, J., Davidsson, P., & Delmar, F. (2008). *Entrepreneurship and growth of firm*. Edward Elgar Publishing.
- World Resource Institute (2000). *World Resources 2000-2001. People and Ecosystems: The Fraying Web of Life*. Washington D.C.: World Resource Institute.

- Zedtwitz, M. (2003). Classification and management of incubators: Aligning strategic objectives and competitive scope for new business facilitation. *International Journal of Entrepreneurship and Innovation Management*, 3(1), 176-196.
- Zimmerman, J. (2008) *Refining the definition of entrepreneurship*. ProQuest Dissertations & Theses. Retrieved from: <http://search.proquest.com/docview/304825438> (10.06.2016).

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Family Businesses in Creative Industries

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Abstract

Family businesses are one of the most common forms of doing business in the world. In many countries, they are a key source of economic growth and employment creation. In Poland, family businesses represent more than 60% of all companies, provide nearly 2/3 of all jobs and generate 40% of GDP. Conducting generational business provides companies with the opportunity to build a distinctive identity, which in turn translates into a strong identification so important in the anonymous world of business. It is also connected with a variety of problems as the family business is associated with both business and family relationships which are sometimes difficult to reconcile. The creative industries sector encompasses the kinds of business activity that have their origin in individual creativity, skills and talent, and which have the potential to generate wealth and jobs through the creation and use of intellectual property. The paper aims to assess the value system prevailing in family businesses operating in the creative industries sector and its role in the development or business failure of these companies. The paper is prepared on the basis of the available literature and reports on the topic under discussion.

Keywords: creative industries sector; family business; entrepreneurship

JEL codes: L25, L26

INTRODUCTION

Family businesses are one of the major sources of creating economy in the contemporary world, they play an important role in its development, but also in the development of new entrepreneurial talents from generation to generation. They consist of large corporations, medium-sized enterprises and a large number of small and even micro-enterprises. There is no doubt that they are also one of the oldest ways

of running a business. They support independence and provide a long-term orientation of previously set company goals and objectives.

The family business is characterised mainly by capital which remains in the family. Family members decide about further development of their family business through their participation in the management of the company. Running a family business is a major interference in the private life of every member of the family, who is also a business partner in the professional life. It is based on common values associated with the mission and vision of the company.

THE CONCEPT OF FAMILY BUSINESS

The definition of family business, even though it exists in everyday language, is not as obvious as it might seem. The difficulty lies in the fact that there are no clear criteria to distinguish this group of companies, which results in the term encompassing diverse legal forms and types of ownership, as well as different sizes and management methods [Sułkowski and Marjański 2009, p. 13]. The Civil Code defines the family business as such that is co-owned by spouses, however, it is a definition created only for the purpose of legislation – tax regulations and the Social Insurance Institution [Więcek-Janka 2015]. In the Polish language, there is also a concept of household, described by P. Sztompka as a closed system in which members are dependent on each other and integrated [Sztompka 2007, p. 15]. This definition, though less precise, fits very well within the reality in which most Polish small family businesses operate.

The foreign literature presents a multitude of definitions of family businesses. Most of these definitions put emphasis on ownership and control as factors determining whether the company belongs to a group of companies referred to as family businesses. Various authors – in a more or less detailed manner – attempt to determine what percentage of shares should be retained in the hands of the family to be able to call a given company a family business, as well as indicate how many family members must hold positions within the company. In the classic American theory, the family business means a company in any legal form in which capital is wholly or in a decisive part owned by the family, and at least one member exercises a decisive influence over its management or occupies a leading managerial position with the intention to keep the company in the hands of the family [Jeżak, Popczyk and Winnicka-Popczyk 2004, p. 19].

A similar definition is provided by D. T. Jaffe, who defines the family business as an entity in which two or more family members share labour and ownership (in the case of private companies, this means the ownership of 51% shares, and in the case of public companies retaining a controlling stake) [Jeżak, Popczyk and Winnicka-Popczyk 2004, p. 19]. The division of shares is also precisely determined by P. Westhead, C. Howort and M. Cowling, who recognise as the family business a company in which more than 50% of the ordinary shares are held by members of the largest single family related by blood or marriage, and the company is perceived by its president or director as a family business [Surdej and Wach 2010, p. 14]. Summarising the above-quoted definitions, it can be concluded that the family business is a company whose ownership is controlled by one family.

The definition provided by J. A. Davis and R. Tagiuri, less detailed in terms of ownership but paying more attention to governance, defines the family business as an organisation in which two or more family members have an impact on the governance (man-

agement) of the company by using family relations, holding the managerial position or ownership. Similar wording can be found in the definition provided by E. Venter, C. Boshoff and G. Mass, who define the family business as “a firm being the property of the members of the same family, who, through it, implement a formal or an informal vision of business activity and have an intention to pass along the business to the next generation, or the business has already been passed along to the present owners by the previous generation” [Surdej and Wach 2010, p. 13].

M. Bertrand and A. Schoar also state that “family firms are characterised by a concentration of ownership, control and often key management positions among family members, even after the retirement of the firms' founders” [Surdej and Wach 2010, p. 13].

The vast majority of definitions of family businesses therefore put emphasis first on ownership and then on the issue of the organisation's management. In the first case, it is assumed that the family is the sole or dominant owner, which usually means owning more than 50% of the company shares by the family – in the case of small and medium-sized enterprises, or 10-20% in the case of large enterprises [Sobiecki 2014].

An extremely detailed, but also a very narrow, definition was proposed by R.G. Donnelly, according to which the family-owned company is closely identified with at least two generations of one family, and the relationship is a mutual one – the relationship between the family and the company, as well as the company and the family's interests and objectives. Such a relationship exists when one or more of the following criteria are met:

1. family is involved, which is one of the factors determining management succession, wives or sons of the current or former head of the company are in the supervisory board;
2. important institutional company values are related to the family in the formal documents of the company or in the informal tradition of the organisation;
3. actions of family members affect or are perceived as affecting the image of the company, regardless of their formal connection with the management of the company;
4. relatives involved in the company feel obliged to keep the shares in the company not only for financial reasons (especially in a situation of loss-making);
5. the position of a family member in the company affects his or her position in the family;
6. a family member must define his or her relationship with the company when deciding about his or her career [Surdej and Wach 2010, p. 15].

It is worth noting that in the cited, very detailed, definition, R.G. Donnelley draws attention to the fact how the family business affects the family, not only in terms of financial matters. The family business may indeed influence career paths of individual family members, their decisions in private life, which may affect the image of the company, as well as their position within the family, or virtually all the areas of the individual's activities.

It is essential, therefore, to emphasise that in the analysis of family businesses one cannot only focus on the economic aspects, but must also take into account the psychological and social aspects related to the very institution of family.

In conclusion, it can be said that the literature most often uses the following criteria to distinguish family businesses: ownership, control (as a derivative of ownership), and management. The family business is therefore a company whose founder/founders and/or successors are among its largest shareholders, and (although this is not always required) they occupy key positions in the company's management board or supervisory board [Jeżak, Popczyk and Winnicka-Popczyk 2004, p. 19].

Among the most important elements contained in the definitions of family business, illustrating its essences, the following ones can be mentioned:

1. employees (the number of family members engaged as paid or non-paid employees in one company);
2. the course and development of family members' careers (the existence of the company has a significant impact on the decisions of family members as to their career development and career choice);
3. the problem of succession (family relationships have an impact on decisions about taking over and transferring managerial duties and ownership of the company);
4. the impact on management (family members occupy key positions or have a decisive voice in the management of the company);
5. the system of values, priorities and goals (the values professed by the family have an impact on the management of the company);
6. the existence of the so-called feedback relationship (no clear distinction between the company and the family);
7. the legend and myth of the company (the family history is an integral part of the legend of the company, creates its myth);
8. shared responsibility (family members have a sense of responsibility for the fate and future of the company as their common heritage).

On the basis of the European definitions, the concept of family business is very similar to the concept of micro-enterprises, which distinguishes this approach from the listed above definitions taken from the American literature. This was pointed out by E. Więcek-Janek, who highlighted such features of the family business as: 1) the ability to adapt to changing market conditions; 2) the ability to adapt to new patterns of behaviour or roles within the organisation; 3) minimising the risk of conflict, which is derived from a situation in which the owner of the capital is also the managing person.

E. Schalek presents a similar approach by assigning small businesses such variables as:

1. the legal and economic independence of the owner;
2. a limited amount of capital;
3. the unity of management and ownership;
4. personal management by the owner, which is expressed in a direct social contact with subordinates [Więcek-Janka 2015].

CHARACTERISTICS OF FAMILY BUSINESSES

The cited-above definitions of family businesses relate to two interacting dimensions: the emotional (family) one and the business (company) one. The effective functioning of the family business requires, on the one hand, corporate governance, namely the effective business organisation and – on the other hand – family governance. Although these are things not easy to reconcile, they must be achieved at the same time.

The essence of each family business is therefore this inseparable connection between the company and the family. It is a relationship that has a fundamental impact on the entity's operations, objectives, system of values or financial policy. It also determines all its actions while contributing to the formation of distinctive, and not found in other cases, contradictions, risks and vulnerabilities. It is a consequence of

the fact that family members share labour and ownership. The problems that the family must face become also business issues, and the obstacles the family business must overcome affect relations among family members.

The main features of the family business derived from the existence of the above-mentioned relationship include:

1. the interdependence of the company and the family;
2. the use of family resources in financial, human and intellectual terms;
3. family succession, which is a specific form of transfer of control in the company;
4. a distinctive corporate culture which is called a familial culture.

Analysing family businesses, one can treat them as a unique system which consists of three separate subsystems:

1. the family;
2. the company and;
3. the ownership;

characterised by certain features, behaviour patterns and goals. Each encompasses a group of people who have different responsibilities, interests, places of activity, as well as different needs and methods of operation. The perception of these interacting subsystems is very important for the proper functioning of family business and its development.

The above-mentioned subsystems of the family business include certain components and characteristics. The family subsystem comprises family members and next generations. This subsystem is oriented towards education, security and peaceful development, it is based on feelings and is internally focused on family members. The business (company) subsystem consists of employees, managers and customers. Its task is to implement the objectives set at the maximum capacity of its members. This subsystem is externally oriented towards customers. The ownership subsystem comprises the owners of the company, family members and persons that do not belong to it. Due to its existence, the efficient management of the company and its mission, as well as planning its objectives are possible [Sułkowski 2011, p. 9-10].

OBJECTIVES OF FAMILY BUSINESSES

The objectives pursued by family businesses are largely a direct result of the system of professed values. Two groups of objectives can be distinguished in this respect: 1) moral and ethical goals, i.e. the survival as well as the strengthening and preserving of the economic and financial autonomy, the positive perception of the company and the family by the environment; 2) economic objectives, i.e. profit growth, productivity, turnover, etc.

For small and medium-sized family businesses, the main goal is to achieve the independence or autonomy of financial institutions, major contractors and foreign markets. Large family businesses, even if they retain their family character, usually take on the style typical of manufacturing-commercial-services enterprises.

The process of managing the family business is similar to the management of non-family-owned businesses, though there are some differences associated, among others, with objectives pursued by this type of organisations. The differences include: 1) the possibility of conflict between the goals related to the development of the family business and the retaining of the existing ownership structure; 2) the pursuit of profit is not the

main goal, long-term security is more important; 3) compared to other types of enterprises, family businesses have to face more difficulties in raising capital and the recruitment of highly qualified managers; 4) reliable information and economic indicators are considered in relation to subjective information and assessments made by family members.

Until recently, even the management style, which constitutes an important element of the system of values professed by the family business, remained unaltered. This is changing now as it is becoming more flexible.

SUCCESSION IN FAMILY BUSINESSES

The distinguishing feature of family businesses is that they are passed on from generation to generation. This applies both to ownership and business management. The strength of the family business is determined by many years of diverse experience and the mutual trust among the relatives. These factors provide an excellent platform on which it is easy to standardise the company's objective, create its own culture and a consistent set of values that allows for the company's continuous development and success. Strategic objectives of family businesses go far beyond the present. Although on a daily basis their activities are focused on the highest quality of services and products, it is done always thinking about the future. The strength of these entities lies in the proper succession to the next generation, the people in whom responsibility and competence in the business area has always been instilled. It is extremely important to carefully plan and prepare the transfer of the company to the successor. Succession, also called an intergenerational change, is a very special issue and one of the most complex problems faced by family businesses. It is a problem in terms of the family business strategy, the HR strategy, as well as the company's organisational culture and structure of ownership. However, to be successful, the family-owned business needs to acquire skills that will enable it to transfer its ownership and management from one generation to the next. Succession is therefore a long-term element of the company's overall strategy [Safin, Pluta, and Pabjan 2014].

Education and preparation of the potential successor to take over the company play a key role in planning succession. It is therefore advisable in the course of the successor's professional development to help him or her in the choice of the educational paths that will be helpful later in running the business. The very decision about the selection and appointment of a successor is a difficult task, therefore a compromise in the family should be gradually built to avoid a conflict since usually only one of the children will become the ultimate successor to power. This is achieved by fair treatment of all the children, which gives them equal, though varied and tailored to their individual needs, opportunities for development. Therefore, the manager should demonstrate pedagogical skills and willingness to skilfully prepare the successor to join the business.

A great effort of all the interested parties is needed for the company to survive and seamlessly pass into the hands of the next generation. Wisdom, knowledge and experience of the senior and the energy and strength of the successor must interact with each other to ensure the effective takeover of succession and power.

FAMILY BUSINESSES OPERATING IN THE CREATIVE INDUSTRIES SECTOR

Creative industries, also equated with cultural industries, are a relatively new sector of the world economy. This sector is based on creativity, innovation and talent resulting

from activities of creators of the widely understood art, media and design. The basis for the existence of such activities is formed by rich and multidisciplinary knowledge of the creators of this sector. As a result, goods and services with an added value (including a high quality, attractive and thought-out form) are manufactured and distributed. Products developed in this sector meet the set market targets, thereby generating significant economic benefits in the services and manufacturing sector and other industries which they are often related to. For artists working in the creative sector, the main source of income is the revenue from trade and intellectual property rights.

In the literature, there are many different definitions of sectors/creative industries. The definition proposed by the Creative Industries Task Force, set up specially in the UK in 1990s, is one of such definitions. According to this definition, the creative sector consists of activities derived from individual creativity and talent, and which have the potential to generate wealth and employment through the production and exploitation of intellectual property rights [Urząd Marszałkowski Województwa Mazowieckiego 2012]. The creative sector includes such activities as advertising, film and video, architecture, music, art and antiques market, performing arts, computer and video games, the publishing market, crafts, software, design, radio and television, fashion design, which represent two branches of the creative economy, i.e. the traditional cultural industries and the new sectors based on knowledge. Thus creative industries include the following activities: 1) activities derived from individual creativity, skills and talent; 2) activities characterised by the potential to create wealth and jobs over generations and to explore unknown and previously unnoticed areas. Family businesses operate successfully in all the industries of the creative sector. The desire to start and run a business in the creative industries sector is often based on completely different motives than commercial principles and is usually associated with the desire to rebuild the family tradition, make use of an inherited talent or return to the roots. The family business is the type of business in which profit is equally important as values.

THE ROLE OF THE SYSTEM OF VALUES IN FAMILY BUSINESSES OPERATING IN THE CREATIVE INDUSTRIES SECTOR – A PILOT STUDY

The aim of the pilot study was the assessment of the system of values prevailing in family businesses operating in the creative industries sector and its role in the development or business failure of these companies.

The pilot study was conducted by means of direct interviews, using the survey form with a standard list of information sought. 20 family businesses were purposefully selected among 438 companies indicated by the Statistical Office, operating in the sector of fashion and industrial design, PKD (Polish Classification of Activity): 7410Z, in the area of specialised design. Direct interviews with a standard list of requested information were carried out between December 2015 and January 2016 in Lodz. The surveyed managers (12 women, 8 men) were owners of micro enterprises operating in the market in the second generation.

According to all the respondents, the system of values adopted by family businesses to a large extent determines the business success or failure of these companies. The system, established by the founders and transferred to the next generations, is a set of

principles and rules regarding the company's operations, as well as the desired ethical and moral attitude of family members involved in the given venture.

According to 17 respondents, the family value system dominant in the company is what distinguishes family businesses from non-family-owned ones and is a factor that is conducive to achieving spectacular economic performance by the company – only 3 people indicated the system as a possible cause of its collapse.

The surveyed companies indicated the following principles that build the system of values in their companies:

- the need to maintain a family nature of their business and the desire to transfer it to the younger generation (19 responses),
- the connection existing between family members and the company, manifested in loyalty, unity, commitment and hard work (20 responses),
- cultivating the family tradition; self-confidence and determination to achieve the objective set (18 responses),
- unwillingness to change industries or the production range (15 responses).

According to the respondents, the shared values:

- promote a high degree of loyalty (20 responses),
- facilitate a consensus in terms of the organisation's main goals (20 responses),
- stimulate ethical behaviour (18 responses),
- develop a strong belief in the need for personal effectiveness (18 responses),
- reduce the level of stress and tension at work (15 responses),
- increase satisfaction derived from the participation in the organisation (14 responses),
- develop teamwork (14 responses).

In the opinion of all the respondents, the fact that their companies are family businesses allows them to make better use of opportunities offered by the market reality. They do not see the threats associated with the family business, and both seniors and successors feel ready to hand over and take on the company's management – 18 respondents appreciate the support they receive from their family and only 2 people feel a bit lonely in their actions.

According to the respondents, the traditional system of values of family businesses fulfils a very useful and stabilising role. First of all, it makes family members realign their career paths to the development and success of the company, as well as continue the project undertaken and support the family tradition. Moreover, the course of changes introduced in the style of conduct within the company is controlled and the changes are implemented gently and gradually.

CONCLUSIONS

The research conducted was a pilot study carried out on a very small sample, thus drawing far-reaching conclusions is too hasty. It can be noted, however, that the specificity of family businesses naturally favours the use of the enormous potential that lies in the creative industries sector. They carry a huge emotional value, are focused on family values and the tradition which is very often passed down from generation to generation. Both the sense of responsibility for a joint project and trust invested by family business employees may be their strength. The system of values professed by family businesses unites people around

the company. It becomes one of the factors responsible for the success of the company and is not a barrier to its further development. The influence of the family on the company and the control that its members exercise over the family business are often a source of specific strength and extraordinary determination to survive, typical of this sector, which may be lacking in non-family-owned organisations. It should also be noted that the familial culture prevailing in such companies gives meaning and social dimensions to family entrepreneurship. It should be remembered, however, that these values can also contribute to the collapse of the company, if not skilfully managed.

REFERENCES

- Jeżak, J., Popczyk, W., Winnicka-Popczyk, A. (2004). *Przedsiębiorstwo rodzinne. Funkcjonowanie i rozwój*. Warszawa: Wyd. Difin.
- Safin, K., Pluta, J., Pabjan B. (2014). *Strategie Sukcesyjne polskich przedsiębiorstw rodzinnych*, Warszawa: Difin.
- Sobiecki, R. (2014). *Przedsiębiorstwo Rodzinne w Gospodarce Globalnej*, Warszawa: Oficyna Wydawnicza Szkoła Główna Handlowa w Warszawie.
- Sułkowski, Ł. (2011). *Firmy rodzinne – determinanty funkcjonowania i rozwoju Współczesne aspekty zarządzania*, Łódź: Wyd. Społeczna Wyższa Szkoła Przedsiębiorczości i Zarządzania.
- Sułkowski, Ł., Marjański, A. (2009). *Firmy rodzinne, jak osiągnąć sukces w sztafecie pokoleń*. Warszawa: Wyd. Poltext.
- Surdej, A., Wach K. (2010). *Przedsiębiorstwa rodzinne wobec wyzwań sukcesji*. Warszawa: Wyd. Difin.
- Sztompka, P. (2007). *Socjologia: analiza społeczeństwa*. Kraków: Wyd. Znak Kraków
- Urząd Marszałkowski Województwa Mazowieckiego. (2012). *Analiza potencjalnych sektorów kreatywnych Mazowsza – wskazanie 5 najważniejszych sektorów/branż w aspekcie budowania inicjatyw klastrowych. Raport końcowy z badania* Warszawa, at: <http://www.msodi.mazovia.pl/upload/files/pdfy/Analiza%20potencjalnych%20sektorow%20kreatywnych.pdf> (access: 15.12. 2015)
- Więcek-Janka, E. (2015). *Przedsiębiorstwo rodzinne jako szczególny typ małych i średnich przedsiębiorstw*, at: http://ewa-wiecek-janka.pl/userfiles/main/file/przed_rodz.pdf. (access: 15.12. 2015)

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An Analytical Methodology for Management Research: Insights from Semiotics

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Abstract

In the field of business management, managers have a tendency to think in a linear fashion that is restricted to cause and effect relationships. This mind-set limits understanding of complex phenomena, including those that managers and business people face in their activities. This article proposes an Analytical Methodology for Management Research (AMMR) using a triadic logic gleaned from semiotics. The AMMR tool used herein diagnoses the meaning people assign to complex concepts such as "business success" and is based on three logical categories within semiotics where success is understood as business sustainability over time. This article applies the AMMR to an empirical sample comprised of managers and business people. The results highlight the similarities and differences in attributing meaning to the concept of sustainability. The study also analyses the knowledge, behaviours and values that respondents considered most important for the success of an enterprise, i.e. its sustainability. This article concludes that the applied methodology creatively enriches the analysis of the phenomenon studied opening up many possible responses. The AMMR can be applied to the assessment of managers and business people from different organisations or people working in the same organisation at different hierarchical levels. In addition, the analysis can be performed individually or collectively. The classification of the responses obtained by applying the AMMR is open for future research, following 10 possible configurations, with each of them emerging as a logical combination that allows for the organisation of the emphasis given to concepts, behaviours and values.

Keywords: Research Method; Business assessment; Directing sustainable businesses; Semiotics; Pragmatism

JEL codes: M10

INTRODUCTION

One of managers' main tasks in organisations is to make decisions. In today's globalised and competitive context, these decisions are expected to be efficient, as well as creative (Shalley & Gilson, 2004). Since creativity emerges from the interaction between individuals, (Csikszentmihalyi, 1996), creativity in decision-making is connected with the ability to articulate the largest number of possible answers (hypotheses) to problems that demand a decision.

Methods to generate new ideas that contribute to creative solutions include research and brainstorming. However research involves stopping daily operations so that the top decision-making levels can brainstorm, which does not seem to be a common practice in small businesses and organisations.

This article proposes a method to analyse phenomena in the field of organisations supported by pragmatic philosophy and semiotics. Since pragmatism is a philosophy of action it can provide management with an epistemological basis for developing a method to help think about everyday problems more creatively.

This article is organized according as follows: The first section highlights Peirce's main contributions as the founder of pragmatism, concluding that Peirce's thought lends itself to the development of an Analytical Methodology for Management Research (AMMR) based on semiotics to aid in the analysis of complex phenomena.

In the second section the AMMR methodology is then explored through its application to a sample of 78 business people and managers who were surveyed about the concept of organisational sustainability. Following the logic of triadic semiotics a three-part questionnaire was developed. The first part inquires into the conditions and knowledge that enable organisational stability in terms of theories, specific reports, laws and culture. The second part focuses on behaviour that supports sustainability, programmes and decisions, as well as their pragmatic effect. The third part focuses on the respondents' values with regard to sustainability, in terms of strategies and goals that guide their actions. Each case includes propositions scored from 1-10, from lesser to greater importance. Participants' responses were then collected into a table with 27 logical cells that include the different emphases that respondents gave to the propositions concerning theory, practice and their assessment of sustainability.

In the third section the results are presented. They show that the average profile of the surveyed sample has a tendency towards taking action. They also considered transparent reports, market surveys, a good working environment, legislation and a stable macroeconomic context – valuable factors that *enable* organisational stability.

Finally, in the conclusions, the results are analysed and they tend towards at least three basic findings. First, this methodology can be applied to organisations of any type and size since the analysis can be performed transversely by comparing the results obtained in different organisations or vertically by comparing the results obtained at different levels within the same organisation. Secondly, the methodology proved valuable for enriching the analysis of complex phenomena and concepts and consequently is a useful tool for organisational diagnosis. Third, by regrouping the 27 cells it is possible to creatively build numerous hypotheses using the logic of abduction. Future research still

needs to address the possibility of testing the hypotheses obtained through the AMMR, using quantitative methods like structural equation modelling (SEM).

THE POSSIBILITIES WITHIN PEIRCE'S THOUGHT

Many disciplines are interested in studying the prolific work of Charles Sanders Peirce (1839-1914), who was a scientist, logician and philosopher. He is further considered the founder of the school of thought known as pragmatism and the father of semiotics. For Peirce action is a principle that accesses reality making his interdisciplinary ideas widely applicable in the field of human action.

The management discipline, in particular, aims to study organisations and develop tools to intervene in them with the intention of producing change, in other words, techniques for action. Sociology and management are closely related because the former analyses organisations as an object of study, considering that it is through organisations that social classes form and reproduce and that through them culture is configured and modelled (Perrow, 1986). Economics has influenced management, most notably as regards the economic theories of organisations opposed to the sociological or political vision of organisations. Studies and research in the area of social psychology and neuroscience have also contributed to management, specifically in studies on the rationality- or irrationality represented by bias— present in managers' decision-making processes (Myers, 2006).

However given that he sustained a philosophy of experience it is worth questioning why Peirce has not been studied more in the field of management, especially in areas like the action of leaders and managers, who, as Bunge (2000) argues, seek to control the administrative aspects of the organisations in which they operate. Whilst connecting Peirce's philosophy and the actions of managers and business people is not common its potential to contribute to the field is clear once one scratches the surface (Arjeliès, Lorino & Simpson, 2013).

These considerations lead us to a question: What can the twenty-first century management discipline take from a nineteenth-century philosopher? As mentioned earlier Peirce's work is vast and profound making it necessary to address only a part of the epistemological and methodological aspects of his thought.

Epistemological Aspects: Pragmatism as a Philosophy Applied to Practice With Creative Reason and Abduction

Pragmatism is a philosophical perspective that aims to identify concepts of reality through their consequences (Lorino, Clot & Tricard, 2010). It connects thought on a continuum with action giving experience a fundamental role in the construction of knowledge. In short, it is an attitude that seeks truth, anchoring reason in the experience of practice. Pragmatism was born of Peirce's work, found especially in his *Collected Papers* (Hartshorne, Weiss and Burks, 1931).

In epistemological terms Peirce focused on knowledge and the justification of beliefs with which research begins, whether philosophical, scientific or otherwise. When a surprising fact presents itself research can be undertaken holistically using three forms of reasoning: abduction, induction and deduction.

Abduction, as Peirce called it (1931), proposes a hypothetical explanation of facts. Induction verifies the hypothesis that abduction provides, whilst deduction predicts.

Whilst abduction is the weakest form of reasoning it involves the highest level of creative thinking. According to Lorino, Clot & Tricard (2010):

Abduction combines logical reasoning (to be plausible, the narrative hypothesis must fulfil some logical conditions), aesthetical judgment (the hypothesis must be "elegant"), analogy, metaphor or pre-reflexive moves (Peirce speaks of "flashes"). It mixes intuition and reasoning, (p.11).

Thus creative methods that open up possibilities for the future-oriented imagination at the service of research are legitimised. Pragmatism, by 'testing ideas through action', is a philosophy that conceives of human beings as open to learning through experience. According to another pragmatist, Dewey (1997),

We always live at the time we live and not at some other time, and only by extracting at each present time the full meaning of each present experience are we prepared for doing the same thing in the future (p.33).

If we add what we do with things to what we do to people we come into the human, ethical and evaluative dimension of action.

Learning also occurs through error caused by the fallibility of abduction, that is, the faulty hypotheses that can be inferred. Pragmatist thought admits mistakes and recognises it as part of the learning and growth processes in the search for truth. For this reason good habits are decisive.

Since the beginning of the twenty-first century pragmatist epistemology has been the basis for methodologies that contribute to the study of learning processes as well as with platforms for qualitative studies on cultural behaviour. In a paper that studies the Maori tribe's worldview, Ruwhiu & Cone (2010) argue that their research goes beyond application in the indigenous context,

...as it grounded in a methodological approach that draws from a pragmatic epistemology offering insightful, more richly contextualized research avenues in organisation and management (p.1).

The next section explores the methodological possibilities of Peirce's triadic thought which has not been extensively explored in organisational studies but has been widely developed in psychology (Lacan, 1966) and semiotics (Eco, 1976), among other disciplines.

Methodological Aspects: Semiotics as Logic for Establishing a Methodology

Peirce argued that is not possible, through reason, to attain absolute certainty: 'No cognition is absolutely accurate' (Peirce, 1931). So how does one know a subject? Peirce's answer is as follows, 'The only thought, then, which can possibly be cognized, is thought in signs', and he further states, 'The sign [...] is something which stands to somebody for something in some respect or capacity' (CP 2.228).

Thus one sign leads to another in an unlimited process that Peirce called semiosis and that always involves three elements: the signifying elements of the sign, the object and the interpreter.

In turn signs involve three aspects: 1) it is an icon that resembles an actual way of being; it represents the universe of possibilities, 2) it is an index to the extent that it indicates a particular object; it represents the universe of that which exists, and 3) it is a symbol or generality that is part of a system and that is taken on as convention. For

a sign to acquire meaning, it has to have a meaningful context, a previous system that gives meaning to any subsequent interpretation (Lorino, Clot & Tricard, 2010).

For Peirce, the theory of signs (semiotics) is comparable to logic, just as classical philosophy, including Aristotle, the Epicureans and sceptics, held. Semiotics aims to study semiosis defined as inference using signs.

The originality of Peirce's thought is found in the triadic conception of the sign as a ratio of three terms that refer to ontological categories. A sign or Representamen is a First that is in genuine triadic relation to a Second, called its Object, so as to be able to determine a Third, called its Interpreter, to assume with its object the same triadic relationship in which it has the same object (Eco, 1976).

What the Management Field Needs: A Method for Thinking about Complex Phenomena

In the previous section we established that the management field aims to study organisations and to develop techniques that contribute to their improvement. Any intervention requires a prior diagnosis built upon research to which Peirce's thought offers a valuable contribution. As an example we could imagine research that aims to investigate the motivation that business students demonstrate for starting their own business, that is, towards entrepreneurship. The *Firstness* corresponds to the idea of opening a business, where entrepreneurship is pure possibility. In this case, the *Secondness* refers to the process of entrepreneurial potential interaction with the environment and the actions and reactions aimed at taking steps to establish and maintain a business.

What is the *Thirdness* in this example? Peirce distinguishes action from behaviour such that action is undertaken because of motives and behaviour because of ideals. Thus, in this example, ends that motivate the entrepreneur to start a business guide his action. The ideal could be leaving a business to his family or becoming an exemplary businessman, amongst others. The ethical question thus infiltrates the question's *Thirdness*.

Business ethics and a pragmatic attitude is a controversial combination (Goodpaster, 2006). On the one hand, a stream of thinkers argue that, 'that which works is, by that very fact, good and true' (Cavanagh, 1976). On the other hand, Peirce himself criticised the economic culture of the United States, which, in turn, most influenced business theory, practice and teaching. In 1893, in his essay 'Evolutionary Love', Peirce referred to the 'Gospel of Greed' criticising the American 'pragmatic' devotion to greed and, to differentiate his ideas, Peirce called his discipline Pragmaticism (Anderson, 1999: 56).

Concerns about ethics and governance in organisations are not new in business schools or in the business world (Clarke, 2004). In the case of business organisations, approaches have changed throughout history from a vision of the business firm as an instrument at the service of shareholders' interests towards a paradigm that considers organisations as more than the sum of their parts or, as Schatzki put it, 'nexuses of practices and material arrangements' (Schatzki, 2005: 471 quoted by Lorino, Clot & Tricard, 2010: 8).

It is generally accepted that, in order to make decisions, managers should combine various skills, including ones of an economic, sociological and ethical nature, amongst others. Therefore we can say that management which is practical knowledge is based on a variety of theoretical knowledge (Jastroch & Marlowe, 2010).

Andrews (1989) was one of the first authors to explicitly incorporate, within the logic of the strategic model, the moral dimension of management amongst the com-

ponents of decision-making and amongst the criteria for the evaluation of any resultant decisions. Other authors conclude that business people act in the present within an ethical framework since their actions in the present safeguard their decisions and future actions (Melé Carné, 2011). But is this so in the practice of management action? Is ethics present in the *Thirdness* of management action?

Business schools have recently become concerned with connecting ethics and business, specifically in Executive MBA programmes. They seem to want to persuade participants of the need to think differently about leadership, organisations and themselves (Cunliffe, 2009). This challenge is difficult to face if one ignores ethical reflection on leaders' actions.

According to Peirce human activity is a dynamic process in which the action of agent (A) towards another agent (B) (considered generically as its environment) produces reactions that generate new actions, forming a spiral of interactions. In the field of organisations making decisions is one of the most frequent tasks that the management role faces. Since the decision-making process is a type of human action a learning process is implicit in it meaning that, whenever a decision is made and put into practice, the results (whether satisfactory or not) obtained from said action are constituted as an experience that the decision maker incorporates as a learning process that transforms him. In the field of organisations, authors such as Argyris (1978), Polanyi (1967) and Schön (1983), amongst others, have studied the learning process, however, the semiotic perspective could be used to understand more fully the knowledge transfer processes involved in collective learning, (Jastroch & Marlowe, 2010) or simply to analyse the 'Role of Management Systems in Organizational Learning' (Lorino, 2001).

When an organisation's manager or leader must decide *a priori* his evaluative capacity to manage his motives and impulses towards a certain action and design a scenario of possible outcomes for each alternative action is put to use. The same happens *posteriori* when evaluating the results of a chosen action, i.e., the consequences of a decision. It is possible to build a practice-driven institutional change model starting from the daily practices of an organisation's members (Smets, Morris & Greengood, 2012). This process, which can continue indefinitely, supposes intention or purpose that motivates action and this intention arms human action with its rational and deliberative nature.

The above is important for connecting Peirce's thought with management action, i.e. the notion of self-controlled behaviour aimed towards a certain end or purpose. Thus probing into the ends that people are willing to deliberately adopt enriches management research, at least from the perspective of what people express in narratives (Tsoukas & Chia, 2002).

In short business people and managers' narratives about the variables they identify as necessary and sufficient factors for achieving business success demonstrate each respondent's speculations and inferences, conscious or not. That is, they produce patterns of meaning (Weick, 2009).

The abductive method for generating hypotheses and Peirce's open triadic thought provide new possibilities for research and study of management practice in organisations. In general research on management action presents questions with structured or semi-structured answers from which researchers deduce conclusions about their meaning. This is true of research on certain management styles, leadership and work motivation, amongst other topics within the discipline.

The linear interpretation given to these answers can be enriched using semiotics as an analytical method. Thus complex issues such as management, leadership and motivation can be conceived as signs whose categories (*Firstness*, *Secondness* and *Thirdness*) allow for a better understanding of a given phenomenon and provide tools for digging deeper into each one. The following section presents an Analytical Methodology for Management Research (AMMR) using the triadic logic gleaned from semiotics.

THE ANALYTICAL METHODOLOGY FOR MANAGEMENT RESEARCH (AMMR)

To develop an empirical sketch of the AMMR the present study uses the concept of sustainability as an example sign; it is defined by the Oxford Dictionary as, 'Able to be maintained at a certain rate or level'. This sign is used because a person who has the responsibility of leading an organisation necessarily directs his/her action toward ensuring that it is maintained and lasts over time. It makes no sense to drive an organisation towards its extinction, which would be considered a failure. Thus in contrast, a manager, director or administrator achieves success by placing his/her creative abilities at the service of actions that sustain the organisation and, preferably, help it to grow.

Peirce, along with other classical pragmatists like Dewey, James, Lewis and Mead, understands growth as a moral order, not as mere accumulation (Buchholz and Rosenthal, 1998). From this perspective, sustainability is *Thirdness* for the management sign; it is the law and the social value that a community gives to organisations. In the case of private organisations it is equivalent to the social function of the business firm. The definition of truth that Peirce suggests also approaches the concept of sustainability by emphasising the role of the community or the "outside world" in questioning the development of research in search of the truth (Norton, 1999). As a practical application this study designed a questionnaire and analysed its results following the AMMR based on Peirce's approach.

Designing Field Tools

The following describes the practical application of a questionnaire design in order to understand the different aspects of a given sign, taking sustainability as an example. Following Peircean logical categories the tool must contain three parts which allude to how the sign in question is manifested. The three parts correspond to the following:

Theoretical Practice

This section includes the formal aspects (the form of the form), that is, the possible conceptualisations of sustainability together in various theories. It gathers all necessary and available knowledge for conceiving the sustainability concept. This knowledge can be found in various disciplines such as management, anthropology, psychology and political science, amongst others.

The formal aspects materialise (existence of the form) in designs, programmes, discourse and concrete narratives about sustainability. They can be expressed in business plans, management projects or sustainable organisation models.

These theoretical conceptualisations expressed in designs, projects and models have a value in the context in which they are applied (value of the form). It corresponds to the value society places on sustainability, the aesthetic question and innovative strategies for achieving it.

Practical Actions

This section refers to the realisation of sustainability which can be seen, for example, in accounting or financial reports, market assessments and certifications of environmental protection standards (form of existence).

Economic practice (existence of existence) refers to specific actions taken to render an organisation sustainable. Here we find investment decisions, stock purchases and sales, environmental monitoring.

Every action receives an assessment (value of existence) corresponding to ethical aspects or the evaluation of action that is expressed through narratives of satisfaction or dissatisfaction.

Political and Strategic Practice

This section applies to the political and strategic practice of sustainability. In terms of the symbolic realm (form of value) it relates to contextual historical possibilities, that is, to the cultural aspects that enable the practice of sustainability-related action in organisations.

Political practice (existence of the form) results in the pragmatic effect of concrete action.

Every practice contains a logic (value of value) which is expressed through owners or managers' intentions that guide their actions and that differentiate between one organisation and another.

Table 1 below demonstrates the three parts of the theoretical basis for analysing the sustainability sign. Each cell contains possible examples of content but it is open to the possibility of other conceptualisations.

The questionnaire's structure consists of three parts each with three sections or nine sets of questions. The questions identify Peircean categories; for example, the first section of the first part seeks to identify the kind of knowledge that the respondent considers most important. The responses include knowledge corresponding to *Firstness*, such as science and technology, to *Secondness*, such as knowledge related to economics, accounting and marketing, and to *Thirdness*, such as philosophy and politics. Thus the nine cells below become 27 cells that compose the sustainability sign.

Table 1. Matrix for analysis of the sustainability sign

	KNOWLEDGE (PAST)	BEHAVIOUR (PRESENT)	SOCIAL VALUE (FUTURE)
THEORETICAL PRACTICE	Theories	Projects	Strategy
PRACTICAL ACTION	Reports	Decisions	Evaluation
POLITICAL PRACTICE	Laws, culture	Pragmatic effect	Ends that guide action

Source: own elaboration based on Guerri C. *et al.* 2014.

RESULTS AND DISCUSSION

The questionnaire designed in accordance with the AMMR was tested on a sample of 78 business people and managers, 22 women and 56 men. Figure 1 shows a summary of the respondent profile:

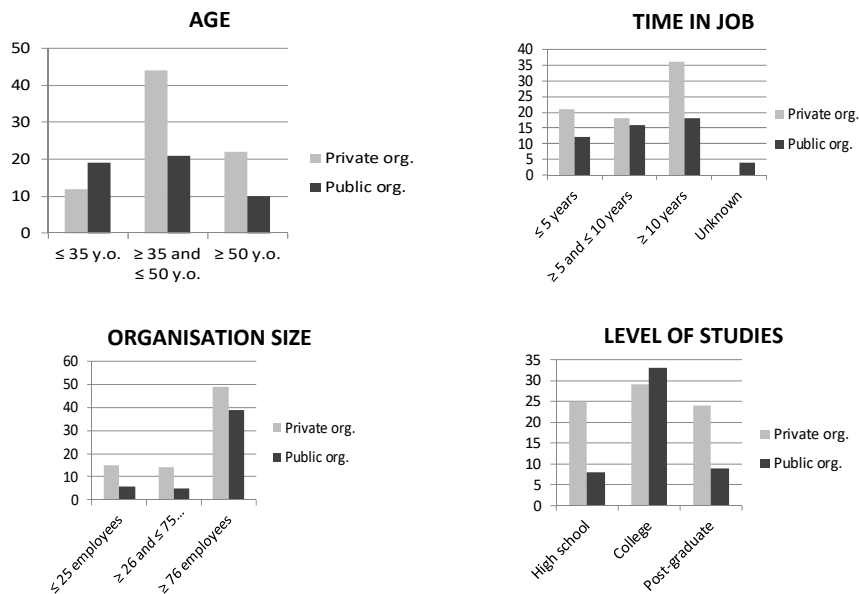


Figure 1. Sample profile

Source: own analysis based on the research results (n = 78)

Each respondent was asked to rate a proposition on a scale of 1 to 10, with 10 being the most important or valuable option and 1 being the least important or least valuable. These ratings were then added up, averaged and ordered in the same way as the questionnaire, that is, in nine parts or boxes. Three of them express possibilities, i.e. the theoretical part, the necessary and available knowledge for conceiving the concept of sustainability. The next three express action, the second part referring to practical actions that embody sustainability. The final three express values, the third part that corresponds to the political and strategic practice of sustainability. Table 2 summarises the scores obtained from the survey showing the sample’s dispositions, actions and values.

Table 2. Average results from the sample

	KNOWLEDGE	BEHAVIOUR	SOCIAL VALUE
THEORETICAL PRACTICE	1 528,17	2 569,78	3 592,40
PRACTICAL ACTION	4 519,83	5 617	6 648,40
POLITICAL PRACTICE	7 603,89	8 583,33	9 608,22

Source: own analysis based on the research results (n = 78)

As shown in Table 2, in the first part of the questionnaire, which inquires into the knowledge and conditions that enable sustainability, cell 7 predominated. In the second part, which focuses on specific behaviours and their pragmatic effect, cell 5 predominated.

Finally, in the third part of the questionnaire, which asks about the values regarding sustainability, cell 6 predominated. In his writings Peirce proposes organising the cells following a classification called "the ten types of signs" (CP 2.254 a 2.264). This organisation is based on the different emphases regarding concepts, objects and behaviours (in the case in question, the results point to a 7-5-6 typology) and it arises from the application of rules. Thus the 10 types of signs are combinations that, amongst the 27 ones mathematically possible, are viable in terms of semiotics. (For more on the relationship between Peirce's phenomenological categories and his sign typology, see: Lizska, 1996 and Savan, 1988).

Figure 2 shows the 10 types of signs that Peirce articulated applied to research on sustainability. The average sample profile showed a tendency to undertake action (cells 5 and 6); they also considered transparent reporting, market surveys, a good working environment, legislation and a stable macroeconomic context valuable factors that enable organisational stability (cell 7).

It is important to note that it is possible to obtain a combination that differs from the 10 types of sign that Peirce articulated, which would indicate semiotic incoherence but not necessarily a discursive contradiction (Foucault, 1989).

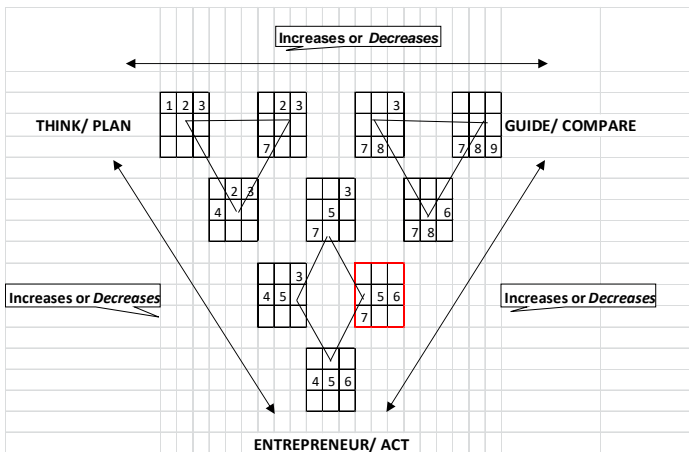


Figure 2. 10 types of sign

Source: own elaboration adapted from Peirce (CP. 2.254-64)

It is possible to enrich this first reading and interpretation of the results in two ways: 1) by breaking down each of the nine cells in Table 2 into three parts each, such that we obtain 27 averages of ratings and 2) by segmenting the sample by categories or subgroups, for example, by gender, education level or size of the organisation where the respondent works. Table 3 shows an attempt to open up the results of nine boxes into three parts each.

Opening these cells up allows for a deeper analysis. We will first focus on the first part of the questionnaire (cells 1, 4 and 7) that explores the issues that enable organisational sustainability represented by theories (cell 1), training courses (cell 4) and needs or laws (cell 7). Cell 1 did not prevail in terms of averages because it obtained 528.17 points. At the same time there is a significant appreciation of theories, with 611.75 points, that relate to aspects of production, economics, management and marketing. In cell 4 this situation reoccurs with 625.25 points assigned to courses in leadership, com-

munication, negotiation and methods for developing business plans. Cell 7, which prevailed on average above cells 4 and 1, shows that respondents gave more importance (658 points) to matters such as having accounting and financial reporting transparency and having legislation that favours investment projects. This predominated over the options to achieve staff commitment or have reports on environmental control and on corporate social responsibility, which obtained an average of 544 points.

Table 3. Average results opened by category

1		2		3	
516,25		609		662,33	
611,75		552,33		595,25	
456,5	528,17	548	569,78	518,67	592,4
4		5		6	
500,75		644		672	
625,25		634,5		667	
433,50	519,83	572,50	617	618	648,4
7		8		9	
658		585		619,67	
609,67		625,33		629,33	
544,00	603,89	539,67	583,33	575,67	608,22

Source: own study based on the research results ($n = 78$)

The second part of the questionnaire (cells 2, 5 and 8) explores management practice in search of organisational sustainability. The practice is represented by reports and tasks requested (cell 2), concrete management decisions and actions (cell 5) and the pragmatic assessment of the impact that sustainable companies produce, i.e. the value they add. In cells 2 and 5 respondents were inclined to give greater value to cash flows and financial plans (609 points) as well as to actions related to having their own capital or seeking sources of financing, investing in science and technology and maintaining operational efficiency (644 points). Actions on the part of management in search of sustainability were more valued than quality control, environmental management or engaging in public relations (572.50 points). As for the value that companies add respondents (in cell 8) believed that a company adds value to consumers, customers and employees (625.33 points) rather than to local or regional economic development, the environment or society as a whole (539.67 points).

The third part of the questionnaire (cells 3, 6 and 9) addresses the evaluative aspects represented by the strategies, the assessment of management action and the assessment of the ends that guide managers' actions. Similarly to cells 2 and 5 respondents were inclined toward *Firstness* in cells 3 and 6, that is, they valued strategies and actions related to finance more, with 662.33 points and 672 points respectively. Regarding the assessment of the ends that guide managers' behaviour the following propositions received the most points: 'Developing my skills and abilities and developing creativity'. This assessment, which on average had 629.33 points,

exceeds that obtained by propositions such as, 'Being admired and instilling values in my workplace' or 'creating wellbeing in my organisation's environment'.

As mentioned above the AMMR allows for a further analysis of research segmenting the sample by categories or subgroups. Segmentation by gender did not show significant differences. Both groups, male and female, fell within the same 7-5-6 typology.

Grouping by size, that is, by the number of people working in the respondents' organisations, presented divergent responses, whilst maintaining logical consistency. Respondents from small organisations, with up to 25 employees, and respondents from large organisations, with 76 to over 100 employees, displayed the same general 7-5-6 pattern. This group accounts for 82% of the sample. The remaining 18% is made up of medium-sized companies employing between 26 and 75 people. Responses from this group diverged with their maximum values in the 7-8-9 cells. Within the logical Peircean typology this result shows a trend towards orienting, comparing and evaluating rather than towards action. This does not mean that this evidence supposes some kind of causality, that is, that the size of an organisation influences the types of responses. It is simply important to show this finding.

Further evidence emerged from segmenting groups in that the group working as employees versus those who are employers diverged when assessing ends and the question of where sustainable organisations add value. To assess the propositions the following phrases were used: 'If you are (or if you were) an entrepreneur, what would be your long-term goals'? Employees were, on average, more likely to value the choice, 'develop my skills and abilities'. Entrepreneurs or freelancers were more likely to value the choice, 'generate wellbeing in my organisation's environment'. When identifying where companies add the most value the former group responded that they add 'economic value to shareholders', whilst the latter group, i.e. the shareholders, gave the highest score to the choice, 'customers by satisfying and serving them with excellence'. This discursive divergence shows how respondents answered differently according to their status within the organisation. As owners they did not think a company's added value directly benefits them; they tended to value contribution to the environment, stakeholders and customers in particular.

CONCLUSIONS

This study aims to contribute to research in business by presenting a methodology that organises perceptions and maps individual and collective subjective understanding of complex management phenomena that occur in organisations. To accomplish this the study presents a new research tool, following Peirce's triadic conception of signs, which was applied to a sample of business people and managers, asking them about the concept of organisational sustainability. Whilst the study could have used other phenomena within management sustainability was chosen as a proxy for the concept of success since a successful organisation is one that sustains itself over time without outside assistance or having to limit internal resources.

The results obtained show 27 logical categories from which respondents, taken individually or segmented into groups, understand sustainability. The empirical application of the method showed that, on average, the survey sample has a tendency to take actions that tend toward sustainability (cells 5 and 6) and that they consider transparent reporting, market surveys, a good working environment, legislation and stability of the

macroeconomic environment important aspects of organisational sustainability (cell 7). Given these results what does the AMMR contribute compared to other qualitative research methods? In principle it provides at least three methodological contributions.

First, the method combines theory and practice in developing a tool for researching the subjective perception of complex phenomena in organisations. This study has delved into the concept of sustainability but it could have looked into any other subject, for example, into what members of a family business understand as ‘the manager-founder’s succession planning’, what a group of business people operating in the same sector understand for ‘sector competitiveness’, what members of a car company understand for ‘mobility’, amongst other examples. Thus to create a questionnaire to help us think about phenomena it is necessary to know the theory and practice of setting the chosen phenomena in motion. The questionnaire should be developed with the participation of those involved in the research, thus pragmatically employing a knowledge advancement strategy and forming a community of inquiry (Dewey, 1916).

Second, the combination of responses obtained in 27 cells enriches the possibility of building hypotheses using the logic of abduction. These hypotheses broaden the spectrum of possibilities for understanding. In addition it is possible to obtain a more penetrating diagnosis by applying the 10 types of signs that Peirce articulated. For example, if the method is applied in the same organisation to inquire into what quality customer service means differences may be observed in responses from people at different levels of the organisation, i.e. directors, managers and employees, who may tend towards action, planning or guiding in search of quality. This information, taken as a preliminary diagnosis, enables the design of actions to coordinate the interpretation of the concept. In addition the questionnaire allows a synchronous analysis at the time of application or a diachronic one, that is, applying the same survey in the same organisation at various times.

Third, the method allows one to submit the results, expressed in hypotheses obtained through abduction, to quantitative corroboration methods. Just as respondents’ value answers can be translated into a table one can also use it to design models that represent hypotheses and then test them with a structural equation model. These models are useful tools for the study of linear causal relationships and help researchers to confirm or reject causal hypotheses.

In short, Peirce’s triadic conception regarding the categories of phenomena that occur in practice can be a research tool in the field of organisations, especially when considering that it is important to articulate theory with practical life and if one values the work of multidisciplinary research (Nubiola, 1996). In fact pragmatism, semiotics and the abductive method are currently used in various disciplines of social sciences with a variety of objectives, such as abducting economic crises (Crespo, Thomé & Heymann, 2010). It remains to be seen if business researchers will permanently install this methodology on the agenda of organisational studies in order to illuminate research on management.

REFERENCES

- Anderson, D. R. (1999). Business ethics and the pragmatic attitude. In Frederick, R. (Ed.), *A Companion to Business Ethics*. (56-64). Oxford: Blackwell.
- Andrews, K. R. (1989). *Ethics in practice: managing the moral corporation*. Boston: Harvard Business School Press.

- Argyris, C., & Schön, D. (1978) *Organizational learning: A theory of action perspective*. Massachusetts: Addison Wesley.
- Arjaliès, D.L., Simpson, B. & Lorino, P. (2013). Understanding Organizational Creativity: Insights from Pragmatism. In: Kelemen, M. & Rumens, N. (Eds.).
- American Pragmatism and Organization – Issues and Controversies, 131-145. Retrieved from <http://SSRN:http://ssrn.com/abstract=2285534>.
- Buchholz, R. A. & Rosenthal, S. B. (1998). *Business Ethics. The Pragmatic Path Beyond Principles to Process*. New Jersey: Prentice-Hall.
- Bunge, M. (2000). Status epistemológico de la administración. En Ader, J.J. (Comp.) *Organizaciones* (52-64). Buenos Aires: Paidós.
- Cavanagh, G. (1976), *American Business Values in Transition*, New Jersey: Prentice-Hall.
- Clarke, T. (2004). *Theories of corporate governance. The philosophical foundations of corporate governance*. London: Routledge.
- Crespo, R., Tohmé, F. & Heymann, D. (2010). Abducing the Crisis. In: Magnani, L., Carnielli, W. & Pizzi, C. (Eds.), *Model-Based Reasoning in Science and Technology: Abduction, Logic and Computational Discovery*. Berlin: Springer-Verlag.
- Csikszentmihalyi, M. (1996). *Creativity*. New York: HarperCollins.
- Cunliffe, A. L. (2009). The Philosopher Leader: On Relationalism, Ethics and Reflexivity. A Critical Perspective to Teaching Leadership. *Management Learning*, 40 (1), 87-101.
- Dewey, J. (1997). *Experience & Education*. New York: Touchstone.
- Dewey, J. (1916). *Democracy & Education*. New York: MacMillan.
- Eco, U. (1976). *A theory of semiotics*. Indiana University Press: Bloomington.
- Foucault, M. (1989). *Archaeology of Knowledge*. London: Routledge.
- Goodpaster, K. E., Nash, L. L. & Claude de Bettignies, H. (2006). *Business Ethics: Policies and Persons*. (4th ed.). Irwin: McGraw-Hill.
- Guerra, C., Acebal, M., Alisio, J., Binnevies, A., Bohorquez Nates, M., Pertot, W. & Voto, C. (2014). *Nonágono semiótico. Un modelo operativo para la investigación cualitativa*. Buenos Aires: Eudeba.
- Hartshorne, C.; Weiss, P. & Burks, A. (1931). *Collected Papers of Charles Sanders Peirce* (Eds.). Cambridge: Harvard University Press.
- Jastroch, N. & Marlowe, T.J. (2010) Knowledge Transfer in Collaborative Knowledge Management: A Semiotic View. *Journal of Systemics, Cybernetics and Informatics, JSCI*, 8, (6), 6-11.
- Lacan, J. (1966). *Ecrits*. Paris: Seuil.
- Liszka, J. (1996). *A General Introduction to the Semeiotic of Charles S. Peirce*. Bloomington: Indiana University Press.
- Lorino, P. (2001). A Pragmatic Analysis of the Role of Management Systems in Organizational Learning. In: Sanchez, R. *Knowledge Management and Organizational Competence*. Oxford: Oxford University Press.
- Lorino, P., Clot, Y. & Tricard, B. (2010). Research Methods for Non-Representational Approaches of Organizational Complexity. The Dialogical and Mediated Inquiry. *Organization Studies*, 32, (6), 769-801.
- Melé Carné, D. (2011). *Management Ethics: Placing Ethics at the Core of Good Management*. New York: Palgrave Macmillan.
- Myers, D. (2006). *Exploring Social Psychology*, New York: McGraw-Hill.

- Norton, B. G. (1999). Pragmatism, Adaptive Management, and Sustainability. *Environmental Values*, 8, (4), 451-466.
- Nubiola, J. (1996). *La renovación pragmatista de la filosofía analítica*. Pamplona: Eunsa.
- Peirce, C. S. [1931 (1893)], *Collected Papers of Charles Sanders Peirce*, Vols. V-VI. Hartshorne, D. & Weiss, P. (Eds.). Cambridge: Harvard University Press.
- Perrow, C. (1986). *Complex Organizations: A Critical Essay*. (3th ed.). New York: McGraw-Hill.
- Polanyi, M. (1967) *The Tacit Dimension*. New York: Anchor Books.
- Ruwhiu, D. & Cone, Malcom (2010) Advancing a pragmatist epistemology in organisational research, *Quality Research in Organisations and Management: An International Journal*, 5 (2), 108-126.
- Savan, D. (1988). *An Introduction to C.S. Peirce's Full System of Semeiotic*. Toronto: Toronto Semiotic Circle.
- Schatzki, T. R. (2005). The sites of organizations. *Organization Studies*, 26 (3), 465-484.
- Schön, D. (1983) *The Reflective Practitioner. How professionals think in action*. London: Temple Smith.
- Shalley, C. & Gilson, L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15 (1), 33-53.
- Smets, M., Morris, T. & Greengood, R. (2012). From Practice to Field: A Multilevel Model of Practice-Driven Institutional Change. *Academy of Management Journal*, 5 (4), 877-904.
- Tsoukas, H. & Chia, R. (2002) On organizational becoming: Rethinking organizational change. *Organization Science*, 13(5), 567-582.
- Weick, K. (2009). *Making Sense of the Organization. Volume II*. West Sussex: Wiley.

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Relations between Country R&D Expenses and Startup IPO in Europe: Empirical Research of Startup IPO Activities from 2005 to 2014

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Abstract

This paper put an attempt to find the impact of money supply, specifically in promoting research and development, of EU countries contributes in successes of startup IPO process. The paper is formulated to prove the hypothesis that the number of money supply in R&D affect the number of IPO within EU countries. This hypothesis comes from the previous research about the impact of patent in reducing asymmetric information of the firm before going to IPO. The model comes from Schumpeter assumption that economic growth is an effect of knowledge accumulation. The data come from 17 countries in Europe. The model is a data panel regression. The variables that used are number of IPO as dependent variable and number of money supply in research and development as independent variable. We use 10 years' data range period from 2005 until 2014. The paper finds the robust relationship between countries research and development expenses and the number of IPO activities in 17 European countries. This research will contribute in providing empirical research about the relationship between favourable research environment (proxied by money supply in R&D) and firms IPO. The expectation is a government will promote and allocate more fiscal project in research and development.

Keywords: IPO; startup; FDI; investment; Schumpeter

JEL codes: C33, G24

INTRODUCTION

The discussion related the importance of innovation toward the growth of company economic values has been discussed for years (Schumpeter, 1934, Brown *et al.*, 2009, Amess *et al.*, 2016). The existence of patent and research record has been proved as one of important factor that contributes in success of Initial Public Offering process (Useche, 2014; Nanda & Rhodes-Kropf, 2013). The purpose of having patent is to reduce the asymmetric information, especially in the company that related to technology. In the ecosystem of startup, the proportion of startup that able to find exit strategy in initial public offering is in the one to one hundred proportion, which means that within 100 startups, only 1 that finally able to make an IPO process. While in macroeconomic level, innovation is also considered as the foremost factor in countries economic development (Schumpeter, 1934; Aghion & Howitt, 1992).

Apart from that, problem related to investment in innovation is the higher probability that the investment in technology firm will give zero return value (Galindo & Mendez, 2014). It is due to the fact that most of investments in innovation are categorized as risky or bad investment, which in a matter of yield, some of this investment will give zero value exit (Nanda & Rhodes-Kropf, 2013). The impact is, innovation either from a relatively small or new company, that does not have any experiences in business, will struggle to get funds. Moreover, most financing institution such as banks do not eager to put investment in such risky institution (Nanda & Rhodes-Kropf, 2013). Therefore the favourable environment in research and development is believed to be able in contributing to the success of IPO.

In terms of macroeconomic perspective, European macro financial situation in terms of GDP growth has been weak since the period of world crisis in 2008. One of the foremost factors is the low expanding in private consumption (Ptacek *et al.*, 2015). European central bank has been promoting a monetary policy that trigger the activities in micro level such as expanding its quantitative easing program and cut the interest rates, in order to increase the number of money supply in the market. Both of these policies are showing the intention of ECB in promoting any micro economic activities that giving economic value in micro level. Furthermore, European Capital Markets Union are becoming more open in last couple years and actively endorsing capital mobilization, including private investment, to be more accessible. By China economic slowdown, the swing investment is giving benefit to more developed market such as European countries. Moreover, the FED policy in United States 2015 has raised appreciation of dollar against euro, which also means that more investment abroad from US market. This entire dynamic macro environment has steamed the state of venture capital activities shifting into European region.

The main objective of this paper put an attempt to find the impact of money supply, specifically in promoting research and development, of EU countries contributes in successes of startup IPO process. The object of the research is a startup, the company object that potentially has a chance to grow rapidly and globally. The research takes this object instead of well establishing companies. Based on the report of European committee, startup is believed as the important factor of European economy. The flexibility and agility in facing the market demand is considered as the basic factor of the startup.

The paper is formulated to prove the hypothesis that the number of money supply in R&D affect the number of IPO within EU countries. This hypothesis comes from the pre-

vious research about the impact of patent in reducing asymmetric information of the firm before going to IPO. The model comes from Schumpeter assumption that economic growth is an effect of knowledge accumulation. The data come from 17 countries in Europe. The model is a data panel regression. The variables that used are number of IPO as dependent variable and number of money supply in research and development as independent variable. We use 10 years' data range period from 2005 until 2014. The paper find the robust relationship between countries research and development expenses and the number of IPO activities in 17 European countries.

LITERATURE REVIEW

Research Expenses and Knowledge Accumulation

The development and alteration of the business environment grow tremendously fast in last decades. The rapid technology improvement, deregulation, and globalization have forced companies to go through the process of reinventing (Garanina & Pavlova, 2011). The investment, which companies put in creating their competitive advantage, will be recorded in two ways. One is a tangible asset, which has physical evidence, and another is R&D and technology development expense, which in opposite, does not have physical evidence. The success in constructing company R&D and technology development expense helps company in seeing 'roots of company value creation' (Garanina & Pavlova, 2011). Moreover, researcher believe that intangibles asset are "major drivers of company growth and value in most economy sector" (Lev, 2001).

R&D and technology development expense are the proxy to define the policy in the company which related with financial and corporate governance (Martins & Alves, 2010). Research and technology development expense has thin in a different way with goodwill and sunk cost. However, it can be seen in the future as giving the benefit for the company (Petkov, 2011). The characteristic of R&D and technology development expense, which is identifiable, make the expense is visible in terms of asset identification. Even though R&D and technology development expense are appraised as positive investment but the character of intangible that does not have physical substance makes this investment expecting high risk in nature.

Even though R&D and technology development expense bring so many advantages to the company, but all in all this particular asset is also close with a factor that trigger agency cost and end lead to the bankruptcy of the company. It is due to large sunk costs can generate a high level of returns in the future if the innovation succeed, but a null return if it fails (Martins & Alves, 2010). Align with an explanation above; many economists put allegation that the wrong way of manager in valuing and treating R&D and technology development expense also led to the world to the economic crisis in 2008 (Petkov, 2011). One interesting occurrence, which happened, is a bubble phenomenon. The condition where the price of asset going up, but later on going down and find the real price (White, 2011). Economists believe that bubble can be happen because of some asset that does not have the ability to be identifiable (Petkov, 2011).

The effect was that the prices of the asset not reflect the real number of intrinsic value. The increasing gap between market and book value of companies spurred reflections on the importance of R&D and technology development expense and the way they

are measured (Garanina & Pavlova, 2011). From microeconomic point of view, intangible assets were significantly influencing the market value of the company (Garanina & Pavlova, 2011; Elveness & Widiartoro; 2012, Widiartoro, 2012). Neil Gross mentioned that, "The shifting from brick and mortar to patent and knowledge are the new realities that grow in latest Modern business competition" (Gross, 2001). From Corporate finance perspective, research expense remains governance's problems such as agency conflict and high liquidity risk, which triggers bankruptcy. The knowledge about managing this expense has been analyzed by many researchers in the latest business academic environment. Both of advantage and disadvantage are proven exist. Research about the relationship of R&D and technology development toward market value added in UK and Russian Company has proved that these expenses have positive relation with market value added (Garanina & Pavlova, 2011). Another research also proved that corporate governance was raised when company put high intensive investment in research and development (Alves & Martins, 2010).

Initial Public Offering

Initial Public Offering is the moment where the company registers their entity into public market. The purpose of initial public offering is to generate cash for company operation. For any kind of company, the moment of IPO is one of the most crucial moments in the company life cycle. It is due to so many determinants that categorized as shady information (Useche, 2014). Such as the information whether the company has potential future to grow or not. For investor the moment of IPO is also aligned with their investment in startup, which is gaining the capital gain.

As it mentioned before in previous paragraphs, the empirical evidence that a startup could finish and find exit strategy in IPO is 1 among 100. The high probability that startup will fail make the research in IPO become one of most interested subject to be conducted.

Private Investment in Europe

The development of Private investment in European countries has been showing a great development in last couple decades (Figure 1). The establishment of Private Investment committee in European Union has made the atmosphere toward economies are more open for private investment. In Europe, startup investment, including venture capital and private equity buyout, has rose 14% to 41.5 Billion Euro (InvestEurope, 2015). The amount is a bit smaller in comparison with 50.75 Billion US dollar investment, which was conducted by Venture Capital firms in United States (Pofeldt, 2015).

The number of deal has reached the peak at first quarter 2014 by having 1534 deals. Unfortunately, the situations in 2015 have been not so swell like a year before, deals and volume has been declining since 2014 (Figure 2). The tight regulations in some countries are still becoming an obstacle to the more dangerous types of loaning and financing. More over European lending market are not as complex as the those in US, therefore the availability from alternate lenders when it comes to buyout is considerably less (Pitchbook, 2015).

Apart from those decline trends, the supply of organizations in the business sector stays significant on a segment by regions. Furthermore, the length of the euro dollar difference stays appealing to US financial investor, American PE firms may well help buyout numbers. For funding financial specialist, Europe startup biological system is generally a system of genuinely dynamic centers, such as Stockholm, London and Berlin.

In those areas, the surge in late stage numbers that has been the essential storyline of endeavour venture in the course of recent years is easily seen.

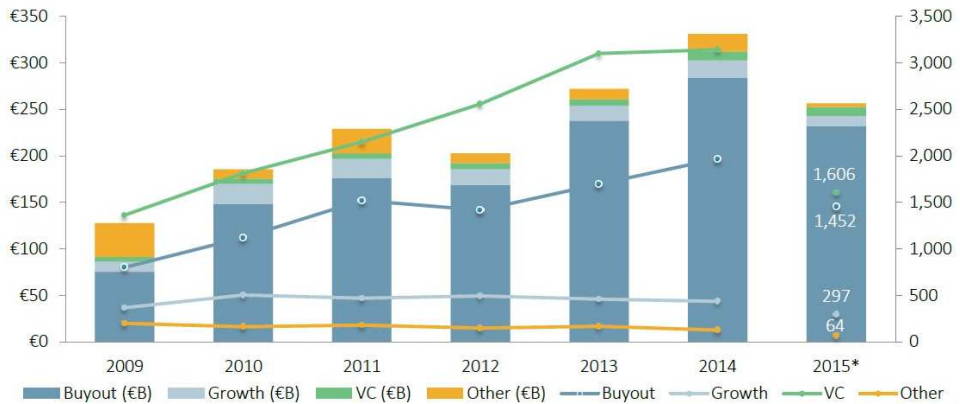


Figure 1. The flow of Private Investment in Europe
Source: Pitchbook (2015).

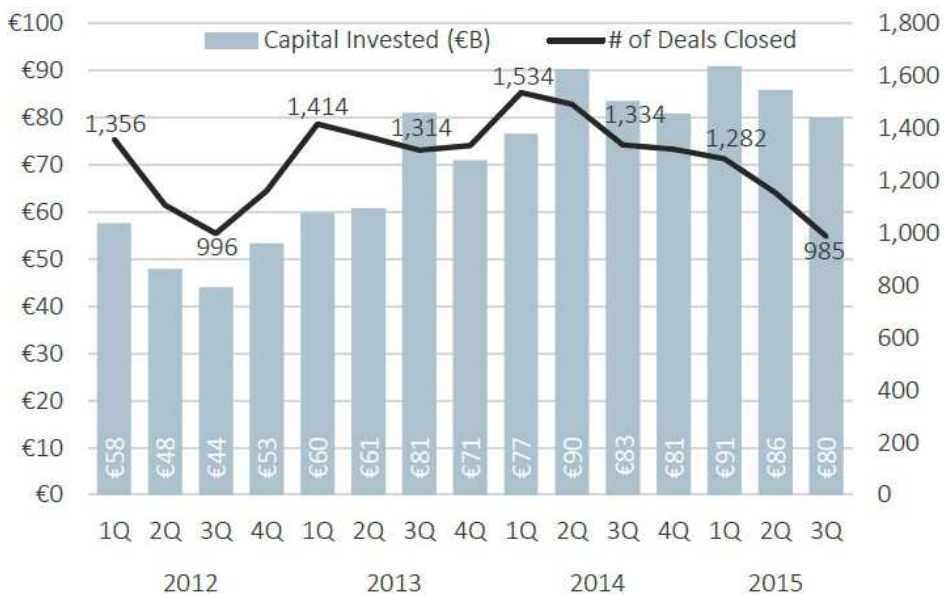


Figure 2. Number of Deal and Private Investment Volume in Europe
Source: Pitchbook (2015).

Very dynamic government establishments and program, such as the European speculation asset have strengthened the journey of the funds, however as frequently been noted, noteworthy deterrents to reinforcing the Eurozone system of startup action remains. A standout amongst the most essential variables to manage at the top of the priority list is when taking a gander at mainland crossing number. Provincial movements

are vital to speculation dynamic, for instance UK center business sector surpassed Germany in terms of income.

Taking a gander at how wander action has plunged in the course of the last a few quarters its simple to see why concern has emerged. From 1Q 2014 to 3Q 2015, the check of VC financing dropped by more than half, from the second quarter of 2015 of 3Q alone the decrease in the general number of European endeavor round surpassed 20% (Figure 3). Yet even as action has dive the past there quarter every hit 3 billion in VC contributed, putting the year as an opening at about € 9.5 billion contributed as of now, overshadowing even a year ago.

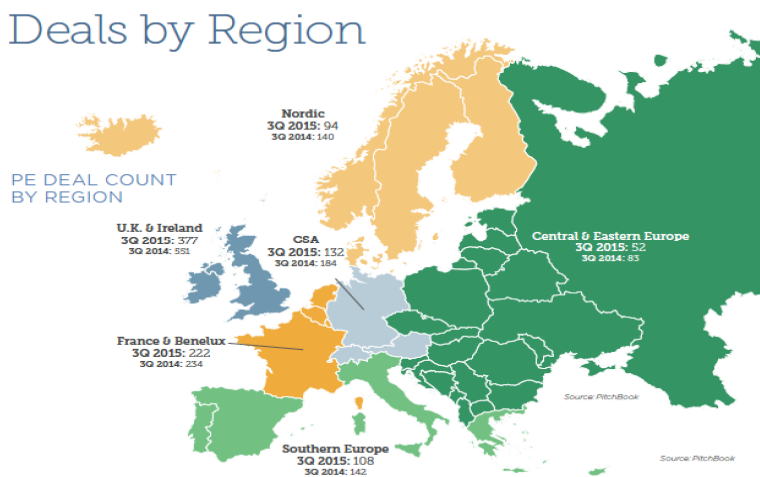


Figure 3. Number of Investment segregated by European Region
Source: Pitchbook (2015).

The immense aggregate contributed for the current year has been skewed by Spotify monstrous \$526 million subsidizing. It makes sense that if there were an irregularity recently organize venture flooding a select gathering if built up new companies in the US, Europe would see a comparable overweighting. The issue with the spread of VC financing is that numerous trepidation related to an absence of fundamental capital mixtures at prior stages of a startup.

MATERIAL AND METHODS

Hypothesis

Based on aforementioned explanation, we propose the hypothesis that countries with the high activities in research will give more beneficial environment to Startup business. Within this specific environment the probability of the successes in Initial Public Offering will be higher.

The model of entrepreneurship, economic growth, and innovation has been developed for many years (Aghion & Howitt, 1992; Brown *et al.*, 2009; Ptacek *et al.*, 2015). Within this research, author belief that the situation within each region in Europe has different factor in attracting PE. Therefore, there is a gap in number of private investment that is flowing among

regions. Our hypothesis is the number of innovation within the region play a role and makes a difference in terms of number of venture capital or private investment.

To answer those hypotheses, first we would like to know whether the climate of entrepreneurship, which is represented by the number of government expense in technology sector, affect the deal. To control the model, we also put into a model about the condition of government expenditure within a year. We propose the idea that countries that have better innovation track record will get higher private investment and the number of deal after all. The money supply in research and development contributes to the number of Initial public offering of startup. These proxies of research and development activities within a countries give better information and reason why the number of IPO's in Europe are various.

Methodology

Data

Type of data that is used in this research are secondary data. The data is taken from the database that is provided by private institution that count how many IPO in European countries from 2005 until 2014. The database of the data comes from European union statistic, Pitchbook Venture Capital, Merger and Acquisition database, and Dow Jones London Stock Exchange Database. The model is we have variable which is research expenses from government that will show us the impact R&D toward the number of IPO deal.

Formulation of model

In the previous research, the impact related to the impact of entrepreneurship, innovation and economic growth has been analyzed (Arora & Nandkumar, 2011; Galindo & Mendez, 2014; Örnek & Danyal, 2015). The model that propose the economic growth here will be replaced by the number of private deal as the proxies of private investment flow.

$$\ln(\Phi)_{it} = \beta_0 + \beta_1 \ln(rc)_{it-1} + \beta_2 \ln(\lambda)_{it-2} + \varepsilon_{it}$$

Variable Explanation

The variable Φ is the number of IPO deal, which is invested in one region of the country. Variable rc here is money supply in research and development. It shows the accumulation of how much money that government spends to create a good climate in research and innovation within a year. Variable λ here is the percentage of government expenditure, showed the proportion of number of total expenditure that the government has in comparison with the GDP.

RESULTS AND DISCUSSION

Presentation of Data

We have collected the number of IPO of startup in each country in Europe, these countries are Czech, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Lithuania, Luxemburg, Netherland, Norway, Poland, Rumania. Others country are not collected due to incomplete data in documentation. The data are consist of number of IPO deal in a year and classified by the number of money which is collected. One of the example from data that has been collected are Data from Czech and Denmark (Table 1).

Table 1. The example of data pool collection

	A	B	IPO	GovExpLn	IPOLn	LnRD							
1.	Czech	2005	0	3.7328963	0	4.8331023	11.	Denmark	2005	31	3.9357395	3.4339872	6.8472619
2.	Czech	2006	4	3.7086821	1.3862944	5.0059577	12.	Denmark	2006	36	3.908015	3.5835189	6.9062542
3.	Czech	2007	6	3.6888795	1.7917595	5.1682087	13.	Denmark	2007	55	3.9039908	4.0073332	6.9825844
4.	Czech	2008	5	3.693867	1.6094379	5.2642434	14.	Denmark	2008	32	3.9219733	3.4657359	7.1097161
5.	Czech	2009	5	3.7750572	1.6094379	5.2181913	15.	Denmark	2009	47	4.0395363	3.8501476	7.1561766
6.	Czech	2010	1	3.7612001	0	5.2998162	16.	Denmark	2010	65	4.0448041	4.1743873	7.1558646
7.	Czech	2011	13	3.7588718	2.5649494	5.4947062	17.	Denmark	2011	78	4.0395363	4.3567088	7.1798414
8.	Czech	2012	17	3.7954892	2.8332133	5.6127631	18.	Denmark	2012	86	4.0656021	4.4543473	7.21524
9.	Czech	2013	18	3.7518543	2.8903718	5.6524892	19.	Denmark	2013	111	4.0342406	4.7095302	7.2389996
10.	Czech	2014	16	3.7518543	2.7725887	5.6835798	20.	Denmark	2014	132	4.0253517	4.8828019	7.2534704

Source: Pitchbook (2015); The World Bank (2016).

The average descriptive information from the number of IPO are placed in Table 2.

The Data Calculation

The data then is calculated by data panel fixed model. The year of research is started from 2005 until 2014 (Table 3).

Based on the panel data calculation above we could see that the government expense affects significantly the success of IPO with the power of 7%. The confident of the independent variable is quite accurate with the α less than 0.1. From this data we could take conclusion that countries with better research expense and more favourable toward innovation get more benefit from the flow of foreign investment, especially in private sector.

Table 2. Average number of deal, capital invested, pre-money valuation, and post valuation median, divided per country for 10 years

Countries	Deal Count	Capital Invested Median	Pre-money Valuation Median	Post Valuation Median
Czech	9	9.598888889	2.91	259.6
Denmark	64	2.609166667	50.71125	54.881
Estonia	11	0.447272727	6.728	8.3
Finland	95	1.740909091	13.66142857	21.19818182
France	314	2.17	16.28333333	28.58166667
Germany	297	3.489	63.21090909	67.84818182
Hungary	12	1.354444444	1.6125	4.405
Iceland	7	0.674285714	3.28	113.3866667
Ireland	111	3.569166667	55.848	44.16545455
Israel	13	7.572727273	281.0685714	223.5311111
Italy	69	2.766666667	40.03625	33.14909091
Lithuania	9	2.857142857	9.12	29.84333333
Luxemburg	8	134.9944444	68.86	64.99666667
Netherland	106	4.244444444	181.55875	115.851
Norway	49	3.396363636	25.0425	50.90545455
Poland	33	1.919090909	6.075	59.806
Portugal	24	1.161818182	18.73	28.64
Rumania	5	1.80125	2	31.33

Source: Pitchbook (2015); The World Bank (2016).

Table 3. The Panel data calculation

Random-effects GLS regression	Number of obs	=	170
Group variable: countrynum	Number of groups	=	17
R-sq: within = 0.0314	Obs per group: min	=	10
between = 0.3481	avg	=	10.0
overall = 0.2568	max	=	10
corr(u_i, X) = 0 (assumed)	Wald chi2(2)	=	10.42
	Prob > chi2	=	0.0055

IPOLn	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
GovExpLn	3.219029	1.050948	3.06	0.002	1.159209	5.27885
LnRD	.0775741	.089056	0.87	0.384	-.0969724	.2521205
_cons	-9.532897	4.018291	-2.37	0.018	-17.4086	-1.657192
sigma_u	1.1973381					
sigma_e	.84285128					
rho	.66866012	(fraction of variance due to u_i)				

Significant codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Source: Pool regression of IPO activities as dependent variable, logarithmic of Government expenses in R & D and ratio of R&D expenses to GDP as independent variable, calculated by Statistica software.

CONCLUSIONS

The number of money supply in research and development robustly affects the number of IPO within a country. This proxy also able to explain why in some country they have better performance in IPO. The existence of startup in technology is believed as one of backbones for national economic growth. Intangible expense of European countries affects on their startup initial public offering successes. Technological expense has become a key function toward the success of Initial Public Offering. In venture capital market, due to 100/10/1, only one that will survive and probably going to IPO. Therefore, possibility of the firm will find an exit is very low and the support from external parties such as government is quite important. In microeconomic activities, Relationship of R&D and technology development are positive with market value added. We can assume that investor considers at countries that has more favourable climate with large R&D expenditures is a reliable place for their investment.

The number of research in the impact of research and development expense within a startup is relatively low. In the other hand, the development of economic growth relies on the accumulation of knowledge that represented by the existence of patent within a firm. This research will contribute in providing empirical research about the relationship between favourable research environment (represented by money supply in R&D) and firms IPO. The expectation is a government will promote and allocate more fiscal project in research and development.

REFERENCES

- Aghion, P., & Howitt, P. (1992). A model of growth through creative destruction. *Econometrica*, 60, 323–351.
- Alves, S., & Martins, J. (2010). The Impact of Intangible Assets on Financial and Governance Policies: UK Evidence. *International Research Journal of Finance & Economics*, 36, 147-169.
- Amess, K., Stiebale, J., & Wright, M. (201). The impact of private equity on firms' patenting activity. *European Economic Review*, 86, 147-160.
- Arora, A., & Nandkumar, A. (2011). Cash-out of flameout! Opportunity cost and entrepreneurial strategy: theory, and evidence from the information security industry. *Management Science*, 57, 1844–1860.
- Brown, J.R., Fazzari, S.M., & Petersen, B.C. (2009). Financing innovation and growth: cash flow, external equity, and the 1990s R& D boom. *Journal of Finance*, 66, 151–185.
- Elveness, V., & Widiatoro, D.M. (2012). Managing Risk of Shipping Industry in Financial Market. *Journal of Finance and Risk Perspective*, 1(1), 10-21.
- Galindo, M.-A., & Mendez, M. T. (2014). Entrepreneurship, economic growth, and innovation: Are feedback effects at work? *Journal of Business Research*, 67, 825-829.
- Garanina, T., & Pavlova, Y. (2011). *Intangible Assets and Value Creation of a Company: Russian and UK Evidence*. Proceedings of the European Conference on Intellectual Capital, 165-175.
- Gross, N. (2001). Commentary: Valuing 'intangibles' is tough job, but it has to be done. *Bloomberg*, published online: August 6, 2001. Retrieved from: http://www.businessweek.com/magazine/content/01_32/b3744008.htm (20.06.2016).
- InvestEurope (2015). *Venture capital to play central role in Capital Markets Union*. Retrieved from: <http://www.investeurope.eu/news-opinion/newsroom/press-releases/capital-markets-union-action-plan> (20.06.2016).
- Lev, B. (2001). *Intangibles: management, measurement, and reporting*. Washington, D.C.: Brookings Institution Press.
- Martins, J., & Alves, S. (2010). The Impact of intangible assets on financial and governance policies: A literature review. *Portuguese Journal of Management Studies*, 15(1), 87-107.
- Nanda, R., & Rhodes-Kropf, M. (2013). Investment Cycles and Startup Innovation. *Journal of Financial Economics*, 110, 403-418.
- Örnek, A.S., & Danyal, Y. (2015). Increased Importance of Entrepreneurship from Entrepreneurship to Techno-Entrepreneurship (Startup): Provided Supports and Conveniences to Techno-Entrepreneurs in Turkey. *Procedia – Social and Behavioral Sciences*, 195, 1146-1155. doi: <http://dx.doi.org/10.1016/j.sbspro.2015.06.164>
- Petkov, R.R. (2011). The Current Financial Crisis and Its Potential Impact on Internally Generated Intangible Assets. *International Journal of Business & Management*, 6(3), 37-44.
- Pitchbook (2015). *European PE Breakdown 4Q 2015*. Retrieved from: <https://pitchbook.com/news/reports/4q-2015-european-private-equity-breakdown> (20.06.2016).
- Pofeldt, E. (2015). *The rise of billion-dollar European unicorns*. Retrieved from: <http://www.cnbc.com/2015/12/07/european-venture-capitalists-spawn-unicorns.html> (20.06.2016).
- Ptacek, O., Kaderabkova, B., & Piecha, M. (2015). Venture Capital, Private Equity and Foreign Direct Investment: Case Study of the Czech Republic. *ISES 3rd and 4th Economics and Finance Conference*, 30, 680-689.

- Schumpeter, J.A. (1934). *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge M.A.: Transaction Publishers.
- The World Bank (2016). *World Bank Open Data*. Retrieved from: <http://data.worldbank.org> (20.06.2016).
- Useche, D. (2014). Are patents signals for the IPO market? An EU–US comparison for the software industry. *Research Policy*, 43(8), 1299-1311. doi: <http://dx.doi.org/10.1016/j.respol.2014.04.004>.
- White, L.J. (2011). Preventing bubbles: What role for financial regulation? *Cato Journal*, 31(3), 603-619.
- Widiantoro, D.M. (2012). Measuring the Role of Intangible Asset toward Company Financial Health and Agency Conflict. *Journal of Finance and Risk Perspective*, 1(2), 25-40.

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Entrepreneurial Behaviour in Periods of Deterioration of Small Firms' Condition

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Abstract

The aim of the paper is to indicate types of entrepreneurial behaviour which should be triggered during periods of deterioration of small firms' condition. The study concerned the causes and symptoms of economic failure identified along the trajectories of this phenomenon. The paper uses selected parts of the study related to the non-occurrence of entrepreneurial behaviour or errors in this behaviour identified in the surveyed firms. The entire study was conducted based on the analysis of 32 case studies carried out among the former entrepreneurs of micro and small firms liquidated in the period from 01.01.2006 to 31.12.2011. The study helped to identify shortcomings in the entrepreneurial process along individual trajectories of economic failure of the surveyed companies. As a result of the conscious entrepreneurial process, small firms have the opportunity to leave the trajectory of economic failure, indicated by the deteriorating condition of the company. It is therefore necessary to develop knowledge concerning the entrepreneurial process and entrepreneurship among managers of small firms. According to the author, one of the key factors affecting the survival of small businesses in the period of deterioration of their condition is the initiation of the entrepreneurial process and/or its deliberate continuation. It seems quite natural to base components of this process on the existing support tools for entrepreneurs that are at risk of economic failure.

Keywords: entrepreneurial process; economic failure; small firms; entrepreneurial behaviour; firm's survival; entrepreneurship; trajectories of economic failure

JEL codes: L26

INTRODUCTION

In today's economy an increasing number of analyses are devoted to observation and evaluation of business growth and development processes. The interest is not focused only on large and medium-sized companies, but also on small and micro firms. The phenomenon of an increasing interest in growth and development processes in the group of micro and small firms provides a great opportunity to identify ways in which entrepreneurial behaviour, or the lack thereof, affects changes occurring within companies. The author of the paper assumes the need for comprehensive perception of entrepreneurial behaviour in this group of firms. However, it is a very difficult task, since, despite a smaller scale of business activity, the impact of the environment and the specificity of processes taking place within the company do not allow to draw simple conclusions about the causes and the course of growth and development processes. In the author's opinion, it is important to focus on entrepreneurial behaviour at a particular stage of the firm's functioning. Economic practice indicates that both in the initial phase of their operation and in the subsequent phases, small businesses may undergo periods of a deteriorated condition, i.e. the deterioration of the parameters achieved by the firm, which is evident in its stagnation that often transforms into the process of reduction in the firm's market share, its size and impact on the market (including its competitive position).

The aim of the paper is to show types of entrepreneurial behaviour which should be triggered during periods of deterioration of small firms' condition.

In order to achieve the objective, the following hypotheses were adopted:

- H1:** Entrepreneurs identify symptoms of deterioration in the condition of their firms too late, and therefore take corrective actions too late.
- H2:** Effective management of a small firm in the period of deterioration in its condition requires the initiation of the entrepreneurial process and/or its deliberate continuation.

In order to verify the hypotheses adopted, a theoretical analysis of the problem based on a literature review and an analysis of the results of empirical research were conducted.

The study concerned the causes and symptoms of economic failure identified along the trajectories of this phenomenon. The paper uses selected parts of the study related to the non-occurrence of entrepreneurial behaviour or errors in this behaviour identified in the surveyed companies. The entire study was conducted based on the analysis of 57 case studies, including 32 case studies carried out among former entrepreneurs of liquidated micro and small firms.

The literature review covers a series of issues related to the field of entrepreneurship, management of small firms and their economic failures.

The section concerning the entrepreneurial process as a factor in reducing the risk of economic failure focuses on the description of the ways of preventing unintended economic failures of small firms based on the entrepreneurial process.

The section on material and methods presents the results of studies available in the literature and the results of the author's own research.

The section concerning results and discussion presents the research findings in conjunction with the possibility of their use by entrepreneurs. Further research opportunities and their limitations are indicated.

Conclusions contain the author's own conclusions and recommendations for entrepreneurs and representatives of business environment institutions.

LITERATURE REVIEW

The Entrepreneurial Process as a Factor in the Creation and Development of Small Firms

Due to the fact that entrepreneurship does not occur at once but is a process that has its beginning and subsequent phases, it is difficult to systematise (Piasecki, 2001, pp. 25-28). The entrepreneurial process is often dynamic, unique, intermittent, variable and initiated by the individual's will. It is therefore dependent on many variables and characterised by high sensitivity to changes in their value. Based on analyses of the characteristics of entrepreneurship perceived from the process approach perspective presented by various authors, it can be seen that the most important is identifying and making use of opportunities, or possibilities, which in subsequent phases leads to the creation of a new venture.

Among the many studies of the process of business creation, the model combining separate actions into an overall concept of creating a new organisation developed by Gartner should be emphasised (Gartner, 1985, p. 698).

On the basis of the four-dimension model, interactions between the initiating individual, the environment, the organisation and the process can be observed.

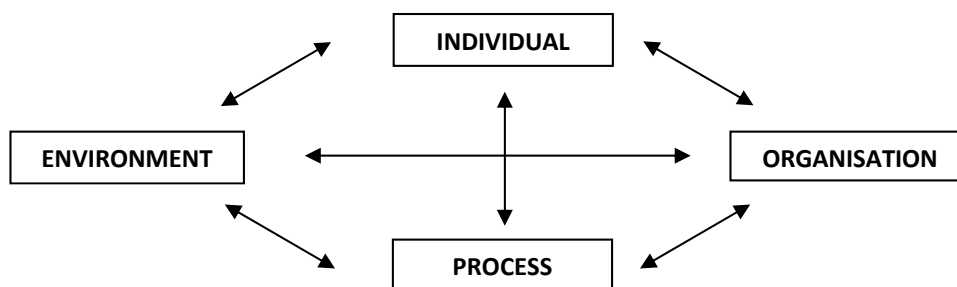


Figure 1. Gartner's model

Source: (Gartner, 1985, pp. 696-706).

1. The individual that is involved in the process (analysed in terms of psychological attributes, such as the need for achievement, willingness to take risks).
2. The environment (a situation in which the individual finds himself or herself and which affects him or her - the availability of capital and other resources, suppliers, etc.).
3. The organisation (the type of business).
4. The process (the type of actions taken - accumulation of resources, production, organisation building).

According to Gartner, the presented model is an instrument for analysing different paths in the creation of new ventures, showing the complexity of the phenomenon and the interactions between the various dimensions of the model.

In the model proposed by Shane (2003, p. 10), the entrepreneurial process begins with the identification of business opportunities, i.e. situations in which resources can be re-combined and used in a way which brings profits. Entrepreneurship is understood in this model as a relationship between the individual and the opportunity. It is a directed process which occurs in a certain order, which may be non-linear.

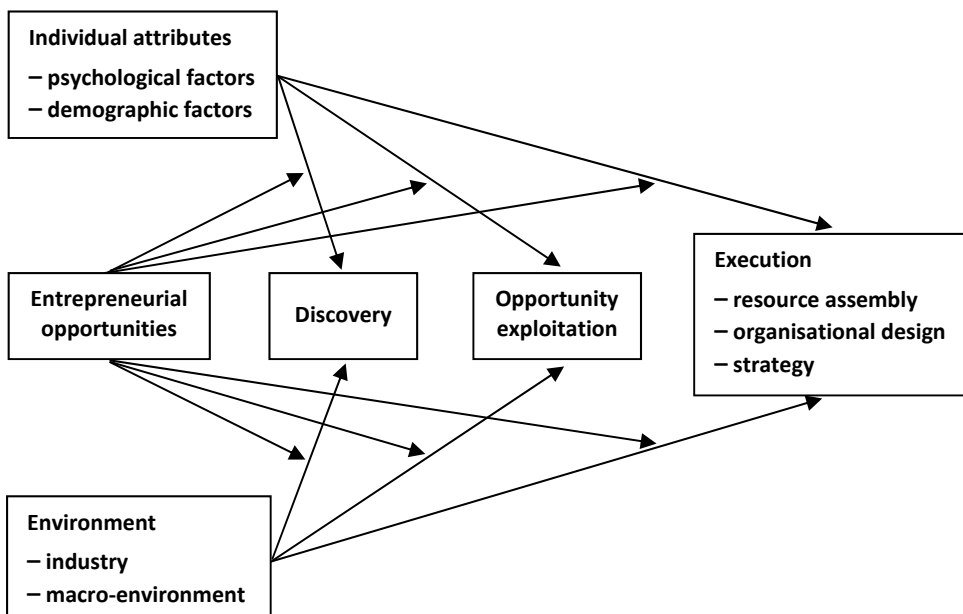


Figure 2. Shane's model

Source: (Shane, 2003, p. 11).

The process of identifying opportunities is individual in its nature and occurs in different ways depending on the available information and beliefs of the entrepreneur. Access to information is shaped by many factors, such as life experience, networking, education, and the manner of search for information. Despite having access to the same information, not everyone is able to identify emerging opportunities. Individual characteristics of a given person affect the manner of identifying and making use of opportunities. Table 1 presents demographic and psychological factors that, according to Shane, have an impact on the use of entrepreneurial opportunities.

Another depiction of the entrepreneurial process is the model proposed by Timmons and Spinelli (2004), which shows the most important components of this process (Fig. 3).

The presented model shows that there should be a balance and a mutual fit between the presented elements, i.e. opportunities, resources and the team. First, the entrepreneur must recognise the market opportunity which underpins the whole pro-

cess. Its perception prompts the individual to take action through which it will be possible to make use of this opportunity. For this purpose, the entrepreneur creates a team and acquires the necessary resources.

Table 1. Factors influencing the use of entrepreneurial opportunities

Demographic factors	Psychological factors
Education – knowledge and skills that help in the identification of opportunities	Extraversion
Work experience – a richer professional life results in the accumulation of a greater amount of information that is needed to identify opportunities	Intuition
Marital status – married people have more courage to take risks	The need for achievement – people with a strong need for achievement are more likely to take advantage of emerging opportunities, as it is connected with facing new challenges
Entrepreneurial experience – observation of other entrepreneurs (e.g.: family members) teaches entrepreneurial behaviour	Propensity to take risks – the willingness to take risks or act in conditions of uncertainty is conducive to making use of opportunities. This personal feature is related to tolerance of ambiguous and unclear situations
Age – older people have more information resources but are less willing to take risks	The need for independence – people used to taking independent actions make use of entrepreneurial opportunities more often
Social position – a higher social status increases the chances of taking advantage of opportunities, as it is easier for these individuals to convince others to their ideas, in addition, they also often have numerous, valuable contacts	Control – inner conviction about the possibility of having an impact on the environment in which one operates helps in taking advantage of opportunities
	Confidence in one's own abilities
	Self-confidence, optimism and conviction in the righteousness of one's beliefs allow the exploitation of entrepreneurial opportunities

Source: The author's compilation based on (Shane, 2003, pp. 45-59).

Opportunities

The entrepreneurial process begins with an opportunity. The recognition of this opportunity is rooted in creativity which is an attribute that the entrepreneur and the team share. However, not every good idea translates into a unique opportunity. Timmons and Spinelli indicate that for every 100 ideas presented to investors, whether in the form of a business plan or a general proposal, fewer than four receive funding (Timmons & Spinelli, 2004, p. 111). Therefore, the ability to quickly estimate potential effects of an idea and to make the decision of how much time and resources to dedicate to it is an important skill of the entrepreneur and the investor.

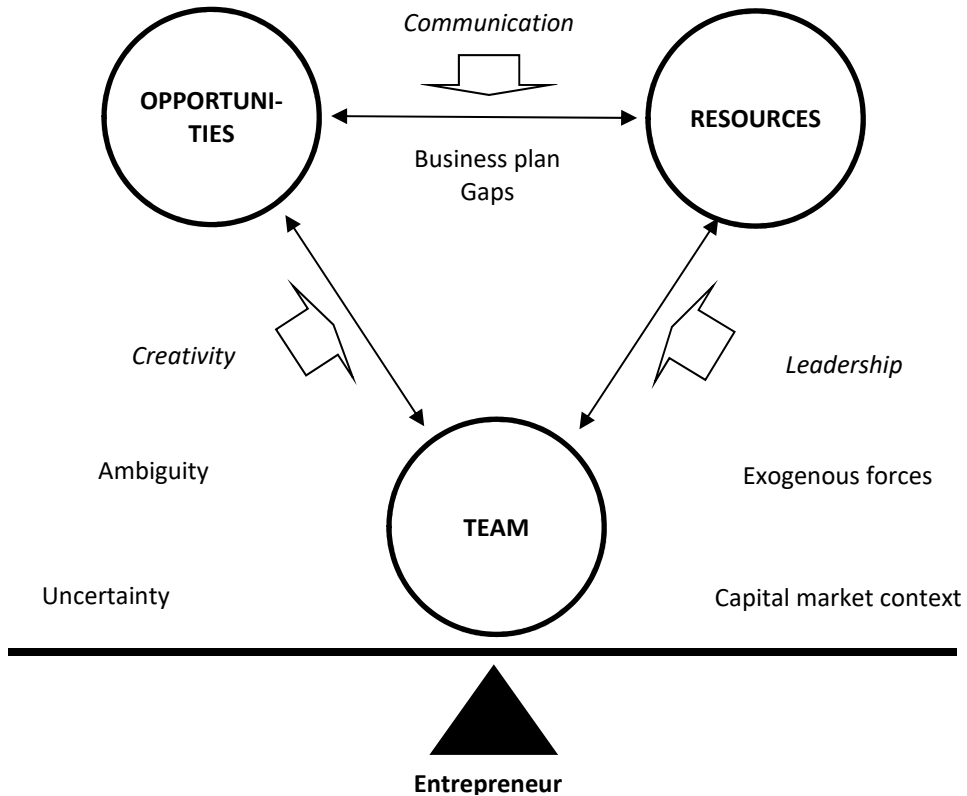


Figure 3. Entrepreneurial process

Source: (Timmons & Spinelli, 2004, p. 110).

Resources

According to Timmons and Spinelli (2004), it is not essential to have all the necessary resources, especially capital, to make a venture successful. Money follows high potential opportunities, perceived and promoted by a strong management team. The authors cite the concept of *bootstrapping* as a way to create entrepreneurial companies since this concept allows to develop a significant competitive advantage. *Bootstrapping* is a philosophy of business operations, especially in the early stages of the company's development, based on the use of internal sources of funding with cost reduction accompanied by the rapid introduction of the venture into the market to generate revenues. At a later stage, further improvement of the product occurs. Appropriate management of working capital cycle (a short-cycle of receivables turnover along with the maximum extension of terms of payment) is an important principle in this respect.

Team

A new venture requires an entrepreneurial leader who has such personal qualities as the ability to quickly learn and teach others, flexibility, the ability to face adversity, as well as honesty and integrity. The ability and skills to acquire other key members of the team and

then build this team are one of the most desirable capabilities which investors look for. When creating a team, attention must be paid to professional qualifications, motivation and commitment, self-reliance, teamwork skills and creativity.

To sum up, the entrepreneurial process is:

- driven by opportunity,
- based on an entrepreneurial leader and an entrepreneurial team,
- creative and resource-conserving,
- dependent on the fit and balance between resources and needs,
- integrated and holistic.

The above-mentioned considerations are used in the discussion on entrepreneurship in the period of conscious creation of the future growth and development of the firm by the entrepreneur. At this point, it is worth drawing attention to the role of business model in this process, which is increasingly often indicated by the authors. A model which is practical, comprehensible and possible to independently design and build by the entrepreneur. In addition, it is easier to build a strategy comprising the stage of strategic analysis, strategic planning, strategy implementation and control based on a business model. Regrettably, this strategic orientation is not often used by small firms. Many small firms believe that strategies are used in medium-sized or large companies. In this respect, it is worth noting that modern approaches to organisational strategy include a clear focus on (compare: Romanowska, pp. 95 – 103, in Krupski, 2005):

- company size,
- organisational solutions used in the company (e.g.: radial or simple organisational structure),
- outsourcing relations,
- forms of cooperation with other organisations, etc.

This is reflected in research and papers on the subject. In recent years, there are new perspectives on the development of strategies of organisations that operate in an ever-changing, turbulent environment. Concepts of organisations operating on the edge of chaos, without clearly defined objectives, experimenting and looking for optimal solutions (Brown & Eisenhardt, 1998, pp. 7-9), taking advantage of opportunities and formulating simple rules instead of strategic goals (Eisenhardt & Sull, 2001, pp. 109-110) are an attempt to respond to challenges presented by a turbulent environment. According to Krupski, strategies for organisations operating in a turbulent environment should be flexible and geared towards making use of opportunities, which can be achieved through (Krupski, 2009, pp. 99-100):

- resignation from the description of the firm's future in terms of product and market in favour of the description of the strategy in terms of resources that determine the effective use of opportunities,
- the assumption that the longer the time horizon, the more issues concerning the acquisition and use of resources should be included in the strategy,
- the assumption that the strategy should include a plan to create the conditions for exploiting opportunities or simple rules of the organisation's functioning,
- the assumption that the only form of strategy in terms of product and market is one characterised by a dynamic nature in the form of scenarios or options.

At the same time, as pointed out by the author of this concept, uniqueness and originality of tangible resources is rather difficult to achieve (apart from few exceptions, they are usually widely available), whereas unique combinations of intangible resources can strengthen the firm's competitive position. Due to their potential originality, the following resources have been identified (Krupski, 2007, pp. 14-15):

- knowledge, skills and talents of employees (specialised, elite, original),
- attitudes and behaviour of employees, motivations and other elements of organisational culture,
- privileged relations with the environment, formalised – licences, certificates,
- privileged relations with the environment, informal – personal contacts based on trust and loyalty, etc.,
- industry technologies – e.g.: patents,
- information technology - proprietary software,
- the company's own natural resources or resources at its disposal,
- location,
- the firm's image - trademarks, history, reputation,
- sources of funding,
- routines, inter-organisational solutions.

The results of research conducted by Krupski (2007) have shown that for small and micro firms the most valuable, rare and difficult to reproduce are informal privileged relations with the environment.

As follows from the previous considerations, the person of the entrepreneur is inextricably linked with the analysis of the functioning of small businesses. This applies both to business success as well as failure. The subject of deterioration in the condition of the firms analysed in the paper should be seen in relation to the cause(s) of the deterioration of their business parameters and the effects that this situation can have in the future. As a result of errors on the part of entrepreneurs, symptoms of deterioration in the economic situation of the company appear. This period may be transient and manifest itself only as a short-term decline or stagnation of the firm's position in the market (its market share), a reduction in its size, etc. However, in many cases, this period represents a threat to the survival of the company on the market. As a result, the company may find itself on the trajectory of business failure (Ooghe & De Prijcker, 2006, pp. 12-13; Crutzen, 2010).

The Entrepreneurial Process as a Factor in Reducing the Risk of Economic Failure

The literature describing consequences of long-term deterioration in the condition of small businesses comprises models that indicate areas and related causes of the entry of a small firm onto the trajectory of economic failure. The areas include: **the company's policy and resources, the characteristics of the entrepreneur and the characteristics of the enterprise.**

The company's policy and resources (its strategy, finances, operational activities, management system, tangible and intangible resources, etc.) are associated with the person of the entrepreneur (the entrepreneur's motivation, skills, abilities, character traits, etc.) and with the characteristics of the enterprise (the period of its development, sector, size, etc.) They form, along with the environment, the real source of the given firm's entry onto the trajectory of economic failure. The deterioration of the

condition of the firm, which should be a warning sign for the entrepreneur (Ropeęa, 2013, pp. 59-60), may be the beginning of this road.

Analysing the course of economic failures of small businesses, one can come to the conclusion that action is needed to identify causes of the deterioration in their condition (including root causes), as well as symptoms and manifestations of business crisis (Piasecki, 2012, p. 6).

Given these components, it can be noted that the person of the entrepreneur plays an important role in this respect. The entrepreneur becomes both the main initiator of the creation of the company and the main person responsible for causing its economic failure. The entrepreneur often participates in events leading to the deterioration in the condition of the small business and its future economic failure.

Thus, the literature provides recommendations to prevent unintended economic failure of small firms, directly related to the behaviour of the entrepreneur. For example, in Poland, based on a recommendation of the Ministry of Development (formerly the Ministry of Economy), the New Opportunity Policy (NOP) programme was created, containing, among others, the following recommendations:

1. improvement of access to information and knowledge sources for entrepreneurs,
2. improvement of the economic, legal, political and technological system shaping the conditions for small firms' operations,
3. introduction of changes in the characteristics, behaviour and attitudes of managers of small firms.

In the context of the undertaken subject, it seems particularly relevant to seek to increase the importance of entrepreneurial traits, behaviour and attitudes in the decision-making process related to managing a small firm in the period of deterioration in its condition and its potential entry onto the trajectory of business failure.

Table 2. Basic "inherent" problems specific to small businesses

Determinants of firm's success or failure	Characteristics
The person of the owner-manager	Key decisions about the firm are taken usually by one person - the owner-manager. Personal qualities and attitudes of the owner-manager determine how a small business is managed and the likelihood of its success or failure. The quality of management in the firm depends on what kind of experience and skills its owner has.
Isolation	Owners of small businesses do not have the opportunity for mutual discussion or sharing problems, as is the case in larger companies. A lack of sufficient knowledge and information about the environment.
Lack of time	Focusing key functions in one hand leads to a lack of time and working under very high pressure, which affects the quality of management.

Source: own compilation based on (Argenti, 1976, pp. 123-125), (Jennings & Beaver, 1995, pp. 185-200), (Peacock, 2000, pp. 6-7), (Gumpert & Boyd, 1984, pp. 18-24), (Larson & Clute, 1979, pp. 35-43).

Many researchers that study the deterioration of the market position and failures of small businesses indicate that the person of the owner-entrepreneur is the key factor

determining the success or failure of the given company¹Argenti determines these factors as "inherent" flaws present in the company. They include: (i) the characteristics of the owner-manager (ii) isolation, (iii) a lack of time. The table 2 presents the description of the above-mentioned factors (Argenti, 1976, pp. 123-125).

The current trend in research related to the person of the entrepreneur, mainly based on the human capital theory (Becker, 1993, p. 59), suggests that the higher the quality of human capital in terms of personal attributes and skills of the entrepreneur, the higher the chance of the company's survival. Among the major factors affecting the reduction of the risk of failure, the following ones come to the fore: experience in business and management (Brüderl, Preisendörfer, & Ziegler, 1992, pp. 231-233; Pasanen, 2005, p. 103), professional experience in the industry (Preisendorfer & Voss, 1990, pp. 123-124; Carter, Gartner, Shaver & Gatewood, 2003, pp. 33-34; Brüderl et al. 1992, pp. 231-233), and education (Brüderl et al. 1992, pp. 231-233; Bates, 2005, p. 8).

MATERIAL AND METHODS

For the purpose of the paper, a theoretical analysis of the problem based on a literature review and an analysis of the results of empirical research were conducted. The author identified in the literature the results of research on the process of decision-making of entrepreneurs. The studies were divided according to the following criteria: entrepreneurs' decisions in relation to their motivation for undertaking business activity and entrepreneurs' decisions in relation to their character traits and behaviour. The following factors influence the behaviour and attitudes of entrepreneurs in the periods of deterioration in the condition of their firms.

Motivation for Undertaking Business Activity

According to Smallbone, motives for undertaking business activities may have an impact on the future success of the given venture (Smallbone, 1995, p. 12). Greater chances of survival are observed in the case of companies founded by the entrepreneurs who saw opportunities arising from the environment and were prompted to establish their firm than in the case when their motivation was solely to become self-employed to avoid unemployment.

Storey (1994, pp. 91-99) classifies these types of motivation as positive (pull factors) and negative ones (push factors)². Positive motivation results from "the need to become an entrepreneur" (Wasilczuk, 2005), an informed choice concerning a better alternative, as well as the perception of an opportunity for a successful venture (Baclawski, Koczerga & Zbierowski, 2005, pp. 11-12)³. The factors such as the need for independence, the need to

¹ Large companies are generally managed by a team of professional managers, hence the impact of individual personal characteristics on the effectiveness of the company's operations is smaller, in contrast to small firms where the decision-making process is often dominated by one person - the owner.

² In other words: opportunity factors or necessity factors (Baclawski et al., 2005, pp. 11-12; Verheul et al. 2010).

³ Giacomini et al. (2007, p. 11) indicate the following groups of pull factors: factors related to market opportunities, factors related to the improvement of one's material status. Carter et al. (2003, p. 20) provide the following classification of motivation categories: innovation (the desire to introduce a new product or service), independence (freedom to control one's own time, more flexibility between working time and time devoted to the family), recognition (in the eyes of the family and friends, a higher position in the community), roles (imitating others),

succeed in running one's own business or a dream of a particular type of business (Orhan & Scott, 2001, p. 238), as well as the desire for filling a market niche and personal development (Carter et al. 2003, p. 37) contribute to an increase in the growth potential and higher chances of survival more than negative motives (Bačlawski et al. 2005, pp. 14-18).

The necessity (compulsion) to set up a business is mainly due to the situation in the labour market. According to the authors of Global Entrepreneurship Monitor (Bačlawski et al., 2005, p. 17), negative motivation is based on the assumption that long-term high unemployment or the threat of losing a job stimulate the desire for economic independence⁴, i.e. the creation of businesses is a reaction to social difficulties and little chance in the labour market⁵. Giacomini et al. (2007, p. 12) also include pressure from relatives to continue the family business in the group of negative factors.

The Firm's Survival

In the research conducted by Watson, Hogarth-Scott, and Wilson (1998, p. 232), such motives to establish business activity as the need for independence, dissatisfaction with the current job, or the utilisation of creative skills were more often indicated by entrepreneurs who continued business activity than by those who have suffered economic failure. The research conducted by Hall (1994) shows that a greater propensity for failure was observed in companies founded by entrepreneurs who were forced to do so, e.g.: due to the reduction of employment, than in companies where "positive" motives were the reason for taking up business activity, e.g.: the desire to increase earnings, or the need for independence.

The Entrepreneur's Character Traits

The entrepreneur's character traits can also have a significant impact on decision-making in the firm, thus on the results achieved, and in consequence, on its business success or failure. Larson and Clute (1979, p. 37) point to such personal features of the entrepreneur that are conducive to failure: relying on one's own taste and opinion in the product selection, making decisions based solely on intuition and emotions and not on objective premises, not taking advice from external advisors, inflexibility in decision making, as well as focusing on the past and ignoring future events. In addition, the following characteristics may be also mentioned: too low or too high propensity for risk taking (Ibrahim and Goodwin, 1986), a lack of charisma (O'Neil & Duker, 1986) or an autocratic and dominant character (Argenti, 1976). To under-

financial success, and self-realisation. Birley and Westhead (1994) and Verheul et al. (2010) make similar classifications.

⁴ This is a reference to Knight's theory (quoted after Storey, 1994, pp. 62-63), according to which people make a choice in terms of professional activity between: being unemployed, being employed or being self-employed.

⁵ The push factors related to the situation in the labour market include: unemployment, unsatisfactory earnings, dissatisfaction with the current job, the difficulty with reconciling professional and family roles (Verheul et al., 2010, Giacomini et al., 2007). The last factor is related particularly to women who often have difficulty reconciling employment with the upbringing of children (compare: Bačlawski et al., 2005, Carter et al. 2003). According to the research for Global Entrepreneurship Monitor, in 2004, among 34 countries participating in the project, on average 75.2% of the ventures were undertaken as a result of an emerging opportunity, 20.9% out of necessity and 3.9% for other reasons. In Poland, ventures undertaken by choice amounted to 64.7%, while the ones undertaken out of necessity to 35.3%. Women are more likely than men to start companies out of necessity, and in terms of the age of entrepreneurs, the largest percentage of people engaged in business activity because of push factors was recorded among the 55-64 age group – 54.5% (Bačlawski et al., 2005, pp. 16-17).

stand why some entrepreneurs are successful and others fail, the combination of three elements should be analysed: personality traits, knowledge and experience along with professional skills (Ropega, 2013, p. 60). The likelihood of success or failure does not depend on a certain set of attributes, but on the infinite variety of combinations in which the particular person's positive attributes can outweigh the negative traits.

Based on the theoretical analysis of the problem, the results of published studies and the discussion concerning the issue, the author conducted his own research. For the purpose of the paper, the author formulated two research hypotheses:

- H1:** Entrepreneurs identify symptoms of deterioration in the condition of their firms too late, and therefore take corrective action too late.
- H2:** Effective management of a small firm in the period of deterioration in its condition re-quires the initiation of the entrepreneurial process and/or its deliberate continuation.

The above-presented hypotheses were included in the methodology of the study.

The study concerned the causes and symptoms of economic failures identified along the trajectories of this phenomenon. The entire study was conducted based on the analysis of 32 case studies carried out among the former entrepreneurs of micro and small firms in the period from 01.01.2006 to 31.12.2011. Their addresses were extracted from the REGON (National Business Registry) database. As a result of the verification, a group of potential addresses, which could also be places of residence of the entrepreneurs, was established. The criteria for the selection included: the contact made with the former owner of the liquidated company, obtaining his or her approval to conduct research, the verification of the actual liquidation of economic activity, and conducting the full range of study. The research was conducted throughout the country. The method of the selection of companies for the study was purposeful.

The ancillary form used in the study included the following issues:

- identification of the number of employees at the time of liquidation and a year before the liquidation,
- predominant type of activity (based on the Polish Classification of Activity),
- the firm's territorial area,
- number of the owners,
- age of the owners,
- the owner's experience in conducting business activity,
- motives for undertaking business activity,
- internal causes of failure, including the area of: strategy, expansion, planning and financial management, human resources, marketing, innovation, production/services and operational activities,
- external causes,
- access to sources of financing,
- effective prevention of economic failure.

The paper uses selected parts of the study related to the non-occurrence of entrepreneurial behaviour or errors in this behaviour identified in the surveyed companies. In the course of the study, financial and non-financial information was collected. 18 entrepreneurs made the financial documentation of their firms available, in the other cases, the

assessment of the economic and financial standing of the firms was carried out in a descriptive manner by their owners, using the characteristics presented by Argenti. Changes in the condition of the firm in time were characterised as follows:

- Poor condition of the firm – the firm's results are worse than its major competitors' and the industry average; the firm's financial results or cash flows are negative;
- Good condition of the firm – the results are comparable with its competitors or the industry average, profits are made and positive cash flows are recorded;
- Excellent condition of the firm – the results surpass those achieved by its competitors, an increase in financial results compared to previous periods is observed;
- Fantastic condition of the firm – rarely achievable, characterised by almost unreal results in comparison with the industry or its competitors.

As a result of the research conducted, the verification of trajectories of economic failure in small businesses presented in the literature was carried out. In the course of analysing the results of research, an additional, unique trajectory identified in the surveyed companies was isolated. Its identification was due to the specificity of the trajectory course in 7 of the 32 firm surveyed. Their share was so large that the author introduced the trajectory of LACK OF SELF-CRITICISM AFTER RAPID, APPARENT GROWTH OF THE COMPANY into the existing classification. As a result, the study highlights 6 trajectories of business failure (TBF).

Table 3. The number of cases identified in the individual trajectories of economic failure

Type of trajectory of business failure (TBF)	Number of cases
(TBF 1) FAILED START-UP	4
(TBF 2) GROWING COMPANY UNDER UNSTABLE MANAGEMENT	8
(TBF 3) LACK OF SELF-CRITICISM AFTER RAPID, APPARENT GROWTH OF THE COMPANY	7
(TBF 4) LACK OF SELF-CRITICISM AFTER REAL, RAPID GROWTH OF THE COMPANY	5
(TBF 5) MATURE APATHETIC COMPANY	6
(TBF 6) EXCESSIVE INTERNAL CONSUMPTION	2

Source: own compilation.

The replies provided by the respondents were characterised by a large degree of subjectivity on the part of the former business owners - managers. In the course of the study, the author sought to verify the respondents' answers with great care, asking questions related to the context of actions and decisions undertaken by the business owners. A great deal of attention was devoted to the references to possible strategies of the surveyed firms and the assessment of the environment on the part of the former owners – managers related to a strategic approach. Despite the author's doubts about the objectivity of the responses of the former owners in relation to their role in the process of economic failure, their arguments were accepted. However, the descriptions of individual trajectories contain the author's conclusions concerning the management process in the analysed cases.

Due to the aim of the paper and the research hypotheses under verification, the following components indicating the deterioration in the condition of the firm along individual trajectories (based on the division presented in Table 3) were identified: specific

threats, systematic threats, internal causes, external causes, non-financial symptoms, financial symptoms, and the course of the crisis.

The above-presented components were analysed in relation to the activities of the entrepreneurs who provided an assessment of their own efforts to initiate the entrepreneurial process and/or continue it in a deliberate manner.

As a result of the study, the responses were obtained that indicated a lack of understanding of the entrepreneurial process and its application.

RESULTS AND DISCUSSION

The qualitative study conducted by the author of the paper has confirmed a lack of entrepreneurial attributes, behaviour and attitudes in people that have concluded economic activity as a result of business failure. The author's research indicates a correlation between the lack of entrepreneurial behaviour and individual trajectories of economic failure. Considerations regarding the phenomenon of economic failure of small businesses can be transposed into the factors that restrict the entrepreneurial process, based on the components of the model proposed by Timmons and Spinelli (2004). Limitations existing in relation to the model indicated in the first part of the paper are related to the occurrence of threats in place of the existing opportunities. The component of the entrepreneurial process in the form of the team may be also deprived of its leader or based on inappropriate relations between individual employees of small firms. In terms of the discussed model, shortcomings or wrong actions in individual components can be seen in practically all the six trajectories. As a result, the lack of entrepreneurial process identified was manifested in:

- Lack of response on the part of entrepreneurs to opportunities emerging in the environment – virtually all the surveyed ex-entrepreneurs could not point out any clearly identified opportunities that emerged at the time when the company perceived its deteriorating condition and entered the trajectory of business failure.
- Lack of response to threats emerging in the environment – among the surveyed entrepreneurs only six took action related to a real assessment of the risks arising from the micro-environment (creditors' claims, loss of key customers, loss of competitive advantages, etc.) and the macro-environment (adapting to changing regulations, responding to changes in exchange rates, changes in the market in terms of export/import, or changes in the prices of raw materials, etc.).
- The response to threats emerging in the environment was late/or inadequate to meet the needs. As a result, the firm failed to respond adequately to the threat. The "escape by going forward" often cited in the literature (Piasecki 2012) was used as a way to counteract the situation.
- Lack of entrepreneurship also occurred in the area of resources. The study included both intangible and tangible resources. Most of the respondents focused on the limitations of tangible resources in the form of fixed and working assets, a lack of access to resources resulting from cash shortage, the loss of access to tangible resources and their inability to acquire new (alternative) resources. Only three respondents among the ex-entrepreneurs indicated the inability to use their own intellectual resources in the course of events initiated by the deterioration in the firm's condition. In their opinion, it was a fundamental error, as it did not allow them to diagnose the cause of the

deterioration in the firm's condition and resulted in an inappropriate reaction to the situation. The respondents did not indicate the existence of a relationship between the lack of tangible resources and the mismanagement of the acquisition of these assets by the entrepreneur. They also did not acknowledge their own ignorance concerning different forms of financing of the firm's operations or forms of support. Also, there were no indications of a formal attempt to prepare the company that was at risk of failure to obtain such resources, e.g.: restructuring plans.

- No active manifestations of entrepreneurship in the area of team building were seen in the 29 analysed cases. This was the result of both a lack of employees in the period of the deterioration of business performance and a lack of focus of the managers of the surveyed companies on team building and development. Most frequently indicated were conflicts between employees and the entrepreneur (the search for a new job during working hours, prolonged absenteeism, absence during the activation of the market for the sake of seasonal work - employees did not perform their professional duties in the company as they undertook seasonal work in construction, agriculture, etc.) and conflicts between employees (obstruction of the performance of official duties, theft, misrepresentation, etc.).

As a result of the deterioration or non-occurrence of entrepreneurial behaviour in the indicated areas, the entrepreneurial process could not take place or it proceeded in an inappropriate manner. Thus, changes are necessary to create a basis for the reduction of threats to business operations.

A lack of creativity, leadership, communication and teamwork is apparent in the analysed cases. Especially during the company's entry onto the trajectory of business failure, it is an additional factor limiting the possibility of counteracting the occurrence of such a situation.

CONCLUSIONS

The existing solutions describing countermeasures of economic failure show the importance of the strategic orientation in the process of quick identification of warning signs of deterioration in the firm's condition and the need to take swift preventive action. The assumptions in the model of counteracting the phenomenon of economic failure include the need for the speedy identification and analysis of the risk of the occurrence of such a situation, the identification of its causes and symptoms, and - as a result - the development of preventive measures. According to the author, one of the key factors affecting the survival of small businesses in the period of deterioration of their condition is the initiation of the entrepreneurial process and/or its deliberate continuation. It seems quite natural to base the components of this process on the existing support tools for entrepreneurs that are at risk of economic failure. Therefore, the effective implementation of the principles of the existing assistance programmes, for example, the New Opportunity Policy, is recommended. According to the author, the main factor initiating a conscious process of strategic orientation in this field is education in the use of entrepreneurship in the modern economy.

The information presented in the results of the research can significantly expand knowledge on the functioning of small firms and the factors causing their entry onto the trajectory leading to economic failure. It has been found that certain factors and processes can affect the formation of erroneous spiral, thus in-depth studies of the process of economic failure are very important.

The results may be useful for entrepreneurs as well as for institutions supporting entrepreneurship and the development of small and medium-sized enterprises.

The research results are based on qualitative case study research. Further studies on a larger scale can help to clarify the factors of failure, and studies of motivation to undertake business activity (push and pull factors) as well as their impact on economic failure of small firms are also an interesting subject worth exploring.

REFERENCES

- Argenti, J. (1976). *Corporate Collapse*, McGraw-Hill, Berkshire.
- Bałański, K., Koczerga, M., & Zbierowski, P. (2005). *Studium przedsiębiorczości w Polsce w roku 2004*, GEM, Fundacja Edukacyjna Bachalski i Krzysztof Bałański, Poznań.
- Bates, T. (2005). Analysis of Young, Small Firms that Have Closed: Delineating Successful from Unsuccessful Closures. *Journal of Business Venturing*, 20, 343–358.
- Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, The University of Chicago Press, Chicago.
- Birley, S. & Westhead, P. (1994). A Taxonomy of Business Start-up Reasons and Their Impact on Firm Growth and Size. *Journal of Business Venturing*, 9, 7–31.
- Brown, S.L., & Eisenhardt, K.M. (1998). *Competing on the Edge: Strategy as Structural Chaos*, Harvard Business School Press, Boston.
- Brüderl, J., Preisendörfer, P. & Ziegler, R. (1992). Survival Chances of Newly Founded Business Organizations. *American Sociological Review*, 57(2), 227–242.
- Carter, N.M., Gartner, W.B., Shaver, K.G., & Gatewood, E. J. (2003). The Career Reasons of Nascent Entrepreneurs. *Journal of Business Venturing*, 18(1), 13–19.
- Crutzen, N. (2010). Essays on the Prevention of Small Business Failure: Taxonomy and Validation of Five Explanatory Business Failure Patterns, [in:] *CeFiP-KeFiK Academic Awards 2009*, De Boeck-Larcier, Bruxelles.
- Eisenhardt, K.M., & Sull, D.N. (2001). Strategy as Simple Rules. *Harvard Business Review*, 79 (1), 106–116.
- Gartner, W.B. (1985). A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *Academy of Management Review*, 10(4), 696–706.
- Giacomin, O., Guyot, J.-L., Janssen, F., & Lohest, O. (2007). *Novice Creators: Personal Identity and Push Pull Dynamics*, “CRECIS Working Paper”, 7, Center for Research in Change, Innovation and Strategy, Louvain School of Management.
- Gumpert, D.E., & Boyd, D.P. (1984). The Loneliness of the Small-business Owner, *Harvard Business Review*, November-December, 18-24.
- Hall, G. (1994). Factors Distinguishing Survivors from Failures amongst Small Firms in the UK Construction Sector. *Journal of Management Studies*, 31(5), September, 737–760.
- Ibrahim, A.B., & Goodwin, J. R. (1986). Perceived Causes of Success in Small Business. *American Journal of Small Business*, Fall, 41–50.
- Jennings, P.I., & Beaver, G. (1995). The Managerial Dimension of Small Business Failure. *Journal of Strategic Change*, 4, 185–200.
- Krupski, R. (2005). Planowany czy nieplanowany rozwój małych firm. Co z teorią zarządzania strategicznego. *Przegląd Organizacji*, 3, 15–18.
- Krupski, R. (2007). Identyfikacja ważnych strategicznie zasobów przedsiębiorstwa w świetle badań empirycznych. *Zarządzanie – kontekst strategiczny, kulturowy i zasobowy. Prace Naukowe Akademii Ekonomicznej we Wrocławiu*, 1187, 13–18.
- Krupski, R. (2009). Ewolucja rozumienia strategii organizacji, [in:] J. Prońko (Eds.), *Ludzie – Jakość – Organizacja. Miscellanea Oeconomicae. Studia i Materiały Wydziału Zarządzania i Administracji Uniwersytetu Humanistyczno-Przyrodniczego Jana Kochanowskiego w Kielcach*, 13(2), 93–102.
- Larson, C.M., & Clute, R.C. (1979). The Failure Syndrome. *American Journal of Small Business*, 4(2), 35–43.

- O'Neill, H.M., & Duker, J. (1986). Survival and Failure in Small Business. *Journal of Small Business Management*, 24, January, 30–37.
- Ooghe, H., & De Prijcker, S. (2006). *Failure Process and Causes of Company Bankruptcy: a Typology*, Working Paper, Universiteit Gent, 1-43.
- Orhan, M., & Scott, D. (2001). Why Women Enter into Entrepreneurship: An Exploratory Model. *Women in Management Review*, 16(5/6), 232–244.
- Pasanen, M. (2005). *Tracking Small Business Failure Factors and Trajectories*, Challenges in Entrepreneurship and SME Research, 2nd Inter-RENT Online Publication, Turku; www.ecsb.org/doc/Inter-RENT%202005%20final%20document.pdf#page=97 [14.04.2009].
- Peacock, R. (2000). *Failure and Assistance of Small Firms*, www.sbeducation.info/serv03.htm, [29.11.2007].
- Piasecki, B. (2001). *Ekonomika i zarządzanie małą firmą*, Wyd. Naukowe PWN, Warszawa–Łódź.
- Piasecki, B. (2012). *Strategie wczesnego ostrzegania i wyjścia z zagrożenia upadkiem*, In B. Piasecki (Ed.), *Upadek małych firm. Symptomy i strategie wczesnego ostrzegania*, Wyd. Uniwersytetu Łódzkiego, Łódź, 113–139.
- Preisendörfer, P., & Voss, T. (1990). Organizational Mortality of Small Firms: The Effects of Entrepreneurial Age and Human Capital. *Organization Studies*, 11(1), 107-129.
- Romanowska, M. (2005). *Analiza i planowanie strategiczne w małej firmie*, In R. Krupski (Ed.), *Zarządzanie strategiczne. Strategie małych firm*. Wyd. Wałbrzyskiej Wyższej Szkoły Zarządzania i Przedsiębiorczości.
- Ropega, J. (2013). *Ścieżki niepowodzeń gospodarczych. Redukcja zagrożenia niepowodzeniem jako element strategii małej firmy*, Uniwersytet Łódzki.
- Shane, S.A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing, Cheltenham.
- Smallbone, D. (1995). *The Survival, Growth and Support Needs of Manufacturing SMEs in Poland and The Baltic States: Developing a Research Agenda*, paper presented to a seminar at University of Lodz, Poland.
- Storey, D.J. (1994). *Understanding The Small Business Sector*, Routledge, London–New York.
- Timmons, J.A., & Spinelli, J. (2004). *New Venture Creation: Entrepreneurship For The 21st Century*. McGraw-Hill/Irwin.
- Verheul, I., Thurik, A.R., Hessels, J., & van der Zwan, P.W. (2010). *Factors Influencing the Entrepreneurial Engagement of Opportunity and Necessity Entrepreneurs*. Scales Research Reports H201011, EIM, Business and Policy Research.
- Wasilczuk, J. (2005). *Wzrost małych i średnich przedsiębiorstw. Aspekty teoretyczne i badania empiryczne*, Wyd. Politechniki Gdańskiej, Gdańsk.
- Watson, K., Hogarth-Scott, S., & Wilson, N. (1998). Small Business Start-ups: Success Factors and Support Implications. *International Journal of Entrepreneurial Behaviour and Research*, 4(3), 217–238.

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Kaldor's Income Distribution and Tourism Specialization: Evidence from Selected Countries

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Abstract

To empirically test Kaldor's income distribution model regarding aggregate-level factor shares in modern economies that are attempting to link tourism development and income, specifically in a number of Mediterranean and European countries. The Kaldor condition of tourism demand in GDP is used to draw out hypotheses about the increasing profit share in national incomes that corresponds to the tourism-led growth assumption. The research is designed by using panel data estimation and the Hausman-Taylor estimator. It is found that the data overwhelmingly reject the theory in the Mediterranean and the countries of the North but accept the theory in the total set of countries. The total set of included economies in our empirical research closely followed the theoretical speculation of profit-led growth in economies. Profit-led growth can provide sufficient savings and investment for future generations, and wage-led growth is beneficial (but myopic) for mitigating the effects of short-term recessions. The originality of this work lies in studying Kaldor's income distribution model linked to tourism specialization and its predictions that are spread out into the group of both similar and different countries in terms of tourism development.

Keywords: Tourism; Destinations; European and Mediterranean countries; Income distribution; Economic growth

JEL codes: Q11, O47, L83

INTRODUCTION

The issue of income distribution linked to specialization can be viewed from various angles, but a formal analysis inevitably abstracts from details and tries to capture the most

relevant aspects of the issue at hand. A Kaldorian hypothesis about income distribution and specialization put forward in this paper is one of the alternative perspectives.

The main hypothetical conjecture in this paper is that tourism leads to profit-led growth in economies. In an open economy that is fully specialized in providing tourism services to foreigners that sector is often the main instrument of economic growth. Many studies have found that most countries are wage-led domestically and that the larger economies (including the US and the EU as a whole) are wage led overall, while some smaller or more open economies (including some individual EU members) are profit led once foreign trade is taken into account (e.g., Onaran and Galanis 2013).

Thus, the primary focus of this paper is to observe the contributions from the use of basic production factors, labour and capital in the aggregate output, which is based on the calculation at the end of the fiscal year and on realised income, as well as to measure the impact of tourism development in this regard.

In this paper, we propose and conduct a simple empirical test that examines the consequences of tourism development and specialization within a given circle of a relatively homogenous group of economies based on Kaldor's theory of income distribution. Using data from the Extended Penn World Tables 4.0 and simple panel regression analysis, our test strongly rejects the prediction of Kaldor's theory in the group of Mediterranean countries that have substantial tourism activity. The rest of this paper is organised as follows. The next section gives a brief discussion of the tourism-income distribution schedule according to Kaldor's theory, an important device used in the empirical approach. In the subsequent two sections, we derive the Kaldorian condition regarding how tourism demand impacted profit shares in terms of income distribution; these sections draw heavily on Candela and Figini (2013). In the penultimate section, we outline our empirical strategy, conduct the empirical analysis and present the main results. The last section concludes the discussion.

LITERATURE REVIEW

It is difficult to relate our results to the existing literature because, apart from Marcouiller, Kim and Deller (2004), who examine the performance of the tourism sector and the distributional mechanisms of aggregate amenity-led economic growth for the US lake states, the relationship between income distribution and tourism specialization across the various regions has not been studied. The distributional consequences of the growth through tourism have not been investigated (Pant, 2011). So, it is very difficult to compare, the drawn conclusions from a set of our aggregate data that are leaning on modified Kaldor's theory of income distribution, to conclusions of other authors.

There are a number of case studies examining the relationship between Kaldor's theory of income distribution and economic conditions in certain aspects, see e.g. Soon Ryoo and Yun K. Kim (2014) who extend Kaldor's theory of income distribution to include workers' debt accumulation and their motive to emulate rentiers' consumption. Cook (1995) made effort to develop a cross-country test for the existence of Kaldor effects in less developed countries in regard income distribution. In paper of Dühaupt (2014) several theoretical approaches explaining functional income distribution are summarized among them the Kaldor's too. In light of the different theoretical stances, this paper reviews the empirical literature on potential explanations for the prolonged fall since the

1980s, the share of wages in national income in almost all countries over the world. Paley (2013) in his theoretical paper presents a Kaldorian model of growth that incorporates both Kaldor's theory of income distribution and his endogenous technical progress function. Based on the assumptions of the neo-Keynesian distribution theory and using an information-theoretic approach, Das and Martin (2012) in their paper derive the distribution of income between income units. The paper of Ryoo (2014) examines the effects of changes in aggregate demand on income distribution in a stock-own consistent model of a corporate economy with two classes. The model has a main Kaldorian feature: income distribution is determined endogenously by the level of aggregate demand.

A large body of literature inspired by the seminal contribution of Marglin and Bhaduri (1988) has debated the distributional determinants of demand and growth. A general conclusion has been that open economy considerations weaken the potential for a wage-led growth regime (Razmi, 2014). As for the role of profit in growth (the focal point in our paper), Bhaduri and Marglin call profit-driven pattern of growth an "exhilarationist" regime (1990). This type of growth benefits not only capitalists but also unemployed workers through the creation of new jobs. Job creation, however, is achieved at the expense of the average real wages of those who are already employed (Molero-Simarro, 2013).

'Income shares' or 'factor shares' refer to the shares of national income that reward the different factors of production. Because they are related to the macroeconomic functioning of economies, they are typically measured from aggregate data. Labour share "*shows how much of national income accrues to labor*" (Lübker, 2007). Krueger (1999) notes that the types of computations used to determine income shares force income into two artificial categories: labour and non-labour, with the latter strongly linked to capital shares. In reality, however, there are many different types of labour – "*labor and capital no longer divide so neatly into mutually exclusive categories*" (Krueger, 1999) – and each economic agent derives its earnings from multiple different sources. Thus, factor shares are very important for studying the functioning of economies, both the economies of the Mediterranean band and those of some European countries.

Owing to the predominance of tourism development strategies in the Mediterranean rim countries, it is interesting to focus on the practical question of whether exaggerated tourism development (and hence specialization) in these countries determines a specific income distribution structure considering the dichotomy between labour and capital.

To our knowledge, we repeat there has not yet been any systematic attempt to assemble a common database and study the conceptual issues linked to the empirical trade-off between level of tourism development and income distribution among labour and capital recipients according to Kaldor's theory of income distribution. However, some papers address that issue from the different angles at which the concept can be studied. Blake et al. (2009) developed a computable general equilibrium (CGE) model of Brazil's tourism that includes earnings by different types of labour in the tourism industry, households with different income levels, and the channels through which tourism alters the income distribution between households with different income levels. In low-income countries, the use of tax revenues to fund tourism promotion is motivated in part by the belief that tourism growth will improve income distribution by expanding the demand for relatively low-skilled labour. The authors examine this opinion for the case of

Thailand, a highly tourism-intensive economy, using a specifically designed applied general equilibrium model (Wattanakuljarus, Coxhead, 2008).

MATERIAL AND METHODS

The Model

Conventionally, national income accounting identities are employed to expose the links between final output consumption, e.g., government budget balance, and the trade balance, among others. The model we use for the empirical study is a panel regression model based on a slightly corrected Keynesian open economy model. In a Keynesian open economy model, gross domestic product Y is the sum of private consumption expenditures C ; gross private domestic investment expenditures I ; government expenditures G ; and net exports $EX - IM$.

$$Y = C + I + G + EX - IM \quad (1)$$

Let us assume now that there is another economy that is the same in every respect as the previous one except that this second one also receives a systematic flow of tourists because it is necessary that a share of the production in our "mixed economy" be directed to tourism consumption. We indicate tourism demand in the economy as TU . By introducing a series of simplifying assumptions (the time term is t , in the economy import equals to export, $EX - IM = 0$, the local population does not travel abroad, and there is no autonomous consumption), the equilibrium condition (1) between aggregate production and aggregate demand becomes

$$Y_t = C_t + I_t + T_{ut} \quad (2)$$

Because we are looking for growth equilibrium in a mixed industrial and tourism economy that does not undergo structural transformations, we must assume that the share of tourism consumption in income remains constant, which is equivalent to adding the following condition:

$$\frac{T_{ut}}{Y_t} = q, \text{ with } 0 \leq q < 1 \quad (2.1)$$

The only problem left to solve, therefore, is the dynamic equilibrium of this mixed economy. With condition (2.1) and the indication of the Keynesian consumption function with no autonomous component, the Harrod-Domar model becomes

$$I_t = v(Y_t + 1 - Y_t), Y_t = C_t + I_t + T_{ut}, C_t = cY_t \quad (2.2)$$

By substituting the third equation (2.2) into the second one, solving for I_t , establishing the propensity to save (s) a fraction of national income as a source of investment, and inserting the result into the first equation, we obtained

$$sY_t - T_{ut} = v(Y_t + 1 - Y_t) \quad (2.3)$$

Dividing both sides by Y_t , we find a warranted growth rate vY of the mixed (industrial and tourism) economy:

$$vY = \frac{s-q}{v} = (s - q) \pi \quad (2.4)$$

where $\pi = 1/v = (Y_t + 1 - Y_t)/(K_t + 1 - K_t)$ denotes marginal capital productivity and where under condition (2), the ratio $q = T_{ut}/Y_t$ is assumed to be constant, with $s > q$. The comparative dynamics in the specialised economy

allow us to remark that $(s - q) \pi < s \pi$, and therefore $vT < va$. The effect of tourism on the host economy is that the warranted income growth rate is lowered; over the long term, tourism consumption has a crowding-out effect on investments by domestic firms. In terms of the lower warranted income growth rate (in the Harrod-Domar growth model, we recall that this is the growth rate necessary to maintain the dynamic equilibrium between production and demand), tourism consumption would only not lower the rate if residents reduced their household consumption to allow for consumption by tourists; in this case, the consumption function would become $Ct = cYt - Tut$, which, when inserted into (2.1), would drive the economy to warranted growth rate va .¹

To complete the theoretical analysis in this paper, the equilibrium or steady state condition that will be tested in the econometric section of this work must be considered. To obtain the equilibrium condition of a full economy, the equality of vT and $n + \lambda$ should be stipulated because in the Harrod-Domar growth model, in order for the initial equilibrium to be steady over time, it is necessary that the growth rates of population n and technological progress λ both follow the so-called natural growth rate $v(or v = n + \lambda)$.

$$vT = (s - q) \pi = n + \lambda = v \tag{2.5}$$

The growth of mixed economy vT is not affected by tourism and remains unchanged because it is plausible to assume that tourism development does not affect demographic and technological parameters.

Now we will introduce Kaldor’s model, which focuses on the distribution of total income between profits Π and wages W , and which assumes that two divided groups’ propensities to save will differ: profit earners’ (capitalists’) propensity to save sc is assumed to be larger than that of wage earners (workers)² sw , given that Keynes stated that the marginal propensity to consume decreases when income grows and Kalecki considered different propensities to consume depending on whether the source is wages or profits. In other words, the propensity to spend one’s share of income is much greater among the working class than *vice versa*. Therefore, total saving is determined by the following equation:

$$S = sc \Pi + sw W \tag{3}$$

where $s = S/Y = sc \Pi/Y + sw W/Y$ with postulated $sc > sw$.

Using Qc and Qw , respectively, to indicate the shares of income accruing to the capitalists and to workers, $Qc + Qw = 1$, and therefore, we can write

$$S = scQc + swQw = scQc + sw(1 - Qc) = (sc - sw)Qc + sw \tag{3.1}$$

Inserting (3.1) into (2.5), we obtain the share of profits in a mixed economy that maintains the growth rate in equilibrium:

$$Qc = ((v - \Pi sw)/(sc - sw) \Pi) + (q/(sc - sw)) \tag{4}$$

¹ In certain pure socialist countries such as Cuba, where the so-called benevolent social planner reduces aggregate consumption using economic policy instruments, smoothing consumption over the lifetime of a typical household can occur at lower standards of living, but this does not occur in capitalist economies, so that the last theoretical consideration is not typical for the modern world.

² Keynes never formulated a theory of distribution. The credit for developing the Keynesian theory of distribution goes to Kaldor, who contended that the principle of the multiplier could be used to determine the relationship between prices and wages given the output and employment levels.

The first-order condition (4), with respect to q , shows the equilibrium effect of opening up a destination to international demand on the functional distribution of income. Because in Kaldor's model,

$$\partial Q_c / \partial q = 1 / (sc - sw) > 0 \quad (5)$$

the destination with a higher share of tourist output in the aggregate economy has a higher quota of profits and a lower quota of wages in the national income. The interpretation here is that tourism-led growth, which stands as a euphemism for the continuing increase in the tourism-to-output ratio, may effectively expand profit shares in the income distribution and reduce thus wage shares in income (implicitly, the proposition $\partial Q_w / \partial q = 1 / (sw - sc) < 0$ can also be valid). In a predominantly tourist-developed country, tourism labour productivity is typically low, and average real wages often converge toward the minimum wage. Although tourism is labour-intensive, the workforce, which is mainly seasonal, contributes less to the salaries in aggregate income than is the case in predominantly industrial countries. Because lowering the wage share in origin countries' income distributions can stagnate tourism growth, the obvious theoretical conclusion is that the future development of destination economies is halted.

Of course, the highlighted consequences of Kaldor's model, considering the relationship between income distribution and tourism in the macroeconomic framework, are actually counterintuitive if we contemplate matters differently. The growth in real wages as part of the GDP in western, industrialised countries implies higher potential growth in international tourism demand.

All in all, this led to the theoretical possibility that the ratio of tourism to output and its dynamics could influence the redistribution of national income between workers and capitalists and vice versa.

The last expression can be transformed into the elasticity of profit share in the mixed economy regarding tourism's share of the economy if we multiply both sides of (5) by q/Q_c .

$$\partial Q_c / \partial q \cdot q / Q_c = 1 / (sc - sw) \cdot q / Q_c \quad (5)$$

The elasticity coefficient is unknown, but the above theoretical considerations suggest that at the macroeconomic level, we should be able to observe a positive (or negative) relationship between the profit (or wage) shares in the national income and tourism shares in the economy.

Specifications

The standard method of statistically proving facts is to test hypotheses. In our case, we would formulate as the null hypothesis H_0 the claim that profit (or wage) share in GDP is not related to the tourism-to-GDP ratio. The related, alternative hypothesis is denoted as H_1 . To test the hypothesis that tourism share in aggregate demand expands (or reduces) the share of profits (or wages) in output, this paper assumes a simple empirical linear relationship between the two variables. Thus, the econometric model for estimating the factor contribution share in GDP, in regard to tourism over GDP, takes the following form:

$$\text{FACTOR_CONTRIBUTION_SHARE} = a + b \cdot \text{TOURISM/GDP} \quad (6)$$

Taking logarithms and adding time subscripts (t) and an error term (uit) to equation (6), the equation for estimating factor share becomes

$$\ln(\text{FACTOR_CONTRIBUTION_SHARE}) = \alpha_0 + \beta_1 \ln(\text{TOURISM/GDP}) + u_{it} \quad (7)$$

where FACTOR_CONTRIBUTION_SHARE is the percentage of profits (or, alternatively, wages) in the aggregate income, TOURISM/GDP is the tourism-to-GDP ratio, $i = 1, \dots, 35$ (total number of countries, i.e., 15 for the Mediterranean circle and 20 for the Northern circle), and $t = 1, \dots, 15$ ($1 = 1995$ and $15 = 2009$).

Thus, a unique type of model is developed to estimate the links between factor shares in GDP and tourism in GDP across the various nations, namely, a panel regression model. The total set of countries is divided into three groups: Total set, Mediterranean circle and Northern circle.

The above model is a generalisation of the different types of specifications to be used in the empirical analysis based on different techniques for estimating static panel data econometrics. We use the panel data method because: (i) both time series and cross-sectional data are available, and (ii) only the relationship between the tourism over GDP and the factor share in GDP is of interest, not forecasts. The restrictions imposed by the cross-section methods yield biased results because they do not control for heterogeneous relationships between countries. Time-series analysis *per se* imposes analogous assumptions about the comparability of different observations in time and also yields biased results (separately, the observed period in our cases is too short). Only panel data methods explicitly take into account unobserved heterogeneity.

The signs for the estimators associated with the variables in the model are expected to be similar to the aforementioned theoretical expectations. It is expected that the effect of the tourism-to-output ratio (TOURISM/GDP $_{it}$) on profit share is positive and on wage share, it is negative. That is, the tourism-to-output ratio, as a proxy for tourism dominance in an economy, has relevant impact, with a theoretically elaborated direction of the aggregate income factor share.

The Data

The model for factor share that links tourism demand to GDP developed as Equation (7) was examined empirically for the case of A) sample and two subset of sample (B and C). A) The total data set (using data on 33 countries) comprises the following countries: AUT, BEL, BGR, HRV, CYP, CZE, DNK, EGY, FIN, FRA, GER, GRC, HUN, ISL, IRL, ISR, ITA, LUX, MLT, MAR, NLD, NOR, POL, PRT, ROM, SVN, SVK, ESP, SWE, CHE, TUN, TUR, and GBR; (B) The Mediterranean countries (14) are: HRV, CYP, EGY, FRA, GRC, ISR, ITA, MLT, MAR, PRT, SVN, ESP, TUN, and TUR; and (C) the Northern block (19 countries) consists of AUT, BEL, BGR, CZE, DNK, FIN, GER, HUN, ISL, IRL, LUX, NLD, NOR, POL, ROM, SVK, SWE, CHE, and GBR. The names of the countries are given in shorthand. Nearly all countries are European; the exceptions are Egypt, Israel, Morocco and Tunisia.

GDP factor shares in percentage statistics over the sample period were collected from the Extended Penn World Tables (EPWT) 4.0 (xls) database on Foley's website. The countries were chosen based on the intuited importance of tourism to their aggregate outputs and on the availability of the required data. The Mediterranean circle serves as the benchmark set of countries, and the other two sets are included for comparison. The data used to create the tourism over GDP by countries, as an independent variable, were collected annually from the World Development Indicators found at <http://data.worldbank.org/country>. All observations are annual and were processed following the required procedures.

Panel Data Regression

There are multiple types of panel analytic models: pooled ordinary least squares (OLS), fixed-effects models (FEM), and random-effects models (REM). To select the correct estimator for the model, a number of tests were performed to determine whether classical OLS assumptions would hold for the model, and remedies are suggested. Then, the factor share model was estimated using appropriate method(s).

Test of the Model

Because the variability in the data increases when the horizontal section dimension is included in the analysis, it is accepted that the panel unit root tests with regard to the information about both the time and the horizontal section dimensions of the data are statistically stronger than the time series unit root tests, which consider only the time dimension (Im, Pesaran, Shin, 2003; Maddala, Wu, 1999; Taylor, Sarno, 1998; Levin, Li, Chu, 2002; Hadri, 2000; Pesaran, 2006; Beyaert and Camacho, 2008).

Although nearly all classical panel data econometrics assume cross-section independence, the dependent variable(s) was subjected to the panel unit root tests to detect whether there would be possible cointegration with other variables. When the significance level obtained from the test results is smaller than 0.05, the null hypothesis is rejected, and it is determined that the series is stable. However, because both tests rejected the unit root hypothesis, the analysis proceeded with estimating the models in log levels (Table 1).

Table 1. Results of panel unit root testing for dependent variable (all countries)

	ADF Test	Hadri Test
log(PROFIT_SHARE)	-5.094***	14.852 ***
log(WAGE_SHARE)	-5.179***	14.843***

Note: Signif. codes: 0 '***'

Source: Author's calculations; notes: reject the null of unit root at the level of significance *** 0%

The following sections discuss the results of each econometric model.

Before panel data estimations are performed, it is necessary to choose the appropriate estimation techniques for the model and test for the specification characteristics. The likelihood ratio test for individual effects and the Hausman test are performed to determine whether to treat individual effects as country-specific or period-specific, and for each effect, the choice is made between fixed and random effects. Tests for heteroscedasticity and autocorrelation assist in specifying and estimating. The following tests are first conducted to aid in choosing the estimation techniques.

Using panel data allows one not only to investigate dynamic relationships but also to control for unobserved cross-section heterogeneity. With panel data, the issue is whether to use random-effects or fixed-effects estimation. The random-effects approach to estimating β_i exploits the correlation in the composite error composed of the unobserved heterogeneity and the error term. This approach uses the idiosyncratic error term, assuming that unobserved heterogeneity (or a specific country effect) is orthogonal to particular country input variables in time dynamics, and it uses a generalised least squares (GLS) estimator to take into account serial correlation in the composite error.

There can, however, be many instances in which this assumption is violated. Specifically, unobserved heterogeneity (individual country effects) can be correlated with explanatory variables in the present model if the individual country effects influence the input variable. In this case, a fixed-effects estimator which is more robust may be more appropriate to use. A shortcoming of the fixed-effects approach, however, is that time-constant factors cannot be included as explanatory variables; otherwise, there would be no way to distinguish the effects of these variables from the effects of the unobservable variable. Although in our panel data set, the tourism-to-GDP ratio is not particularly volatile, that variable is also not exactly constant. Another shortcoming of the fixed-effects estimator is that it is less efficient than the random-effects estimator; it has a lower degree of freedom and calculates only the within-units variation, not the variation between units. Accordingly, to avoid exclude intuitively hypothesised issues, the unique explanatory variable that determines the factor share in aggregate output, it is natural to exclude from the game the fixed-effects estimator. However, prior to opting for the random-effects estimator, we need to diagnostically test this question. Whether the effects are truly random or not can be determined by F test. Validation was performed once again using LM and the Hausman test.

Fixed Effects Versus the Pooled OLS Estimator

In the estimation, unbalanced panel data were used, and individual effects were included in the regressions. We first perform the test for data pooling (Chow F- test) by comparing the fixed effects and the benchmark pooled OLS fits by means of F test for individual effects. Our results indicate that there is substantial inter-country variation, indicating that a fixed-effects model is appropriate; the FE model is a better choice than pooled OLS (Table 2).

Table 2. FE vs. pooled OLS Estimator: Diagnostic Results of F test (Chow Test)

Dependent variable (model)	All countries	Mediterranean	North
Log (profit_share)	F = 116.467*	F = 91.342*	F = 95.985*
Log (wage_share)	F = 109.117*	F = 108.707*	F = 68.394*

*Null hypothesis rejected

Note: Null (unconstrained) hypothesis – distinct regressions for each individual; alternative (constrained) – individuals have same coefficients, no error components (simple error); Signif. codes: ‘*’ 0.05

Source: own study.

We also used the Lagrange Multiplier (LM) test proposed by Honda (1985) to determine whether the variance of the intercept components of the composite error term would be zero. The results of the LM tests are summarised in Table 3.

Table 3. Pooled OLS Estimator: Diagnostic Results

Dependent variable (model)	Lagrange Multiplier Test – (Breusch-Pagan)		
	All countries	Mediterranean	North
Log (profit_share)	$\chi^2 (1) = 3422.56^*$	$\chi^2 (1) = 1658.433^*$	$\chi^2 (1) = 1812.04^*$
Log (wage_share)	$\chi^2 (1) = 3625.50^*$	$\chi^2 (1) = 1677.30^*$	$\chi^2 (1) = 1711.440^*$

Null hypothesis rejected; Signif. codes: ‘*’ 0.05

Source: own study.

Here, with the LM test, we successfully reject the null and conclude that random effects are appropriate; the test also suggests that some form of parameter heterogeneity must be taken into account. This is, evidence of significant differences across countries, and therefore, we cannot run a simple pooled OLS regression. Now, the confirmation comes from comparing the pooled OLS estimator with the RE estimator.

Fixed Effects versus Random Effects – The Hausman Test

Random-effects methods are more efficient than the fixed-effects estimator under more restrictive assumptions, namely, the exogeneity of the individual effects. A central assumption in random-effects estimation is that the random effects are uncorrelated with the explanatory variables. One common method for testing this assumption is to employ the Hausman (1978) test to compare the fixed- and random-effects estimates of coefficients. The Hausman test indicates whether the specific effects are correlated with the explanatory variables. Thus, we test for the occurrence of endogeneity, or, in other words, whether it is really more appropriate to choose the competitive random-effects model, based on the exclusion principle, rather than a fixed-effects model.

High Hausman Chi-square values (that is, low p -values, for example, <0.05) favour fixed-effects modelling, and low Hausman Chi-square values (that is, high p -values) favour random-effects modelling.

The results of the Hausman specification tests are summarised in Table 4 below.

Table 4. FE vs. RE Estimator: Diagnostic Results

Dependent variable (model)	Hausman Specification Test (endogeneity)		
	All countries	Mediterranean	North
Log (profit_share)	χ^2 (1) = 1.562 (0.211)	χ^2 (1) = 1.842 (0.174)	χ^2 (1) = 3.061 (0.081)
Log (wage_share)	χ^2 (1) = 2.025 (0.154)	χ^2 (1) = 2.907 (0.088)	χ^2 (1) = 3.014 (0.082)

Note: () – p -value

Source: own study.

The results of the Hausman test suggest that the random-effects model (REM) is the appropriate panel data estimator for this study because the Chi-square statistic ($\chi^2 = 1.56-3.06$) provides evidence against the null hypothesis that there is no misspecification. Therefore, the Breusch-Pagan LM test results, which strongly indicate the existence of REs, is supported by the Hausman test results, which also find in favour of the RE. These findings suggest that the RE estimator can be used in all of our regressions without the anxiety of producing biased estimates.

Testing for Heteroscedasticity

In panel data analysis, homoscedasticity is an underlying assumption. Consequently, the assumption of homoscedasticity in the panel sample data needs to be tested. To test the heteroscedasticity in the model, the Breusch-Pagan LM test was adopted because it accurately detects heteroscedasticity. The null hypothesis for the Breusch-Pagan test is homo-

scedasticity. The test detected the existence of heteroscedasticity in all regressions except for that for the total set of included countries with profit share as a dependent variable. The most popular remedy for heteroscedasticity, the heteroscedasticity corrected standard errors technique, is used to estimate the random effects of the model for the Mediterranean circle. It focuses on improving the estimation of the standard errors in estimators without changing the slope coefficient estimates. For the other models that were plagued by heteroscedasticity, different means were used (see the next paragraph).

Test for Serial Correlation

The estimation of the random-effects models uses the Breusch-Godfrey/Wooldridge test for serial correlation in panel models. This test indicated the presence of serial correlation in the residuals in all cases except for the Mediterranean set. To remedy the first-order serial correlation, the general FGLS estimator is used to yield unbiased and efficient parameter estimates. This type of estimator allows for correcting the serial correlation structure and heteroscedasticity within the panel data when both problems occur at the same time.

The Hausman-Taylor Estimator

The error term (ϵ_{it}) in our model reflects measurement error both in percentage of factor share and in the other determinants of cross-country differences in factor share that were excluded for this simple specification. To correct for the omitted variable bias, it is assumed that factor distribution share is affected by realised tourism per capita because time and human resources are required to develop and improve structure and income distribution. Although we exclude the endogenous problem using the Hausman test in our model with one explanatory variable, and instrumental variable methods allow for consistent estimation when the explanatory variables (covariates) are correlated with the error terms of a regression relationship, in the table 5 and table 6 we present the results for the Hausman-Taylor (1981) estimator, and the 2SLS regression results are displayed in the table 7. (Appendix)

The 2SLS regression uses at least one instrument and identifying assumptions to obtain an unbiased estimator. The identifying assumptions are that the instrument correlates highly with the *explanatory variable* but does not correlate with the error term. The latter assumption cannot be tested, and thus, any conclusions from the Hausman-Taylor estimators rest on attestable assumptions. Hence, the 2SLS regression results should be viewed with caution.

Some theoretical considerations are linked with that procedure. In brief, the tourism demand in a national economy is measured with the tourism-to-GDP ratio and instrumented with the log of TOURISM per capita. The concept is that with regard to tourism's impact on an economy, wherever a comparative advantage in tourism exists for the local inhabitants, the human factors will focus their activities on tourism, thereby augmenting the profit share in GDP (as our theory suggests).

The Empirical Results

As we mentioned earlier, the Hausman test suggested that random-effects panel estimation was the appropriate strategy to be adopted. The models of equations (1 and 3) above are estimated using the tourism over GDP variable for all three groups of countries. The

estimation uses White's heteroscedasticity – corrected covariance matrix estimator for the Mediterranean circle of countries, which is considered to be a robust method. This measure focused on improving the estimation of the standard errors without changing the slope coefficient estimates. The estimation subsequently uses the general FGLS estimators for the remaining two sets of countries that allow for serial correlation and heteroscedasticity within the data. The R -squares of the models are between 0.28 and 0.51, and the F -statistics are always significant at $p < 0.05$. This implies that including estimated random effects, the models explain 28-51% of the variations in the factor share(s).

In the present models, the intercept term α_0 is considered to be country-specific, and the slope coefficients are considered to be the same for all countries. The results refer to a simple double log regression of factor share(s) in income structure on tourism to GDP to determine the (constant) elasticity of factor(s) share with respect to the tourism-to-GDP ratio for each of the three groups. The coefficient of TOURISM over GDP ratio, as expected, is positive (0.016) and significant ($p < 0.05$) for the total data set. This implies that the profit shares in the incomes of given countries increase on average by 1.6% when tourism in the GDP increases by 1%. It is found that the intensity index of tourism activity in an economy (as measured by tourism per capita) positively affects profit share in income. We observe that the coefficient on tourism to GDP for the 2SLS procedure is still significant (at the 5% level) and has a lower magnitude. This result suggests that the possibly omitted variables in the random-effects specification likely biased the coefficient upwards. By looking at the first-stage regression results in Panel B, we observe that the proposed instrument ($\log(\text{TOURPC})$) affects the endogenous variable positively and highly significantly (at the 1% level), with an adjusted R^2 of 0.92; thus, the assumption of correlation between the explanatory and instrument variables is satisfied. Thereby, the positive value of the coefficient that precedes the explanatory variable for the total set of countries confirms the initial hypothesis of a positive link between tourism intensity in an economy and profit share.

The test results obtained in the regressions with the other data sets are surprising and counterintuitive, that is, contradictory to the earlier theoretical speculations. For the countries in the Mediterranean circle and the Northern circle, we obtain a negative parameter sign when we regress the explanatory variable on profit share. In addition, this parameter is significant for the Northern circle. The IV regression applied to the circuit of the Northern countries resulting in positive but not significant values for the explanatory variables. We also did not find sound statistical evidence in support of the theory that the growth of tourism in GDP causes a rise in the share of profits in aggregate income.

If we consider the results of the regression of wage share in income as an endogenous variable given the explanatory variable, we see that the results are, as expected, more or less the inverse of a regression with profit share in income as an independent variable. In the focus of our research, as well as in the detailed theoretical elaboration that links profit and tourism, it does not make sense to interpret these regression results separately.

CONCLUSIONS

The theory that explains tourism intensity (within output) growth by referring to the functional distribution of aggregate income (between wages and profits) – but abstracting from complexity because of the progressing reductionism – cannot be reliably tested at the national level. However, the modified Kaldor theory of income distribution and its

interference to tourism sector could, at least in principle, be tested more reliably at the global level. In this paper, we attempt to do this.

The stylised fact (the magnified tourism demand within GDP), coupled with a firmer fact (the impact on the increasing global share of profit in GDP), suggest that the total set of included economies in our empirical research closely followed the theoretical speculation of profit-led growth in economies. Profit-led growth can provide sufficient savings and investment for future generations, and wage-led growth is beneficial (but myopic) for mitigating the effects of short-term recessions (for example Croatia, Greece, Portugal, Italy, Egypt, etc.).

However, we failed to find hard evidence that our theory was valid in the separate cases of the Mediterranean and Northern circle countries. One of the reasons the Mediterranean economies have been losing momentum in growth, compared with the finite set of all included countries to produce substantial profits through tourism growth, may be linked to the exaggerated union interest in valuing labour in those countries. Because the tourism sector is labour-intensive by nature, continuing steps to increase minimum wages could stimulate the expanding wage share in GDP if and only if other factors beyond the horizon of our reasoning remain the same.

Although we know that a conservative stance in wage policy has not been popular, the proven rule, one that was once obeyed in economic policy making, that wages must move hand-in-hand with labour productivity needs to be resurrected, allowing the Mediterranean tourist economy to continue to generate growth and capacity for future generations.

REFERENCES

- Beyaert, Arielle, and Maximo Camacho. 2008. "TAR Panel Unit Root Tests and Real Convergence." *Review of Development Economics*. 12 (3): 668-681.
- Bhaduri, Amit, and Stephen Marglin. 1990. "Unemployment and the real wage: the economic basis for contesting political ideologies." *Cambridge Journal of Economics*. 14: 375-93.
- Blake, Adam, Jorge S. Arbache, Thea M. Sinclair and Vladimir Teles. 2009. "Tourism And Poverty Relief." *Textos para Discussão*, 237.
- Breusch, Trevor S., and Adrian Pagan. 1979. "A Simple Test for Heteroscedasticity and Random Coefficient Variation." *Econometrica*, 47 (5): 1287-1294.
- Candela Guido, and Paolo Figini. 2012. *The Economics of Tourism Destinations*. Springer-Verlag: Berlin Heidelberg.
- Extended Penn World Tables (EPWT), 2.1 (<http://homepage.newschool.edu/foleyd/epwt>)
- Hadri, Kaddour. 2000. "Testing for stationarity in heterogeneous panel data." *Econometrics Journal*, 3(2): 148-161.
- Hausman, Jerry A. 1978. "Specification Tests in Econometrics." *Econometrica*, 46(6): 1251-1271.
- Honda, Yuzo. 1985. "Testing the error components model with non-normal disturbances." *Review of Economic Studies*, 52(4): 681-690., <http://data.worldbank.org/country>.
- Im, Kyung S., Pesaran Hashem M., and Shin Yongcheol. 2003. "Testing for Unit Roots in Heterogeneous Panels." *Journal of Econometrics*, 115 (revise version of 1997's work): 53-74.
- Krueger, Alan B. 1999. "Measuring Labor's Share." *The American Economic Review*, 89: 45-51.
- Levin, Andrew, Lin, Chien-Fu, and Chia-Shang, James Chu. 2002. "Unit root tests in panel data: asymptotic and finite sample properties." *Journal of Econometrics*, 108: 1-24.
- Lübker, Malte. (2007). "Labour Shares." *Technical Brief No. 1*. Geneva: ILO, P. I. Department.

- Maddala, G.S., and Shaowen Wu. 1999. "A comparative study of unit root tests with panel data and new simple test." *Oxford Bulletins of Economics and Statistics*, Special issue, p. 631-652.
- Molero Simarro, R. 2013. *Distribution, demand and growth*. September 10, 2013 blog: mappingignorance.
- Pesaran, M.Hashem. 2006. *A simple panel unit root test in the presence of cross section dependence*. Cambridge University, Department of Applied Economics, Working Paper.
- Taylor, Mark P., and Lucio Sarno. 1998. "The behavior of real exchange rates during the post-Bretton Woods period." *Journal of International Economics*, 46(2): 281-312.
- Wattanakuljarus, Anan, and Ian, Coxhead. 2008. "Is tourism-based development good for the poor? A general equilibrium analysis for Thailand." *Journal of Policy Modeling*. 30(6): 929-955.
- White, Halbert. 1980. "A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity." *Econometrica*, 48: 817-838.
- Onaran, Ö. and G. Galanis (2013), 'Is aggregate demand wage-led or profit-led? A global model', in M. Lavoie and E. Stockhammer (eds), *Wage-led Growth: An Equitable Strategy for Economic Recovery*, Basingstoke, UK: Palgrave Macmillan, pp. 7199.
- Suraj Pant (2011) *The Impact of Tourism on Income Inequality: An Econometric Assessment*, The UCLA Undergraduated Journal of Economics
- Soon Ryoo and Yun K. Kim *Income Distribution, Consumer Debt and Keeping up with the Joneses*, *Metroeconomica* Volume 65, Issue 4, pages 585-618, November 2014
- Cook C. (1995). *Savings rates and income distribution: further evidence from LDCs*. *Applied Economics*, 27(1): 71-82.
- Petra Dünhaupt; *Determinants of functional income distribution: theory and empirical evidence*, International Labour Office ; Global Labour University.- Geneva: ILO, 2013 Global Labour University working paper, No. 18; ISSN 1866-0541 ; 2194-7465
- Thomas I. Palley (2013) *A Kaldor-Hicks-Goodwin-Tobin-Kalecki Model of Growth and Distribution*; *Metroeconomica*, Vol. 64, Issue 2, pp. 319-345, 2013
- Amaresh Das and Frank Martin, *Kaldor's theory of distribution: an information-theoretic approach* ; *International Journal of Operational Research* 15(2):136-146(2012)
- Ryoo, S. and Kim, Y. K. (2014) *Income Distribution, Consumer Debt and Keeping Up with the Joneses*. *Metroeconomica* 65(4), 585-618.
- Arslan Razmi (2014) *Re-Distribution, Aggregate Demand, and Growth in an Open Economy: The Crucial Interaction of Portfolio Considerations and External Account Constraints*; Working Paper Number 2014-07
- Marglin, S. and A. Bhaduri (1988, April). *Profit squeeze and Keynesian theory*. Working Paper 39, UNU WIDER, Helsinki.

APPENDIX

Table 5. Random Effects of Models: Estimation Results of Profit Share Model

Dependent Variable: PROFIT_SHARE	All countries	Mediterranean	North
Constant	-0.643*** (-15.97) -0.691*** (-7.764)	-0.541 *** (-7.521) [-7.150]+	-0.688 *** (-15.574) -0.034*** (12.987)
Log (TOUR/GDP)	0.007 (0.863) 0.016* (2.023)	-0.004 (-0.291) [-0.224]+	0.008 (0.789) -0.027**(- 2.873)
Observations	495 (33 coun-tries*15 years)	210 (14 coun-tries*15 years)	285 (19 Coun-tries*15 years)
R-squared	0.28	0.4	0.36
F	3.227 [0.03]	6.768 [0.01]	6.675 [0.01]
Breusch_Godfrey/Wooldridge Test of serial correlation	100.468 [0.000]	12.556 [0.051]	72.581 [0.000]
Breusch-Pagan LM test of heteroskedasticity a)	1.092 [0.295]	17.930 [0.000]	6.744 [0.009]

Notes: The t-values are shown in () brackets; t-values obtained from the standard errors of the β_i 's which are White-adjusted are in []+; p-values in [] brackets; bolded are general FGLS estimators that allows for a serial correlation structure and heteroscedasticity within panel data.a) Based on the OLS estimates, tested for heteroscedasticity. The null hypothesis for the Breusch-Pagan test is homoscedasticity.
 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
 Source: own study.

Table 6. Random Effects of Models: Estimation Results of Wage Share Model

Dependent Variable: WAGE_SHARE	All countries	Mediterranean	North
Constant	-0.541 *** (-7.521) -0.746*** (-17.147)	-0.914 *** (-8.901) [-7.184]+	-0.717 *** (-13.06) -0.846*** (-20.945)
Log (TOUR/GDP)	-0.009 (-0.767) -0.002 (-0.295)	0.006 (0.296) [0.194]+	-0.009 (-0.715) 0.041*** (4.332)
Observations	495 (33 coun-tries*15 years)	210 (14 coun-tries*15 years)	285 (19 countries*15 years)
R-squared	0.46	0.51	0.39
F	12.108 [0.000]	6.987 [0.01]	11.399 [0.000]
Breusch_Godfrey/Wooldridge Test of serial correlation	55.057 [0.000]	12.222 [0.06]	31.927 [0.000]
Breusch-Pagan LM test of heteroskedasticity a)	7.137 [0.007]	26.318 [0.000]	1.986 [0.04]

Source: ibidem own study.

Table 7. 2SLS Model by Hausman and Taylor Estimator: Estimation Results

Dependent Variable	PROFIT_SHARE			WAGE_SHARE		
	All countries	Mediterranean	North	All countries	Mediterranean	North
Panel A. Second-stage regressions						
Constant	-0.643*** (-15.97)	-0.541*** (-7.521)	-0.688*** (-15.574)	-0.779*** (-14.378)	-0.909*** (-7.840)	-0.654*** (-11.269)
Log (TOURGDP)	0.007 (0.863)	-0.004 (-0.291)	0.008 (0.789)	-0.009 (-0.767)	0.007 (0.204)	-0.012 (-0.715)
Observations	495	210	285	495	210	285
R-squared	0.25	0.37	0.32	0.24	0.32	0.29
Instrumented variable	TOURGDP	TOURGDP	TOURGDP	TOURGDP	TOURGDP	TOURGDP
Instrument	TOURPC	TOURPC	TOURPC	TOURPC	TOURPC	TOURPC
Panel B. Second-stage regressions						
Log(TOURPC)	0.715*** (71.955)	0.737*** (52.875)	0.708*** (52.417)	0.715*** (71.955)	0.737*** (52.875)	0.708*** (52.417)
Observations	495	210	285	495	210	285
R-squared	0.92	0.92	0.91	0.90	0.89	0.87

Notes: The t-values are shown in () brackets

Signif. codes: 0 '***'

Source: own study.

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Feminist Theory and Its Influence on Female Entrepreneur's Growth Intentions

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Abstract

Existing results suggest that entrepreneurs vary considerably in their intentions to grow their businesses; that men have more success in pursuing growth than women. Prior investigations on entrepreneurship also suggest female business owners might deliberately choose to keep their business from growing. However, these studies have been conducted in developed countries. Diversity in context and theories could vary by gender, business sectors and regions of the world. Scholars maintain that feminist perspectives theories are necessary to provide some insights in understanding the phenomena. The goal of this paper is to analyse research findings on the growth aspirations of the female entrepreneurs and offer alternative views of understanding, by employing feminist theories, in explaining why women behave differently in their adaptation of reduced growth intentions. In an attempt to understand the tendencies that might lead to reduced growth intentions in female entrepreneurship, literature was extensively reviewed on female entrepreneurship and growth intentions. The study uses a desk-based approach to data collection. An overview of the main issues concerning female entrepreneurs growth intentions is presented. The conclusions drawn from the literature provide foundations for policy measures assisting women to overcome their low growth aspirations and measures required to encourage women to grow their businesses. The paper identifies research gaps that continue to exist in female entrepreneurs growth intentions research with the aim of encouraging further research in this field.

Keywords: female entrepreneurs; growth intentions; feminist theories

JEL codes: D24, J7, J24, O1, L26

INTRODUCTION

Research in OECD countries consistently shows that job growth in the entrepreneurial sector is higher than for established (corporate) organizations. Implicitly, women play a significant part of this activity; recent business statistics identify women as the drivers of economic growth in many of the world's economies (Minniti *et al.*, 2005). It is undisputable that when more women work, economies grow; women's economic activity, managerial and entrepreneurial activity have a significant impact on economic growth and prosperity (Global Entrepreneurship Monitor, 2004). Countries with high total entrepreneurial activity rates are associated with high female entrepreneurial activity rates (Verheul & Thurik, 2004).

Since the 1970s and 1980s, there has been growing interest in studying women entrepreneurs mostly from United States and Canada as a result of the high growth in the number of enterprises created by women (Neider, 1987). The Center for Women's Business Research (2006) of the United States offers some insights on the estimates of the impact of women enterprises on the economy of the United States. Women's enterprises contribute 1.9 million dollars in annual sales and hire 12.8 million people. Majority of women-owned firms employ 9.2 million workers and generates 1.2 trillion dollars in sales revenues (National Women's Business Council, 2004). Estimates of the total cost of salaries and wages in women's enterprises was 546 billion dollars in 2006. Between 1997 and 2006 women's enterprises grew twice as fast as other enterprises (42.2% versus 23.3%) in United States. Interestingly, in a more recent statistics self-employed females in Canada increased from 513 300 to 953 000 between 1987-2011. That is an increase of 85 %. In a similar manner, in the U.S. female owned firms were estimated to have reached 7.8 million in 2007, representing 28% of the total number of companies across the nation.

Some investigations show the prevalence rates of female entrepreneurship tend to be relatively higher in developing than in developed countries (Minniti & Naùde, 2010). For instance studies in female entrepreneurship in Latin America and Caribbean countries found very high rates of female entrepreneurship in the poorest region estimated to be up to 35% in Peru. Global Entrepreneurship Monitor (GEM) (2010) established that Ghana is the only economy with more female than male in entrepreneurship, where women conduct 55% of entrepreneurial activity. This broad observation simply implies that women are important for growth and entrepreneurship. However, in other areas of the world few female entrepreneurs have indicated their aspiration to grow even when they have the abilities and knowledge (Minniti & Naùde, 2010). Taking into account the potential role of women entrepreneurs in generating economic growth, investigating the relationship between female entrepreneurs and growth intentions seems to be highly recommended.

The aim of the paper is to explore female entrepreneurship and in particular to understand the complexities that are related to reduced growth intentions of female entrepreneurs. The research is exploratory in nature and has used a desk-based approach to data collection. Initially an overview of the issues concerning gender, entrepreneurship and female growth intentions was reviewed mostly from developed countries. However to have a more rounded perspective, research regarding developing countries was also reviewed. The feminist liberal and social theories were employed to provide an alternative perspective on why women behave differently in their adaptation of growth

objectives. The paper further provides directions for further research, identifying the research gaps and provides recommendations for policy making.

OVERVIEW OF RESEARCH LITERATURE

Growth of enterprises is generally perceived as a significant measure of success and a key driver to the creation of wealth, employment and economic development in every country (Bosma *et al.*, 2000). Dobbs and Hamilton (2007) asserted that growth is closely related to the creation of jobs and that rapidly growing small enterprises create employment opportunities in society, which is vital for the success of the economy. Women entrepreneurs make a substantial contribution to national economic growth by their participation in entrepreneurship especially in high growth business, which boost the economies of most nations. Previous studies on growth of entrepreneurial firms have mostly focused on the entrepreneur's motives towards growth (Davidsson *et al.*, 2010) and literature on entrepreneur's growth intention mostly directed on individuals and graduate students intent to start businesses (Fatoki, 2013). This study includes feminist theory in this academic debate.

Entrepreneurship and Gender

Ahl (2006) identifies that financial growth with its inferred and expected contribution is the single most common rationale of entrepreneurship, and that entrepreneurship research is thus legitimized in the business and economic literatures. However the enactment of entrepreneurship as growth-oriented behaviour is culturally masculine specifically tied to particular forms of masculinity (Galloway *et al.*, 2015). Different authors have identified masculinized approach most often taken in studies of entrepreneurship (Petterson, 2004). If entrepreneurship requires the pursuit of growth then, successful entrepreneurship must be defined as business activity that has resulted in growth (Galloway *et al.*, 2015). However, this overwhelming direction on firm growth does not reflect most business activity as it occurs in reality. Not only it ignores the diversity of business in the real world (Hamilton, 2006; Morris *et al.*, 2006), but it also does not correspond with the majority of business experience, as most businesses are not growth oriented (Ahl, 2006).

Furthermore, entrepreneurship understood as an individualized, growth-oriented activity marginalizes other ways in which entrepreneurship is enacted (Ahl & Marlow, 2012; Petterson, 2004). It also limits entrepreneurship as a concept by limiting constructions of the entrepreneur despite the fact that most businesses are created and operated by partners or teams, and in fact in most countries the most common business model is family owned enterprise (Drucker, 1995). In spite of this, the "Entrepreneur" prevails as a construction, and has become normalized as male, he is the man who creates growth firm or what leads an organization to financial growth (Franco & Matos, 2013).

Female Entrepreneur's Characteristics

Given the important role of female entrepreneurs and their enterprises, it is noteworthy to understand female entrepreneurs characteristics as well as the motivations behind their entrepreneurial activity, for as much as it has been emphasized the success of an enterprise depends on the person's initiatives to create a viable business (Mitchell, 2004). Hisrich and Brush (1986) established that women-owned enterprises are more dissimilar than similar to those owned by men. They showed that women and men en-

trepreneurs have similar personalities and background, except for the fact that most women are older when they get involved in an entrepreneurial venture: 35 to 45 years old instead of 25-35 years old in the case of men. There are differences, however, in their motivations, the process of starting their enterprises, their administrative and entrepreneurial skills and professional background as well as the problems they face.

Brush (1992) observed that differences between male and female business owners have been found in educational and occupational background motivations for business ownership, business goals, business growth and approaches to business creation. Other researchers have noted fundamental similarities between male and female entrepreneurs, most notably in terms of key motives, such as the desire for independence or self-achievement or the tendency to have an internal locus of control (Sarri & Trihopoulou, 2005). The most noteworthy difference is that female entrepreneurs may tend to face different domestic parallel to their entrepreneurial activity. Despite their role as business owners and entrepreneurs, they are more likely to be “the primary parent, emotional nurturer and house keeper” (Unger and Crawford, 1992, p. 474). Thus in most cultures being an entrepreneur is not an excuse for being relieved of her domestic responsibilities (Goffee & Scase, 1985). Maybe that is why women business tends to be smaller, with less capital, has lower revenues and fewer employees and resides in lower profit industries (Bird, 1989).

Zapalska (1997) studied women entrepreneurs in Poland and found that they are significantly different to men in important dimensions; therefore they require assistance, plans especially developed for their specific needs. She found that there are significant differences in obstacles they face, the reasons they have to start a business, their goals and the factors they consider important for success.

Findings regarding to three countries (in Africa), Ethiopia, Tanzania and Zambia, noted that majority of the female entrepreneurs were pushed into business as a ‘no choice’ option for escaping from poverty (Zwede & Associates, 2002). This category of entrepreneurs is also referred as lifestyle entrepreneurs (OECD, 1998). Much of the evidence supports the view that the majority of women in business are seen to be engaged as micro entrepreneurs and consequently have become the stereotype women entrepreneurs as observed in regions of Africa (Richardson *et al.*, 2004). Mitchell (2004) studied the motivation of women entrepreneurs in South Africa and established that starting an enterprise involves a significant amount of risk and effort for an entrepreneur. For women, however, the risk is higher because they have problems related to the enterprises, but they also have to solve the problems of being a woman in society dominated by men. He concludes and suggests that modern research studies indicate that women face different problems to men entrepreneurs and that it is an imperative that a better understanding of women entrepreneurs and the specific constraints they face in starting and operating a business is made, so as to develop appropriate assistance programs and policies. It is however argued that most of the knowledge on entrepreneurial activity is based on studies about men entrepreneurs (Hisrich & Brush, 1983). That theories on creation of organizations have been generalized and tested on men entrepreneurs, for men, these approaches do not necessarily reflect women’s processes and organizational styles because women and men manage their enterprises in different ways, they use different strategies and organizational structures.

THE FEMALE ENTREPRENEURS GROWTH INTENTIONS

Growth of a business is widely recognized as a choice and most business owners choose not to grow (Wiklund & Shepherd, 2003). Conversely, the intentions of the entrepreneur have been identified as “being the entrepreneur’s goals or aspirations for growth trajectory, he/she would like the venture to follow” (Dutta & Thornhill, 2008). The distinction between the actual growth of a business and growth intentions according to Toivonen *et al.* (2006) are that intentions are only one of the fundamentals for small business growth. Given the significance of growth intention in entrepreneurship and small businesses, the pursuit of growth is a deliberate individual decision of the entrepreneur, which depends upon his/her perceived opportunities, skills and the entrepreneur’s willingness to do so (Wiklund & Shepherd, 2003). So, it is possible to describe growth intention as a combination of what entrepreneur wants with what is possible given the critical resources and skills of the entrepreneur and available opportunities (Terjesen & Szerb, 2008).

However, while some entrepreneurs are determined to grow their business into larger businesses and attain substantial growth (Neneh & Vanzyl, 2014), some small business-owners don’t aspire to grow or they deliberately refrain from pursuing growth (Gundry & Welsch, 2001; Wiklund, Davidsson, & Delmer, 2003). Sexton (1989) was of the view that growth of a new venture does not occur naturally but instead is determined by the owner of the business. Those in control of the firm may initiate, foster, nurture or prune growth in accordance with their own prosperity for growth as the degree to which he/she can obtain resources and develop the organization. Sexton (1989) further defines propensity for growth as an entrepreneur’s intent to expand the organization, and the ability to manage growth as the degree to which he/she can obtain resources and develop the organization. Many studies indicated that men are assumed to have success in this regards (Lerner *et al.*, 1997; Still & Timms, 2000).

Some studies, mentioned women to be less effective in growing sales turnover and profitability and with deliberate reduced growth intentions (Cliff, 1998; Fasci & Valdez, 1998), and that “women start and operate ventures that grow at a lower rate than those of men” (Hisrich and Brush, 1984). Investigations on women-owned enterprises suggest that female business owners deliberately choose to keep their businesses small (Goffee & Scase, 1985; Lee-Gosselin, 1990) or have conservative growth expectations (Chaganti, 1986; Lee-Gosselin, 1990). Some studies suggest that expansion is at least partially determined by entrepreneur’s motivations and intentions (Bird, 1989; Sexton, 1989; Kolvereid, 1992; Cooper, 1993). Some scholars established that women are less likely to desire to grow their business since expansion may interfere with other aspects of their lives (Cliff, 1998), while others argued that women in running their business would not wish the interest of their immediate family conflict with the interest of their business (Carter & Cannon, 1992).

Some of these views are considered as negative misconceptions concerning women entrepreneurs (Brush *et al.*, 2004) as some women entrepreneurs are portrayed as favouring life-style businesses, balancing work and family or seeking opportunities to supplement household income. While other researchers asserted that female entrepreneurs tend to be sole owners and have less managerial experience, lack self-confidence in their enterprises (Hisrich & Brush, 1983; Birley, 1989), and their businesses are smaller on average, both in terms of sales, revenues, number of

employees and resides in lower-profit industries (Loscocco *et al.*, 1991; Bird, 1989), What is more, women-owned enterprises are also described to be especially affected by conflicts between the home and family demands which may advertently have implications on the growth of their business (Stoner *et al.*, 1990).

Several authors observed that differences also exist between male and female business owners in educational and occupational background, motivations for business ownership, business goals, business growth and approaches to business creation (Brush, 1992; Welter, Smallbone & Isakova, 2006). These differing observations and misconceptions concerning women entrepreneurs may lead to tendencies in ventures that might reduce their growth prospects. However, studies comparing the performance of male and female owned firms have noted some obstacles that are specifically experienced by females. Some of these hindrances are attributable to the complexity of small business itself rather than the gender-based factors women face to enterprise growth and some are specifically self-imposed by culture (Morris *et al.*, 2006). The prominent reasons are associated with difficulties in accessing and obtaining institutional or venture capital due to negative perception. Women are assumed to be less focused and lack the drive for success in business than their male counterparts (Brush, 1992). Such perceptions directed at women-owned ventures as, women are not as good in leadership and management of large-scale ventures, and other generalized gender-based perceptions, can make it difficult for women-owned ventures to obtain growth capital (Morris *et al.*, 2006). However, Brush *et al.*, (2004), opined that these perceptions are due in theory to the way that data about women-owned ventures is presented and that the fact that women are later entrants to the entrepreneurial game. Hisrich and Brush (1984) and Scott (1986) asserted that gender stereotypes along with limited access to networks and mentoring may create barriers to effectively run a business (Still & Timms, 2000). Some studies also have shown that cultural imposed attitudes regarding gender remain constraining barriers for women in achieving financial rewards and status in business (Calás *et al.*, 1992). Some scholars observed that female entrepreneurs find time with family as primary and ventures were sometimes specifically founded to allow for more quality time with family (Gundry & Welsch, 2001), attempted to maintain equilibrium between economic goals such as profit and growth and non-economic goals such as personal fulfilment and helping others (Brush, 1992). These are all empirical studies, which offer insights into different situational variations that consistently bother the female entrepreneurs in starting and operating businesses. However, scarcities of other comparative investigations do exist. Although these studies make up a consideration on literatures of female entrepreneurs, it is also important to note that there is virtually no empirical research on women in growth enterprises in Africa, or if any research has in some way assess women enterprises similarity or it difference from that headed by male.

Few perspectives that are known on female business owners in most developing countries like Africa are that most women do not have the same opportunity as men in job acquisitions, business contacts, and opportunities to accumulate savings as men. In spite of all development and organizational activities in favour of women over the past years, gender gap in women's equality has not narrowed very much. The nature and scale of an enterprise growth and development is influenced and shaped by a range of traditional norms that are embedded in social, cultural and economic

context (Richardson *et al.*, 2004). The prevailing social norms affect the ability of women-owned enterprises to function and grow bigger like the male-dominated businesses do. These challenges with many others are rooted on the socialization processes for both sexes (Black, 1989) and this one way or the other influences the kind of economic activities that women find themselves. For instance women in Ghana are perceived as homemakers and therefore, cared and reared for home and child-care. This contributes to their low self-esteem. These factors and others tend to diminish the importance of women aspiration economically and socially. Consequently, these impact on women's enterprises negatively in varying degrees.

In view of the fact that, findings and theories might not be totally applicable to all varied contexts, distinct differences exist between developed and developing countries regarding female entrepreneurs and their growth intentions. Studies have found that the rate at which women are forming and operating indigenous, micro and small businesses has increased in developing countries (Richardson *et al.*, 2004; Minniti & Naude, 2010). The few studies that were recorded from developing countries like Africa, these studies apply small sample and there is no way of knowing to what extent their findings reflect the overall pattern of women's entrepreneurship. Given the important role of women as owners of various micro- and small business enterprises in developing countries (Richardson *et al.*, 2004) an attempt to identify their varying growth needs and its constraints will be particularly important.

FEMINISM THEORIES

In explaining the systematic differences why female entrepreneurs adopt a reduced growth intention and the smaller size of their businesses we employ two theoretical perspectives, consistent with Holmquist and Sundin (2002). These are the liberal and social feminism to explain why women behave differently in adaptation of the varying degree of growth aspirations. First, some scholars maintain that gender theory and feminist perspectives are necessary to understand this phenomena. Secondly, others argued that differences and similarities between men and women should be considered within the conventional theories relating to entrepreneurship research field. Holmquist and Sundin (2002) conclude that contributions from both perspectives are needed to provide insights behind these imbalances of gender and entrepreneurship. Feminist theoretical perspective address the questions of women's subordination to men, how it arose, how and why it is perpetuated, how it might be changed and what life would be like without it. Each perspective of the theories (social and liberal) offers differing views.

The liberal feminist theory according to Fischer *et al.* (1993), asserted that the liberal feminist tradition goes back to feminism's earliest days (the first wave of feminism) and argues for the necessity of social reform in order to give women the same status and opportunities as men. The fundamental basis of the liberal theory assumes that men and women are equal and that rationality not sex is the basis for individual rights. It emphasizes the existence of discriminatory barriers and systematic biases facing women (for example restricted access to resources, education, business experience), which must be eliminated. Liberal feminism is outgrown of political views of equality, entitlement, and individual rights, the liberal feminist perspective has been the basis for many legal changes that have been used to bring about greater equality for women. Liberal feminist theory in the articulation of this theory in the context of women's entrepreneurship posits that if women had

equal access to the opportunities available to men such as education, work experience and other resources, they would behave similarly (Unger & Crawford, 1992).

Social Feminism theory- assumes that men and women are seen to be or have become different (Ahl, 2006), social feminism emphasizes that there are differences between male and female experiences through the deliberate socialization methods from the earliest moments of life that results in fundamentally different ways of viewing the world (Fischer *et al.*, 1993). Female's socialization creates different perspectives, goals and choices for women (Brush, 2006) and they choose their business field accordingly. The relationship between family and work has been stronger for women, rather than seeing their business as a separate economic unit in a social world. Brush (1992) adds that women view their business as an interconnected system of relations (family, community and business). These differences do not imply that women will be less effective in business than men, but only that they may adopt different approaches which may not be equally as effective as the approaches adopted by men (Watson & Robinson, 2003).

While the outcome of past findings is relevant to the question of if and how female and male entrepreneurs differ, there are still large gaps in knowledge. Some scholars (Kalleberg & Leicht, 1991; Cliff, 1998), have systematically explored whether or not potential differences related to discrimination or socialization affect business performance or growth intention. Notwithstanding, the notion that differences do exist between male and female entrepreneurs, researchers fail to investigate uniquely female entrepreneur's growth intentions of their enterprises. Liberal and socialist theories provide socio-cultural reasons for expected gender differences. Sexton (1989) argued that there are no psychological reasons to believe that female entrepreneurs will have lower propensity for business expansion. Accordingly, there is suggestive evidence that factors associated with growth intention, may vary by gender. Even if intent to grow does not vary by gender the process that leads to the decision may vary (Orser & Hogarth-Scott, 2002).

Given the important role of female business owners and their different structural variations, it follows that women may make decision related to growth of their businesses using different process by weighing the social risk and reward differently from men. In view of these literatures, the liberal and feminist theories provide reasons for expecting gender differences and why female entrepreneurs and female business owners behave differently in their adaptation of low growth intentions. Many studies that were explored (Kalleberg & Leicht, 1991; Lee-Gosselin & Grise, 1990; Cliff, 1998) identified female entrepreneurs to have less experience in managing employees, less industry experience, prior start-up experience in businesses. Furthermore, women's firm also was found to be smaller than men's and have lower growth and income over some years, and to have lower sales per employee (Kalleberg & Leicht, 1991). Cliff (1998) speculates that women who lack relevant experience may question their ability to manage quickly growing enterprises and may therefore purposely limit the expansion of their firms and these might contribute to their modest growth expectations (Lee-Gosselin & Grise, 1990).

Female entrepreneurs growth intention may also differ in terms of attitudes and values. Birley (1989) posit that sources of culture, behavioural norms, professional networks and family relationship all affect the attitudes of women entrepreneurs. Most women held positive attitudes towards achievement and success, self-preservation, self-worth expressiveness, freedom, health and education as well as to

economic profits and growth (Jacobson, 1993). Empirical studies indicate that men tend to place a greater value on economic values and non-ambiguous measures of achievement and success such as status and wealth (Unger & Crawford, 1992).

This offers us a compelling argument for anticipating gender differences in growth intentions. As noted further, female entrepreneurs' position should not be generalized, as they are complicated with varied characteristics and motivations (Sarri & Trihopoulou, 2005). Theories of motivation posit that values influence intentions (Locke, 1991). The value placed on business expansion by female business owners will in no doubt contribute to their growth intentions. More specifically, it is expected that women will be less likely to express a desire to grow their enterprises, since expansion may interfere with other equally cherished goals (Orser & Hogarth-Scott, 2002). Female entrepreneurs have so many roles to play in their lives, and tend to face different domestic demands to their male counterparts and therefore may not follow the normal expected growth cycles based on stereotypical male-owned business cycles (Still & Timms, 2000). Managing households may significantly add to women's capabilities in business (Stevenson, 1986). But can also create demands on their life-styles, which would threaten the pattern of family and conjugal relationships (Goffee & Scase, 1985). Thus, due to the many conflicting demands between female entrepreneurs businesses and their personal lives (Buttner & Rosen, 1992; Stoner *et al.*, 1990; Goffee & Scase, 1985), they may tend to adopt a reduced growth intention (Cliff, 1998) in their businesses, despite the fact that female entrepreneurs are unique, have the skills and competencies to manage business effectively and intentionally (Sarri & Trihopoulou, 2005). Moreover, it is perceived that female entrepreneurs have inadequate resources, specifically in terms of business and managerial experience and access to finance. Lee-Gosselin and Grise (1990) added that female entrepreneurs deliberately adapt to this situational constraints by adopting lower growth expectations (Cliff, 1998).

CONCLUSIONS

In summary the paper shed light on gender perspective in entrepreneurship, feminist theories and growth intentions of female entrepreneurs. The findings shows that most women entrepreneurs compared to their male counterpart are dissimilar than similar in their characteristics of their business endeavours. Studies noted differences in their motivations in starting their enterprises, their administrative and entrepreneurial skills, and professional background and the problems they face. Some of these identifiable differences concerning female entrepreneurs in their growth intention were explored in order to find out if they were related to discrimination or socialization process.

According to analysed studies female entrepreneurs hold small, slow and modest expectations about their businesses and growth prospects are as a result of situational constrains. These were on account of differences in attitudes, different ways of thinking, the values place on growth and the socialization process. While others could be owing to the fact that they lack adequate resources specifically, in terms of business and managerial experience and access to finance (Cliff, 1998), which are prerequisite of a growing entrepreneurial business and lacking such qualities and requirements may limit the expansion of female firms. More so, the desire to expand may interfere with other cherished goals for example family demands and conjugal life.

These observed differences do not imply that women will be less effective in business than men, as affirmed by feminist theories that offer some perspectives to these variations. The liberal feminist view affirms that women entrepreneurs may adopt different approaches due to their lesser access to resources, education, business experience and as discriminatory should be eliminated. The social feminist theory posit that even though gender differences are recognized it should be acknowledged that it stems from the socialization process. In conclusion, women if given equal access to the opportunities available to men such as education, work experience and other resources they would equally grow their businesses. This research also identified that in developing countries there prevails paucity of research on growth aspirations of women entrepreneurs. It has been identified that they face higher barriers to entry into the labour market. They are forced into entrepreneurship as an only option out of poverty and way out of unemployment. However, majority of the female entrepreneurs fail to express their growth expectations.

To fully understand the importance of growth intentions of women entrepreneurs, and why they deliberately pursue a low growth expectations is critical. Identifying ways and removing those barriers, and negative misconceptions that women face requires initiatives. It is imperative to understand that the essence of entrepreneurship is seeking growth and it must reflect as a business that has achieved growth. Central to these issues is the suggestions by some studies that women entrepreneurs are unique. However, those who aspire to build high growth businesses require unique skills, competencies to manage effectively and intentionally. Policy makers should also acknowledge and consider the growing number of businesses that wish to stay small and respond to both economic and personal motives of the entrepreneurs. The provision of sustainable business support infrastructure which might better meet the needs of these female entrepreneurs and which is appropriate to their needs should be provided. Some of the female entrepreneurs slow growth orientation could change if assistance in coaching, training, experience, support service, information in business is provided.

Another barrier identified by reviewed studies is associated with difficulties in assessing and obtaining institutional finance due to negative perception. The attitude of bankers and business professionals towards these female entrepreneurs has to be positive and should be more cooperative. Some institutions may not take enterprises of women seriously, considering they are not growth oriented. Some constrains that are gender-based factors which women face to enterprise growth are also specifically imposed by culture. Government policy and programs aimed at improving perceptions of aspiring women to grow their enterprises to higher growth and economic prosperity should be encouraged. There should be policies and programs in favour of women's growth enterprises, which remove barriers in start-up and growth, improve access to resources, strengthen social protection and inclusion, foster a supportive culture and conducive environment for business growth.

There should be capacity building of research and knowledge, consideration of the context, comparison of findings of both female entrepreneurs growth intentions in developed and developing countries. This is needed in order to determine, if these results are gender specific, socialization function or just discrimination. This would further benefit our understanding of both male and female entrepreneurship. Growth of women's enterprises is acknowledged to have positive impact on job creation and economic growth.

This research has identified that in case of female entrepreneurs issues on how and why women create and manage their small business is still not well understood. Small and stable business owned by female entrepreneurs is described as 'good and real business' (Lee-Gosselin & Grise, 1990). Most female entrepreneurs value the loose organization; the proximity to employees, customers, suppliers and obtain mostly experiences offered by small organizations. These businesses stay small and respond to both economic and personal motive of the female entrepreneur. Research is still not conclusive if intent to grow might vary by gender and why women entrepreneurs don't aspire to grow their firms. However, we need some answers and understanding on women's growth intentions. A greater consideration should be focused on developing economies, as its women entrepreneurs are indispensable for economic development. Research in this direction will contribute and enhance the female entrepreneurship stream of research. In view of the fact that developing countries have limited access to affordable business development services, business management, technical training and operate within cultural environment that reflects stereotypes much work remains to be done both academically and policy wise. Policy makers would benefit from new research results that are focused on eliminating barriers faced by women in their aspirations to grow their enterprise in a more demanding environment.

REFERENCES

- Ahl, H. (2006). Why Research on Women's Enterprise Needs New Direction. *Entrepreneurship, Theory and Practice*, 30(5), 595-621.
- Ahl, H., & Marlow, S. (2012). Exploring the Dynamics of Gender, Feminism and Entrepreneurship: Advancing Debate to Escape a Dead End. *Organization*, 19(5), 543-562.
- Black, N. (1989). *Social feminism*. New York, NY: Cornell University Press.
- Bosma, N., Van Praag, M., & De Wit, G. (2000). *Determinants of Successful Entrepreneurship. Research report*. Retrieved from: <http://ondernemerschap.panteia.nl/pdf-ez/h200002.pdf> (15.01.2016).
- Bird, B.J. (1989). *Entrepreneurial Behavior*. Glenview, IL: Scott Foresman.
- Birley, S. (1989). Female Entrepreneurs: Are They Really Any Different? *Journal of Small Business Management*, 27(1), 32-37.
- Brush, C. (1992). Research on Women Business Owners: Past Trends and New Perspective and Future Direction. *Entrepreneurship, Theory and Practice*, 16(4), 5-30.
- Brush, C., & Bird, B. (2002). A Gendered Perspective on Organizational Creation. *Entrepreneurship Theory and Practice*, 26(3), 41-66.
- Brush, C. (2006). Women Entrepreneurs: A Research Overview. In: A. Basu, M. Casson, B. Yeung & N. Wadesdon (Eds.), *Oxford Handbook of Entrepreneurship*. Oxford: Oxford University Press.
- Brush, C.G., Carter, N.M., Gatewood, E.J., Greene, P.G. & Hart, M. (Eds.), (2006). *Diana Project International: Growth Oriented Women Entrepreneurs and their Businesses*. Cheltenham: Edward F. Elgar.
- Buttner, H., & Rosen, B. (1992). Rejection in Loan Application Process: Male and Female Entrepreneurs: Perceptions and Subsequent Intentions. *Journal of Small Business Management*, 30(1), 59-65.

- Calás, M. B., Smircich, L., & Bourne, K. A. (2009). Extending the Boundaries' Reframing 'Entrepreneurship as a Social Change Through Feminist Perspectives. *Academy of Management Review*, 34(3), 552-569.
- Galloway, L., Kapasi, I., & Sang, K. (2015). Entrepreneurship, leadership and the value of feminist approaches to understanding them. *Journal of Small Business Management*, 53(3), 683-697.
- Carter, S., & Cannon, T. (1992). *Women as Entrepreneurs*. London: Academic Press
- Center for Women's Business Research (2006). *Women-owned Businesses in the United States*. Retrieved from: <http://www.Cfwbr.org/assets,factsheet/pdf> (15.01.2016).
- Chaganti, R. (1986). Management in Women-Owned Enterprises. *Journal of Small Business Management*, 24(4), 18-29.
- Cliff, J.E. (1998). Does one Size Fit All? Exploring the Relationship Between Attitudes Towards Growth, Gender, and Business Size. *Journal of Business Venturing*, 13(6), 523-542.
- Cooper, A. (1993). Challenges in Predicting New Firm Performance. *Journal of Business Venturing*, 8(3), 241-253.
- Davidsson, P., Achtenhagen, L., & Naldi, L. (2010). Small Firm Growth. *Foundations and Trends in Entrepreneurship*, 6(2), 69-166.
- Dobbs, M., & Hamilton, R.T. (2007). Small Business Growth: Recent Evidence and New Directions. *International Journal of Entrepreneurial Behavior and Research*, 3(5), 296-322.
- Drucker, P. (1995). *Managing in a Time of Great Change*. London: BCA.
- Dutta, D.K., & Thornhill, S. (2008). The Evolution of Growth Intention: Toward a Cognitive-Based Model. *Journal of Business Venturing*, 23(3), 307-322.
- Fasci, M., & Valdez, J. (1998). A Performance Contrast of Male and Female owned Small Accounting practices, *Journal of Small Business Management*, 36(3), 1-7.
- Fatoki, O.O. (2013). The Determinant of Immigrant Entrepreneur's Growth Expectation in South Africa. *Journal of Social Science*, 37(3), 209-216.
- Fini, R., Grimaldi, R., & Sobrero, M. (2009). Factors Fostering Academics to Start-up New Ventures. An Assessment of Italian Founders' Incentives. *Journal of Technology Transfer*, 34, 380-402.
- Fischer, E.M., Reuber A.R., & Dyke, L.S. (1993). A Theoretical Overview and Extension of Research on Sex, Gender and Entrepreneurship. *Journal of Business Venturing*, 8(2), 151-168.
- Franco, M., & Matos, P. (2013). Leadership Styles in SMEs: A Mixed-Method Approach. *International Entrepreneurship and Management Journal*, 11(2), 425-451.
- Global Entrepreneurship Monitor (2004). UK National Report. Retrieved from: www.Gemoconsotium.org (15.01.2016).
- Global Entrepreneurship Monitor (2011). The women's Report 2010. Retrieved from: <http://www.gmconsortium.org> (15.01.2016).
- Goffee, R., & Scase, R. (1985). Business Ownership and Women's Subordination: A Preliminary Study of Female Proprietors. *Sociological Review*, 31(4), 625-648.
- Gundry, L.K., & Welsch, H.P. (2001). The Ambitious Entrepreneurs: High Growth Strategies of Women-Owned Enterprises. *Journal of Business Venturing*, 16(5), 453-470.
- Hisrich, R.D., & Brush, C. (1983). The Woman Entrepreneurs: Impact on Family, Educational and Occupational Experience. In: J. Hornaday, J.A. Timmons & K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Babson Park, MA: Babson College.
- Hisrich, R.D., & Drnovsek, M. (2002). Entrepreneurship and Small Business Research – a European perspective. *Journal of Small Business and Enterprise Development*, 9(2), 172-222.

- Holmquist, C., & Sundin, E. (2002). *Företagerskan: Omkvinnor och Entreprenörskap*. Stockholm: SNS Förlag.
- Jacobson, M. (1993). *Essential Values and Characteristics of Entrepreneurial Women Formerly Managers in a Corporate Setting*. Doctoral Thesis, Union Institute, Cincinnati, OH.
- Kalleberg, A., & Leicht, K. (1991). Gender and Organizational Performance: Determinants of Small Business Survival and Success. *Academy of Management Journal*, 34(1), 136-161.
- Kolvreid, L. (1992). Growth Aspirations Among Norwegian Entrepreneurs. *Journal of Business Venturing*, 7(3), 209-222.
- Lee-Gosselin, H., & Grise, J. (1990). Are Women Owner-Managers Challenging our Definition of Entrepreneurship? An In-depth Study. *Journal of Business Ethics*, 9(4/5), 423-433.
- Lerner, M., Brush, C., & Hisrich, R. (1997). Israel Women Entrepreneurs: An Examination of Factors Affecting Performance. *Journal of Business Venturing*, 12(4), 315-339.
- Locke, E. (1991). The Motivation Sequence, the Motivation Hub, and the Motivation Core. *Organizational Behavior and Human Decision Process*, 50(2), 288-299.
- Loscocco, K.A., Robinson, J., Hall, R.H., & Allen, J.K. (1991). Gender and Small Business Success: An Inquiry into Women's Relative Disadvantage. *Social Forces*, 10(2), 65-85
- Minniti, M., Arenius, P., & Lagowitz, N. (2005). *Global Entrepreneurship Monitor: 2004 Report on Women and Entrepreneurship*. Bobson Park and London: Bobson College and London Business School.
- Minniti, M., & Naude W. A. (2010). What do we know about the patterns and determinants of female entrepreneurship across countries? *European Journal of Development Research*, 22(3), 277-293.
- Mitchelle, B. (2004). Motives of Entrepreneurs: A case of South Africa. *The Journal of Entrepreneurship*, 13(2), 167-193.
- Morris, H.M., Miyasaki, N., Watters, C.E., & Coombes, S.M. (2006). The Dilemma Of Growth: Understanding Venture Size Choices of Women Entrepreneurs. *Journal of Small Business Management*, 44(2) 221-244.
- Neider, L. (1987). A Preliminary Investigation of Female entrepreneurs in Florida. *Journal of Small Business Management*, 25(3), 22-28.
- Neneh, B.N., & Nazy, J. (2014). Growth Intention and its Impact on Business Growth Amongst SMEs in South Africa. *Mediterranean Journal of Social Sciences*, 5(20), 172-182.
- OECD (1998). *Women Entrepreneurs in Small and Medium Enterprises*. Paris: OECD.
- Orser, B., & Hogarth-Scott, S. (2002). Opting for Growth: Gender Dimension of Choosing Enterprise Development. *Canadian Journal of Administrative Sciences*, 19(3), 284-300.
- Petterson, K. (2004). Masculine Entrepreneurship-The Gnösjö "Discourse in a feminist Perspective". In: D. Hjorth & C. Steyaert (Eds.), *Narrative and Discursive Approaches in Entrepreneurship* (pp. 177-193). Cheltenham: Edward Elgar.
- Richardson, P., Howarth, R., & Finnegan, G. (2004). *The Challenges of Growing Small Businesses: insights from Women Entrepreneurs in Africa*. Geneva: International Labour Office.
- Sarri, K., & Trihopoulou, A. (2005). Female Entrepreneur's Personal Characteristics and Motivation: A review of the Greek situation. *Women in Management Review*, 20(1), 24-36.
- Scott, C.E. (1986). Why More Women are Becoming Entrepreneurs. *Journal of Small Business Management*, 24(4), 37-45.
- Sexton, D. (1989). Research in Women Business Owners In: O. Hajen, C. Rivchun & D.L. Sexton (Eds.), *Women Owned Business*. New York: Praeger.
- Steinholm, P. (2011). Innovative Behavior as a Moderator of Growth Intention. *Journal of Small Business Management*, 49(2), 233-251.

- Stevenson, L.A. (1986). Against All Odds: The Entrepreneurship of Women. *Journal of Small Business Management*, 24(4), 30-36.
- Still, L.V., & Timms, W. (2000). Women's Business: The Flexible Alternative Work Style for Women. *Women in Management Review*, 15(6), 272-282.
- Stoner, C.R., Hartman, R.I., & Arora, R. (1990). Work/Family Conflict: A Study of Women in Management. *Journal of Applied Business Research*, 7(1), 67-74.
- Terjesen, S., & Szerb, L. (2008). Dice thrown from the Beginning: An empirical Investigation of Determinants of Firm Level Growth Expectations. *Estudios de Economia*, 35(2), 153-178.
- Toivonen, J., Steinholt, P., & Heinonen, J. (2006). Different Conditions of Growth - Finnish SMEs in Focus. In: J. Heinonen (Eds.), *The nature and elements of growth* (pp. 122-137). Turku: Turku School of Economics.
- Unger, R., & Crawford, M. (1992). *Women and Gender: A Feminist Psychology*. New York: McGraw-Hill.
- University of Dares Salaam Entrepreneurship Center (2002). Jobs, Gender and Small Enterprises in Africa: Women Enterprises in Tanzania. A Preliminary Report, Geneva ILO. IFP/ SEED –WEDGE, October.
- Verheul, I., Risseeuw, P., & Bartelse, G. (2001). Gender Differences in Strategy and Human Resource Management. *International Small Business Journal*, 20(4), 443-476.
- Verheul, I.A., & Thurik, R. (2006). *Explaining Female and Male Entrepreneurship at the Country Level*. Erasmus Research Institute of Management. Erasmus University, Rotterdam.
- Watson, J., & Robinson, S. (2003). Adjusting for Risk in Comparing the Performance of Male and Female-Controlled SMEs. *Journal of Business Venturing*, 18(6), 773-788.
- Welter, F. (2006). Women's Entrepreneurship in Germany. In: C.G. Brush, N.M. Carter, E.J. Gatewood, P.G. Greene & M. Hart (Eds.), *Diana Project International: Growth-Oriented Women Entrepreneurs and their Businesses*. Cheltenham: Edward Elgar Publishing.
- Welter, F., Smallbone, D., & Isakova, E. (2006). Female Entrepreneurship in Transition Economies: The case of Lithuanian and Ukraine. *Feminist Economics*, 13(2), 157-183.
- Wiklund, J., Davidsson, P., & Delmer, F. (2003). What do they think and feel about Growth? *Entrepreneurship Theory and Practice*, 27(3), 247-269.
- Wiklund, J., & Shepherd, D. (2003). Aspiring For, and Achieving Growth: The Moderating Role of Resources and Opportunities. *Journal of Management Studies*, 40(8), 1919-1941.
- Zapalska, A. (1997). Profiles of Polish Entrepreneurship. *Journal of Small Business Management*, April, 111-117.
- Zwede and Associates (2002). *Jobs, Gender, and Small Enterprises in Africa: Women Entrepreneurs in Ethiopia*. A preliminary Report, Geneva, ILO, IFD/SEED-WEDGE.

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Statement on the First Research on Digital Startups in Poland

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Abstract

The objective of the paper is to present the results of the first study of Polish startups' ecosystem as the first stage of a larger study of digital economy landscape in Poland. The first estimate of the number of Polish startups amounts to 2400 entities. The publication presents the first survey Polish startups that marks the beginning of cyclical studies on enterprises belonging to the digital economy in Poland. The study was conducted among 423 entities using an in-house questionnaire prepared based on the author's own knowledge. Results are discussed. Startups most often consider themselves software producers who follow the SaaS model and operate in the following industries: mobile apps, e-commerce and Internet services. Nearly one in three startups achieve 50% annual revenue growth, while in one-fifth such growth exceeds 100%. Almost two thirds of Polish startups are financed exclusively from own funds. It is necessary to repeat and deepen the study in order to determine the significance of the digital industry in the economy of Poland and the CEE region. The originality of this work lies in taking this subject for the first time in Polish literature and in elaborating the proposition of a "startup" term's definition.

Keywords: digital economy; software industry; technology; innovation, survey

JEL codes: O33, O310, O330, L860

INTRODUCTION

The development of digital economy is one of the highest priorities of the European Union (EU). In its publications and documents, the European Commission tries to assess the importance of this sector, for the economy of the EU (European Commission, 2014, 2015, 2016). The Commission also plans projects which should serve two purposes: on one hand,

enhancing the use of new digital technologies by companies, especially industrial ones. On the other hand – encouraging the entrepreneurship of companies which create and commercialize solutions basing on the knowledge in terms of information and communication processing technologies with the use of the Internet. At the same time, there is a lack of publications in Europe which would characterize these companies. So far, no such publication, which would in a comprehensive manner present the image of this sector in the EU or in the member states, has been created. The most important reason is the lack of a clear and well established definition of what a “startup” is. This issue is raised in the still few, but quickly growing, Polish scientific publications concerning the subject of startups (Korpysa, 2012; Cieřlik, 2014a; Łuczak, 2014; Burżacka & Gąsiorowska, 2015).

The first study on Polish startups marks the beginning of cyclical studies on enterprises belonging to the digital economy in Poland. The research aimed to provide information which will make it possible to determine the significance of the digital industry in the economy and the direction and pace of its growth in Poland. Until now no research has been conducted which would make it possible to describe the industry’s most important features and support them with detailed figures. A database of 2 432 startups was created for this study, and 432 entities (17%) completed the survey between June 10 and September 15, 2015. The study was executed in a close cooperation with Startup Poland Foundation, that represents Polish startups in relation with decision-makers, politicians and local government officials. The foundation’s support has ensured the necessary range and significance to the study.

The objective of the paper is to present the results of the first study of Polish startups’ ecosystem as the first stage of a larger study of digital economy landscape in Poland. The Report of this research: “Polskie Startupy 2015” was published in October 2015 (Skala, Kruczkowska & Olczak, 2015).

MATERIAL AND METHODS

A challenging methodological issue in the study was a “startup” definition. The term has recently become as popular as inaccurate (Osterwalder & Pigneur, 2010; Blank, 2012; Ries, 2012; Blank & Dorf, 2013; Henrekson & Sanandaji, 2014; Cieřlik, 2014b). In this study, “startups” are understood as enterprises where information processing and derivative technologies constitute a key element of their business models. Such a definition complies with the academic and political understanding of the “new economy”, also known as “e-commerce” or “e-business.” A Polish startup is an entity which is registered in Poland or has at least one partner who is a Polish citizen and operates in part in Poland. A branch of a company whose headquarters are located abroad is not considered a Polish startup.

For the purpose of the study, a startup database was prepared by procuring startup names from the following sources: venture capital funds, accelerators, entrepreneurship incubators, training companies, organizers of startup competitions, subsidy lists, lists from industry media sites, as well as the private rankings and databases of “startup activists”. This represents the first attempt on such a scale to estimate the number of startups in Poland. The population of Polish startups was assessed in this manner at 2 432 entities. An e-mail message was sent twice to each of them with a request to complete the survey questionnaire; additionally, one or two telephone calls were also made. Startup representatives could also find out about the questionnaire from the media and social networking sites.

The study was conducted using an in-house questionnaire prepared based on the author's own knowledge. A pilot study was conducted (38 completed questionnaires) between May 10 and 25, 2015, during which the questionnaire was evaluated by competent parties, i.e. experts specializing in startups. After analyzing the remarks, some of the suggested changes were incorporated into the questionnaire. The pilot study results were described and presented during the Digital Ecosystems conference organized by the Digital Economy Lab of Warsaw University (DELab) in June 2015 (Skala & Gieżyńska, 2015).

The questionnaire was completed by 423 entities (17% of the population reached). The sample is not representative. In the case of 21 questionnaires, doubts arose as to whether the company qualifies as a "startup". After analyzing this small group of projects, the decision was made to include them in the analyzed population. Therefore, the results discussed refer to all 423 entities. In over 80% of cases, the questionnaires were completed by the (co-)founders and/or management board presidents (CEOs) of the companies. Other persons most often included other board members, and less-often product managers, sales managers and board assistants. The questionnaire was made up of 36 questions. The majority were multiple-choice questions and included space for an additional answer. Startups were required to provide their company names, the role of the person completing the questionnaire and to label themselves as startups (or not) in line with the adopted definition. All other answers were voluntary. Various methods of data analysis were used in the study. Responses to closed-ended questions were analyzed mainly using analytical tools made available by the website webankieta.pl. Responses to open-ended questions were studied via keyword coding analysis, indicating those statements that appeared most often. Potential correlations were checked using SPSS Statistics. The study has been divided into six sections:

1. Startup profiles: presentation of the location, period of operation and legal form of startups taking part in the survey;
2. Business models and growth: specification of the main categories of clients, most popular product types, stage and pace of growth, plans for the future and valuation of companies;
3. Resources: divided into two sub-chapters that discuss sources of capital in startups and their needs with respect to non-financial resources;
4. Employment: analysis of founder teams, employment volume and prospects in startups;
5. Exports: devoted to the presence of startups in foreign markets and description of their export activities;
6. Innovation: presentation of the sources of inspiration, and the means of applying innovation in startups.

In this paper the main findings from every six sections mentioned above will be presented.

RESULTS

Over half of respondents are registered startups (or are currently operating) in one of three cities: Warsaw, Krakow or Poznan. Popular locations also included Wroclaw and the Tri-City and, to a lesser extent, Lodz and Katowice. Dominant legal structures include

limited liability companies (almost two-thirds); one in five are conducted as a sole proprietorship. Only 5% are joint stock companies.

30 types of products and industries were proposed, and startups were asked to choose those that best describe their primary business activities. Startups most often consider themselves to be software producers (half of all answers) selling in the SaaS model and operating most readily in the following industries: mobile applications, e-commerce and web services. Startups indicated B2B as their primary sales model almost twice as often as B2C. A relatively large number of startups produce corporate software in an agency model; Big Data, Research Tools and Business Intelligence also enjoy significant interest. Such industries as the power sector, artificial intelligence, logistics and telecommunications are the least popular fields for startups (Table 1).

Financing is one of the key elements determining startups' growth. Its availability has a significant impact on the scope of their operation, their tendency to invest in innovation and the number of jobs created. According to the answers regarding sources of capital in companies, almost 60% of Polish startups are financed exclusively from own funds. Other sources include EU funds in the form of subsidies (23%) or seed funds (7%). Almost every fifth examined startup reached for funds from Polish or foreign venture capital funds; the same number of companies received such funds from investment angels. One in twelve startups received bank loans (8%). Crowdfunding is still in its infancy with a result of 3%, representing only a small proportion of the examined population. It is worth emphasizing that none of the startups studied, including the New Connect market, indicated the stock market as a source of financing. It should be emphasized that foreign resources (both capital and others) are much less popular (or available) than domestic ones. Their level of use is several times lower than that of their Polish equivalents (funds, incubators, accelerators, etc.).

The startups were also asked whether they use other, non-financial forms of support. Only one in ten startups took advantage of an entrepreneurship incubator or a technology park; accelerators enjoy a similar (read: low) level of interest. On the other hand, less than 5% of startups operated or still operate as part of an academic incubator, i.e. they are located near a university. Polish startups rarely take advantage of the assistance of experienced entrepreneurs (Table 2).

As far as startup needs are concerned, at their present stage of development 60% of startups cite money as their greatest need. Half indicated new employees as another pressing need, and the same number also indicated a better contact network. Nearly one-fourth of startups need to increase specialist knowledge resources. Treating knowledge as a resource, startups were asked about their cooperation with the research world. Such cooperation is understood as cooperation with universities, institutes, and laboratories, as well as regular, even informal, consultations. Exactly one in four startups confirmed that they cooperate with researchers. Compared to those of other startups, the clients of startups cooperating with researchers more often tend to be corporations and institutions. They are most likely the recipients of products related to KETs (key enabling technologies) produced by one-third of startups in this population (one in twelve among the remaining group).

Startups cooperating with the research sector value their technologies and often claim that their products are innovations on a global scale. They hire three times the number

of researchers as other startups, and they are twice as likely to patent their products (nearly half do so). It is not yet possible to indicate significant differences with respect to the rate of growth or valuation of such companies compared to the rest. Fifteen percent

Table 1. Characteristics of startups and its structure: locations, legal form, business models and products

	Characteristics	Structure (%)
Locations of startups	Warsaw	28
	Krakow	16
	Poznan	13
	Wroclaw	7
	Trojmiasto	7
	Other cities and abroad	29
Legal form	Limited liability company	65
	Sole proprietorship	19
	Joint-stock company	5
	Other	12
Business Models (multiple choice)	Business-to-business (B2B)	57
	Business-to-consumer (B2C)	28
	Business-to-business-to consumer (B2B2C)	21
	Software as a Service (SaaS)	39
	Hardware	11
	Software	49
Products (multiple choice)	e-commerce	22
	Web Service	21
	Mobile	24
	Corporate Software	18
	Big Data	17
	Agency	13
	Analytics	13
	Marketing Technology	12
	Games, entertainment	12
	Marketplace	10
	Utility designs	10
	Education	10
	Internet of Things	9
	Content / Social	9
	Programmers and Developers Tools	8
	Electronics/Robotics	7
	Financial services	6
	Virtual/Augmented Reality	5
	Life Science	5
	Telecommunication	5
Transport and logistics	4	
Semantic Web / Artificial Intelligence	3	
Energy Industry	2	

Source: own elaboration based on (Skala, Kruczkowska & Olczak, 2015).

of startups were established by persons professionally involved in research (at least doctoral candidates). This group is quite small (64 companies) yet interesting, so it was decided to list its main features. First, “academic” startups most readily operate in such areas as hardware, biotechnology, analytical tools, as well as the power industry and education. They perceive their products as an innovation on a global scale more often than others (63%). Over half cooperate with research centers, yet they enter foreign markets at a level similar to other startups.

Table 2. Characteristics of startups and its structure: financial and non-financial resources

	Characteristics	Structure (%)
Sources of capital (multiple choice)	Only own funds	59
	EU subsidy	23
	Angel investment	20
	Venture Capital	18
	Bank (loan)	8
	Crowdfunding	3
Non-financial support (multiple choice)	Industry meetings	12
	Mentoring	12
	Participation in a startup competition	12
	Incubator or technology park	10
	Accelerator	10
	Academic incubator	5

Source: own elaboration based on (Skala, Kruczkowska & Olczak, 2015).

The most interesting differences lie in sources of financing – startups founded by researchers are more effective at procuring external financing, in particular VC funds and EU funds, and they use entrepreneurship incubators, technology parks and acceleration programs much more often. Such companies obviously indicate research grants as a source of financing. The researchers indicated access to properly trained personnel as a missing resource, and as such this may be taken as one of their barriers to growth. Such fears are not surprising in view of the fact that as many as half employ other researchers, and three-fourths plan to increase employment.

Employment is one of the most important aspects of a startup’s operation. From the point of view of the company, the competences of the founding team and proper selection of employees determine the success of the entire enterprise. On the other hand, knowledge of employment volume and the rate at which startups create new jobs is necessary for macroeconomic analysis. The first part of the questions referred to the structure and number of members of the founding team. One in three startups are run by a single founder, while 60% are run by two- or three person teams. Startups managed by a single person are, as a whole, clearly at an earlier stage of development than the population average, and they are financed almost exclusively from EU funds and own funds. Women are partners in one-third of startups; in one in six, at least one founder is a person involved in academic work (doctoral candidate or higher). In 60% of cases, at least one of the founders is a person with experience in establishing and running a startup.

In the study, employees are understood as persons cooperating with the company on an ongoing basis, receiving payment for this activity and are not partners – without regard to the form of the agreement this relationship is based on (Table 3).

Table 3. Characteristics of startups and its structure: employment

	Characteristics	Structure (%)
Employment	No employees	17
	1 person	9
	2-4 people	34
	5-10 people	21
	11-20 people	8
	More than 20 people	11
Number of founders	1 founder	32
	2 founders	39
	3 founders	21
	More	8

Source: own elaboration based on (Skala, Kruczkowska & Olczak, 2015).

Among the examined startups, 54% are exporters; on the other hand, 40% claim that they do not sell outside of Poland. This is a high number, considering that in the entire Polish MSE sector only 7% of enterprises provide exports (Starczewska-Krzysztosek, 2012). Medium-sized companies in Poland, i.e. those with 50 or more employees, report an export level of 50%. It can thus be stated that, in reference to export activity, startups behave as if they had the potential of a medium-sized company at their disposal, evaluating their competitive advantage in a similar way. Among exporting startups, almost half complete over 50% of their total sales abroad (Table 4.). For 60% of exporters, the main destination countries are Great Britain or the United States. Germany is also an important export location. These are very demanding markets, testifying to the high level of Polish startups' offers. One fifth of startups have a foreign branch.

The final section of the study was devoted to the issue of innovation in startups and the nature of research & development and innovation (RDI) activities to be undertaken by such entities. The closed-ended questions – taking into account the fact that the study was being performed for the first time – were supplemented by four open questions, and startups were allowed to provide unlimited answers. Even though analysis of the materials obtained in this manner was much more difficult, it allowed for observing general tendencies and procuring spontaneous opinions about innovations and their place in the everyday “life” of startups. To start, a question was asked about the level of product innovation; the respondents were asked to select the proposed scope of its “innovation”. Almost half of startups declared that their solution was “new on a global scale”. One-third of respondents believe that they are working on a solution that is new on a local scale, and one in four admit that their product is “more of an imitation, though it has specific advantages”.

Many startups indicated their product as the key innovation. This included breakthrough innovations (52% innovations) and innovations that improve upon an existing solution (40%). As mentioned previously, one in four startups cooperate with the research sector, which is perceived as a potential source of innovative solutions. A relatively large number, i.e. 59 companies (15%), declared that their activities are related to KET:

Key Enabling Technologies. Almost one third of the examined startups declare that they own a patent or a reserved trademark, purchase or sell licenses for technologies – this group was called the “patent group”.

Table 4. Characteristics of startups and its structure: exports

Characteristics		Structure (%)
Share of export in sales	None	40
	Up to 10%	18
	10-50%	10
	50-90%	10
	90-100%	16
	no answer	6

Source: own elaboration based on (Skala, Kruczkowska & Olczak, 2015).

As mentioned previously, the respondents were asked four open questions in order to evaluate the sources of innovation in startups. In the first, they were asked to describe the manner in which innovations are created in the company; in the second, to list the sources of inspiration. The third question referred to RDI activity: how do startups understand this process, and how do they carry it out?

The first conclusion to be made based on analysis of the collected data is that clients form the basis for creating new solutions. For the majority of the examined companies, inspiration is provided primarily by: talks with their clients, the needs they voice, and feedback received. At the same time, it should be noted that, when creating new solutions, startups are guided more by the opinion of their present users, relatively rarely testing new solutions on potential recipients on their own initiative. The companies undertake work on innovation only sporadically, guided by classic market polling results. In creating new products, they try to respond to the specific problems voiced by clients, or they create solutions on the basis of their own market analysis (direct quote from the questionnaire): “searching for a problem concerning the protection of young children’s health, for which no ideal solution has been found so far”. When creating new solutions, previous experience is of great importance. Responses often featured the names of industries which the owners came from (e.g. marketing, e-commerce). However, not only professional qualifications turn out to be useful; equally important – and sometimes even more valuable – sources of inspiration are conclusions drawn from real life experience: being a parent, a patient or a typical Internet user. As for methods of working on the idea, “brainstorming” is the clear favorite; “Lean Startup” also appeared several times. Many answers confirmed a lack of a clear manner of creating innovations by suggesting that they emerge “in the mind” or “in the shower,” or are simply an “inspiration”. Only a few startups mentioned collaboration with outside experts or advisors. The next question referred to sources and inspiration; here, the respondents most often put suggestions and needs voiced by clients. An analysis of these answers leads to the conclusion that sources of innovation in companies are quite pragmatic, e.g. modelling themselves on other startups, following trends, needs analyses for various groups of clients. A significant number of respondents simply draw ideas “from their surroundings” or “from the people they meet”. Only a few indicated “visions,” “ideas” or “drawing inspiration from

travels and nature". Inspiration is also provided by industry conferences and large successful companies, such as Apple or Amazon. Among Polish startups, a significant number of people are inspired by "the development of modern technologies"; thus, they readily follow the news on this topic and meet at conferences and other industry "rallies".

The effects of these activities may be, for example, attempts to apply a given solution in a completely new area, or combining two ideas into one and searching for new applications for it. Success stories also tend to provide inspiration – both Polish and foreign startups as well as examples of companies and successful people from the world of business. A small group of respondents indicated that they look for ideas for new products in books or scientific studies. The idea of universities as sources of potential cooperation in innovation appeared only in a few spontaneous answers, which should be considered a low result. The topic of innovation also brought about answers regarding imitation. Some startups simply indicated the fact that their solution was copied from other markets (quote): "we are not outstanding innovators, we are intelligent observers". The third question referred to how startups understand and implement RDI. The most frequent answer was: "improvement of existing product/process". Less frequently, startups declared that they look for completely new solutions and ideas to implement. Other answers also included: "formulating solutions for specific clients" and (again) "analysis of data describing the behavior of our users". Among the answers to this question, there were also several answers indicating that the creation of innovations takes place via intended copying of solutions from other markets. Once again, the issue of collaboration with the research sector appeared quite rarely, and more in the context of the insufficiency of such collaboration, its informal nature and sometimes even disappointment with its absence. The last open question referred to the existence of an RDI team in the company. Four times as many answers indicated the absence of a group of employees dedicated exclusively to work on innovations than those that indicated having such a group. Justification for the failure to form such a division in the company was varied. In some startups, the founders deal with creation of new solutions, whereas employees focus on ongoing customer service. A significant number of respondents believe that if the entire company is innovative, "there is no need to set up a separate team to work on something new". There is also the issue of the low number of people on teams: "There's only the two of us, so we do everything on our own". Several answers indicate that Polish startups do not work on innovations at all, e.g. "RDI is in our plans. At the present moment, we do not have funds for it [to set up a separate team]". To summarize: the issue of creating innovations is important to startups, which described honestly and in detail the implementation of this key process in their companies. The answers often featured such phrases as: "passion" and "clients", which jointly constitute the main "fuel" for innovation processes in startups. It is possible to see a small group of enterprises where such processes have already been professionalized, i.e. separated from other processes and given their own structure. The majority of startups still operate spontaneously, but knowledge about the market and awareness of its growing needs results in many answers featuring information about plans and attempts at a more serious approach to the subject. We hope to learn more about the specific nature of these intentions during subsequent editions of the study which is planned for 2016.

CONCLUSIONS

This study deals with the problem of determining the significance of the digital industry in the economy of Poland and the region. The study constitutes the first stage of work on this issue and it is clear, that in its first edition it is not completely exhaustive. The main findings of the study are:

- The first estimate of the number of Polish startups amounts to 2,400 entities;
- Over half of the questionnaire respondents are startups operating in one of three cities: Warsaw, Krakow and Poznan;
- Startups most often consider themselves software producers who follow the SaaS model and operate in the following industries: mobile apps, e-commerce and Internet services;
- Nearly one in three startups achieve 50% annual revenue growth, while in one-fifth such growth exceeds 100%. Half of respondents expect at least a five-fold increase in enterprise valuation within the next two years;
- The results confirm the thesis that sales in foreign markets accelerates monetization of a business and increases its value;
- Almost 60% of Polish startups are financed exclusively from own funds;
- Other sources of capital include EU funds in the form of subsidies or seed funds. Almost one-fifth of startups examined made use of funds from Polish or foreign venture capital; the same number received such funds from angel investors;
- One in four startups cooperate with researchers. Startups established by researchers are more effective at procuring external co-financing, especially VC funds and EU funds, and more frequently use incubators, technology parks and acceleration programs. Barriers to their development include trouble finding properly qualified personnel;
- Almost half of all startups are exporters; half of these complete over 50% of sales abroad. Software production in the B2B and SaaS models dominates exporters' business profiles;
- Exporters create more jobs than companies operating in the local market, and they start to bring in revenue and grow more quickly;
- Startups that patent their products are twice as likely to apply for and receive money from venture capital funds or funds from investment angels; they also decide to expand globally more frequently than other companies;
- The main source of startups' innovation is analysis of client behavior.

REFERENCES

- Burzacka, M., & Gasiorowska, E. (2015). New Connect w finansowaniu działalności firm typu start-up. *Acta Universitatis Nicolai Copernici. Nauki Humanistyczno-Społeczne. Zarządzanie*, 42(3), 163.
- Blank, S. (2013). Why the Lean-Start-up Changes Everything. *Harvard Business Review*, May, 3–9.
- Blank, S., & Dorf, B. (2012). The startup owner's manual: The Step-By-Step Guide for Building a Great Company. California: K&S Ranch.
- Cieślak, J. (2014a). Iluzje innowacyjnej przedsiębiorczości. *Kwartalnik Nauk o Przedsiębiorstwie*, 3, 4-16.
- Cieślak, J. (2014b). *Przedsiębiorczość, polityka, rozwój*. Warszawa: Wydawnictwo Akademickie SEDNO.
- European Commission (2014). *Fuelling Digital Entrepreneurship in Europe*. Retriever from: http://ec.europa.eu/growth/sectors/digital-economy_pl

- European Commission (2015). *Transformation of European Industry and Enterprises. A report of the Strategic Policy Forum on Digital Entrepreneurship*. Retrieved from: <http://www.digitaleurope.org/Pressroom/Publications/DigitalTransformationofEUIndustryandEnterprisesreport.aspx>
- European Commission (2016). *Accelerating the digital transformation of European industry and enterprises. Key recommendations of the Strategic Policy Forum on Digital Entrepreneurship*.
- Henrekson, M., & Sanandaji, T. (2014). Small business activity does not measure entrepreneurship. *Proceedings of the National Academy of Sciences*, 111(5), 1760-1765.
- Korpysa, J. (2012). Uwarunkowania przedsiębiorczości indywidualnej przedsiębiorstw typu start-up. *Studia Ekonomiczne Regionu Łódzkiego*, 8, 377-388.
- Łuczak, K. (2014). Rachunkowość innowacji na przykładzie przedsiębiorstw określanych mianem start-up. In: *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse. Rynki finansowe. Ubezpieczenia*, Uniwersytet Szczeciński, 79-87.
- Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers*. Hoboken, New Jersey: John Wiley & Sons.
- Ries, E. (2012). *Metoda Lean Startup*. Gliwice: Wydawnictwo Helion.
- Skala, A., & Gieżyńska, K. (2015). *Translating Translating Digital into High-Tech Economy*. In K. Śledziwska (Ed.), *Digital Ecosystems, Smart Economy and Innovation*, University of Warsaw, 8-25.
- Skala, A., Kruczkowska, E., & Olczak, M. (2015). *Polskie Startupy. Raport 2015*. Warszawa: Startup Poland Foundation.

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Organizational Culture and Firms' Internationalization, Innovativeness and Networking Behaviour: Hofstede Approach

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Abstract

The objective of this paper is to describe the features of firms' organizational culture within four of Hofstede's national culture dimensions and their potential relationships with internationalization, innovativeness and networking behaviour of firms. This explorative quantitative research refers to results of an earlier study on internationalization, innovativeness and networking of firms in Poland. Descriptive statistics are used to depict the features of the organizational culture of the firms differing in behaviour in the three fields. The study leads to two hypotheses. First is that higher power distance is conducive for firms' internationalization and innovativeness. The second is that the lower uncertainty avoidance supports internationalization, innovativeness and networking behaviour of firms. An attempt to create more consistent measures of organizational culture dimensions should be made in future analyses. This could help to achieve more sound results on the relationships between organizational culture and firms' behaviour in internationalization, innovativeness and networking. The paper gives an insight into the organizational culture features relationships with a broad area of firms' behaviour related with their ability to gain competitive advantage.

Keywords: organizational culture; Hofstede approach; internationalization; innovativeness; networking

JEL codes: M14, D22, M16, O31, L21

INTRODUCTION

Organizational culture is an important factor influencing the behaviour of firms and their performance in many fields. It has a broad scope of influence and it is very difficult to change

in a short-term perspective. Organizational culture is conceptualized in many ways, one of them being based on the concept of national culture introduced by Hofstede (1980). Hofstede distinguished six dimensions of national culture and four of them: power distance, collectivism vs. individualism, uncertainty avoidance and long-term orientation are translated into organizational culture features that may be related to the performance of firms. Poland as a country is characterized by high level of power distance, high individualism, very high uncertainty avoidance and short-term orientation ([geert-hofstede .com/Poland](http://geert-hofstede.com/Poland)).

A significant number of empirical studies demonstrate the influence of the organizational culture on the innovativeness of firms, their willingness to network or their internationalization. Hofstede's concept was used to study the impact of culture on firm level entrepreneurship (Morris, Davis & Allen, 1994) and on entrepreneurship level of individual countries (Thomas & Mueller, 2000; Hayton, George & Zahra, 2002). It was also studied in the context of social networks in the international perspective (Zaheer & Zaheer, 1997; Manev & Stevenson, 2001). Furthermore, the concept is often employed in studies of foreign market entry modes, including joint ventures and strategic alliances, in the research conducted both on the individual countries' level and on an international scale. Finally, Hofstede's concept of culture dimensions is often related to the innovativeness and R&D analysed for individual countries and compared internationally (Shane, 1995; Shane, Venkataraman & MacMillan, 1995; Jones & Teegen 2001; Kirkman, Lowe & Gibson, 2006).

Internationalization, innovativeness and networking are the most important drivers of firms' competitive advantage today. These phenomena are to a large extent interrelated, which creates a vicious circle for firms representing a low degree of internationalization and innovativeness and unwillingness to engage in networks as is the case for many firms in transition or emerging economies. Polish firms in general represent a low level of internationalization, innovativeness and reluctance to cooperate (Szymura-Tyc, 2015a; Lewandowska, Szymura-Tyc & Gołębiowski, 2015). The main research question that arises is whether there are any particular organizational culture features that underlie the specific firms' behaviour related to internationalization, innovativeness and networking. An answer to this question might help to understand better the organizational culture consequences for the firms' behaviour in the three fields and indicate directions of changes that might promote further development of these firms.

Hence, the general aim of this exploratory study is to describe the features of firms' organizational culture within the four above-mentioned Hofstede's dimensions of national culture, and find out their potential relationships with internationalization, innovativeness and networking behaviour of firms.

Research presented in this paper refers to results of an earlier study of internationalization, innovativeness and networking of firms in Poland conducted by one of the authors (Szymura-Tyc, 2015b). The current study is based on the empirical data collected *via* an internet survey. Descriptive statistics are used to depict the features of organizational culture of firms within the sample and within four clusters differing in the firms' behaviour in the field of internationalization, innovativeness and networking. The results and conclusions refer to both stages of the research of the organizational culture's links to internationalization, innovativeness and networking behaviour of firms.

The paper continues with the literature review related to the Hofstede's concept of national culture and its dimensions as well as his understanding of the organizational

culture within these dimensions. This part of the paper also presents selected empirical research results and theoretical assumptions concerning the potential relationship between Hofstede's concept of culture and firms' behaviour in relation to innovativeness, internationalization and networking. Additionally, a short review of literature on the interrelationships between internationalization, innovativeness and networking and a brief description of prior empirical research results are included in the theoretical part of the paper. As the current study on organizational culture is exploratory in nature, the literature review only leads to the formulation of research questions. After that, the research concept is presented together with the methodology, the research instrument and the empirical research process. The results are presented in two parts: for the entire sample and within clusters of firms. Conclusions, limitations, and future research avenues are discussed at the end of the paper.

LITERATURE REVIEW

Organizational Culture Concept: Hofstede Approach

The research on cultural determinants of the internationalization, innovativeness and networking of firms is based on the concept of national culture dimensions by Geert Hofstede. Hofstede's work of 1980 titled "*Culture's consequences: international differences in work related values*" and his subsequent achievements form the most influential theoretical concept that is the basis for the research on the consequences of culture for the performance of nations and countries, organizations, teams and individuals. Hofstede is cited much more often than other researchers of national cultures (Trompenaars, 1993) and his work is used in thousands of empirical studies (Kirkman *et al.*, 2006). He is also frequently criticized for various reasons (McSweeney, 2002; Smith, 2002). However, in spite of that fact, his concept underlies a lot of studies and research cases on different levels of analysis conducted by academics from many countries.

Hofstede distinguished four basic dimensions of culture: power distance (PD), collectivism vs. individualism (IDV), masculinity vs. femininity (MSC) and uncertainty avoidance (UA), the long-term orientation (LTO) added in 1991 as the fifth dimension and also the indulgency vs. restrained dimension (IND) added in 2010. Hofstede used the distinguished dimensions of culture to search for correlations between them and other measures describing the features of studied countries, which lead him to the conclusion that, in most cases, two or three dimensions have to be used to describe such dependencies (Hofstede, 2001, pp. 43-54). What is more, certain dimensions of culture are strongly correlated with one another, e.g. the power distance and the individualism have a high negative correlation (Boski, 2011, p. 100). Individualism vs. collectivism is the individual dimension of culture most frequently studied in various contexts while the power distance and uncertainty avoidance are the most frequently studied pair of dimensions.

Even though Hofstede assumed that his concept of culture dimensions refers to nations and should not be directly applied to organizations or individuals (the need to distinguish levels of an analysis in the convention "gardens – bouquets – flowers" (Hofstede, 1995), researchers using his concept refer to individuals and groups in an organization and the organization as a whole very often. Culture is usually an independent

variable in such research influencing the performance of such entities or a variable moderating relation between other variables.

The popularity of Hofstede's concept among management, entrepreneurship or international business academics probably results from that fact that the majority of Hofstede's achievements is related to the interpretation of dimensions of culture in the context of people's behaviours, which is translated, to a degree, to an organizational culture or at least to behaviour in a work place. Actually, Hofstede himself applied it to all six dimensions of culture: power distance, collectivism vs. individualism, femininity vs. masculinity, uncertainty avoidance, long-term orientation and indulgence vs. restrained (Hofstede, Hofstede & Minkov, 2011). However, masculinity vs. femininity is a dimension describing more the attitudes of people towards the relationship between personal life and work, while indulgence vs. restrained dimension translates only into a personal behaviour at a place of work.

Having in mind the aim of the study linking the organizational culture to internationalization, innovativeness and networking behaviour of firms, four organizational culture dimensions should be taken into account: power distance, collectivism vs. individualism, uncertainty avoidance and long-term orientation. The organizational culture features based on Hofstede's national culture dimensions concept can be presented, somewhat simplified, below (Table 1).

The dimensions of an organizational culture so described by Hofstede *et al.* (2011) may affect the behaviour of firms in the area analysed in the study. In particular, such influence may apply to the organizational power distance (PD) and the organizational uncertainty avoidance (UA) considered in the context of innovativeness. It can also be important in internationalization of firms as some researchers define internationalization as an innovation involving an entry to a new, unknown market that requires new knowledge and is executed with an uncertainty of the attained result (Andersen, 1993, Kosła, 2015).

What might be important here is that the power distance and uncertainty avoidance are the basis for the grouping of countries in culture clusters differing in their way of thinking about an organization resulting in a strong link to its operation, including its innovativeness. The widely known classification of countries in clusters called the Machine, Pyramid, Market and Family places Poland in the Pyramid cluster as a country with a characteristic high power distance and very high uncertainty avoidance (Hofstede *et al.*, 2011, pp. 309-315). Poland shares that cluster with Mediterranean countries that are characterized by a lower degree of innovativeness than other developed countries with a significantly lower power distance and uncertainty avoidance (e.g. Scandinavian countries, Great Britain, the United States).

The organizational power distance and the organizational uncertainty avoidance may be also supplemented with the third organizational dimension – the individualism/collectivism (IDV). Sułkowski (2012) applies such a three-dimensional model of an organizational culture in the description of firms' behaviour in the management process, linking it with their competitive potential.

It is worth mentioning that Hofstede (2011) pointed out that the culture profile of Poland houses a contradiction resulting from high individualism (IDV) and high power distance (PD), which are usually negatively correlated. This contradiction creates a specific tension in Polish culture and a challenge for managers. To achieve fruitful results managers are advised to establish a second level of communication, having a personal contact with everybody in the structure, allowing to give the impression that "everybody is important" in the organization, although unequal (geert-hofstede.com/Poland).

Table 1. Organizational culture features based on Hofstede national culture dimensions concept

Power distance in organization	
Low	High
Subordinates and superiors are co-dependent	Subordinates are dependent on superiors
Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	Superiors make decisions without consultations with subordinates on the basis of the superiors' experience and formal regulations
Occupying top positions does not entail substantially higher salaries and special privileges	Occupying top positions entails substantially higher salaries and special privileges
Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
Important decisions are made on different levels and do not require strict control in the course of their execution	Important decisions are made on top levels and require strict control in the course of their execution
Collectivism and individualism in organization	
Collectivism	Individualism
Employees strive to act in the interest of the group they are part of	Employees strive to act in their own interest
Decisions concerning employees' salary and promotion depend on their membership in a group and achievements of the group	Decisions concerning employees' salary and promotion depend on the regulations in force and their individual achievements
Even if someone has a different opinion, she/he should adapt to the opinion of the collective	Everyone can have a different opinion and is expected to express it
Interpersonal relations are more important than the execution of tasks	The execution of tasks is more important than interpersonal relations
Relations between the employer and the employee resemble family ties	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	
Low	High
Change is more desirable than preservation of the current situation	Preservation of the current situation is more desirable than a change
Innovative and creative employees have more freedom	Innovative and creative employees are limited by regulations
Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
Few matters are regulated in detailed regulations and they are usually complied with	Many matters are regulated in detailed regulations but they are not always complied with
Many ideas/inventions are generated but not all are implemented	Few ideas/inventions are generated but most of them are implemented
Short and long orientation of organization	
Short-term orientation	Long-term orientation
Actions taken are evaluated from the perspective of their effects in annual periods	Actions taken are evaluated from the perspective of their effects in many years' periods
Relations with business partners are evaluated from the perspective of short-term profits	Relations with business partners are evaluated from the perspective of long-term profits
Meeting the deadline for a task completion is more important than attaining an expected result	Attaining an expected result is more important than meeting the deadline for a task completion
A fast, spectacular market or financial success is more important than the gradual building of a strong market position	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
Objectives of the managerial staff and employees diverge	Objectives of the managerial staff and employees converge

Source: own elaboration based on Hofstede et al. (2011, pp. 83-86; 127-133; 215-223; 250-258).

The individualism/collectivism in organization dimension (IDV) alone may also have a potential significance for the networking i.e. the willingness of a firm to create network ties. It may influence the perception of individual and mutual interest, be connected with opportunistic attitudes toward business partners, result in the lack of trust and loyalty in business relationships. Combined with very high uncertainty avoidance (UA), high level of individualism may limit the firms' openness for cooperation within networks.

Considering the fact that both firms' innovativeness and internationalization require investments that bring about effects in a longer term, one should also take a fourth dimension into account, i.e. the organizational long-term/short-term orientation. This dimension may also appear significant in the process of creation of firms' long lasting relationships with business partners that provide basis for a network development.

Internationalization, Innovativeness and Networking: Interrelationships

The dominating model of firms' internationalization today is the network model of internationalization (Johanson & Mattsson, 1988; Johanson & Vahlne, 2009). The model describes the process of internationalization as a process of learning through networks (Sharma & Blomstermo, 2003; Blomstermo, Eriksson, Lindstrand & Sharma, 2004; Coviello, 2006). It assumes that knowledge exploitation enables the firm to expand on well-known paths of development only and reduces the risk of increased resource commitment in foreign market. The knowledge exploration from external sources, i.e. from partners in the network, allows for experimentation to explore new possibilities with higher risk but also higher potential profits in the longer term (Forsgren, 2002; Sharma & Blomstermo, 2003).

Eriksson, Majkgård and Sharma (2000) state that the experiential knowledge of a firm may be a barrier for its further internationalization as it limits the ability to recognize new possibilities for international development. The network ties, indirect and weak with multiple partners rather than direct and strong with few partners, offer an access to knowledge and resources of the network partners valuable for international expansion. Combined with the knowledge and resources of the firm, the network ties speed up and support the process of internationalization (Coviello & Munro, 1995; Sharma & Blomstermo, 2003; Coviello, 2006; Majkgård & Sharma, 1998; Bell, 1995). Forsgren (2002) and Johanson and Vahlne (2009) state that the network model of internationalization is universal as it describes how both small and medium firms (e.g. born global, new international ventures) and large corporations internationalize their activity by learning in networks.

Similarly, the network model of innovation (Rothwell, 1992) has been the model of innovation dominating since the early 90s. It explains the innovation process as a process of inter-organizational learning (Calantone, Cavusgil & Zhao, 2002) or network learning in innovation networks (Dhanaraj & Parkhe, 2006). The innovation processes span the firms' borders to integrate and share knowledge and resources of multiple partners needed for successful innovation. Innovation is created within networks that emerge as a result of the longitudinal cooperation between business partners or in networks engineered intentionally to create and support innovations. Powell, Koput and Smith-Doerr (1996) prove that if the knowledge base in an industry is complex and the sources of expertise are dispersed, innovation may be not created in a single firm and inter-organizational innovation cooperation is necessary. Access to the developing and evolving learning community becomes a critical factor for competitive advantage in the industry.

Furthermore, international business literature has been discussing relationships between internationalization and innovativeness of firms for a long time. The majority of studies on such relationships concentrate on the dependence between internationalization and innovativeness assuming that firms' internationalization is a result of their innovation activity or, more generally, is determined by their innovativeness. Empirical firm-level studies conducted in numerous countries and sectors generally confirm a positive link between innovation and exporting (Basile, 2001; Roper & Love, 2002; Becker & Egger, 2009). The other stream of research focuses on the opposite, presuming that internationalization can stimulate innovativeness because it offers access to new knowledge, more demanding customers and challenges of the international competitiveness (Gupta & Govindarajan, 2000; Zahra, Ireland & Hitt, 2000). Therefore, the innovativeness of a firm may be the outcome of a firm's preceding involvement in international market by exports and learning by exporting is considered to be leading to an increased innovativeness of a firm (Salomon & Shaver, 2005; Salomon & Jin, 2008).

The findings of three research streams combined have led to a hypothesis that the internationalization, innovativeness and networking are interrelated. The empirical research performed by the one of the authors has confirmed that positive relationships exist between all three concepts: internationalization, innovativeness and networking (Szymura-Tyc & Łapczyński, 2012). The empirical research conducted by direct questionnaire interview covered 274 firms located in Poland. Firstly, the collected data has allowed for the measuring of the firms' degree of internationalization, innovativeness and networking with the use INT, INN and NET indices based on formative indicators. The measures indicated a low degree of internationalization, medium innovativeness and a relatively high degree of networking of the studied firms. Secondly, the analysis of relationships between internationalization, innovativeness and networking demonstrated positive although weak to moderate correlations between all the three indices. Thirdly, the research showed that there were significant differences in the firms' behaviour in the field of internationalization, innovativeness and networking. The firms with similar values of the INT, INN and NET indices have been grouped with the use of a cluster analysis called self-organizing maps (SOM) or the Kohonen network (Kohonen, 1990). As a result, four clusters of firms with different characteristics of behaviour in the internationalization, innovativeness and networking area were distinguished. Graphical illustration of the clusters identified by the SOM method is presented in Figure 1.

Firms in the first cluster (SOM 1) have a moderate degree of internationalization, high degree of innovativeness and high degree of networking. These firms may be called "international network and innovation high-fliers". The second cluster (SOM 2) contains firms with low internationalization, moderate innovativeness and high networking degree called "local innovation and network front-runners". The third cluster (SOM 3) consists of firms with low degree of internationalization, moderate innovativeness and moderate networking named "local innovation and network commoners". The fourth cluster (SOM 4) embraces firms with the lowest internationalization, innovativeness and networking labelled "local innovation and network laggards".

The analysis of relationships between the degree of internationalization, innovativeness and networking of the studied firms belonging to individual clusters made it possible to make certain assumptions regarding the dependence path in the analysed area. As for

the first cluster, it was assumed that a relatively high internationalization degree was conducive to high innovativeness, both being supported by a high networking degree of the firms. Regarding cluster two, it was presumed that a moderate innovativeness of firms could not be linked to their internationalization as it was not very high. However, the innovativeness of these firms can be “drawn” by their network ties as these firms are characterized by the highest degree of the networking in the studied population. In the third cluster, consisting of firms whose internationalization resembles the internationalization of firms belonging to the second cluster, the innovativeness degree that is lower in the second cluster can be due to a much lower degree of networking. The last cluster consisted of firms operating mainly on a local market with the lowest innovativeness accompanied by the markedly lowest networking that could “pull down” their innovativeness.

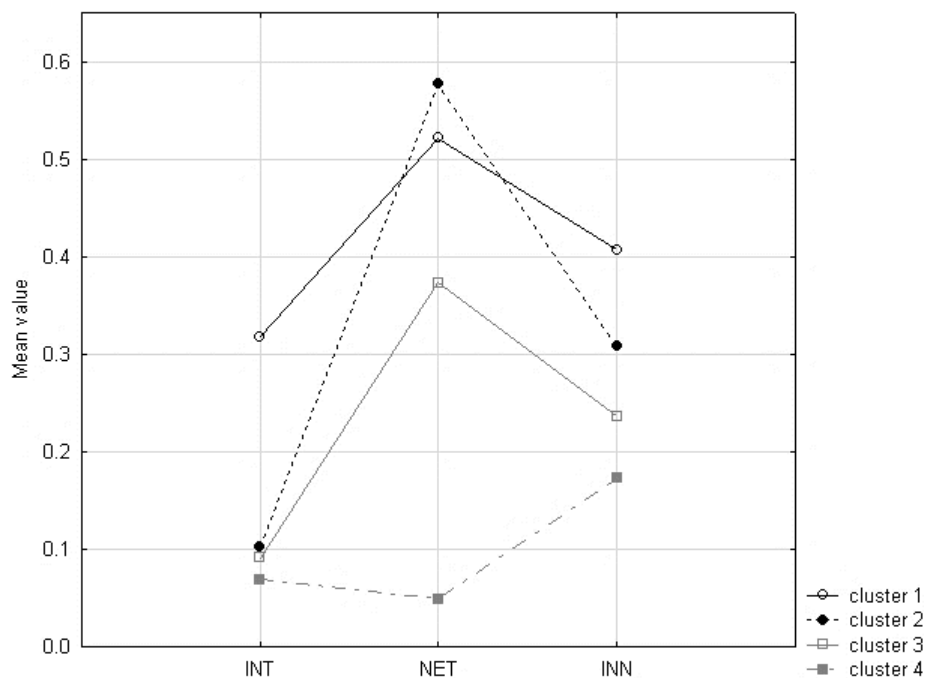


Figure 1. Clusters of enterprises distinguished with the use of the SOM method ($n = 274$)

Source: Szymura-Tyc (2015b, p. 187); Szymura-Tyc and Łapczyński (2012, p. 298).

The findings described above concerning the firms' behaviour in internationalization, innovativeness and networking fields as well as rather general knowledge of the potential influence of organizational culture on this behaviour resulted in further research assumptions leading for the explorative study presented in this paper. The first assumption is that the actual degree of internationalization, innovativeness and networking of the studied firms may be related to some extent to their organizational culture features. The second assumption is that differences in firms' behaviour identified by the cluster analysis may be dependent on the differences in the organizational cultures of firms in the particular clusters.

As a result, the objective of the current stage of the research has been to answer the following research questions:

- What are the features of the organizational culture of the studied firms in the context of the Hofstede's concept of national culture dimensions?
- May the distinguished features of organizational culture be related with the firms' behaviour in the internationalization, innovativeness and networking fields?
- Are the firms belonging to the individual clusters characterised by different features of their organizational cultures?
- May the differences in the organizational culture features within individual clusters be related to the different firms' behaviour in internationalization, innovativeness and networking fields?

MATERIAL AND METHODS

Research Instrument and Research Process

The organizational culture is treated in the study as a variable independent from the internationalization, innovativeness and networking of firms. It is divided into four dimensions: power distance, collectivism/individualism., uncertainty avoidance, and short/long-term orientation. The dimensions of the organizational culture are constituted by features assigned by Hofstede to the individual dimensions of national culture as presented in table 1.

The explorative empirical study is based on an internet survey with the use of a questionnaire developed for the quantitative research. The research instrument contained five questions related to situations occurring in the surveyed firms within each of the four dimensions of their organizational culture. Respondents were asked to indicate whether any of the described situations: (1) *corresponds to the situation in the firm to a degree*; (2) *greatly corresponds to the situation in the firm*; (3) *fully corresponds to the situation in the firm*. They could also indicate (0) if, in their opinion, *none of the described situations prevailed in the firm*. All of the provided answers created a 7-items Likert-type bipolar scale referring to the opposing designations of features of the organizational culture within its individual dimensions. This type of scale is commonly used in psychometric studies to measure attitudes and behaviours by ascribing values to qualitative answer choices that range from one extreme to another. For example, the short/long-term orientation scale ranged from 1 to 7, where 4 represented a situation in which none of the described situations prevailed in a firm. Respondents were not aware to which of the opposite culture features descriptions lower scores were assigned corresponding to a lower level of the studied dimension and to which of them higher scores were assigned indicating its higher level. It was possible thanks to a random reversal of the opposite culture features descriptions within the individual culture dimensions, which is in line with the recommendation for this research technique (Osgood, Suci & Tannenbaum, 1957). After collecting the data, the answers were assigned proper values and results were subjected to the statistical descriptive analysis. The long-lasting disagreement among statisticians whether the Likert items are interval-level data or ordered-categorical data inclined the authors to adopt a compromise in the form of the presentation of all three measures of the central tendency: mode, median and mean. The means for individual organizational culture features are presented in the paper because the authors share the prevailing opinion that if the Likert-type scale is symmetric and equidistant it may be treated as a quasi-interval scale allowing for the calculation of scores for a group of items.

Research Sample and Respondents

The target of the internet survey consisted of all the 274 firms participating in the first stage of the research. Therefore, each survey was preceded by on-the-phone conversations with respondents in order to invite and encourage them to participate in the second stage of the research. An attempt was also made to obtain a proportional number of firms in each of the four clusters distinguished in the earlier study. As a result, 130 firms completed the entire electronic survey questionnaire. It means that the return rate is 47% of the firms whose internationalization, innovativeness and networking was studied previously. A relatively proportional number of firms was also obtained in each of the four clusters: respectively 66%, 42%, 41% and 61% of the firms in a cluster.

It was assumed at the beginning of the empirical research that respondents participating in the survey should be members of the top or medium-level management of firms. It is because Hofstede's cultural research shows that the perception of the culture dimensions can vary depending on the social position of a respondent. It was not easy to attain that goal. As a result, top and medium-level management constitute about 30%, while specialists and accountants make for another 30%, and management assistants and secretaries form almost one fourth of respondents (Table 2). The majority of respondents has at least 6 years of employment history and the average employment history is 8 years. This fact may be a symptom of the respondents' good knowledge of the organizational culture of studied firms.

Table 2. Characteristics of respondents (n = 127)*

Position in the firm	Share in the sample [%]
Top and medium-level management	27.7
Specialists and accountants	30.0
Management assistants /secretaries	23.8
Other positions	18.5

* in three cases, respondents did not provide the information about the occupied position.

Source: own study.

RESULTS AND DISCUSSION

The analysis of features comprising individual dimensions of the organizational culture was conducted for the entire sample and in individual SOM clusters. The goal of the conducted analyses was to identify the features of organizational cultures in all firms subject to the research and their differentiation depending on the type of behaviour related to the internationalization, innovativeness and networking. The descriptive statistics used in the study are mode (Mo), median (Me) and mean (M). The mode shows the value with highest frequency of answers, the median divides the sample into equal parts showing the central value for a feature, while the mean is the arithmetic mean of the values ascribed to an organizational culture feature in a sample. It is assumed that the 1-3 modes and medians represent, respectively, a very low, low and moderate low level of a culture feature within a given dimension, 4 – moderate, and 5-7 – moderately high, high and very high level respectively. As far as the means are concerned, the 1-3.5 value consistently indicates a very low to moderately low level of a feature; 3.6-4.4 – moderate and 4.5-7 – a moderately high to very high level.

Characteristics of Organizational Cultures Features in Entire Sample

The first step of the analysis was the description of cultural features for the whole research sample within the four studied dimensions: power distance, individualism, uncertainty avoidance and long term orientation. For detailed descriptive statistics see Appendix 1.

Power Distance in an Organization

The analysis of the frequency of indications related to the power distance in an organization shows that the largest number of the surveyed firms assess the dimension as low or moderately low. The prevailing opinion is that subordinates and superiors are co-dependent, occupying top positions does not entail substantially higher salaries or special privileges while important decisions are made on different levels and do not require strict control in the course of their execution. The only exception is the prevailing belief that employees occupying lower positions have lesser abilities and skills than employees on higher levels, which suggests a greater power distance in the organization. Median values are between 3-4, which means that half of the firms report a moderately low to moderate level of the power distance organizational culture features. The highest mean denotes the way of making decisions by superiors without consultations with subordinates indicating a more authoritarian style of the firms' managers. The situation is similar for means within 3.53-4.08, which suggests a moderately low to moderate power distance in the entire sample. The highest mean denotes the way of making decisions by superiors without consultations with subordinates indicating a more authoritarian style of the firms' managers.

Individualism in an Organization

The analysis of survey data on individualism vs. collectivism in the studied firms shows the prevalence of opinions denoting a moderately high level of individualism. It is reflected by the indication that employees strive to act in their own interest, that everyone can have a different opinion and is expected to express it, that the execution of tasks is more important than interpersonal relations and that relations between the employer and the employee are reduced to the employment contract. It was only with regard to salaries that the largest number of respondents pointed at a moderately low level of individualism reflected by the fact that decisions concerning employee salaries and promotions depend on their membership in a group and achievements of the group rather than on their individual achievements. In spite of the prevalence of symptoms of a moderately high level of individualism in the firms, the median value ranges from 4 to 4.5 indicating a moderately high level of individualism in one half of the sample. The mean values describing the organizational culture range from 3.77 to 4.24 depicting a moderate level of individualism in the entire research sample.

Uncertainty Avoidance in Organization

The situation is similar for the level of uncertainty avoidance in the surveyed firms where prevalent responses are indicative of a moderately high uncertainty avoidance. It is pointed out that innovative and creative employees are limited by regulations, many matters are regulated in detailed regulations that are not always complied with. While few ideas/inventions are generated, most of them are implemented. In the case of the managerial focus, the largest number of respondents indicated a high level of uncertainty avoidance reflected by the fact the managers mainly focus on operational activities and, to a lesser degree, on strategic issues. Only the dominance of an indication that change is

more desirable than the current situation might signal a lower level of uncertainty avoidance. As far as the median values are concerned, they suggest a moderately high and moderate level of uncertainty avoidance, which is also reflected in the mean values describing the organizational culture features within the range of 3.67-4.53, representing moderate and moderately high uncertainty avoidance in the studied firms.

Long-Term Orientation in an Organization

As far as the short-term vs. long-term orientation in organization is concerned, the dominance of indications of the long-term orientation suggests a high level of this dimension in the entire sample. The respondents point out that actions taken in a firm are evaluated from the perspective of their effects in many years' periods, relations with business partners are evaluated from the perspective of long-term profits, attaining an expected result is more important than meeting the deadline for a task completion and objectives of the managerial staff and employees converge. It was only in the case of the general aim of a firm described as the company building a strong market position gradually rather than striving to achieve a fast, spectacular market or financial success, that the largest number of firms supported it at a moderately high level. In most cases, median values report the moderately high level of long-term orientation as central in the sample, while the mean values of the organizational culture range from 4.17 to 4.68, representing the moderate to moderately high level of the long-term orientation dimension in surveyed firms – the lowest one for the time perspective in business partners relationships assessment and the longest one in the evaluation of activities conducted within the firm.

To sum it up, research results for the entire sample of surveyed firms show that the power distance (PD) is at a moderate level with a tendency towards moderately low, the individualism (IDV) is moderate with a tendency towards moderately high, the uncertainty avoidance (UA) is also moderate towards moderately high and the long-term orientation (LTO) is moderately high with a tendency towards a high level of this dimension (Table 3).

Table 3. Evaluation of the organizational culture features within the Hofstede's dimensions (n = 130)

Organizational culture dimension	Evaluation of culture features		
	by dominant value (Mo)	by central value (Me)	by mean values (M)
power distance	low (3) moderate low (1) moderate high (1)	moderate low (4) moderate (1)	moderate low (2) moderate (3)
individualism	moderate low (1) moderate high (4)	moderate (4) moderate high (1)	moderate (5)
uncertainty avoidance	moderate low (1) moderate high (3) high (1)	moderate (2) moderate high (3)	moderate (4) moderate high (1)
long-term orientation	high (4) moderate high (1)	moderate (1) moderate high (4)	moderate (2) moderate high (3)

(1, 2, ...) – numbers in brackets represent the number of organizational culture features which are ascribed the particular assessment

Source: own study.

Having in mind that the degree of internationalization for the entire sample is low, the innovativeness is moderate and the networking – relatively high, the power distance (PD) and individualism (IDV) could be expected at least at a moderate level, uncertainty avoidance (UA) – at a high level and the long-term orientation (LTO) at a level that is not higher

than moderate. The results go in line with the expectations regarding the individualism and uncertainty avoidance. However, the power distance is lower than expected and the most surprising results show that the long-term orientation is moderately high.

The results are not easy to discuss in the light of other researchers' findings as the scope of the study is very broad. This fact stands for the originality of the study but, on the other hand, it limits the comparative analysis. Furthermore, latent variables being the basis for calculation of the internationalization, innovativeness and networking indices are built on formative variables, which is not a common practise in studies concerning cultural determinants of firms' behaviour in the field of innovativeness or networking.

Characteristics of Organizational Culture Features in SOM Clusters

The second step of the exploratory study involved a description of the organizational culture features in all four dimensions separately for each of the identified clusters. The detailed descriptive statistics are provided in the Appendix 2.

International Network and Innovation High-Fliers (SOM1)

Firms belonging to SOM1 named "the international network and innovation high-fliers" are characterised by a moderate internationalization, high innovativeness, and high networking. In the case of the power distance (PD), firms from this cluster most often declare a moderately high or high level of power distance in their organizational culture. However, the median value predominantly indicates a moderate level of features describing this dimension and the same applies to the mean values pointing at a moderate power distance for all features constituting the power distance dimension. As far as individualism is concerned (IDV), there is a lack of consistency of the dominant values; each feature of culture has a different mode. Both the median and the mean range from moderately low to moderately high and most probably the moderate level would be the one that describes the level of individualism in SOM1 best. Uncertainty avoidance (UA) is described as moderate to very high, however, a moderate level may be considered most frequently related to the organizational culture features comprising this dimension. As for the long-term orientation (LTO), conclusions may be made on the basis of the medians and means most frequently reflecting a moderately high level of the features depicting this dimension of the firms' culture (Table 4).

Table 4. Evaluation of the organizational culture features within the Hofstede's dimensions in SOM1 (n = 27)

Organizational culture dimension	Evaluation of organizational culture features		
	by dominant value (Mo)	by central value (Me)	by mean values (M)
power distance	moderate high (1) high (1)	moderate (4) moderate high (1)	moderate (5)
individualism	low (1) moderate low (1) moderate (1) moderate high (1) high (1)	moderate low (2) moderate (1) moderate high (2)	moderate low (1) moderate (3) moderate high (1)
uncertainty avoidance	moderate high (2) high (1)	moderate (2) moderate high (3)	moderate (4) moderate high (1)
long-term orientation	moderate (1) very high (1)	moderate (1) moderate high (4)	moderate (2) moderate high (3)

(1, 2, ...) – numbers in brackets represent the number of organizational culture features which are ascribed the particular assessment; if in case of modes the numbers do not sum to 5 multimodal distribution appeared for some features of organizational culture

Source: own study.

Local Innovation and Network Front Runners (SOM2)

Firms constituting the SOM2 are described as “local innovation and network front runners” because they are characterised by low internationalization, moderate innovativeness and high networking. The power distance (PD) level in this cluster may be described by medians and means that show a moderately low to moderate level of the organizational culture features under study, with the prevalence of indications towards a moderately low power distance. Individualism (PD) is also moderate as suggested by the central values and means describing the level of cultural features within this dimension. Uncertainty avoidance (UA) is moderate or moderately high as regards most of the culture feature; however, it is on a moderate level that prevails in these results. The last dimension, i.e. the long-term orientation (LTO) is characterized by a moderate and moderately high level of features constituting it and it is difficult to compare them; however, the frequency of answers may suggest that moderately high can be a better evaluation of this dimension level in the cluster (Table 5).

Table 5. Evaluation of the organizational culture features within the Hofstede’s dimensions in SOM2 (n = 48)

Organizational culture dimension	Evaluation of organizational culture features		
	by dominant value (Mo)	by central value (Me)	by mean values (M)
power distance	low (4) moderate high (1)	moderate low (4) moderate high (1)	moderate low (2) moderate (3)
individualism	moderate low (1) moderate (1) moderate high (2) high (1)	moderate (4) moderate high (1)	moderate (5)
uncertainty avoidance	low (1) moderate high (4) high (1)	moderate low (1) moderate (2) moderate high (2)	moderate (4) moderate high (1)
long-term orientation	moderate low (1) moderate high (1) high (2)	moderate (1) moderate high (4)	moderate (4) moderate high (1)

(1, 2, ...) – numbers in brackets represent the number of organizational culture features which are ascribed the particular assessment; if in case of modes the numbers do not sum to 5 multimodal distribution appeared for some features of organizational culture

Source: own study.

Local Innovation and Network Commoners (SOM 3)

The third cluster – SOM3 – includes firms called “local innovation and network commoners” as they present low internationalization, moderate innovativeness, and a moderate degree of networking. Power distance (PD) is at a moderate low level in this sample, indicated by the majority of the descriptive statistics for the cultural features within this dimension. The Individualism (IDV) might be evaluated as ranging from moderate to moderately high with the prevalence of moderate indications. The level of uncertainty avoidance (UA) is more diversified when it comes to modes and medians but, in general, it may be assessed as moderately high. The long-term orientation clearly tends towards moderately high for the majority of organizational culture features comprising the dimension (Table 6).

Table 6. Evaluation of the organizational culture features within the Hofstede’s dimensions in SOM3 (n = 39)

Organizational culture dimension	Evaluation of organizational culture features		
	by dominant value (Mo)	by central value (Me)	by mean values (M)
power distance	low (2) moderate low (2)	low (1) moderate low (4)	moderate low (4) moderate (1)
individualism	low (1) moderate low (1) moderate high (3)	moderate low (1) moderate (2) moderate high (2)	moderate (4) moderate high (1)
uncertainty avoidance	moderate low (1) moderate high (1) high (1)	moderate low (1) moderate (2) moderate high (2)	moderate (1) moderate high (4)
long-term orientation	moderate high (2) high (3)	moderate (1) moderate high (3) high (1)	moderate (1) moderate high (4)

(1, 2, ...) – numbers in brackets represent the number of organizational culture features which are ascribed the particular assessment; if in case of modes the numbers do not sum to 5 multimodal distribution appeared for some features of organizational culture

Source: own study.

Local innovation and network laggards (SOM 4)

The last cluster – SOM4 – embraces firms labelled “local innovation and network laggards” whose internationalization, innovativeness as well as networking are low. Firms in the cluster are characterized by moderate power distance (PD). The results for individualism (IND) offer a mixed picture ranging from moderately low to moderately high; hence, the moderate level might be a proper evaluation of the dimension. The uncertainty avoidance (UA) tends to be moderately high while the long-term orientation (LTO) that shows mixed results may be considered tending towards a moderately high level of the organizational culture features comprising the dimension (Table 7).

Table 7. Evaluation of the organizational culture features within the Hofstede’s dimensions in SOM4 (n = 19)

Organizational culture dimension	Evaluation of organizational culture features		
	by dominant value (Mo)	by central value (Me)	by mean values (M)
power distance	low (2) moderate high (1)	moderate low (1) moderate (4)	moderate low (1) moderate (4)
individualism	moderate low (2) high (1)	moderate low (3) moderate high (2)	moderate (4) moderate high (1)
uncertainty avoidance	moderate low (1) moderate high (2) high (1)	moderate (1) moderate high (4)	moderate (2) moderate high (3)
long-term orientation	moderate high (3) high (2)	moderate (1) moderate high (4)	moderate (4) moderate high (1)

(1, 2, ...) – numbers in brackets represent the number of organizational culture features which are ascribed the particular assessment; if in case of modes the numbers do not sum to 5 multimodal distribution appeared for some features of organizational culture

Source: own study.

The analysis of results of the study for individual SOMs, i.e. clusters with different behaviours of firms in the area of internationalization, innovativeness and networking,

shows few differences in the organizational culture dimensions depicted by the descriptive statistics of organizational culture features presented above. A summary of the findings is included in table 8.

Table 8. Comparative analysis of the organizational culture features evaluations for individual SOMs

Culture dimension	SOM1 <i>international network and innovation high-fliers</i>	SOM2 <i>local innovation and network front-runners</i>	SOM3 <i>local innovation and network commoners</i>	SOM4 <i>local innovation and network laggards</i>
	- moderate internationalization - high innovativeness - high networking	- low internationalization - moderate innovativeness - high networking	- low internationalization - moderate innovativeness - moderate networking	- low internationalization - low innovativeness - low networking
PD	moderate	moderate low	moderate	moderate
IDV	moderate	moderate	moderate	moderate
UA	moderate	moderate	moderate high	moderate high
LTO	moderate high	moderate high	moderate high	moderate high

Source: own study.

The comparative study shows that, for SOM1 and SOM2 that differ essentially with the degree of internationalization and innovativeness, a divergence appears in the case of the power distance only, which is higher for the international network and innovation high-fliers. Higher uncertainty avoidance is a distinctive organizational culture characteristic of local innovation and network commoners (SOM3) representing a lower degree of networking than in the case of firms belonging to SOM1 and SOM2. SOM4 comprised of local innovation and network laggards in the field of internationalization, innovativeness and networking shares the same level of the four culture dimensions as SOM3. And again, a moderately high level of the long-term orientation – the same for all four SOMs – is the most surprising feature here.

The findings of the study are satisfying to a degree. They show that a higher power distance is needed for a firm to become an international network and innovation high-flier. International high-fliers or local front-runners are characterized by lower uncertainty avoidance than local innovation and network commoners and laggards.

The long-term orientation as conceptualized in the study is not a dimension that differentiates the behaviour of firms in the area of internationalization, innovativeness and networking. One of the possible explanations of the fact is that it was much easier for the respondents to guess the “favoured answers” in the case of statements relating to the organization culture features constituting the long-term orientation dimension, which means that the social desirability bias might underlie the results.

CONCLUSIONS

The study as an explorative one may serve to pose two hypotheses for further research. The first one is that higher power distance may be conducive for dealing with moderate individualism if the ambitious aims of the firms’ internationalization and innovativeness are to be achieved. The second one is a presumption that a lower uncertainty avoidance may be indicative of a higher openness for new opportunities and risk acceptance leading to a higher degree of internationalization, innovativeness and networking in firms.

The study presented here has many limitations. Firstly, the analysis is based on a non-representative sample, which means that the findings only refer to the population under study. Secondly, there is the differentiation of the positions occupied in the firms by the respondents participating in the survey, which may have influenced certain answers and the achieved results. Thirdly, there is the construction of the research instrument that includes statements concerning organizational culture features giving inconsistent results within particular culture dimensions. The analysis of the three descriptive statistics shows a variety of answers appearing within individual culture dimensions representing very different or even opposite levels of the culture characteristics.

To make up for the inconsistencies, an attempt could be made in the further analysis of the organizational culture to create more consistent measures of organizational culture dimensions. Individual features of the firms' organizational culture could be considered formative variables constituting indices that can be measures of the organizational power distance, individualism, uncertainty avoidance and long-term orientation. Perhaps a change of the methodological approach would make it possible to obtain more sound results regarding the relationships between the organizational culture of firms and their behaviour as regards the internationalization, innovativeness and networking.

REFERENCES

- Andersen, O. (1993). On the internationalization process of firms: a critical analysis. *Journal of International Business Studies*, 24(2), 209-231.
- Basile, R. (2001). Export behaviour of Italian manufacturing firms over the nineties: the role of innovation. *Research Policy*, 30(8), 1185-1201.
- Becker, S.O., & Egger, P.H. (2013). Endogenous product versus process innovation and a firm's propensity to export. *Empirical Economics*, 44(1), 329-354.
- Bell, J. (1995). The internationalization of small computer software firms: A further challenge to "stage" theories. *European Journal of Marketing*, 29(8), 60-75.
- Blomstermo, A., Eriksson, K., Lindstrand, A., & Sharma, D.D. (2004). The perceived usefulness of network experiential knowledge in the internationalizing firm. *Journal of International Management*, 10(3), 355-373.
- Boski, P. (2009). *Kulturowe ramy zachowań społecznych. Podręcznik psychologii międzykulturowej*. Warszawa: Wydawnictwo Naukowe PWN.
- Calantone, R.J., Cavusgil, S.T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial Marketing Management*, 31(6), 515-524.
- Coviello, N.E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, 37(5), 713-731.
- Coviello, N.E., & Munro, H.J. (1995). Growing the entrepreneurial firm: networking for international market development. *European Journal of Marketing*, 29(7), 49-61.
- Dhanaraj, C., & Parkhe, A. (2006). Orchestrating innovation networks. *Academy of Management Review*, 31(3), 659-669.
- Eriksson, K., Majkgård, A., & Sharma, D.D. (2000). Path dependence and knowledge development in the internationalization process. *Management International Review*, 40(4), 307-328.
- Forsgren, M. (2002). The concept of learning in the Uppsala internationalization process model: A critical review. *International Business Review*, 11(3), 257-277.

- Gupta, A.K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473-496.
- Hayton, J.C., George, G., & Zahra, S. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory & Practice*, 26(4), 33.
- Hofstede, G. (1980). *Culture's consequences: international differences in work related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1995). Multilevel Research of Human Systems: Flower, Bouquets and Gardens. *Human Systems Management*, 14, 207-217
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*. Second Edition. Thousand Oaks CA: Sage Publications.
- Hofstede, G., Hostede, G., & Minkov, M. (2011). *Kultura i organizacje. Zaprogramowanie umysłu*. Warszawa: Polskie Wydawnictwo Ekonomiczne.
- Johanson, J., & Mattsson, L.G. (1988). Internationalisation in Industrial Systems – a Network Approach. In N. Hood & J.E. Vahlne (Eds.), *Strategies in Global Competition* (pp. 303-321). New York: Croom Helm.
- Johanson, J., & Vahlne, J.E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411-1431.
- Jones, G.K., & Teegen, H.J. (2001). Global R&D activity of US MNCs: does national culture affect investment decisions? *Multinational Business Review*, 9(2), 1.
- Kirkman, B.L., Lowe, K.B., & Gibson, C.B. (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies*, 37(3), 285-320.
- Kohonen, T. (1990). The Self-Organizing Map. *Proceedings of the IEEE*, 78, 1464-1480.
- Kosała, M. (2015). Innovation Processes as Stimulant of Internationalisation Process of Firms. *Entrepreneurial Business and Economics Review*, 3(2), 65-84.
- Lewandowska, M., Szymura-Tyc, M., & Gołębiowski, T. (2016). Innovation complementarity, cooperation partner, and new product export: Evidence from Poland. *Journal of Business Research*, 69(9), 3673-3681.
- Majkgård, A., & Sharma, D.D. (1998). Client-following and market-seeking strategies in the internationalization of service firms. *Journal of Business-to-Business Marketing*, 4(3), 1-41.
- Manev, I.M., & Stevenson, W.B. (2001). Nationality, cultural distance, and expatriate status: Effects on the managerial network in a multinational enterprise. *Journal of International Business Studies*, 32(2), 285-303.
- McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith-a failure of analysis. *Human relations*, 55(1), 89-118.
- Morris, M.H., Davis, D.L., & Allen, J.W. (1994). Fostering corporate entrepreneurship: Cross-cultural comparisons of the importance of individualism versus collectivism. *Journal of International Business Studies*, 26(1) 65-89.
- Osgood, C.E., Suci, G.J., & Tannenbaum, P.H. (1957). *The Measurement of Meaning*. Urbana, IL: University of Illinois Press.
- Powell, W.W., Koput, K.W., & Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41(1), 116-145.
- Roper, S., & Love, J.H. (2002). Innovation and export performance: Evidence from the UK and German manufacturing plants. *Research Policy*, 31(7), 1087-1102.

- Rothwell, R. (1992). Successful industrial innovation: critical factors for the 1990s. *R&D Management*, 22(3), 221-240.
- Salomon, R. M., & Shaver, J. M. (2005). Learning by exporting: new insights from examining firm innovation. *Journal of Economics & Management Strategy*, 14(2), 431-460.
- Salomon, R.M., & Jin, B. (2008). Does knowledge spill to leaders or laggards? Exploring industry heterogeneity in learning by exporting. *Journal of International Business Studies*, 39(1), 132-150.
- Shane, S. (1995). Uncertainty avoidance and the preference for innovation championing roles. *Journal of International Business Studies*, 26 (1), 47-68.
- Shane, S., Venkataraman, S., & MacMillan, I. (1995). Cultural differences in innovation championing strategies. *Journal of Management*, 21(5), 931-952.
- Sharma, D.D., & Blomstermo, A. (2003). The internationalization process of born globals: a network view. *International Business Review*, 12(6), 739-753.
- Smith, P.B. (2002). Culture's consequences: Something old and something new. *Human Relations*, 55(1), 119-135.
- Sułkowski, Ł. (2012). *Kulturowe procesy zarządzania*. Warszawa: Difin.
- Szymura-Tyc, M., & Łapczyński, M. (2012). Internationalisation and Innovation in Networks. In R. Springer & P. Chadraba (Eds.), *Proceedings of the 20th Annual Conference on Marketing and Business Strategies for Central & Eastern Europe* (pp. 287-301). Vienna: Vienna University of Economics and Business.
- Szymura-Tyc, M. (2015a). Innovativeness and Internationalisation of the Polish Economy – the Transition Process Perspective. *Journal of Economics and Management*, 21(3), 5-20.
- Szymura-Tyc, M. (2015b). *Internacjonalizacja, innowacyjność i usieciowienie przedsiębiorstw. Podejście holistyczne*. Warszawa: Difin.
- Thomas, A.S., & Mueller, S.L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31(2), 287-301.
- Trompenaars, F. (1993). *Riding the Waves of Culture: Understanding Diversity in Global Business*. Chicago IL: Irwin.
- Zaheer, S., & Zaheer, A. (1997). Country effects on information seeking in global electronic networks. *Journal of International Business Studies*, 28(1), 77-100.
- Zahra, S.A., Ireland, R.D., & Hitt, M.A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925-950.

Appendix 1: Descriptive statistics for organizational culture features within Hofstede's dimensions in the entire sample

Entire sample		Mo	Me	M	N=130
Power distance in organization	Subordinates and superiors are co-dependent	2	3	3.52	Subordinates are dependent on superiors
	Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	3	3.5	4.08	Superiors make decisions without consultations with subordinates on the basis of the superiors' experience and formal regulations
	Occupying top positions does not entail substantially higher salaries and special privileges	2	3	3.52	Occupying top positions entails substantially higher salaries and special privileges
	Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	5	4	3.95	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
	Important decisions are made on different levels and do not require strict control in the course of their execution	2	3	3.69	Important decisions are made on top levels and require strict control in the course of their execution
Individualism in organization	Employees strive to act in the interest of the group they are part of	5	4	3.77	Employees strive to act in their own interest
	Decisions concerning employees' salary and promotion depend on their membership in a group and achievements of the group	3	4	4.24	Decisions concerning employees' salary and promotion depend on the regulations in force and their individual achievements
	Even if someone has a different opinion, she/he should adapt to the opinion of the collective	5	4.5	4.16	Everyone can have a different opinion and is expected to express it
	Interpersonal relations are more important than the execution of tasks	5	4	4.16	The execution of tasks is more important than interpersonal relations
	Relations between the employer and the employee resemble family ties	5	4	4.04	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	Change is more desirable than preservation of the current situation	3	4	3.67	Preservation of the current situation is more desirable than a change
	Innovative and creative employees have more freedom	5	5	4.42	Innovative and creative employees are limited by regulations
	Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	6	5	4.53	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
	Few matters are regulated in detailed regulations and they are usually complied with	5	4	3.88	Many matters are regulated in detailed regulations but they are not always complied with
	Many ideas/inventions are generated but not all are implemented	5	5	4.36	Few ideas/inventions are generated but most of them are implemented
Long term orientation in organization	Actions taken are evaluated from the perspective of their effects in annual periods	6	5	4.68	Actions taken are evaluated from the perspective of their effects in many years' periods
	Relations with business partners are evaluated from the perspective of short-term profits	6	5	4.17	Relations with business partners are evaluated from the perspective of long-term profits
	Meeting the deadline for a task completion is more important than attaining an expected result	6	4	4.27	Attaining an expected result is more important than meeting the deadline for a task completion
	A fast, spectacular market or financial success is more important than the gradual building of a strong market position	5	5	4.47	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
	Objectives of the managerial staff and employees diverge	6	5	4.45	Objectives of the managerial staff and employees converge

Source: own study.

Appendix 2: Descriptive statistics for organizational culture features within Hofstede’s dimensions in SOMs

SOM1		Mo	Me	M	N=27
Power distance in organization	Subordinates and superiors are co-dependent	6	4	3.92	Subordinates are dependent on superiors
	Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	x	4	4.11	Superiors make decisions without consultations with subordinates on the basis of the superiors’ experience and formal regulations
	Occupying top positions does not entail substantially higher salaries and special privilege	x	4	3.93	Occupying top positions entails substantially higher salaries and special privilege
	Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	5	5	4.04	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
	Important decisions are made on different levels and do not require strict control in the course of their execution	x	4	4.04	Important decisions are made on top levels and require strict control in the course of their execution
Individualism in organization	Employees strive to act in the interest of the group they are part of	2	3	3.26	Employees strive to act in their own interest
	Decisions concerning employees’ salary and promotion depend on their membership in a group and achievements of the group	6	5	4.59	Decisions concerning employees’ salary and promotion depend on the regulations in force and their individual achievements
	Even if someone has a different opinion, she/he should adapt to the opinion of the collective	5	5	4.15	Everyone can have a different opinion and is expected to express it
	Interpersonal relations are more important than the execution of tasks	3	3	3.78	The execution of tasks is more important than interpersonal relations
	Relations between the employer and the employee resemble family ties	4	4	3.89	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	Change is more desirable than preservation of the current situation	5	4	3.85	Preservation of the current situation is more desirable than a change
	Innovative and creative employees have more freedom	x	5	4.30	Innovative and creative employees are limited by regulations
	Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	6	4	3.96	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
	Few matters are regulated in detailed regulations and they are usually complied with	5	5	4.33	Many matters are regulated in detailed regulations but they are not always complied with
	Many ideas/inventions are generated but not all are implemented	x	5	4.59	Few ideas/inventions are generated but most of them are implemented
Long term orientation in organization	Actions taken are evaluated from the perspective of their effects in annual periods	x	5	4.59	Actions taken are evaluated from the perspective of their effects in many years’ periods
	Relations with business partners are evaluated from the perspective of short-term profits	x	5	4.78	Relations with business partners are evaluated from the perspective of long-term profits
	Meeting the deadline for a task completion is more important than attaining an expected result	4	4	3.89	Attaining an expected result is more important than meeting the deadline for a task completion
	A fast, spectacular market or financial success is more important than the gradual building of a strong market position	7	5	4.93	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
	Objectives of the managerial staff and employees diverge	x	4.5	4.35	Objectives of the managerial staff and employees converge

(x) – multimodal distribution

SOM2		Mo	Me	M	N=48
Power distance in organization	Subordinates and superiors are co-dependent	2	3	3.38	Subordinates are dependent on superiors
	Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	2	3	4.00	Superiors make decisions without consultations with subordinates on the basis of the superiors' experience and formal regulations
	Occupying top positions does not entail substantially higher salaries and special privilege	2	3	3.54	Occupying top positions entails substantially higher salaries and special privilege
	Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	5	4.5	4.08	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
	Important decisions are made on different levels and do not require strict control in the course of their execution	2	3	3.56	Important decisions are made on top levels and require strict control in the course of their execution
Individualism in organization	Employees strive to act in the interest of the group they are part of	5	4	3.77	Employees strive to act in their own interest
	Decisions concerning employees' salary and promotion depend on their membership in a group and achievements of the group	3	4	4.23	Decisions concerning employees' salary and promotion depend on the regulations in force and their individual achievements
	Even if someone has a different opinion, she/he should adapt to the opinion of the collective	6	4.5	4.27	Everyone can have a different opinion and is expected to express it
	Interpersonal relations are more important than the execution of tasks	5	4	4.15	The execution of tasks is more important than interpersonal relations
	Relations between the employer and the employee resemble family ties	4	4	4.17	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	Change is more desirable than preservation of the current situation	2	3.5	3.65	Preservation of the current situation is more desirable than a change
	Innovative and creative employees have more freedom	6	5	4.40	Innovative and creative employees are limited by regulations
	Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	5	5	4.81	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
	Few matters are regulated in detailed regulations and they are usually complied with	5	3	3.60	Many matters are regulated in detailed regulations but they are not always complied with
	Many ideas/inventions are generated but not all are implemented	5	4	4.17	Few ideas/inventions are generated but most of them are implemented
Long term orientation in organization	Actions taken are evaluated from the perspective of their effects in annual periods	3	4.5	4.40	Actions taken are evaluated from the perspective of their effects in many years' periods
	Relations with business partners are evaluated from the perspective of short-term profits	5	5	4.23	Relations with business partners are evaluated from the perspective of long-term profits
	Meeting the deadline for a task completion is more important than attaining an expected result	6	4	4.13	Attaining an expected result is more important than meeting the deadline for a task completion
	A fast, spectacular market or financial success is more important than the gradual building of a strong market position	x	5	4.33	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
	Objectives of the managerial staff and employees diverge	6	5	4.45	Objectives of the managerial staff and employees converge

(x) – multimodal distribution

SOM3		Mo	Me	M	N=36
Power distance in organization	Subordinates and superiors are co-dependent	x	3	3.28	Subordinates are dependent on superiors
	Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	3	3	3.19	Superiors make decisions without consultations with subordinates on the basis of the superiors' experience and formal regulations
	Occupying top positions does not entail substantially higher salaries and special privilege	2	2	3.22	Occupying top positions entails substantially higher salaries and special privilege
	Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	3	3	3.86	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
	Important decisions are made on different levels and do not require strict control in the course of their execution	2	3	3.36	Important decisions are made on top levels and require strict control in the course of their execution
Individualism in organization	Employees strive to act in the interest of the group they are part of	5	5	4.22	Employees strive to act in their own interest
	Decisions concerning employees' salary and promotion depend on their membership in a group and achievements of the group	3	3	3.92	Decisions concerning employees' salary and promotion depend on the regulations in force and their individual achievements
	Even if someone has a different opinion, she/he should adapt to the opinion of the collective	2	3.5	3.81	Everyone can have a different opinion and is expected to express it
	Interpersonal relations are more important than the execution of tasks	5	5	4.72	The execution of tasks is more important than interpersonal relations
	Relations between the employer and the employee resemble family ties	5	4	4.17	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	Change is more desirable than preservation of the current situation	3	3	3.56	Preservation of the current situation is more desirable than a change
	Innovative and creative employees have more freedom	5	5	4.44	Innovative and creative employees are limited by regulations
	Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	6	5	4.50	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
	Few matters are regulated in detailed regulations and they are usually complied with	x	3.5	3.78	Many matters are regulated in detailed regulations but they are not always complied with
	Many ideas/inventions are generated but not all are implemented	x	4	4.36	Few ideas/inventions are generated but most of them are implemented
Long term orientation in organization	Actions taken are evaluated from the perspective of their effects in annual periods	6	6	5.11	Actions taken are evaluated from the perspective of their effects in many years' periods
	Relations with business partners are evaluated from the perspective of short-term profits	6	3.5	3.89	Relations with business partners are evaluated from the perspective of long-term profits
	Meeting the deadline for a task completion is more important than attaining an expected result	6	5	4.66	Attaining an expected result is more important than meeting the deadline for a task completion
	A fast, spectacular market or financial success is more important than the gradual building of a strong market position	5	5	4.67	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
	Objectives of the managerial staff and employees diverge	5	5	4.76	Objectives of the managerial staff and employees converge

(x) – multimodal distribution

SOM4		Mo	Me	M	N=19
Power distance in organization	Subordinates and superiors are co-dependent	x	3.5	3.78	Subordinates are dependent on superiors
	Superiors consult their decisions with subordinates using their own experience and the experience of subordinates	2	4	4.00	Superiors make decisions without consultations with subordinates on the basis of the superiors' experience and formal regulations
	Occupying top positions does not entail substantially higher salaries and special privilege	x	3	3.47	Occupying top positions entails substantially higher salaries and special privilege
	Employees occupying lower positions perform different roles in the enterprise than employees on higher levels	5	4	3.68	Employees occupying lower positions have lesser abilities and skills than employees on higher levels
	Important decisions are made on different levels and do not require strict control in the course of their execution	2	4	4.16	Important decisions are made on top levels and require strict control in the course of their execution
Individualism in organization	Employees strive to act in the interest of the group they are part of	x	3	3.63	Employees strive to act in their own interest
	Decisions concerning employees' salary and promotion depend on their membership in a group and achievements of the group	6	5	4.37	Decisions concerning employees' salary and promotion depend on the regulations in force and their individual achievements
	Even if someone has a different opinion, she/he should adapt to the opinion of the collective	x	5	4.58	Everyone can have a different opinion and is expected to express it
	Interpersonal relations are more important than the execution of tasks	3	3	3.61	The execution of tasks is more important than interpersonal relations
	Relations between the employer and the employee resemble family ties	3	3	3.68	Relations between the employer and the employee are reduced to the employment contract
Uncertainty avoidance in organization	Change is more desirable than preservation of the current situation	3	4	3.68	Preservation of the current situation is more desirable than a change
	Innovative and creative employees have more freedom	6	5	4.58	Innovative and creative employees are limited by regulations
	Managers mainly focus on strategic issues and, to a lesser degree, on operational activities	5	5	4.68	Managers mainly focus on operational activities and, to a lesser degree, on strategic issues
	Few matters are regulated in detailed regulations and they are usually complied with	5	5	4.16	Many matters are regulated in detailed regulations but they are not always complied with
	Many ideas/inventions are generated but not all are implemented	x	5	4.53	Few ideas/inventions are generated but most of them are implemented
Long term orientation in organization	Actions taken are evaluated from the perspective of their effects in annual periods	6	5	4.68	Actions taken are evaluated from the perspective of their effects in many years' periods
	Relations with business partners are evaluated from the perspective of short-term profits	6	4	3.68	Relations with business partners are evaluated from the perspective of long-term profits
	Meeting the deadline for a task completion is more important than attaining an expected result	5	5	4.42	Attaining an expected result is more important than meeting the deadline for a task completion
	A fast, spectacular market or financial success is more important than the gradual building of a strong market position	5	5	3.79	Building of a strong market position gradually is more important than a fast, spectacular market or financial success
	Objectives of the managerial staff and employees diverge	5	5	4.05	Objectives of the managerial staff and employees converge

(x) – multimodal distribution

Source: own study.

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Business Models and Growth Modes: Qualitative Research of Polish Online Companies

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Abstract

The purpose of the paper was to identify differences and similarities between business models and growth modes of Polish online companies. Following statistical segmentation five companies were chosen. Companies as the segment representatives were the subject of qualitative research. The analysed companies share some similarities (e.g. contribution to customer efficiency, breadth of choice) and differences (e.g. content management, customer value co-creation). The identified growth mode is based on entering foreign markets after reaching a certain scale on the domestic market.

Keywords: Value proposition; business model; growth modes; e-commerce; firm performance; case study; Poland; CEE

JEL codes: L21, M10

INTRODUCTION

Existing relationship between a business model and a company growth is one of the current topics in entrepreneurial research. According to Teece, the essence of a business model is in defining the manner by which the company delivers value to customers, entices customers to pay for value, and converts those payments to profitable growth (2010). Business models affect firm's possibilities for value creation and capture (Amit and Zott 2001), hence they have close connections with strategies.

We refer to the approach of McKelvie and Wiklund who find that growth in the subject literature is treated as dependent or independent variable or the mode of growth is analyzed (2010). The mode of growth is understood here as a sequence of decisions related to growth activities. Hence, mode of growth as a sequence of actions, can be also treated as a strategy.

In 2013 we published the results of our survey study investigating links between elements of business model and profitability of Polish internet companies (Zaborek et al., 2013). The sample used in the study, was mostly made up of retail and consumer services companies (150 Polish online firms). The findings revealed that out of four elements constituting a business model, that according to Amit and Zott's taxonomy (2001) are *novelty*, *complementarities*, *customer lock-in*, and *efficiency*, only the *complementarities* were statistically significant predictors of financial performance.

Trying to explain such findings we went in-depth in our research identifying and differentiating approaches to *value proposition* of online companies and their consequences to firm financial performance, which is a core element of every business model. Thanks to segmentation procedure we managed to identify five segments of companies (Doligalski et al., 2015). Short description of these five segments is as follow: (1) suppliers of unique offerings – providers of unique products with a narrow range of complementary items and options; (2) specialized newcomers – providers of a specialized offer (i.e. not comprehensive) of rather conventional products, which is hinted at by a small mean of product uniqueness; (3) comprehensive incumbents – providers of a wide offer of popular items with the lowest rating on offer uniqueness; (4) productivity enhancers – the firms which display the strongest concentration on solutions that can enhance effectiveness and efficiency of their customers and (5) run-of-the-mill retailers – a typical member benefits from some extent of co-creation, has an offer that encompasses multiple options and the incidence of offering free valuable content is higher in only one other cluster. The most striking observation from the quantitative research was that the identified segments do not show statistically significant differences in financial performance, which was represented here by operating sales profit margin. In this paper, due to high heterogeneity of the sample we aimed at identification of differences and similarities between business models and growth modes of Polish online companies. Following statistical research outcomes we chose qualitative methods – case study research – to better control the unique conditions of each company. According to Yin (2003) and Eisenhardt (1989) this method is recommended when investigating a recognized phenomenon within its real-life context, when the boundaries between phenomenon and its context are not clearly evident and when little is known about phenomenon and current perspectives seem inadequate. Each case serves as a distinct experiment that stands on its own as an analytic unit.

We chose five companies (segment representatives) out of distinguished segments. The criteria for the sample selection was matching the segment's profile within the variables, that were the basis for the initial segmentation (e.g. efficiency for customers, value co-creation, complete customer solutions, uniqueness, free benefits), as well as availability of information about the company. The final list of analysed companies includes: Motointegrator.pl (suppliers of unique offerings), e-Lady.pl (specialized newcomers), Komputronik.pl (comprehensive incumbents), PanoramaFirm.pl (productivity enhancers) and Projektoskop.pl (run-of-the-mill retailers). The main sources of information on analysed companies were their websites, press releases and articles, past version of the websites (e.g. archive.org) and online statistics (e.g. Megapanel). The information gathered from these sources was compared with declarations of companies' representative received during the segmentation research.

Business models are perceived here through the approach of M.J.Eyring, M.W.Johnson, H.Nair. According to them, business model should include four elements: customer value proposition, profit formula, key processes, and key resources. A **value proposition** is – according to Payne and Frow (2014) – an organisation’s offering to customers, representing a promise of benefits of value that customers will receive during and after the usage experience. It identifies both product and experiential benefits and costs (or sacrifices) that result from the relationship between customer and organisation. **Profit formula** comprises cost structure, revenue model and target unit margin. **Key resources** of online companies comprise customer portfolio (customer database, loyal customers, customer community), brand (credibility, reputation, image, customer trust, domains), websites (corporate website, product websites, blogs, profiles on social networking websites, microblog profiles, video website profiles, etc.), information resources (owned by a company or co-created by customers), partnership and cooperation with other online services (Doligalski, 2015). **Key processes** of online companies can be perceived from many perspective. Taken approach of CRM we can distinguish customer acquisition and retention, as well as up- and cross-selling. Another perspective is offered by Zhu’s e-commerce capabilities (2004), which are: providing information on products and services (including also tools facilitating data utilisation); transaction facilitation (possibility of online ordering, tracking of the order status, collecting products from a physical store, etc.); customisation (customer service and delivery of individual offers and information); integration of internal processes (leading to improvement of coordination, order fulfilment and supply management). According to the research conducted by Zhu the e-commerce capabilities, together with a complementary factor, that is the level of IT-structure development have a positive influence on the company’s performance, including revenue per employee, inventory turnover and cost reduction. The proposed by the authors strategies (i.e. low cost and differentiation) better fit traditional than online companies. Many online services are offered free of charge, and even if the customer pays to the company, the strategy of high prices is rarely adopted. To investigate the growth mode we rely on McKelvie and Wiklund’s approach. We identified the sequence of growth activities undertaken by analyzed companies in order to ensure their growth. “How do companies grow?” is a necessary and fundamental question. Analyzing the business model of research companies and linking them to sequences of the firm growth activities may help to understand the essence of relation between two concepts.

CASE STUDIES OF SEGMENT REPRESENTATIVES

Segment 1: Suppliers of Unique Offerings

1. Providers of unique products addressed to market niches, with a narrow range of complementary items and options.
2. There is very limited reliance on involvement from business partners and customers to enhance the value proposition.
3. The segment is also distinguished by more than half of returning customers, but the least dynamic in terms of attracting new customers.
4. Main streams of revenues originate from sales of tangible products, sales of virtual products and services and advertising; they rarely employ freemium

strategy and thus their Internet operations are typically not supported by revenues from advertising.

5. This segment is balanced concerning dominant types of business activities and sources of revenue: it has almost equal proportions of Internet storefronts, providers of services for business and public sector and news portals.
6. Many of the firms belonging in this category started out using traditional distribution channels on average in 2003 and moved onto the Internet only after about three years.

Segment representative: Motointegrator.pl

Motointegrator.pl is an online venture project of the company Inter Cars, one of the largest Polish distributors of automotive parts. It is an online automotive shop that cooperates with more than five thousands of garages across Poland.

Table 1. Motointegrator.pl – outline of business model constructs and growth stages

Business model constructs	Growth stages
<p>CVP: unique offerings of spare parts. Uniqueness results from wide range of automotive products and services rendered by the network of garages</p>	<ol style="list-style-type: none"> 1. 1990 – Inter Cars is established 2. 2009 – launch of Motointegrator.pl e-commerce website 3. 2012 – launch of the second version of the Motointegrator.pl website, including the collection of automotive advice, care package on the road, loyalty program 4. Regional internationalization – selling automotive products in Slovakia, Czech Republic and Germany.
<p>Key Resources:</p> <ul style="list-style-type: none"> - Online store - Well-known partner company Inter Cars - Inter Cars logistic infrastructure (i.e. warehouses) - Network of 1000 owned garages - Partnerships with 4000 automotive garages across Poland - Brand Ambassador – Krzysztof Hołowczy (famous rally driver) 	
<p>Key Processes:</p> <ul style="list-style-type: none"> - Customer acquisition and retention - Sophisticated supply chain management (around 50 deliveries daily) - Inventory management (ca. one million products) - Multichannel management 	
<p>Profit Formula:</p> <ul style="list-style-type: none"> - Selling on-line tangible products - Garage services - Revenue sharing with partners 	

Source: own elaboration based on a company website.

Motointegrator.pl – a business model explanation

Motointegrator's unique service combines spare parts together with garage services. Customers can purchase online both automotive spare parts and accessories, and immediately have them installed in a local garage. The products in the number exceeding a million, which is more than anyone else offers on the market, are sent to the customer within 24 hours. Customers can count on consultants' assistance on an infoline working in a 24/7 mode. The chain of local garages includes more than 5000 shops across Poland, of which 4000 are partner entities. The Motointegrator's revenue model is based on sale of tangible products and services to customers.

Uniqueness of Motointegrator's offer results from the wide range of automotive products and well-developed chain of garages. Hence the company is not a perfect representative of the segment. Its perfect representative would rather offer a narrow range of complementary goods and hardly depend on partners.

Motointegrator.pl growth strategy – from products sales through service performance to regional internationalization

Inter Cars, the mother company of Motointegrator.pl, was founded in 1990 in the very beginning of Poland's economic and social transition. First the company sold spare engine parts for German cars. During the following years Inter Cars expanded becoming a major player on domestic market of spare parts. The website Motointegrator.pl was launched in 2009 as an online platform allowing ordering products and facilitating contact with local garages. Since 2012 the company added new services like a care package on the road, which provides assistance for emergencies on the road.

In the area of branding activities, company is taking advantage of Krzysztof Hołowczyc, a famous rally driver. Hołowczyc advocates for safety on the roads, which he associates also with the proper condition of vehicles. This in turn depends on purchasing spare parts from a trusted partner such as Motointegrator.pl. Company also tried to create a community around the blog called 300kucy. The name means literally 300 ponies, which are a slang synonym of horsepower. The posts refer to car racing and car tests. The blog is displayed as a part Onet.pl, the biggest Polish news portal, which should result in reaching wide audience. In spite of having a team of 15 bloggers, the latest post is currently 6 months old. This may suggest that the blog has been abandoned and is not developed any more. The reasons for its discontinuation are not clear. Maybe the blog did not contribute enough to company's brand recognition?

Motointegrator also follows also a regional internationalization. It has websites in Slovakia and Czech Republic. In any of both countries company is supported by the network of 60-70 garages. There is also a German version of the website – it is just an online store without the chain of garages. The online presence in the neighboring countries and Poland share similarities i.e. the same brand, website layout and similar product range. However some differences are to be noticed. The four logistic centers of Inter Cars, contributing to stocking place of 115 000 square meters, are located only in Poland. Infoline in the three neighboring countries is available only during working hours, and not 24/7 as in Poland. This may suggest a lower business activity there so far.

Segment 2: Specialized newcomers

1. Companies providing specialized offer (i.e. not comprehensive) of rather conventional products, which is hinted at by a small mean of product uniqueness.
2. The customer benefits do not entail productivity gains.
3. The group of Internet companies that have the lowest percentage of regular customers, which was estimated by the managers at 38%, on average.
4. The segment companies are mostly Internet storefronts, which source their incomes from sales of tangible products.
5. The youngest companies in the research sample, with the average founding year in 2006, which expanded online in 1.5 years after their set-up date.

Segment representative: E-Lady.pl

E-Lady.pl – a Polish company established in 2003 operating as an on-line store selling a women’s underwear items.

Table 2. E-Lady.pl – business model constructs and growth stages

Business model constructs	Growth stages
CVP: Wide range of products from the category of women’s underwear and related categories .	<ol style="list-style-type: none"> 1. Mid 2000’s – Polish e-commerce market is saturated and competition is price-based. Differentiation strategy – creating blog.e-lady.pl and building women’s community around the shop 2. 2009 – Facebook fan page – <i>E-Lady.pl - the most female on-line shop</i> 3. 2014 – Improvement in process of shopping delivery to a customer. Delivery only via courier company and novel solution of parcel lockers
Key Resources: - Product offer presented on the website - Customer portfolio, including Facebook followers - Bloggers promoting the company	
Key Processes: - Customer acquisition and retention - Supply chain and order management - Managing the blogger relationships - Maintaining high position in search engine listings	
Profit Formula: - Selling on-line tangible products - Promotion code for creating an account	

Source: own elaboration based on a company website

E-Lady.pl – a business model explanation

E-Lady is an online storefront offering items from the category of women’s underwear. Company sells also products from related categories (e.g. regular women’s clothes, men’s underwear), however their range is narrow. Items sold come from many producers. Interestingly some of them are labeled “Only at E-Lady”.

The product descriptions are rich in information and updated. In some cases also video presentations are provided, which is a novelty on Polish market. The layout of the website is however old fashioned. It has not been profoundly changed during the last 10 years of company’s operation.

The storefront appears favorably in search engine listing (e.g. with the keyword “store with underwear”). Achieving and sustaining top positions in a competitive industry is a remarkable success resulting in visits of consumers interested in buying or at least browsing women’s underwear. E-Lady acquires customers also thanks to cooperation with fashion bloggers. If a consumer clicks E-Lady’s ad on a blog, and then purchases a product, this is the blogger who will receive a financial remuneration.

E-Lady.pl growth strategy – Storefront, content, modern logistics

In the mid 2000’s many new online stores appeared and the Polish market become quickly saturated with the lack of clear market leaders. Growing price competition made it difficult to sustain satisfying profitability. Anna Marynowska, the owner of E-Lady.pl set a very challenging goal to build brand image of E-Lady.pl and generate added value for customers’. The idea was to attract customers who are less sensitive to price and lock-in them with the brand store. *The challenge was also to break a stereotype of non-*

confidence for online stores with maintaining the highest level of professional service and a very rich offer with detailed descriptions. Thus, the goal was to reach opinion leaders and familiarize them with the brand E-Lady.pl.

As the result of searching for cost-effective brand building the idea of creating a corporate blog was chosen. A blog, an open, efficient and modern way of communication, had four objectives to reach: (1) make a place for “discussion and a lot of fun for anyone who appreciates a woman's perspective on work, network and business”, that will build a positive brand image, (2) get E-Lady.pl to know the opinion leaders, such as representatives of the media or bloggers, (3) make a special shop attribute and adding more value for existing customers, (4) get customer feedback (e.g. especially within the product preferences).

The implementation plan was launched highlight the real advantages of the store: the openness to novelty, a willingness to listen to customers, original products and sincerity in order to obtain pure and clear communication. Two editors with different personalities were selected, allowing them not only write on the blog, but mutually refer to their statements. Jointly established thematic scope and frequency of writing. Launching a blog was scheduled in such a way as to exploit the effects of mouth marketing.

In 2006 the blog was one of the first projects of this type in Poland. In 2007 E-Lady.pl launched another blog on shopping aimed at female consumers. However, this initiative has ended after a year. Currently the E-Lady blog does not play an important role in company's marketing. Most of the content that appears there does not refer to offered product and has rather entertaining character. The frequency of posting is rather low – one note per week. They also do not evoke readers activity. Most of blog notes have one or no comments at all.

The lack of users interested in the blog may be to some degree explained with the popularity of company Facebook fan page. It managed to gather more than 7500 subscribers. The news presented there refers mostly to underwear items (as contrary to entertaining content on the blog). Interestingly, also fan page does not evoke followers' activity. Most of the news have been liked by less than 10 subscribers, some of them have not been liked at all.

Due to frequent customers' post compelling about delays in good delivery by the Polish Post, the owner decided to change the operator. In order to ensure timely and qualitative service to their customers the company moved to a courier company and a novel parcel lockers solution.

Segment 3: Comprehensive incumbents

1. Companies that rely on a wide offer of popular items (the lowest rating on offer uniqueness).
2. The firms in this segment recorded on average the highest proportion of loyal customers (more than half) and the fastest pace of acquiring new patrons, as compared to their direct competitors.
3. The dominant type of company is Internet storefront with providers of consumer services coming in second. Chief sources of income are sales of advertising and tangible products.
4. Companies report that the only half of total sales derived from the electronic marketplace.

5. The oldest companies (established on average in 2001) with the longest period from the funding to the moment of starting doing business through Internet channels (more than 3 years).

Segment representative: Komputronik.pl

Komputronik stock-joined company, a part of Komputronik Group, is a public company quoted on Warsaw Stock Exchange. Since 1996 the company has been offering a wide range of hardware, software, electronic accessories, domestic appliances and electronics, as well specialized services. Retail sales are carried out through an online shop Komputronik.pl and a nationwide network of 300 salons of their own, franchisers and partners.

Table 3. Komputronik.pl – outline of business model constructs and growth stages

Business model constructs	Growth stages
CVP: Fast and safe on-line shopping of computer equipment	<ol style="list-style-type: none"> 1. 1998 – on-line shop was opened as a “promotion of Komputronik brand” 2. From 1999 – moving from a promotional website into transactional one 3. From 2000 – e-commerce website 4. 2014 – geographical expansion on German market.
Key Resources: <ul style="list-style-type: none"> - Well recognized brand of Komputronik - Partnerships – suppliers of hundreds of brands, computer stores, financial companies - Circa 300 traditional stores - Website with content including guides and tips, as well as product reviews written by customers - Storefronts also in Slovakia and Czech Republic - Russian-language version of the Polish store 	
Key Processes: <ul style="list-style-type: none"> - Customer acquisition, growth and retention in a price-driven environment - Product portfolio management (offer – wide range of products - 70000 SKU) - Order-delivery process - Multichannel management - Presence on electronic markets (online auction, price comparison websites) 	
Profit Formula: <ul style="list-style-type: none"> - Online sales of tangible products - Payment enhancements: sale by installments; - Leasing - Rendering additional services 	

Source: own elaboration based on a company website.

Komputronik.pl – business model explanation

Customers choose company solutions generally because of their comprehensiveness, not innovativeness. Customers choose company’s offer because of an availability of wide range of products (circa 70 000 SKUs) from various categories (economies of scope). Komputronik.pl provides its customers with few personalized solutions (possibility of assembling computer based on chosen components, after sales services). The company maintains relationships for as long as possible even with customers who are less profitable. Regular customers, in generally, are not rewarded specially (for example only occasional standardized price discounts for chosen products for all customers or free delivery period). Hence an important criterion for selecting the business partners is enhancing the capacity for product portfolio management – in order to keep attractiveness of a comprehensive offer, the company cares of a wide range of an assortment Kompu-

tronik is a distributor of hundreds of brands (hardware, software, electronic accessories, products, domestic appliances and electronics items), and payment convenience solutions, Komputronik has a cooperation a few financial institutions to offer its clients an attractive terms of sale of installments and leasing contracts.

Komputronik.pl growth strategy – from brand promotion to on-line sales channel benefiting from economies of scale and scope

Since February 1998 an online store has been operating. Initially it was only a tool for promoting a Komputronik brand and reliable form of presentation of offerings. Only at that year the Internet storefront developed a turnover comparable to the one of brick-and-mortar company's stores. Nowadays the company increases its offer by more than 1 thousand products every month. The customers can choose from nearly 70 000 products of hundreds different brands.

Since 2000 the competition from hypermarkets has started to grow, the priority for company was to develop the portfolio of IT services. For this reason, Komputronik shops have changed from the usual points of sale into the local Information Technology Centers for individual customers and companies. The company offer wide range of after sales services: post-warranty service, extended warranty service, servers configuration, software installation services, data recovery.

In 2010, as well as in 2011, an online shop Komputronik.pl earned the title of best e-store in Poland, and in the computer ranking of the "Rzeczpospolita". Komputronik was considered the most valuable Polish computer brand. In 2013 the online shop was the winner of the 6th Edition of the Polish Quality of Service Program in the category – "Computer Shops". It was awarded the prestigious prize: the Star Quality of Service 2013 with the highest, among its competitors, the Consumer Satisfaction Index, which amounted to 87.6%.

Pricing policy has been also subject of change. For many years Komputronik used to be perceived as rather expensive store. Competing in online environment with high prices may be difficult. Consumers often take advantage of benefits facilitating the pre-purchase process for free (e.g. guides, tips, product reviews); the transaction however is conducted with lowest-price provider. Komputronik is right now competing with prices to higher extend. According to Wojciech Buczkowski, company's founder and CEO, lower prices result mainly from economies of scale and reduction of organization's costs (Rdzeń, 2014).

The company also expands geographically. It has its online stores in Slovakia and Czech Republic under the brand of K24. There is also a Russian-version of the store dedicated to customers from Russia, Belarus and Ukraine. They may pick up products at Komputronik's agents located in Poland close to the border and benefit from VAT return.

In 2014 the next direction of geographical expansion is Germany, the largest IT market in Europe. Komputronik has registered a Berlin-based daughter company, The Board of Directors of the company, explained that the registration of the company on the spot was needed because for players "from the outside" was very difficult to be on the market. The German subsidiary will sell first through e-commerce platforms (e.g. third-party stores), and later it will start launch its own online store (2014).

Segment 4: Productivity enhancers

1. The firms display the strongest concentration on solutions that can enhance effectiveness and efficiency of their customers.
2. The products on sale are not unique and the offer seems to be rather wide in scope.
3. The companies do not shy away from offering free content and involving partners and customers in co-creation.
4. The dominant type of companies are news portals, where chief sources of income are sales of virtual products and services (through subscription) and advertising.
5. The companies on average set up in 2004 and with the shortest time lag between the year of funding and the year of getting onto the Internet (less than one year) and, fittingly, the part of the revenues from the Internet is here the greatest.

Segment representative: PanoramaFirm.pl

PanoramaFirm.pl is one of the most important Polish yellow pages companies allowing finding a potential business partner. It offers search engine of local businesses as well as other application facilitating first contact of potential customers with companies.

Table 4. PanoramaFirm.pl – outline of business model constructs and growth strategy

Business model constructs	Growth stages
CVP: Matching potential customers with local businesses	<ol style="list-style-type: none"> 1. Printing out and distributing yellow pages catalogues 2. Offering online search of business entities (early 1990's) 3. Broadening the range of services to news with an attempt to become an online portal. Offering free e-mail services (late 1990's) 4. Reduction of services around 2005 resulting in concentration only on local business search 5. Adding utilities within the search services: mobile search, map with business locations, navigation application.
Key Resources: <ul style="list-style-type: none"> - Well-recognized brand - Database including information on 2.3 million Polish companies - Search engine - Online map of Poland with business locations - Navigation applications 	
Key Processes: <ul style="list-style-type: none"> - Providing potential customers with precise information on local companies - Facilitating companies presence in the portal - Acquisition and retention of both user types (potential customers and supplying companies) 	
Profit Formula: <ul style="list-style-type: none"> - Advertisement revenue, - Fees for companies' favorable presence in the internal search engine listing 	

Source: own elaboration based on a company website

Panoramafirm.pl – business model explanation

The purpose of Panoramafirm.pl is to provide potential customers with precise information on local companies. The company possess a detailed database including information on 2.3 million of Polish businesses. Apart from traditional yellow-pages printed book, potential customers may reach the would-be business partners via internet and mobile search engine, as well as the navigation application.

The complementary group of customers, i.e. local businesses, may present their offer in a various forms starting from basic contact information up to enriched multimedia

presence. The companies are the entities providing Panoramafirm.pl with revenues, the potential customers may use the searching tools for free.

The database of 2.3 million companies is also monetized in a different way. The company renders services related to direct marketing (i.e. e-mailing companies from the data base). Benefiting from the database requires constant its updating. The company claims 95% of its records are valid. As a consequence more than 5 million unique users visits the search engine every month, which is supposed to lead to millions of customer enquiries monthly.

Panoramafirm.pl growth strategy – from printed catalogue through content to search

The company started in the early 1990s. First it offered printed catalogue, a yellow pages style book. Quite early it launched its first website allowing searching for businesses. Catching up with the online trends of the late 1990s, the company started offering content on its website with an attempt to become a portal. At the time company offered current news, as well as information on business, sport, movies etc. It also offered free e-mail services. Around the year 2005 the company shrank back services to information on local businesses. However within that category it offered over the time also mobile search engine, maps with business' locations as well as navigation application facilitating reaching the companies' premises. The company still prints out and distributes paper catalogues, however their importance is strongly diminishing.

Companies revenues stem mostly from the internet (70%) and the rest from offline products. The internet revenues represent bigger and bigger part of the total income amounting to 33 m USD in 2011. Company's main competitor PKT.pl enjoyed even higher revenues of 45 m USD in 2011. The total yellow pages market in Poland is assessed to be worth of 60-75 m USD (Stanisławska, 2014). Company treats also Google as a competitor, especially in the area of mobile searches.

Segment 5: Run-of-the-mill retailers

1. Companies seems to benefit from some extent of co-creation and has an offer that encompasses multiple options.
2. The segment has the second lowest percent of loyal customers and the second fastest acquisition of new customers.
3. The segment companies are mostly Internet storefronts, which source their incomes from sales of tangible products.
4. The companies in the segment are the least likely to service market niche.
5. They were on average founded in 2003 and went online after three years.

Segment representative: Projektoskop.pl

Projektoskop.pl is an online platform providing tools for searching a house project, as exchanging information on house building and renovating

Projektoskop.pl – a business model explanation

The portal offers a unique value proposition for users, who are building or planning to build their own home, hence are interested in finding a suitable house project, as well as useful information related to house building, its arrangement, interior design etc.

There are many websites offering similar benefits. Projektoskop.pl offers a novel graphic search of house projects. It allows the user to allocate space between rooms

on the floor, the algorithm presents house projects meeting the query. Besides it also offers other form of house project searching. It is a necessity, as the company presents around 16 000 of houses projects. The website does not sell projects itself, it rather redirect the interested user to the website of project vendor.

Except from houses projects the website offers content. There is more than more than 2500 articles and guides on house building, repair, arrangement and interior equipment. Projektoskop.pl has also a social elements and provides the discussion forums for the exchange of information among users on the selection of projects and of the actual construction issues.

The business model includes many features: it allows time saving (search engine of house projects), it offers free benefits (articles and guides), it facilitates social communication (user forum). However, typically for the segment of run-of-the-mill retailers, Projektoskop.pl lacks a dominant characteristics. It benefits from some extent of co-creation and has an offer that encompasses multiple options. It should be noted that the typical representative of the segment is a retailer, while Projektoskop.pl plays rather a role of information intermediary directing potential customers to websites, where they can purchase house projects etc.

Table 5. Projektoskop.pl – outline of business model constructs and growth strategy

Business model constructs	Growth strategy
CVP: comprehensive information on house building, including collection of house projects	<ol style="list-style-type: none"> 1. 2008 – business concept preparation for EU funds financing 2. 2009 – the beginnings of the construction of the portal: conceptual and programming works 3. 2010 – launching website on the Internet
Key Resources: <ul style="list-style-type: none"> - Projects of houses – 16000 coming from 60 design offices - Content – more than 2500 articles and guides on house building, repair, arrangement and interior equipment - Community of users active on the forum 	
Key Processes: <ul style="list-style-type: none"> - Customer acquisition - Acquisition of house projects - Content creation (articles) and customer content co-creation (forum) 	
Profit Formula: <ul style="list-style-type: none"> - Display advertisement - Promotion of house projects 	

Source: own elaboration based on a company website.

Projektoskop.pl growth strategy – affliction of Google dependency

Projektoskop.pl was co-financed by the European Regional Development Fund under the Operational Programme Innovative Economy 2007-2013, Action 8.1 – “Support for economic activity in the field of electronic commerce.” The value of the subsidy amounted to 200 000 USD with project estimated value of 270 000 USD.

In 2011 the website attracted rather constant traffic – ca. 350 000 unique users contributing to to 1 500 000 pages views monthly. In February the 2013 the traffic was much lower. The website was visited then by 130 000 unique users. What could be the reason for such high decrease of users? Provided that company’s services remained at the same level, the reason for changes of website visits may be Google

dependency. Modifications in search engine's algorithm may lead to high volatility of website traffic. This is a common affliction of online.

businesses that take advantage of their content to generate the traffic via search engines.

The company continues to complement the guidance content and editorial, and add to new projects. The owner plans also to make the advertising platform for the construction industry and housing to increase this source of revenue.

CONCLUSIONS

Analyzed companies display following similarities and discrepancies. All of the businesses contribute to **customer efficiency**, understood mainly as time savings. PanoramaFirm.pl (representative of productivity enhancers), does it in the highest degree. Increasing consumer productivity is typical for the majority of online services, as benefits they offer are usually a few clicks away, as opposed to traditional services which are not so easily accessible.

Researched businesses also offered **breadth of choice**. It is easy to notice in Komputronik.pl case (representative of comprehensive incumbents). The company offers wide range of products in the category of computer hardware. The companies of the least comprehensive offer are E-Lady.pl (women's underwear) and Projektoskop.pl (services related to house building). The conclusion of generality of offer width should not be easily transferable to all online businesses. In our research we included entities that are medium or big online companies. As a consequence small companies, especially start-ups, that may not share this trait, were not incorporated. Besides, one can dispute how a product category should be defined – be it women's clothes or rather women's underwear. In the first case E-lady has a narrow offer, in the other – a comprehensive one.

Uniqueness is a dimension within which companies ranked differently. Komputronik.pl selling computer hardware and E-Lady.pl offering women's underwear ranked low. It is not surprising, as usually online stores offer items which are available in other companies. Interestingly, this is the online store that ranks the highest in the dimension of uniqueness being the representative of unique offerings suppliers. Motointegrator.pl offers a wide range of automobile items and enriches its offer with services, which makes the offer rare. Uniqueness of PanoramaFirm.pl results from the database of companies. The rare service of Projektoskop is the graphical search engine, the remaining benefits (e.g. house projects, forums) are rather typical for such websites.

Companies differ also in the area of **value co-creation**. Projektoskop (run-of-the-mill retailer) takes advantage of user-generated content. Panorama Firm allows companies to present their profile on the website. The users however do not contribute to the value co-creation. The three analyzed stores to a limited degree rely on prosumerism. Komputronik.pl is probably the one which has the highest number of product reviews written by its customers.

Differences are also to be noticed in the area of **content management**. Motointegrator.pl and E-Lady.pl tried to develop blogs on topics related to their activity. Both initiatives were abandoned. This may suggest difficulties in brand building with the specialized content. All companies communicate with Facebook pages (fan pages). The content of communication is wide and relates to products, news or entertainment.

Three out of five analyzed cases were online ventures of **traditional companies** (Motointegrator.pl, Komputronik.pl, PanoramaFirm.pl). Thus they could benefit from recognized brand and competitive position in traditional environment. E-Lady and Projektos-

kop are online ventures without significant traditional presence. The latter discrepancy finds its reflection also in ventures popularity. Recognized brand and firm competitive position leads to higher website traffic and higher number of Facebook followers. The pure players suffers from rather relatively low number of website visitors.¹

Table 6. Comparison of number of website visitors and Facebook followers of researched companies.

Company	Number of vistors (February 2013)	Number of vistors (February 2014)	Facebook followers (November 2014)
Motointegrator.pl	104 086	198 069	35 171
E-Lady.pl	n/a	84 164	7 624
Komputronik.pl	420 715	592 843	77 948
PanoramaFirm.pl	2 432 094	2 909 906	39 213
Projektoskop.pl	132 101	93 576	92

Source: Megapanel & Facebook.

There is also a difference between brick-and-click companies and pure players in the area of markets served. The growth of the two brick-and-click companies is based on the **internationalization**. They are Komputronik.pl and Motointegrator.pl, who entered neighboring markets. Panoramafirm.pl is a part of international Eniro Group. Both pure players, i.e. E-Lady.pl and Projektoskop, rely only on domestic Polish market.

The researched companies followed two similarities: contribution to customer efficiency and offering breadth of choice. They displayed differences in other areas (i.e. uniqueness, value co-creation and content management). We do not find any single factor that could serve as explanation in the above characteristic. In other words, we do not find any independent variable for which value proposition (as a composite of business model) could be dependent variable.

A simple relationship between business model and **mode of growth** is to be noticed. Companies with developed traditional (offline) presence and recognized brands tend to serve foreign markets more often than smaller companies concentrating only on their Internet activity. This can be easily explained with the volume of operation and difficulties of further harnessing the domestic market. Hence the expansion on neighboring markets is necessary to sustain the growth. Interestingly, this can be interpreted twofold. In the first explanation, growth is the independent variable and mode of growth is the dependent one. The mode of growth here is entering foreign markets after reaching some critical point. The other possible explanation is treating business model as the independent variable and mode of growth as the dependent variable. Again, having strong traditional presence and recognized brands (constructs of business model) allows the market expansion (mode of growth). These conclusions, as obvious as they are, show rather two-way relationship between the business model and company growth.

LIMITATIONS

The present study has several important limitations. Firstly, decided to go in-depth with case study method only with the one representative of each segments. Howev-

¹ Megapanel research is based on data reflecting Polish demographic structure that originate from the Net Track Millward Brown SMG/KRC research of a sample chosen and weighted by PBC.

er the chosen case we can treat as exceptional ones according to Dyer and Wilkins (1991), but in common practice of designing case study research is usage of Eisenhardt multiple rule: 4-10 cases (1989). By expanding the number of companies selected to case study research in each segment we could better control similarities and discrepancies among companies' from the same segment.

Secondly, the initial research sample of analyzed companies, used in qualitative segmentation procedure, was characterized by profound heterogeneities in terms of companies size, employed business models and growth phases Hence the conclusion of generality of an individual case study and not be easily transferable to each segment levels.

Third limitation stems from the fact that all case studies comes from a single country, which is still considered an emerging economy. In consequence, some of the identified patterns may not repeat in other national environments with different market structures and dynamics.

In this paper we identified differences and similarities between business models and growth modes of Polish online companies. We went through in-depth analysis of unfocused (in terms of business profile) case studies. We have come across with a conclusion about an evident existence of a business model and a mode of growth relationship. The essence of this relationship however has not been defined yet and requires a longitudinal field study to justify it. More specified case research structure is needed to meet such addressed research purpose.

REFERENCES

- Amit R., Zott, Ch. Value creation in E-business, *Strategic Management Journal*, 2001, 6-7, p. 493-520.
- Doligalski T. *Internet-based Customer Value Management. Developing Customer Relationships Online*. Helderberg: Springer 2015.
- Doligalski T., Zaborek P., Sysko-Romańczuk S. Value Proposition and Firm Performance: Segmentation of Polish Online Companies, *International Journal of Business Performance Management*, Vol. 16, Nos. 2/3, 2015.
- Dyer W.G., Wilkins, A.L. Better Stories, Not Better Constructs, to Generate Better Theory: A Rejoinder to Eisenhardt, *Academy of Management Review*, 1991, Vol. 16, No.3, p. 613-619.
- Eisenhardt K.M. Building Theories from Case Study Research, *Academy of Management Review*, 1989, Vol. 14, No. 4, p. 532-550.
- Eyring M.J., Johnson M.W., Nair H. New Business Models in Emerging Markets, *Harvard Business Review*, 2011, 1, p. 19-26.
- Komputronik uderza na Niemcy (Komputronik hits Germany), *Rzeczpospolita*, 2014.01.21, 21-01-2014, <http://www.ekonomia.rp.pl/artykul/1080855.html>, [2014.10.25].
- McKelvie A., Wiklund J. Advancing Firm Growth Research: A Focus on Growth Mode Instead of Growth Rate, *Entrepreneurship Theory and Practice*, 2010, Vol. 2, No. 34, p. 261-288.
- Payne A., Frow P. Developing superior value propositions: a strategic marketing imperative, *Journal of Service Management*, 2014, Vol. 2, No.25, p. 213-227.
- Rdzeń K. Wywiad z Wojciechem Buczkowskim. Współzałożycielem i Prezesem Zarządu Komputronik S.A. (Interview with Wojciech Buczkowski. Co-founder and CEO of Komputronik S.A.), *Mentis*, 08-09 2014, 30-34.

- Stanisławska A., Już nie książki telefoniczne, tylko aplikacje mobilne (Not only phone books, but also mobile apps), Rzeczpospolita, 2013.04.25, <http://www.ekonomia.rp.pl/arttykul/1003791-Juz-nie-ksiazki-telefoniczne--tylko-aplikacje-mobilne.html>, [2014.10.25].
- Teece D.J. Business Models, Business Strategy and Innovation, Long Range Planning, 43 2010.
- Yin R. Case Study Research. Design and Methods. London, Sage 2003.
- Zaborek P., Doligalski T., Sysko-Romańczuk S. Value Creation in e-Business and Financial Performance: Researching Polish Online Companies with Amit and Zott's Model, 4th EMAC Regional Conference - Marketing Theory Challenges in Emerging Societies, St. Petersburg University Graduate School of Management, Conference Proceedings, 2013, p. 440-447.
- Zhu K. The Complementarity of Information Technology Infrastructure and E-Commerce Capability: A Resource-Based Assessment of Their Business Value. Journal of Management Information Systems, 2004, Vol. 1, No. 21, p. 167-202.

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The Role of an Entrepreneur in Developing Organizational Culture Fostering Innovations

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Abstract

The paper examines the role of an entrepreneur in developing organizational culture which could contribute to sustaining a competitive advantage based on innovation. The article starts with early concepts of an entrepreneur and his role in the economy are presented as well as the contemporary concept of corporate entrepreneurship. The attempt is made to link these concepts by the corporate culture which should foster corporate entrepreneurship. It then presents Wal-Mart as an example of culture of fostering entrepreneurship based on innovation. Findings suggest that entrepreneurship embedded in corporate culture is crucial for achieving sustainable competitive advantage and should be developed from the moment of company founding. The main values which fostered company success should be maintained whereas the way of implementing them should be changed along with the changes in and outside of the organization. The paper contributes to the theory as well as to the business practice in reference to sustaining competitive advantage based on an entrepreneurial corporate culture. Past research does not emphasize enough the development of entrepreneurship culture which allows an organization to sustain its growth after the entrepreneur's death. This problem should be tackled by the scientists in the management field.

Keywords: entrepreneurship; organization culture; competitive advantage

JEL codes: L26, O31, M14, M21

INTRODUCTION

One of the main focuses of contemporary economy, sometimes called knowledge economy, is innovation. It brings interest in the works of J. Schumpeter and his concept of innovation and entrepreneurship; it is timeless and valid when nowadays big corpora-

tions managed by professional managers are the main market actors. D. Levinthal (1995) relying on Burgelman and Sayles (1986) and Block and MacMillan (1993) pointed out that entrepreneurship activity is not only associated with the founding of new enterprises but can also occur in the established one. Big corporations face the challenge of how to raise innovation and organize the learning process to react to the changing environment. To solve this problem the concept of corporate entrepreneurship has been introduced.

The aim of the paper is to show that corporate entrepreneurship should be deeply rooted in its culture, so the role of entrepreneur/ founder who creates the foundation of it, is crucial. It was observed that the rules of corporate entrepreneurship were similar to the rules introduced by Sam Walton founder of the biggest retailer in the world, so this case has been chosen to be presented.

The role of entrepreneur/founder of the organization in developing organizational culture, was tackled inter alia by E.H. Schein (1983), Stachowicz-Stanusch (2007). But here, by relating it to the problems of developing competitive advantage and introducing innovations it became new, and very important in a knowledge based economy context, issue to search. Some links between entrepreneurship theory and resource based theory (RBT) of achieving competitive advantage are shown so in this way the paper contributes to the research in this field presented inter alia by Montgomery (1995). A critical literature review from economy, theory of developing sustainable competitive advantage (exactly resource based view) and organizational culture followed by the case study is used to solve the problem. The paper is structured as following.

It starts from presenting some early thoughts on the concept of entrepreneurship with the focus on Schumpeter, who stressed the role of the entrepreneur in introducing innovations. But in present day corporations are managed by managers not entrepreneurs, so the concept of corporate entrepreneurship, which role is to foster innovations, is introduced. But the question arises if introducing this concept could be the source of sustainable competitive advantage. To answer this question the theory, which justifies that only if corporate entrepreneurship is deeply rooted in corporate culture it could contribute to achieve competitive advantage, is presented. So it is shown that culture, as an intangible asset, could be the source of sustainable competitive advantage (SCA), and by the same token corporate entrepreneurship deeply rooted in it could contribute to SCA.

This single case study method of Sam Walton the founder of Wal-Mart – the biggest retail chain in the world is presented. This positive case study method is appropriate for theory -testing research indicated above (Dul & Hak, 2008, chapter 5). Sam Walton is well known as the creator of Wal-Mart organizational culture which is considered one of the main success factors of Wal-Mart, a company characterized by sustainable growth even after Sam Walton's death. Many of Wal-Mart routines have been copied by other companies and became the rules of entrepreneurial culture.

ENTREPRENEUR AS AN AGENT AND HIS ROLE IN INTRODUCING INNOVATION

The concept of an entrepreneur and entrepreneurship could be traced to the first economic activity which was trading and has changed over time along with the changes in economic focus. It has been examined inter alia by C. Dorin (2014) and Wood (2005). Dorin (2014) pointed out that the first entrepreneur was defined by Richard Cantillon in the eighteenth century who described him as a person "Willing

to buy at a certain price and to sell at a certain price” (Cantillon, 1931). At the beginning of the nineteenth century Jean Baptiste Say considered that the role of an entrepreneur is to transfer the economic resources from the sector with lower productivity into another with higher productivity and better outcome (Dorin, 2014, p. 445). His concept is then developed by Kirzner (1973) who holds that an entrepreneur is a person who identifies the information asymmetry and takes advantage of it as an arbiter. He is just a person who creates a business (Hashi and Krasniqi, 2010).

During the twentieth century an Austrian economist contributed to the development of this concept. J.S. Wood (2005) examines some thoughts of F.K. Knight, F.A. Hayek, J.A. Schumpeter, L. Mises, I. M. Kirzner, G. I. S. Shackle and L.M. Lachmann showing how these economists by emphasizing different aspects of entrepreneurship have contributed to the understanding of what entrepreneurship is and how entrepreneurship function is fulfilled.

The crucial role of an entrepreneur in the economy was highlighted by J. Schumpeter. He stated that an entrepreneur plays the most important role in capitalist society because of introducing innovations – “carrying out new combinations” (Schumpeter, 1961, p.132) of resources which is fundamental for development. Schumpeter stressed that “Economically and sociologically, directly or indirectly, the bourgeoisie therefore depends on the entrepreneur, and, as a class. Lives and dies with him” (Schumpeter, 1943, p. 134). In his first works he had associated an entrepreneur with an individual whereas later had changed his mind and assigned an entrepreneur behavior to big organizations.

An Entrepreneur introduces innovation which is the application of a solution for the first time on a world scale, with the regard to “introduction of new goods, introduction of a new method of production, opening a new market, conquest of a new source of supply of raw materials or a half-manufactured goods and implementation of a new form of organization” (J. Schumpeter, 1912, p. 66, quoted after M. Kosala, 2015).

For Schumpeter entrepreneurship is reserved for a brilliant, imaginative, daring, resourceful innovator” (Kirzner, 1973, p. 129). The main drives for an entrepreneur are:

- the will for power and independence,
- the aim of triumph,
- the happiness of creating.

Wieser (1927, p. 327) characterizes an entrepreneur as “Great personalities...bold technical innovators, organizers with a keen knowledge of human nature, far-sighted bankers, reckless speculators, the world-conquering directors of the trust”

Such entrepreneurs are very desirable in present day economy characterized by constant environmental changes especially in technology and consumer expectation to exploit these opportunities and convert them into market success. Focus on innovations as a main source of companies’ success has brought new life to Schumpeters’ views. But in case of corporations it is difficult to apply the model of individual entrepreneurship. Thus the concept of corporate entrepreneurship has been developed.

Corporate entrepreneurship refers to different types of entrepreneurial behavior in existing large organizations (corporations) aimed at achieving – through encouraging innovations – competitive advantage at all levels: corporate, divisional, business units, business functions and project teams (Burns, 2011, p. 471). Such corporate entrepreneurship should be deeply rooted in organizational culture, which is considered as a source of competitive advantage by the representatives of resource based theory.

ENTREPRENEURIAL ORGANIZATIONAL CULTURE IN DEVELOPING COMPETITIVE ADVANTAGE

Schein (1983) defined organization culture as the pattern of the basic assumption that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration – a pattern of assumption that has worked well enough to be considered valid and, therefore, to be taught to the new members as the correct way to perceive, think, and feel in relation to these problems. So the organizational culture depends on its existence of a definable organization.

Such an organization culture is considered as an intangible resource by the representatives of the Resource-Based Theory (RBT) of developing sustainable competitive advantage which perceives a company as a unique bundle of tangible and intangible resources. These resources are the basis on which the company can build its sustainable competitive advantage (SCA) (Minzberg and Lampel, 1999, Obłój, 2001). The resources can become the source of SCA if they are valuable, scarce, imperfectly imitable (Barney, 1999).

Organization culture which is developed by a certain organization is scarce and imperfectly imitable; but to be the source of competitive advantage it should be valuable (Śmigielska, 2011, 2012). It has been noticed inter alia by R. Hall (1993), who regards the employees' knowledge, organizational culture along with reputation, innovation, connection network, and databases as the most significant factors in building competitive advantage. He points out the need of continuous development of capabilities and sustaining the value of intangible assets, as well as using them for the development of the organization, especially for diversification.

K.P. Coyne (1986) identified cultural capabilities and discussed their importance for SCA together with functional differential, positional differential, and regulatory differential. He states that cultural capability applies to the organization as a whole, including both individuals and groups which comprise the organization.

As far as core competences based on knowledge are concerned two important cultural aspects could be identified: positive culture and routines, which are included in the culture.

The role of positive culture was stressed by Sharkie (2003). When analyzing knowledge creation and its place in the development of sustainable competitive advantage he said that "The positive culture is of critical importance because organizations operate in all areas through people and it is their contribution which determines success, because it is people working within organizations, not the organizations themselves, who provide the initiative, the productive input and the reflection on these activities" (Sharkie, 2003).

Organizational routines are the result of the learning process. Knowledge generated in it should become organizational routines; routines which are available for the employees desiring them. Routines become organizational assets. They are regular and predictable characteristics which coordinate the activities of different people (Nelson, Winter, 1982, p.15). Coordination aims at raising efficiency of resources and as a consequence the whole organization. What is more these routines could also be used in other places where similar resources are coordinated and in this way they contribute to sustain the company's advantage (Winter, 1995, p.149). The routines used to develop a new product and new markets are core competencies. They are knowledge assets and they should be constantly perfected. This process requires the knowledge management which is also the set of routines on how to change the tacit knowledge into routines (more in Zollo and Winter, 1998).

Thus routines are the result of organization learning process. They are worked out in the process of interaction of organization members with the members of its environment. They become knowledge assets but the organization should also have the routines of knowledge management, which stimulate the process of perfecting existing routines, in this way giving the capabilities of their development the status of dynamic capabilities (Zollo and Winter, 1998).

The process of learning and knowledge management should be deeply rooted in organizational culture which predicts revenue from new resources This culture defined by Stephen McGuire (2003) as Entrepreneurial Organizational Culture (EOC) is a system of shared values, beliefs and norms of members of an organization, including valuing creativity and tolerance of creative people, believing that innovating and seizing market opportunities are appropriate behaviors to deal with problems of survival and prosperity, environmental uncertainty, and competitors' threats, and expecting organizational members to behave accordingly.

Duobiene & Pundziene (2007) recalled main characteristics of entrepreneurial organizational culture indicated by Cornwall and Perlman (1990) which include:

1. Risk tolerance. Innovations and possibilities search are supported at all levels of organization from ordinary worker to general director and owner.
2. Respect down activity. Each member of an organization realizes that each organization has a contribution to make that it is much needed and deserves the serious approach and respect of all in the work place.
3. Ethics, confidence, and responsibility. It is commitment of people in an organization behaving properly with respect to each other.
4. People. Organization members are involved in organization activity. Owners, managers realize that people are the main resource of an organization.
5. Emotional recognition. It is listening to the opinion regarding various dealings and taking them into account.
6. Satisfaction with work. Work is not distributed to organization members , but for each task a person willing to carry it is appointed.
7. Leadership. Employees have the possibility to take initiative, realize their desires, and are given necessary authority.
8. Focus on consumer values. Everything an organization does, should be valuable to its customers and employees.
9. Attention to details and finish. If something is well done, thus it can be done better.
10. Effectiveness and efficiency. For an organization to be effective it should not only create its future but also properly carry out daily activity.

Such a culture is said to be a successful culture because it fosters employee development and encourages highly competent employees to exercise their talents to impact positively on the organization. Such a culture is crucial for developing the sustainable competitive advantage in all types of organizations, but in a retail organization in particular. It is because retailers:

- have direct contact with the clients,
- are in a service business so their success significantly depends on employees,
- operates in a highly competitive market.

But such a culture to be the source of SCA should be developed from the point the company is founded and the founder/ entrepreneur has the crucial role in this process.

SAM WALTON AS AN ARCHITECT OF WAL-MART ORGANIZATIONAL CULTURE

Wal-Mart is now the biggest retail chain in the world. The success of the Wal-Mart organizational culture made it one of the most famous organizational cultures of all time (Hill & Jones, 2009, p. 242). It has been developed around the image of the company founder Sam Walton. He was a typical entrepreneur (Slater, 2009, p. 12):

1. First, he was probably the best trader of his epoch.
2. He had an amazing instinct which told him which products to buy and how to sell them at favorably prices, where and when to locate them in stores and what they should look like.

He was an innovator in Schumpeter's sense because of conquering a new organization of an industry (discounting) he also created – a model of distribution FMCG in which a retailer owns logistics centers and has its own transport fleet. This model has then been copied by the big retailers and has become very popular.

Wal-Mart's organization culture focuses on reducing costs, so the firm can provide low prices to its customers. It is reflected in Wal-Mart Stores' Mission statement: People, Saving Money, Living a Better Life (Wal-Mart Store Mission Statement, 2015). The company, although it has become very big, has been able to stay competitive because managers have enough flexibility to respond to nearby rivals with lower prices. It was due to the culture developed by Sam Walton and his successors.

In 1962 Sam Walton established three basic rules for company management:

1. Respect for an individual.
2. Service to a customer.
3. Striving for excellence.

Company values which are communicated to employees and clients involve:

- taking care of a client,
- taking care of a partner (employee),
- selling the national brand products at lower prices.

It is believed that the heart of Wal-Mart's success lay in ten private rules of management followed by Sam Walton. They are as follows (Małkowska, 2003):

1. Commit to your business. Believe in it more than anybody else. Bring passion to your work.
2. Share profits with your associates and treat them like partners.
3. Motivate your partners. Money and ownership alone are not enough. Set high goals, encourage competition, and then keep the score.
4. Communicate all the time. The more they know, the more they'll understand. The more they understand, the more they'll care. Once they care, there's no stopping them.
5. Appreciate everything your associates do for the business. If people believe in themselves, it's amazing what they can accomplish.
6. Celebrate your successes. Find some humor in your failures. Don't take yourself so seriously.

7. Listen to every suggestion and motivate your partners to propose new ways and solutions. The folks on the front lines – the ones who actually talk to a customer – are the only ones who really know what’s going on out there.
8. Exceed your customer’s expectations. The secret of successful retailing is to give your customers what they want.
9. Control your costs better than your competitors do, because this is the true source of advantage.
10. Swim upstream which means ignoring conventional wisdom. If everybody else is doing it one way, there's a good chance you can find your niche by going in exactly the opposite direction.

As customer satisfaction was Sam Walton’s focus he added two additional rules for employees who have ongoing contact with them. The “ten-foot rule states that “anytime an employee comes within ten feet of a customer the employee is to look the customer in the eye and ask if he or she requires help of any kind”. The other rule called “sundown rule”, related to customer requests says that “expected to answer requests by sundown on the day the requests are received” (Davies, 2007).

When comparing Sam Walton's rules of management with the characteristics of entrepreneurial organizational culture indicated by Cornwall and Perlman a lot of similarities could be identified. The most important for Sam Walton was focus on client.

He assumed that shopping is a difficult and rather annoying task so the role of a retailer is to convert it into a pleasurable experience (Slater, 2009, p. 48). It is why he strived to make the stores well organized and cared about a good shopping atmosphere. It was created by the smiling and very helpful employees. Sam Walton personally was engaged in developing such a friendly culture non only by setting the rules but by communicating them and by his own example.

Along with the consumers the other valuable resource for Sam Walton was employees. He appreciated their role in company development not only by everyday activities but also by providing innovative ideas. Thus he involved them in different organizational activities as well as listening carefully to their suggestions. Sam Walton was personally engaged some of them by visiting stores belonging to the Wal-Mart chain and talked not only to the managers but also to ground floor workers. His “yellow book” where he put the notes was very famous. He rewarded them for good work and innovation (D. Gross, 1999). Acquiring company's stock shares by the employees was an important element of the motivation system, as this made them owners of the company. To show his respect for employees Sam Walton introduced the “open door” policy. Open door policy meant that every employee could come to top managers to present problems and complaints related to his work, and they would be analysed to find a solution.

The concept of leadership was implemented by giving the store managers a lot of freedom to manage their stores, but, on the other hand, they were held responsible for their decisions. Each store had to be a "profit center". The respect paid to the employees resulted in their commitment to all the tasks and was reflected in the high level of organizational culture. Such values as ethics, confidence and responsibility were communicated by Sam Walton's behavior and symbolic behavior. The idea was to reinforce its emphasis on controlling costs to fulfill the company mission (Ferguson, 2015).

Although Sam Walton became very rich he lived with his family in a very modest house and went to work in an old pickup. The fact that photocopying machines at corpo-

rate headquarters had cups on them for employees to pay for any personal copying is an example of a symbolic behavior. At the traditional Saturday morning meeting employees present information on cost control-measures they have recently undertaken.

When Sam Walton died in 1992 the value of his business was USD 43,8 bn. After Sam Walton's death the company could not be managed in the same way. Three main reasons could be identified. First was that nobody could take Sam Walton's place – talk to people, communicate with them the main values because nobody from the management team had his talent and charisma. The second was that the company became too big to manage in the same direct and personal way as it was done by Sam Walton. It also internationalized and some key elements of corporate culture did not fit to new markets. For example, in 1997, because of internationalization, program “Buy American: was changed with a “Make Right Here” program which promoted buying domestic products. Thus the culture had changed, but it still had four main components, which guided employees' behaviors. The components are also identified as Wal-Mart's beliefs (Walmart's Organizational Culture, 2015):

- service to customers,
- respect for an individual,
- strive for excellence,
- action with integrity.

Its main focus “service to the consumer” is reflected in a company slogan “Exceed customer expectation”. According to Slater the difference, between Wal-Mart and other chains addressing their offer to a similar market segment, is visible. In Wal-Mart stores shop assistants are smiling and helpful whereas in the stores belonging to other chains employees often disregard customer wishes (Slater, 2009, p. 49).

R. Slater (2009, p. 105) noticed that in 2002 the corporate culture of Wal-Mart developed by Sam Walton was still alive. At the doors the client was welcomed, and still employees shout the company exclamation. The open door policy also remained after his death.

Although Sam Walton avoided formal, written procedures the “Guiding Principles”, with the best practices have been created. They appear in company's flyers and “Ten Rules of Business” could be found on the stairwells and hallways of employee's areas and office spaces (Wal-Mart organizational culture, 2015). In 2005 Wal-Mart went through incremental changes to improve operating structures, workflow processes and procedures (Driving Business Performance, pdf).

It was decided that in such a situation the training delivered through instructor-led and computer based training was not sufficient to educate the former district managers who become market managers. As the result of an eighteenth month project the competency models for all workplaces in the company were developed. The training process in Wal-Mart consisted of three phases: onboarding, foundation and advanced. During the first one a new employee learns about the corporate culture, diversity and orientation. The second one gives the association access to the targeted skills training whereas the last one provides a higher level of learning and it is targeted to the specific competency gaps. Ongoing learning process is facilitated by Wal-Mart executives each week flying out to the stores to get tacit knowledge about local market and circumstances. This knowledge is then processed to be shared with the others during the traditional Saturday morning meeting at Bentonville. The best ideas are discussed and then implemented as operational routines.

But now these traditional systems of perfecting the routines is supported by information technologies. Wal-Mart invested USD 4 bn. in Retail Link computer satellite system. This system enables to exchange point – of sales purchase information with vendor partners and each store and enables each department manager to know exactly about their own sales, margins and profits absolutely and relatively to other stores and departments. The 104 – week rolling history of every item in the Wal-Mart distribution system is known as well as the status of any product in the store. Each department effectively becomes an individual shop proprietor with all the attendant feelings of ownership.

CONCLUSIONS

Nowadays a lot of attention is paid to the problem of fostering and managing innovations which are sought as a main source of competitive advantage. It seems that the statement of Schumpeter who said “ that an entrepreneur could be eliminated from the society if “innovation itself is...reduced to routine”(Schumpeter, 1942, p. 132)” is now valid for big corporations. The role of an entrepreneur is taken over by routines developed for the purpose of knowledge management to let the organization react to the changes in the environment.

The paper shows that the role of an entrepreneur/founder of an organization or somebody who has determined the most important values, in this way determined its culture, should not be neglected. Successful culture (entrepreneur culture) involves all the important values in contemporary economy: focus on customer and employee, fostering innovation, participation of organizations’ members in the management process. Such a culture could not be built in one day but it has to be developed. Such a culture should also include the routines concerning knowledge management, and routines to change the routines.

Along with the environmental changes and changes in organization itself the culture should evolve, as it did in the case of Wal-Mart. If the culture does not evolve it becomes the obstacle against organizational growth. Another problem could arise when the suspensors of the entrepreneur/founder do not follow his policy. This was the case when Wal-Mart started to develop very fast, also in international markets, and the company in US was accused of not providing employees rights.

In the paper the focus was on entrepreneurial organization culture which fosters organization learning process and growth. But there are some other areas which could be search related to the entrepreneur role in economy indicated by the economist like e.g. motivation, personality.

The practical role of this paper is to show how important is the role of the entrepreneur/founder of the organization and it opens a lot of new areas to be researched in Polish entrepreneurs who are now in the process of developing their organizational cultures.

REFERENCES

- Barney, J.,B. (1999). Firm resources and Sustained Competitive Advantage, *Journal of Management*, March, vol 17, no 1, 99-120.
- Block, Z., & MacMillan, I. (1993). Corporate venturing: Creating new businesses with the firm. *Boston (Massachusetts)*.
- Burns, P., (2011). *Entrepreneurship and Small Business: Start -up. Growth and Maturity*, Palgrave Macmillan, New York.

- Burgelman, R. A., & Sayles, L. R. (1986). Inside corporate innovation: Strategy, Structure and Managerial Skills, Free Press, New York.
- Cornwall, J., & Perلمان, B. (1990). Organizational Entrepreneurship. Irwin: Homewood.
- Cantillon, R., (1931). Essay on the nature of commerce. London: Macmillan. (Original work published 1755).
- Coyne K., P.(1986). Sustainable Competitive Advantage-What It Is and What It Isn't, *Business Horizons*, January/February.
- Davies, D., J. (2007). Wal-Mao: The discipline of corporate culture and studying success at Wal-Mart China. *The China Journal*, 1-27.
- Driving Business Performance, American Society for Training and Development, PDF.
- D. Gross i redaktorzy Forbes Magazine (1999). Forbes o największych sukcesach w świecie biznesu, Wydawnictwo Naukowo-Techniczne, Warszawa.
- Dorin, C., & Alexandru, G. S. (2014). Dynamics of the Entrepreneurship concept . Literature Review. *The Annals of the University of Oradea*, 443.
- Dul, J., & Hak, T., (2008). Case Study Methodology in Business Research, ELSEVIER, Available at: <https://saidnazulfiqar.files.wordpress.com/2013/09/20-case-study.pdf>, Accessed 25.01.2016.
- Duobiene, J. & Pundziene, A. (2007). Development of entrepreneurial organizational culture. *Economics and Management*, 5(3), 507-515.
- Ferguson, E. (2015). Walmart's, Vision, Mission, Generic and Intensive Strategies, Business Management, Available at: <http://panmore.com/walmart-vision-mission-statement-intensive-generic-strategies>, Accessed 4.01. 2016.
- Hall, R. (1993). A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage. *Strategic Management Journal*, vol. 14, 616-617.
- Hashi, I., & Krasniqi, B. A. (2011). Entrepreneurship and SME growth: evidence from advanced and laggard transition economies. *International Journal of Entrepreneurial Behaviour & Research*, 17(5), 456-487. Available at: <http://doi.org/10.1108/13552551111158817>, Accessed 2.01, 2016
- Hill, C. & Jones, G. (2009). Essentials of Strategic Management, SOUTH-WESTERN CENGAGE Learning, Available at: <http://www.imsciences.net/wp-content/uploads/2012/01/Essentials-of-Strategic-Management-by-Hill-Jones.pdf>.
- Kirzner, I. (1973). Competition and Entrepreneurship, Chicago, University of Chicago Press.
- Kosala, M., (2015). Innovation Processes as a Stimulant of Internationalization Process of the Firms. *Entrepreneurial Business and Economics Review*, 3(2), 65-84. Doi: 10.15678/EBER.2015.030206.
- Levinthal, D. (1995). Strategic Management and the Exploration of Diversity. In: Montgomery, C. (ed) Resource Based and Evolutionary Theory of the Firm: Toward a synthesis: Dordrecht and Boston. Kluwer Academic.
- Małkowska, M. (2003), Zarządzanie zasobami ludzkimi w przedsiębiorstwie handlowych na przykładzie Wal-Mart Stores, In: Sławińska M. and Mikołajczyk J. (ed.) Zarządzanie przedsiębiorstwem handlowym. Zadania i studia przypadków, Wydawnictwo Akademii Ekonomicznej w Poznaniu.
- McCaffrey, M. (2009). Entrepreneurship, Economic Evolution, and the End of Capitalism: Reconsidering Schumpeter's Thesis . *Quarterly Journal of Austrian Economics*, 12 (4), 3-21.
- McGuire, S. J. (2003). Entrepreneurial organizational culture: construct definition and instrument development and validation. PH.D. Dissertation, George Washington University Washington D.C.
- Minzberg, H., Lampel, J. (1999). Reflecting of the Strategy Process, *Sloan Management Review*, Spring, 40 (3), 21-29.
- Nelson, R., and Winter, S. (1982). An Evolutionary Theory of Economic Change, Belknap Press, Cambridge, MA.
- Obłój, K. (2001), *Strategia organizacji PWE*, Warszawa.

- Paunovic, S., Dima, I., C., (2014), Organizational culture and corporate entrepreneurship, *Annals of the University of Petrosani Economics*, 14(1), 269-276, Available at <http://www.upet.ro/annals/economics/pdf/2014/part1/Paunovic-Dima.pdf>.
- Schein, E. H. (1983). The Role of the Founder in the Creation of Organizational Culture (No. TR-12-ONR). Alfred P Sloan School of Management Cambridge MA.
- Schumpeter, J., (1942). *Capitalism, Socialism, and Democracy*, New York: Harpers and Brothers Publishers.
- Schumpeter, J., (1961). *The Theory of Economics Development*, Redvers Opie, trans, New York: Oxford University Press.
- Sharkie, R. (2003). Knowledge creation and its place in the development of sustainable competitive advantage, *Journal of Knowledge Management*, 7(1).
- Slater, R. (2009). Dekada Wal-Marta. Difin, Warszawa.
- Stachowicz- Stanusch, A. (2007). Potęga wartości. Jak zbudować nieśmiertelną firmę, HELION.
- Śmigielka, G., (2011). Corporate Culture in Developing Retailers; Sustainable Competitive Advantage, In: Borowiecki R. & JAKI A. (ed,) *Global and Regional Challenges of the 21st Century Economy Studies from Economics and Management*, Foundation of the Cracow University of Economics, Cracow.
- Śmigielka, G. (2012). Kultura organizacyjna w konkurencyjności przedsiębiorstw handlu detalicznego (Organizational Culture in Retailers Competitiveness), *Marketing i Rynek* (3), 2-6.
- Wal-Mart organizational culture, <http://www.zabanga.us/international-marketing/walmart-organizational-culture.html>, Last Updated on Thu, 07 May 2015 | International Marketing
- Wal-Mart Store Mission Statement, Available at <http://retailindustry.about.com/od/retailbestpractices/ig/Company-Mission-Statements/Wal-Mart-Mission-Statement.htm>, Accessed, 3.01.2016.
- Walmart's Organizational Culture, Available at: <http://panmore.com/walmart-organizational-structure-organizational-culture>, Accessed, 3.01. 2016.
- Wieser, F. (1914). *Social Economics*. A. Ford Hinrichs, trans. London: GorgeAllen & Unwin Ltd.
- Winter, S. (1995). Four Rs of profitability: rents, resources, routines an replication. In.: Montgomery, C. (ed.) *Resource Based and Evolutionary Theory of the Firm: Toward a synthesis: Dordrecht and Boston*. Kluwer Academic.
- Wood, J. S. (2005). The development and present state of the theory of entrepreneurship in product and asset markets by Knight, Hayek, Schumpeter, Mises, Kirzner, Shackle, and Lachmann. *Recuperado mayo, 7, 2006*.
- Zollo, M., Winter, S. (1998). From Organizational Routines to Dynamic Capabilities, A Working Paper of the Reginald H. Jones Center, The Wharton School University of Pennsylvania 1998.

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Identification of Linkages between the Competitive Potential and Competitive Position of SMEs Related to their Internationalization Patterns Shortly after the Economic Crisis

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Abstract

We aim to identify internationalization profiles of SMEs for the period immediately following the global economic crisis (years 2010-2013) and characterise them with reference to the firms' competitive potential during the crisis (year 2009), and their competitive position at the end of the analysed period. The study is based on a complementary data set derived from secondary (AMADEUS database) and primary sources of information (computer assisted telephone interviews with top managers) for 553 micro, small and medium firms located in Poland. We conduct a cluster analysis to identify different internationalization profiles of SMEs for the years 2010-2013. In the year of the global economic crisis ambitious investors on average had at their disposal substantially better competitive potential than the remaining two groups. Ambitious exporters were better equipped than cautious internationalizers only in terms of human resources, intangible resources and quality control.

Keywords: internationalization; SME; economic crisis; Poland; competitiveness

JEL codes: F23, F44, L25, M16

INTRODUCTION

Poland is often regarded as a country, which had not been significantly affected by the global economic crisis. In fact, Poland's annual GDP growth in 2009 amounted to 2.63% as

opposed to the average for OECD members of -3.94% (World Bank, 2012). Undoubtedly, the expansion of a nation's exports has positive effects on the growth of the economy as a whole, as well as on individual firms (Cavusgil & Nevin, 1981). Additionally, an extensive network of international operations allows firms to react swiftly to unexpected declines in demand or increases in production factor prices in both domestic and international markets, as it allows to shift sales to customers in more munificent environments or benefit from operational flexibility and move operations to less costly locations (Kogut & Kulatilaka, 1994; Roberts & Tybout, 1997). At the same time, the capacity of the firms to react actively to the challenges brought by the crisis, deeply influences the ability of the whole economy to recover from it. From this perspective changes in internationalization level of companies during economic crisis period is an interesting research area worth further investigation. It is especially important in terms of a country that was performing relatively well in terms of its economic results during the global economic crisis (Poland) and relations of international expansion issue with aspects of firm competitiveness in general. Therefore, the scientific problems undertaken in this paper is the identification of internationalization profiles of Polish SMEs for the period following global economic crisis and their background in terms of the competitive potential possessed by those companies before that period and the competitive position occupied by them at its end.

Macroeconomic data indicate that changes in terms of Polish companies involvement into foreign markets were taking place during the global economic crisis. This evidence pertains to the most advanced form of firm internationalization, i.e. foreign direct investment (FDI): net outflows from Poland in 2009 grew by 21.51%, as compared to a sharp decline of 32.85% for the OECD group. This can reflect a relatively high immunity of Polish firms to the economic downturn and increase in Polish companies' interest in expansion to foreign markets (Gorynia, Nowak, Trąpczyński & Wolniak, 2015b). Still, the export of goods and services from Poland in 2009 decreased by 6.28%, and it was accompanied by a decrease in import of goods and services amounting to 12.38% (as opposed to a decline of respectively 11.40% and 11.76% for the OECD group) (World Bank, 2016).

Adopting a microeconomic perspective towards Polish companies, in particular small and medium enterprises (SMEs), extant studies point to clearly negative effects of the crisis for domestic firms, including *inter alia* the decline of orders, sales, delayed or cancelled payments (Orłowski, Pasternak, Flaht & Szubert, 2010), decline in corporate value and increase in costs (Grądzki & Zakrzewska-Bielawska, 2009; Brojak-Trzaskowska & Porada-Rochoń, 2012). Additionally, the study of Zelek and Maniak (2011) suggest that SMEs most frequently recurred to defensive rather than offensive reactions to the crisis. Furthermore, in the context of Polish SMEs there was evidence of a rather low perceived effectiveness of expansion to new markets (Burlita, Bursiak, Grzesiuk, Lachowska, Maniak, Świergiel & Zelek, 2011). Nevertheless, in the post-crisis time firms can respond to changes in external settings by *inter alia* extending or limiting their international operations, and deepening or shallowing their internationalization level. Thus, the aim of our study is threefold. Firstly, we aim to identify the internationalization profiles of Polish SMEs in terms of their internationalization after the global economic crisis (years 2010-2013). For this purpose we look at the intensity of internationalization in terms of its breadth and depth. Second, our research is to detect whether the most ambitious internationalization behaviour described by the changes

in its depth and breadth can be associated with possessing a superior competitive potential. Third, our investigation is to discover any links between the changes in the depth and breadth of internationalization and competitive position of the firms.

We set out by outlining the conceptual background behind internationalization, firm competitiveness, as well as their mutual relationships. We then use existing literature on the effects of economic crisis on competitiveness and internationalization of firms to formulate hypotheses related to the interplay of firm internationalization and competitiveness under crisis conditions. Subsequently, we present the methodology of our empirical data collection, as well as the findings of the related cluster analysis and the Kruskal-Wallis H test. In the final part of the paper, we discuss the findings and highlight their implications.

LITERATURE REVIEW

Firm Internationalization and Competitiveness

Welch and Luostarinen (1988, p. 36) define firm internationalization as “the process of increasing involvement in international operations”. However, business reality clearly indicates that sometimes firms tend to limit their international commitment. Particularly for firms with less advanced international operations the probability of exiting foreign markets is high (Benito & Welch, 1997). In fact, Benito and Welch (1994) argue that firms learn throughout the process of internationalization, thus adjusting their approach to risk and paying greater attention to subsequent expansion steps. Moreover, since both organizational and environmental complexity rises with the widening of a firm's international operations (Verbeke, Li & Goerzen, 2009), Calof and Beamish (1995) argue that internationalization is related to adapting the firms' operations to international environments, which pertains to their strategy, structure and resources.

One of the key questions in the research on internationalization is whether the increase of its degree is beneficial to firm performance (Verbeke, Li & Goerzen, 2009). Meanwhile, the related academic debate remains inconclusive (Matysiak & Bausch, 2012). It has been argued that the predominant focus on the direct link between internationalization degree and performance is not entirely legitimate, as performance is a derivative of its capabilities, leveraged in international markets (Luo, 2002). Thus, in order to account for the interplay of resources, internationalization, and performance, it appears legitimate to explore the concept of firm competitiveness.

In the presence of numerous determinants of competitiveness, it is relevant to decompose this concept into specific dimensions (Gorynia, Jankowska & Tarka, 2013; Buckley, Pass & Prescott, 1988; Wach, 2014). According to the model of Gorynia (2004; 2005), firm competitiveness can be divided into competitive potential, competitive strategy and competitive position. However, even the deconstruction of the competitiveness concept into competitive potential, competitive strategy and competitive position still does not allow to conduct its measurement, and therefore, all those dimensions need to be operationalized into variables. Due to the aims of this paper our understanding of competitive potential and competitive position are of special importance. In regard to competitive potential, answering to an issue raised in the literature (Collins, 1991; Porter, 1991; Dess, Gupta, Hennart & Hill, 1995; Spanos & Likoukas, 2001; Sheehan & Foss, 2009), the perspective applied in the paper combines competences (Porter, 1985) and resources (Wernerfelt, 1984; 1995; Prahalad & Hamel, 1990; Barney, 1991; 2002; Barney & Clark,

2009) as sources of a company's competitiveness. Such approach has been also suggested in some previous studies referring to firm competitiveness (Dzikowska, 2014).

On the other hand, competitive position can be defined as the result of market evaluation of a firm's offering. It reflects constant rivalry between competitors and since that it has a dynamic character (Porter, 2006). Variables expressing this dimension can be classified into three basic groups: financial results (i.e. profits, rate of return on assets, rate of return on investments etc.), market results (i.e. profits, market shares etc.) and shareholders results (i.e. shareholder total return, economic value added etc.) (Richard, Devinney, Yip & Johnson, 2009). Additionally, the mentioned variables can be expressed as objective measures (nominal values) or subjective ones (evaluations of respondents).

It is easy to notice that the above mentioned competitive dimensions are inter-linked. Competitive positions are results achieved thanks to the competitive potential used during a competition process, conducted according to a scheme set by a company's competitive strategy that takes into account environmental conditions (Dzikowska, 2014; Jankowska, 2011).

The achievement of a given competitive position is determined by the possession or lack of competitive advantage, which pertains to the ability to survive in the middle- and long-run. Competitive advantage results from "a skilful exploitation of existing potential with the use of appropriate competitive instruments" (Gorynia, Jankowska & Tarka, 2013, p. 28).

The Role of Internationalization Depth and Breadth during Economic Crisis

Many international business studies focus on the relationship between widely understood enterprise's internationalization and its performance. However, at it was already mentioned, the results remain inconclusive. While some results indicate that the relationship between the mentioned variables is linear and positive (Vernon, 1971; Grant, 1987) or negative (Collins, 1990), others suggest existance of U-shaped (Qian, 1997; Elango & Pattnaik, 2009), reverted U-shaped (Ramaswamy, 1995; Gomes & Ramaswamy, 1999) or S-shaped (Contractor, Kundu & Hsu, 2003) relationship. In a call to better explain the performance effects of internationalization, it has been argued that further studies should explore the actual substance of internationalization, rather than simple measures like the share of foreign sales (Verbeke, Li & Goerzen, 2009). While most studies still focus on the effect of the share of foreign sales on firm performance (for an overview see Matysiak & Bausch, 2012), there is also empirical evidence that it is FDI that affects economic outcomes in international markets (Fang, Wade, Delios & Beamish, 2012; Luo, 2002). Hence, we argue that the breadth of internationalization should be distinguished from its depth, the former meaning the number and diversity of foreign markets served by the firm, while the latter referring to the advancement of the commitment of resources to foreign markets. In fact, as it has been argued, the influence of internationalization on firm competitiveness is contingent upon its stage of advancement (Trąpczyński & Wrona, 2013), which can be measured both along its depth and breadth.

The ability of firms to sustain a favourable competitive position and even improve financial performance during the period of crisis can be enhanced by the possession of appropriate competitive potential in terms of product, process and organizational innovativeness (Antonioli, Bianchi, Mazzanti, Montresor & Pini, 2011; Köksal & Özgül, 2007). Lee, Beamish, Lee and Park (2009) argue, based on their study of Korean exporters during the Asian crisis that firms with a leading market position were the most internationalized. Meanwhile, this relationship was positively moderated by the possession of above-

average R&D capabilities (Lee *et al.*, 2009). In the same vein, Filippov and Kalotay (2011) argue that foreign operations of firms whose strategic position was strong already before the crisis, were able to grow more quickly throughout the crisis. As far as the depth of internationalization, i.e. the role of FDI in foreign expansion, is concerned, it has been argued that the crisis increases the propensity of firms to raise control of foreign operations through capital ownership (Williams & Martinez, 2012). In fact, foreign operations with a higher investment of the parent firm show higher survival chances (Chung & Beamish, 2005). Another argument for the particular role of internationalization depth during the crisis pertains to the acquisition mode. In fact, research indicates that recession conditions favour high-performing acquisitions as compared to pre- and post-crisis conditions, which can be related to the emerging takeover opportunities (Wan & Yiu, 2009). Given the above, we propose that:

- H1:** Higher competitive potential of SMEs at the outset of the economic crisis is characteristic for firms that increase their internationalization depth rather than breadth thorough the post-crisis period.

The gross financial results of Polish exporters declined from 44.4 billion PLN in the first half of 2008 to 34 billion PLN in the first half of 2009. However, firms specialised in export (whose share of export in total revenues exceeds 70%) managed to increase their results in the same period from 9.2 billion PLN to 12.2 billion PLN (Wołodkiewicz-Donimirski, 2010). Likewise, Amendola, Ferragina, Pittiglio & Reganati (2012) found that Italian exporters from different sectors had higher survival chances, although this relationship was also affected by their liquidity and level of debt. In a similar vein, exporters knowing a variety of host countries and having a network of foreign contacts, were more able to cope with uncertainty related to economic risk, thus achieving higher performance gains (Jansson, Hilmersson & Sandberg, 2010).

In the light of extant research, an extensive network of international operations allows firms to react swiftly to unexpected declines in demand or increases in production factor prices in both domestic and international markets, as it allows to shift sales to customers in more munificent environments or benefit from operational flexibility and move operations to less costly locations (Kogut & Kulatilaka, 1994; Roberts & Tybout, 1997). During the crisis, enhancing internationalization depth in a narrow number of locations may not necessarily be an appropriate solution, since firms seek to limit their investment risk in locations with higher uncertainty (Hryckiewicz & Kowalewski, 2010). In fact, the economic crisis even intensifies the phenomenon of international divestment (Benito & Welch, 1997; Filippov, 2011). Hence, we argue that it is the firms which diversify risks under crisis conditions by extending internationalization breadth more intensively that will enjoy higher performance gains (Figure 1):

- H2:** The improvement of competitive position of SMEs shortly after the economic crisis is more positive for firms that increase their internationalization breadth rather than depth.

The objective of the presented study is the identification of the linkages between the competitive potential and competitive position of SMEs in Poland shortly after the economic crisis with regard to their internationalization patterns. To meet this objective we conducted the in-depth literature studies and then we collected primary data on the topic using computer assisted telephone interviews (CATIs). CATIs were conducted with firms fulfilling particular criteria

presented in the next section and with the use of a questionnaire. The in-depth critical literature studies proceeded and supported the design of the questionnaire. The results of the literature studies were exploited to properly define the research variables and their measures. The initial version of the questionnaire was discussed with the representatives of firms that were to participate in CATIs and later updated according to their comments. It was necessary to test the accuracy of the face validity of the questionnaire and check the understanding and unambiguity of questions. Then the authors conducted the pilot study among 154 firms. This allowed for the preparation of the final version of the questionnaire. The questionnaire referred to the competitiveness of the firms, intensity of their internationalization, diversified external circumstances related to demand, competition and resource conditions the firms had to cope with. Nevertheless in the presented paper the authors report just on the results related to the internationalization intensity and the competitiveness of the firms under study. The dimensions of competitiveness of the firms in the years 2009, 2010, 2011, 2012 and 2013 were evaluated with the use of a 7-point Likert scale, with the range of <-3; 3>, where the response -3 stood for "the company was much worse than competitors", and the 3 meant "the firm has been much better than the competitors" (Chang, Chen & Huang, 2015; de Jong, van Dut, Jindra & Marek, 2015; Fernández-Mesa & Alegre, 2015; Nguyen & Rugman, 2015). The internationalization issue was evaluated with regard to the export intensity and intensity of foreign investment.

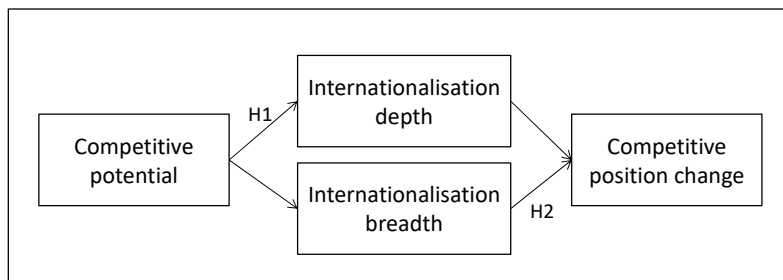


Figure 1. Analytical framework

Source: own study.

MATERIAL AND METHODS

Objective, Methods, Variables and Operationalisation

To analyse primary data we applied the following statistical methods: two-step clustering technique, the post-hoc test descriptive statistics and non-parametric analysis of variance. Firstly, a hierarchical cluster analysis based on Ward's minimum variance technique was carried out in order to identify the most stable number of clusters for the proposed solution. To distinguish the clusters we used two variables – internationalization breadth and internationalization depth (Table 1). The Cornbach's alfa was applied to check the reliability of indicators used to measure the construct of the competitive potential and competitive position (Table 1). Secondly, a K-means cluster analysis was performed to verify the hierarchical cluster analysis. To be more confident about the number of clusters that were to be indicated for the K-Means cluster analysis we applied additional measure suggested by Mojena (1977) also known as the upper tail rule. In order to check the differences

between the variables in relation to the generated clusters, the F-test was applied. Then the post hoc test – Games Howell test was conducted.

Table 1. Operationalisation of variables

Variable	Operationalisation	Internal consistency
Internationalization depth		
FDI intensity (<i>IFDI</i>)	The number of new FDI projects undertaken by a firm diminished by the number of previous FDI projects abandoned by a firm in the period 2010-2013.	
Export intensity (<i>EXPI</i>)	The share of export in total sales of the company in the period 2010-2013.	
Internationalization breadth		
Number of new foreign markets in the portfolio of markets (<i>NFM</i>)	The number of new foreign markets a firm entered in the period 2010-2013 diminished by the number of previous markets a firm left in the period 2010-2013.	
Competitive potential in the crisis period (2009)	13 variables on a 7-point Likert scale, where -3 stands for " <i>much worse than direct competitors</i> ", an 3 stands for " <i>much better than direct competitors</i> ". The set of variables included resources and competences.	
Resources	Material resources, human resources, intangible resources (knowledge, brand, patents, etc.); financial resources.	Cronbach's Alpha (2009) = 0.974
Competences	Logistics (<i>performance and efficiency</i>), production (<i>performance and efficiency</i>), marketing and sales (<i>effectiveness and efficiency</i>), service (<i>effectiveness and efficiency</i>), supplies (<i>performance and efficiency</i>), technology (<i>advancement and efficiency</i>), management of human resources (<i>efficiency and performance</i>), firm management systems (<i>efficiency and effectiveness</i>), quality control (<i>efficiency</i>)	
Competitive position in the crisis period and shortly after (years 2009 and 2013 respectively)		
Subjective measures	5 variables (<i>profitability, sales growth, market share, overall financial condition, customer satisfaction</i>) evaluated with the use of 7-point Likert scale, where -3 stands for " <i>much worse than direct competitors</i> ", 3 stands for " <i>much better than direct competitors</i> "	Cronbach's Alpha (2009) = 0.949 (2013) = 0.940
Objective measures	4 variables related to the financial position of a firm: <i>the profit margin (EBIT/revenues), sales growth (based on company revenues - year to year), return on equity</i>	

Source: own study.

In the next step we characterised the clusters with regard to internationalization and evaluated the competitive potential and position of firms in the identified clusters using

descriptive statistics. Last but not least, we checked whether there are any statistically significant differences among the clusters with regard to their competitive potential and position using the Kruskal-Wallis non-parametric analysis of variance.

Sample and Time Frame

The study is based on data from the AMADEUS database and primary data from computer assisted telephone interviews with top managers of 553 micro, small and medium firms located in Poland and operating in 7 manufacturing industries defined according to NACE Rev. 2 at the level of divisions (Table 2). The delimitation of the sectoral background of sample firms was determined by a prior analysis with the use of linear ordering of objects (Dzikowska, Gorynia & Jankowska, 2015). The latter's aim was to identify industries in which firms did relatively well during the economic crisis (division 10, 17, 25, 32) in Poland and those that had difficulties with returning to pre-crisis performance (division 14, 15, 24). Subsequently, a ranking of industries was developed. The industries included in our study encompass 44% of firms registered in Poland and operating in the manufacturing sector.

Table 2. Sectoral structure of the sample – number of firms from particular divisions ($n = 553$)

Division	Description of activity	≤ 9 employees	10-49 employees	50-249 employees	Total number
Division 10	manufacture of food products	15	80	147	242
Division 25	manufacture of fabricated metal products, except machinery and equipment	19	89	82	190
Division 17	manufacture of paper and paper products	0	19	30	49
Division 24	manufacture of basic metals	4	8	10	22
Division 32	manufacture of other manufacturing	4	9	8	21
Division 14	manufacture of wearing apparel	0	14	9	23
Division 15	manufacture of leather and related products	1	4	1	6

Source: own study.

Our proprietary electronic database featured complete contact and financial records for a total of 2533 firms representing the 7 selected industries¹. Thereof, 750 firms were contacted in July and August 2015 and 701 completed questionnaires were accepted as reliable data, resulting in an effective response rate of 25%. Among those 701 companies, there are 553 micro, small and medium entities, thereafter called SMEs for the purpose of this study. The majority of SMEs represent division 10 (242 entities) and division 25 (190 entities) which are industries that

¹ That is the number of entities in the database without records related to firms that participated in the pilot study that was conducted by the authors in 2014.

coped relatively well with the crisis. The criteria used to identify the SMEs was the number of employees in 2009 indicated by respondents in questionnaires.

The timeframe of the study embraces the period 2009-2013. The year 2009 is recognised as the crisis period, while the years 2010-2013 represent the post-crisis time. The first symptoms of the global economic crisis in Poland were visible in the second half of 2008, hence the year 2009 was defined as the period of the crisis. The growth of GDP in 2009 was 1.79%, down from 5.13% in 2008. In 2010, GDP growth recovered to the level of 3.88% (World Bank, 2015).

RESULTS AND DISCUSSION

Identification of the most Ambitious Internationalizers – Cluster Analysis

First, the authors used a hierarchical clustering which created a hierarchy of clusters. The applied algorithms for hierarchical clustering were agglomerative. The obtained dendrogram allowed to determine Euclidean distances between the analysed units. To determine the appropriate number of clusters the authors examined the fusion curve and it suggested that there are 3 clusters of firms differ in terms of their internationalization breadth and depth. The suggestion was supported by the upper tail rule. According to the rule, we have selected the first number of groups that satisfied the Mojena's equation which in our case amounted to 3. The three clusters embraced 492, 29 and 32 firms respectively. The accuracy of delimitation of three clusters resonates with the results of the analysis of variance presented in Table 3, statistically significant differences among the identified clusters are easily visible. The variables were normalised to assure their comparability.

The highest evaluation of IFDI is characteristic for cluster 3 (MN = 3.625). The EXPI in cluster 3 (MN = 0.303) is higher than in cluster 1 (MN = 0.133), but lower than in cluster 2 (MN = 0.446). It means that firms in cluster 3 are the most involved in FDI, being at the same time characterised by a lower export intensity. Firms in cluster 2 are practically not involved in FDI as the mean value for IFDI is 0.000, but they report strong development of their market portfolio (MN = 3.483), which means the breadth of their internationalization is the largest. The same firms are the most involved in exporting (EXPI) (MN = 0.446). The lowest evaluation of the EXPI (MN = 0.133) and IFDI (MN = 0.004) variables is characteristic for cluster 1. Looking at the data in Table 4 we can conclude that the most ambitious internationalizers – firms involved the most in the highest degree of internationalization depth belong to cluster 3. However, to obtain a more detailed and meaningful view of internationalization profiles of the identified clusters, it is useful to analyse a number of indicators.

The results of the analysis of variance (Table 3) show that the entities in the clusters differ in a statistically significant way with regard to the breadth and depth of internationalization, but we still don't know which of the specific clusters differ. To check it we ran the multiple comparisons, post hoc test using the Games Howell test. There are differences between the pair of clusters 1, 2 and 3 in terms of the EXPI, differences between the following pairs of clusters – cluster 1 and cluster 3; cluster 2 and cluster 3 in terms of IFDI, and last but not least differences between the following pairs of clusters: cluster 1 and cluster 2; cluster 2 and cluster 3 in terms of NFM.

Table 3. Analysis of variance

Variables	Between Clusters	df	Within Clusters	df ²	F Test	Significance level
Export intensity (EXPI)	3.3834	2	22.9027	550	40.625	0.000
Foreign outward investment intensity (IFDI)	395.3291	2	17.4919	550	6215.201	0.000
Number of new foreign markets in the portfolio of markets (NFM)	327.5687	2	171.8237	550	524.266	0.000

Source: own study.

Table 4. Mean values for cluster variables (normalised) (n = 553)

Variables	Cluster 1	Cluster 2	Cluster 3
EXPI	0.133	0.446	0.303
IFDI	0.004	0.000	3.625
NFM	0.024	3.483	0.188
Number of firms	492	29	32

Source: own study.

Characteristics of the most Ambitious Internationalizers – Cluster Profiles

Looking at the shares of export in total value of sales, they were the highest in cluster 2 (Table 5). In each of the three identified clusters, the intensity of export grew throughout the analysed period. However, the strongest growth of that indicator was observed in the second cluster (over 6 percentage points).

Additionally, it is visible that cluster 2 is composed of firms that serve the biggest number of foreign markets which confirms that their internationalization breadth is the largest (Table 6). Simultaneously, when we compare the change in the number of foreign markets that the firms entered and the number of foreign markets the firms left in all respective years of the post-crisis period, the net result is positive and the most satisfactory in the case of cluster 2. Accordingly, these firms were the most engaged in extending the breadth of their internationalization. On the other hand, the same difference in cluster 1 is negative in 2010 and 2013, which means that de-internationalization occurred and affected the breadth of internationalization. Cluster 1 encompasses companies that indicated the lowest number of foreign markets served.

The most diversified set of foreign markets is visible for cluster 2 (Table 7). This reinforces the earlier remark about the focus of firms in cluster 2 on extending internationalization breadth rather than depth. The role of Central and Eastern Europe, Western Europe, USA and Africa did not change in the post-crisis period, on the whole. The percentage of indication for particular regions in the case of firms from cluster 3 is stable and similar for the crisis and post-crisis period, with the exception of Asia, where in 2009 its level of indication was 12.50% and in the post-crisis period it reached the level of 15.63%.

² The number 550 results from subtracting the number of clusters on the number of survey units for which complete data existed or 553-3 = 550.

Table 5. Share of import in total purchases and share of export in total sales during the post-crisis period (n = 553)

Category		2010		2011		2012		2013	
		MN	SD	MN	SD	MN	SD	MN	SD
Share of export in total sales (%)	Cluster 1	12.92	19.83	13.35	20.36	13.40	20.26	13.52	20.58
	Cluster 2	42.28	24.40	42.28	25.89	46.28	24.46	47.52	23.65
	Cluster 3	28.75	20.15	30.50	21.88	30.72	22.46	31.25	23.37

Source: own study.

Table 6. The number of foreign markets served, left and entered by the company during the post crisis period (n = 553)

Category		2010		2011		2012		2013	
		MN	SD	MN	SD	MN	SD	MN	SD
The number of foreign markets served by the company (<i>incl. export markets</i>)	Cluster 1	2.42	5.09	2.41	5.07	2.45	5.10	2.45	5.10
	Cluster 2	7.76	5.00	8.83	4.53	9.83	5.29	10.55	5.59
	Cluster 3	4.59	4.11	4.72	4.12	4.66	4.17	4.72	4.19
The number of foreign markets the firm left (<i>incl. export markets</i>)	Cluster 1	0.02	0.16	0.04	0.27	0.02	0.15	0.03	0.17
	Cluster 2	0.03	0.18	0.17	0.91	0.03	0.18	0.03	0.18
	Cluster 3	0.00	0.00	0.00	0.00	0.09	0.29	0.00	0.00
The number of new foreign markets the firm entered (<i>incl. export markets</i>)	Cluster 1	0.02	0.15	0.03	0.19	0.05	0.29	0.02	0.14
	Cluster 2	0.69	0.88	1.28	1.11	1.03	1.71	0.76	1.07
	Cluster 3	0.06	0.24	0.13	0.33	0.03	0.17	0.06	0.35

Source: own study.

As far as FDI operations are concerned, it is visible that Cluster 3 is characterised by firms strongly involved in FDI (Table 8). In the crisis year more than 80% of firms in cluster 3 reported new FDI projects and the involvement of the companies in FDI has grown since that year. It could suggest that they exploited the crisis to increase the depth of their internationalization. Bearing in mind that their portfolio of markets was not that much developed as in the case of cluster 2, we can suppose that they trade off breadth for depth by switching from mere exporting to FDI, rather than diversifying their geographic portfolios. The highest mean values for IFDI (Table 4) is in a way confirmed by the fact that more than 96% of those businesses reported undertaking new FDI projects and just around 3% indicated dismantling their foreign investments. Thus, they can be referred to as ambitious investors.

Cluster 2 embraces firms that are involved the most significantly in exporting since the EXPI indicator reached the highest value. No firm from that cluster reported any new FDI projects in the crisis year 2009 and in the post-crisis period of 2010-2013 (Table 8). There are no firms involved in withdrawing from FDI activities. However, they expanded abroad by entering new foreign markets (Table 5). The mean values for the number of new foreign markets is the highest in the case of cluster 2 and the set of foreign markets served by the firms from cluster 2 is diversified the most (Table 6). Hence, they can be called ambitious exporters.

Cluster 1 are firms undertaking export and trying to win new foreign markets, but their intensity of export is still the lowest within the whole sample of firms. Accordingly, we call them cautious internationalizers. It should be noted at this juncture that they constitute the majority of our total sample.

Table 7. Percentage of firms doing business in particular locations in the post crisis period (n = 553)

Region	Cluster	2010	2011	2012	2013
Central and Eastern Europe	Cluster 1	32.59	32.79	32.65	32.38
	Cluster 2	93.10	93.10	93.10	93.10
	Cluster 3	93.75	93.75	93.75	93.75
Western Europe	Cluster 1	25.66	25.66	25.92	26.07
	Cluster 2	82.76	82.76	86.21	86.21
	Cluster 3	46.88	46.88	46.88	46.88
USA	Cluster 1	2.65	2.65	2.86	2.65
	Cluster 2	24.14	20.69	27.59	34.48
	Cluster 3	6.25	6.25	6.25	6.25
Asia	Cluster 1	5.30	5.50	5.51	5.50
	Cluster 2	37.93	51.72	51.72	51.72
	Cluster 3	15.63	15.63	15.63	15.63
Africa	Cluster 1	2.65	2.65	2.65	2.65
	Cluster 2	3.45	3.45	3.45	6.90
	Cluster 3	9.38	9.38	9.38	9.38

Source: own study.

Table 8. Undertaking or abandonment of FDI in the post-crisis period – percentages of indications (n = 553)

Category		2010	2011	2012	2013
Undertaking of new FDI	Cluster 1	0.41	0.00	0.20	0.41
	Cluster 2	0.00	0.00	0.00	0.00
	Cluster 3	93.75	96.88	96.88	96.88
Abandonment of FDI	Cluster 1	0.00	0.20	0.00	0.41
	Cluster 2	0.00	0.00	0.00	0.00
	Cluster 3	9.38	6.25	3.13	3.13

Source: own study.

Competitive Potential of Ambitious Investors, Ambitious Exporters and Cautious Internationalizers in the Crisis

A closer look at the elements of the competitive potential of firms within particular clusters allows us to state that the highest values were reported among ambitious investors (cluster 3, Table 9). Firms the most involved in FDI possessed the best competitive potential in the crisis year 2009. In the case of ambitious exporters and cautious internationalizers, a higher assessment for a larger number of aspects is visible for the cluster of cautious internationalizers. This provides additional rationale for the term cautious. In fact, they were better equipped than the ambitious exporters during the crisis, but still expanded very carefully (Tables 4, 5 and 6).

In order to verify whether the differences in the competitive potential of firms representing particular clusters are statistically significant, we used the Kruskal-Wallis test. The results presented in Table 9 include critical values and significance levels in relation to the elements of competitive potential where clear differences were observed in the distribution of the answers related to the evaluation of its particular elements. A comparison between the H-values and the critical value in the statistical table of the chi-

square distribution for $k-1 = 3-1 = 2$ degrees of freedom and $p = 0.05$, which equals 5.991, showed that the calculated values of the H statistics were above the critical range ($H > 5.991$). Therefore, the differences in the competitive potential of ambitious investors, ambitious exporters, and cautious internationalizers are statistically significant.

Table 9. Competitive potential of firms in 2009 – during the crisis (n = 553)

Aspects of competitive potential	Cluster	MN	SD	Kruskal-Wallis test	Level of significance
Material resources (<i>available machines, assets and infrastructure</i>)	Cluster 1	0.41	0.87	H = 29.97	p = .0000
	Cluster 2	0.41	0.93		
	Cluster 3	1.47	1.09		
Human resources	Cluster 1	0.46	0.79	H = 30.81	p = .0000
	Cluster 2	0.48	0.72		
	Cluster 3	1.47	1.09		
Intangible resources (<i>knowledge, brand, patents, etc.</i>)	Cluster 1	0.45	0.86	H = 33.87	p = .0000
	Cluster 2	0.52	0.93		
	Cluster 3	1.50	1.00		
Financial Resources	Cluster 1	0.39	0.93	H = 30.85	p = .0000
	Cluster 2	0.10	0.92		
	Cluster 3	1.47	1.09		
Logistics (<i>efficiency and effectiveness</i>)	Cluster 1	0.48	0.77	H = 28.52	p = .0000
	Cluster 2	0.31	0.53		
	Cluster 3	1.31	0.92		
Production (<i>efficiency and effectiveness</i>)	Cluster 1	0.73	0.99	H = 14.35	p = .0008
	Cluster 2	0.34	0.88		
	Cluster 3	1.38	1.29		
Marketing and sales (<i>effectiveness and efficiency</i>)	Cluster 1	0.35	1.28	H = 11.47	p = .0032
	Cluster 2	0.17	1.12		
	Cluster 3	1.25	1.62		
Service (<i>efficiency and effectiveness</i>)	Cluster 1	0.17	1.13	H = 13.13	p = .0014
	Cluster 2	0.07	0.98		
	Cluster 3	1.19	1.65		
Supply (<i>efficiency and effectiveness</i>)	Cluster 1	0.73	0.97	H = 17.43	p = .0002
	Cluster 2	0.28	0.69		
	Cluster 3	1.38	1.29		
Technology (<i>advancement and performance</i>)	Cluster 1	0.42	0.89	H = 29.52	p = .0000
	Cluster 2	0.34	0.71		
	Cluster 3	1.47	1.09		
HR management (<i>efficiency and effectiveness</i>)	Cluster 1	0.48	0.80	H = 29.15	p = .0000
	Cluster 2	0.52	0.81		
	Cluster 3	1.47	1.09		
Company management systems (<i>efficiency and effectiveness</i>)	Cluster 1	0.35	1.27	H = 11.08	p = .0039
	Cluster 2	0.24	1.13		
	Cluster 3	1.25	1.62		
Quality control (<i>efficiency</i>)	Cluster 1	0.15	1.12	H = 10.40	p = .0055
	Cluster 2	0.31	0.99		
	Cluster 3	1.03	1.65		

Source: own study.

The Competitive Position of Ambitious Investors, Ambitious Exporters and Cautious Internationalizers – Contrasting the Crisis and Post-crisis Period

The changes in the intensity of internationalization, which can be considered as one of the reactions to crisis, can have an impact on the competitive position of firms. Interestingly, the mean values for subjective indicators of performance (Table 10) are generally the lowest for the ambitious exporters (cluster 2) in the crisis period (year 2009), with the exception of client satisfaction. It could mean that firms tried to keep their clients even at the expense of their profitability (MN = -0.07). Being exporters very much focused on EU markets (Table 7), whose situation at that time was difficult, and coping with the consequences of the depreciation of the Polish currency (PLN), which are negative in case of firms using imported goods in production (Table 5), they clearly perceived their position as the worst within the whole sample. However, the evaluation of competitive position for 2013 compared with the results from 2009 reveals that ambitious exporters improved their performance to the highest extent during the post-crisis period (Table 10).

Table 10. Competitive position according to subjective indicators contrasting the crisis and post-crisis period (n = 553)

Dimensions of competitive position	Cluster	2009		2013		Change 2013-2009	Kruskal-Wallis test	Level of significance
		MN	SD	MN	SD			
Profitability	Cluster 1	0.32	1.40	0.63	1.39	0.31	H = 14.07	p = .0009
	Cluster 2	-0.07	1.39	0.72	1.23	0.79		
	Cluster 3	1.25	1.50	1.59	1.30	0.34		
Sales growth	Cluster 1	0.43	1.43	0.65	1.38	0.22	H = 13.65	p = .0011
	Cluster 2	0.10	1.40	0.72	1.23	0.62		
	Cluster 3	1.25	1.62	1.59	1.30	0.34		
Market share	Cluster 1	0.33	1.38	0.63	1.40	0,30	H = 13.65	p = .0011
	Cluster 2	0.10	1.42	0.72	1.23	0.62		
	Cluster 3	1.31	1.51	1.59	1.30	0.28		
Overall financial condition	Cluster 1	0.46	1.45	0.61	1.44	0.15	H = 9.65	p = .0080
	Cluster 2	0.10	1.32	0.66	1.18	0.55		
	Cluster 3	1.13	1.65	1.44	1.48	0.31		
Client satisfaction	Cluster 1	0.75	0.77	0.76	0.76	0.02	H = 24.29	p = .0000
	Cluster 2	0.79	0.71	0.86	0.68	0.07		
	Cluster 3	1.63	0.99	1.63	0.99	0.00		

Source: own study.

To check if the differences in the competitive position of firms from particular clusters measured with subjective indicators are statistically significant, we used the Kruskal-Wallis test. The results, also presented in Table 10, include the critical values and significance levels in relation to the indicators of competitive position, where clear differences were observed in the distribution of the answers related to the evaluation of its particular dimensions. A comparison between the H values and the critical value in the statistical table of the chi-square distribution for $k-1 = 3-1 = 2$ degrees of freedom and $p = 0.05$, which equals 5.991, demonstrates that the calculated values of the H-statistics are above the critical range

($H > 5.991$). Thus, the differences in the competitive position of firms measured with subjective indicators representing our identified clusters are statistically significant.

The evaluation of objective measures of competitive position for particular clusters are presented in Table 11. The measures are based on the financial results reported by the firms and available in the AMADEUS database. In the crisis period, the sales growth was the highest in the case of cautious internationalizers, and the worst in the case of ambitious exporters. To calculate the sales growth in 2009, we used data from 2009 and 2008. As 2008 was marked by recession particularly in Western Europe, which constitutes the main export area of the firms representing the ambitious exporters, this finding is not surprising. Cautious internationalizers depended much less on foreign markets, thus they were able to achieve relatively higher sales growth. The highest profit margin can be observed for ambitious investors in the crisis year 2009 in Poland. Ambitious exporters scored the best result in terms of return on equity in 2009. It was the group of firms that managed to improve its sale growth and profit margin the most – when we compare the results from 2013 and 2009. However, these findings for objective indicators are not statistically significant at $p = 0.05$.

Table 11. Competitive position according to objective indicators contrasting the crisis and post-crisis period

Dimensions of competitive position	Cluster	2009		2013		Change 2013 vs 2009	Kruskal-Wallis test	Level of significance
		MN	SD	MN	SD			
Sales growth	Cluster 1	0.96	10.43	0.02	0.48	-0.93	H = 4.84	p = .0888
	Cluster 2	0.00	0.24	0.09	0.19	0.09		
	Cluster 3	0.06	0.28	0.00	0.26	-0.06		
Profit margin	Cluster 1	0.03	0.96	-0.05	1.59	-0.08	H = 4.42	p = .1095
	Cluster 2	0.03	0.08	0.05	0.07	0.02		
	Cluster 3	0.06	0.07	-0.07	0.70	-0.13		
Return on equity	Cluster 1	0.15	1.19	-0.21	9.35	-0.37	H = 1.51	p = .4698
	Cluster 2	0.31	0.71	0.18	0.19	-0.13		
	Cluster 3	0.15	0.31	0.18	0.22	0.03		

Source: own calculations based on data from the AMADEUS database.

CONCLUSIONS

Our study corroborates the findings of earlier research on the internationalization of Polish firms that they are still at an early stage of evolution of their international operations (Burlita *et al.*, 2011; Gorynia, Nowak, Trąpczyński & Wolniak, 2015b). In fact, we identified three groups of firms characterised by different profiles of their international strategy, as expressed by the breadth and depth of internationalization. Clearly, firms belonging to cluster 1 (cautious internationalizers) are still limited both in terms of the breadth and depth of their internationalization. They constitute the vast majority of our sample, which is indicative of overall trends in the actual population of Polish SMEs doing business abroad. Conversely, firms involved in broader and deeper internationalization, i.e. ambitious exporters and ambitious investors, respectively, are far less numerous, pointing to the still limited scale of this phenomenon.

In addition to this more descriptive contribution, our findings bear several normative implications related to reactions to crisis and their consequences. In fact, the identified firm clusters differ significantly in terms of changes in depth and breadth of their internationalization, as well as the initial competitive potential and the changes in their competitive position during the crisis. Our cluster analysis provides support for the hypothesis that better competitive potential of SMEs at the outset of the economic crisis is characteristic for firms that increase rather their internationalization depth than breadth through the post-crisis period (Hypothesis 1). In fact, we find that firms which are the most dynamically engaging in FDI activities during the period of crisis and thereafter, are the ones best equipped with different resources and capabilities, which resonates with existing theoretical concepts of FDI. Second, we argued earlier in the paper that bigger improvement of competitive position of SMEs shortly after the economic crisis is more positive for firms that increase rather their internationalization breadth than depth (Hypothesis 2). Our empirical evidence provides support for this assertion. In fact, it is the ambitious exporters, focusing more on internationalization breadth than depth, that managed to enhance their financial and non-financial performance most visibly, although in absolute terms their performance was on average the lowest among our sample firms. In particular, given the fact the crisis affected the key export markets of Polish firms, it seems legitimate to argue based on the present findings that the strategy of diversifying international markets during the economic crisis and recovery can be a mean of improving performance and reducing excessive dependence on fluctuations in key markets. Overall, the findings contribute to the discussion whether reactive or proactive steps are more effective in sustaining the crisis period. Contrary to some prior studies pointing to a lesser perceived role of expansion as a means of withstanding the crisis (Lachowska, 2011; Orłowski *et al.*, 2010; Zelek & Maniak, 2011), our study provides some arguments to the debate about the effectiveness of proactive measures in crisis times.

Interestingly, we find that decisions related to enhancing or limiting a firm's internationalization breadth and depth are not necessarily linked to their resources and capabilities, or their performance outcomes, as the cautious internationalizers turned out to excel in certain specific dimensions. This reinforces the notion that internationalization decisions are complex in nature and highly affected by managerial values (Wrona & Trąpczyński, 2012). Thus policy support should be particularly oriented towards supplying information about foreign markets and fostering firms in an optimal allocation of their resources (Gorynia, Nowak, Trąpczyński & Wolniak, 2015a).

The study is burdened with several limitations. The reliance on predominantly interview-based measures may provide a biased account on the evaluations of resources and performance. Applying the cluster analysis the authors are aware of its limitations. Bearing in mind the strengths and weaknesses of this method of exploration of data, the authors purposefully combined the hierarchical and non-hierarchical cluster analysis. Moreover, while our cluster analysis allowed identifying the internationalization profiles of SMEs as a reaction to crisis, how it was affected by the possession of capabilities, and how it affected firm performance, the choice of our research methods only provides an initial exploratory look at the data. We are aware that our study does not provide a full understanding of causality in the studied relationships. Further studies should recur to econometric modelling to investigate moderating effects of internationalization depth

and breadth on the relationships between firm resources and strategy on performance, in order to seize the effect of internationalization in a more direct manner. To profile the clusters we used the Kruskal-Wallis test which provides a correct in terms of methodology, but rather not a very detailed and in-depth picture of the phenomenon. To obtain more valuable results the authors plan to apply more advanced methods in the future, such as discriminant analysis or decision trees. Furthermore, the nature of the sources of competitive advantage of firms should be explored in more detail in different geographic contexts, as it is the contexts in which the resources are deployed that their value can be assessed. Accordingly, a more nuanced analysis with consideration of the geographic patterns of expansion should be undertaken by future studies.

REFERENCES

- Amendola, A., Ferragina, A., Pittiglio, R., & Reganati, F. (2012). *New Aspects of Multinational Firms Activities in the Context of Global Financial Crisis: Experience of Italy*. 7th International Scientific Conference "Business and Management 2012", May 10-11, 2012, Vilnius: Vilnius Gediminas Technical University.
- Antonoli, D., Bianchi, A., Mazzanti, M., Montresor, S., & Pini, P. (2011). Economic Crisis, Innovation Strategies and Firm Performance. Evidence from Italian-Firm Level Data. *Quaderno*, 2, 1-38.
- Barney, J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J.B. (2002). *Gaining and sustaining competitive advantage*. 2nd ed. New Jersey: Prentice-Hall.
- Barney, J.B., & Clark, D.N. (2009). *Resource-based theory. Creating and sustaining competitive advantage*. Oxford: Oxford University Press.
- Benito, G.R.G., & Welch, L.S. (1994). Foreign Market Servicing: Beyond Choice of Entry Mode. *Journal of International Marketing*, 2(2), 7-27.
- Benito, G.R.G., & Welch, L.S. (1997). De-internationalization. *Management International Review*, 37(2), 7-25.
- Brojak-Trzaskowska, M., & Porada-Rochoń, M. (2012). Zakres i struktura działalności innowacyjnej badanych przedsiębiorstw województwa zachodniopomorskiego w okresie kryzysu gospodarczego. *Współczesne Zarządzanie*, 1, 55-66.
- Buckley, P.J., Pass, C.L., & Prescott, K. (1988). Measures of International Competitiveness: A Critical Survey. *Journal of Marketing Management*, 4(2), 175-200.
- Burlita, A., Bursiak, L., Grzesiuk, A., Lachowska, A., Maniak, G., Świergiel, E., & Zelek, A. (2011). *Przetwórci dekonstrukcji. Przedsiębiorstwa i gospodarstwa domowe wobec kryzysu*. Szczecin: Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu w Szczecinie.
- Calof, J., & Beamish, P.W. (1995). Adapting to Foreign Markets. Explaining Internationalization. *International Business Review*, 4(2), 115-131.
- Cavusgil, S.T., & Nevin, J.R. (1981). Internal determinants of export marketing behavior: An empirical investigation. *Journal of Marketing Research*, 18(1), 114-119.
- Chang, K.-H., Chen, Y.-R., & Huang, H.-F. (2015). Information technology and partnership dynamic capabilities in international subcontracting relationships. *International Business Review*, 24(2), 276-286.
- Chung, C.C., & Beamish, P.W. (2005). Investment mode strategy and expatriate strategy during times of economic crisis. *Journal of International Management*, 11(3), 331-355.
- Collins, J.M. (1990). A market performance comparison of U.S. firms active in domestic, developed and developing countries. *Journal of International Business Studies*, 21(2), 271-287.

- Collins, D.J. (1991). A Resource-based analysis of global competition: the case of the bearings industry. *Strategic Management Journal*, 12(S1), 49-68.
- Contractor, F.J., Kundu, S.K., & Hsu, C.C. (2003). A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34(1), 5-18.
- de Jong, G., van Dut, V., Jindra, B., & Marek, P. (2015). Does country context distance determine subsidiary decision-making autonomy? Theory and evidence from European transition economies. *International Business Review*, 24(5), 874-889.
- Dess, G.D., Gupta, A., Hennart, J.-F., & Hill, W.L. (1995). Conducting and integrating strategy research at the international, corporate, and business levels: Issues and directions. *Journal of Management*, 21(3), 357-393.
- Dzikowska, M. (2014). Importance of relocations for competitive position of an enterprise: a perspective of located in Poland companies from the clothing and automotive industries. *Argumenta Oeconomica*, 32(1), 141-176.
- Dzikowska, M., Gorynia, M., & Jankowska, B. (2015). Globalny kryzys gospodarczy – próba pomiaru efektów dla poszczególnych krajów. *Ekonomista*, 6, 733-759.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: A study of Indian firms. *Journal of International Business Studies*, 38(4), 541-555.
- Fang, Y., Wade, M., Delios, A., & Beamish, P.W. (2012). An Exploration of Multinational Enterprise Knowledge Resources and Foreign Subsidiary Performance. *Journal of World Business*, 48(1), 30-38.
- Fernández-Mesa, A., & Alegre, J. (2015). Entrepreneurial orientation and export intensity: Examining the interplay of organizational learning and innovation. *International Business Review*, 24(1), 148-156.
- Filippov, S. (2011). *Russia's Emerging Multinational Companies Amidst The Global Economic Crisis*. Proceedings of the 37th EIBA Annual Conference, ASE, Bucharest, 1-16.
- Filippov, S., & Kalotay, K. (2011). Global crisis and activities of multinational enterprises in new EU member states. *International Journal of Emerging Markets*, 6(4), 304-328.
- Gomes, L., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*, 30(1), 173-188.
- Gorynia, M. (2004). Competitiveness of Polish Firms and the European Union Enlargement. *Competitiveness Review*, 14(1-2), 1-11.
- Gorynia, M. (2005). Competitiveness of Firms from Ziemia Lubuska and Poland's Accession to the European Union. *Journal for East European Management Studies*, 10(3), 195-217.
- Gorynia, M., Jankowska, B., & Tarka, P. (2013). Basic Concepts of Company Competitiveness. In M. Gorynia & B. Jankowska (Eds.), *The Influence of Poland's Accession to the Euro Zone on the International Competitiveness and Internationalisation of Polish Companies* (pp. 17-39). Warszawa: Difin.
- Gorynia, M., Nowak, J., Trąpczyński, P., & Wolniak, R. (2015a). Government Support Measures for Outward FDI: An Emerging Economy's Perspective. *Argumenta Oeconomica*, 1(34), 229-258.
- Gorynia, M., Nowak, J., Trąpczyński, P., & Wolniak, R. (2015b). Outward FDI of Polish firms: The role of motives, entry modes and location factors. *Journal for East European Management Studies*, 20(3), 328-359.
- Grant, R.M. (1987). Multinationality and performance among British manufacturing companies. *Journal of International Business Studies*, 18(3), 79-89.
- Grądzki, R., & Zakrzewska-Bielawska, A. (2009). Przyczyny i objawy kryzysu w polskich przedsiębiorstwach. In J. Bieliński & R. Płoska (Eds.), *Przedsiębiorstwo w warunkach kryzysu* (pp. 11-22). Gdańsk: Fundacja Rozwoju Uniwersytetu Gdańskiego.

- Hryckiewicz, A., & Kowalewski, O. (2010). Economic determinates, financial crisis and entry modes of foreign banks into emerging markets. *Emerging Markets Review*, 11, 205-228.
- Jankowska, B. (2011). Implications of Coopetition for International Competitiveness and Internationalization of Firms: Perspective of SME and Large Companies. *International Journal of Business and Management Studies*, 1, 49-58.
- Jansson, H., Hilmersson, M., & Sandberg, S. (2010). *The Impact of the Great Global Recession on the International Competitiveness of SMEs from Southern Sweden*. 33 Annual Meeting of SNEE (Swedish Network for European Studies in Economics and Business): European Integration in Swedish Economic Research, Mölle.
- Kogut, B., & Kulatilaka, N. (2001). Capabilities as real options. *Organization Science*, 12(6), 744-758.
- Köksal, M.H., & Özgül, E. (2007). The relationship between marketing strategies and performance in an economic crisis. *Marketing Intelligence & Planning*, 25(4), 326-342.
- Lachowska, A. (2011). Zachowania przedsiębiorstw w okresie dekonstrukcji. In A. Burlita, L. Bursiak, A. Grzesiuk, A. Lachowska, G. Maniak, E. Świergiel & A. Zelek (Eds.), *Przetworzyć dekonstrukcję. Przedsiębiorstwa i gospodarstwa domowe wobec kryzysu* (pp. 108-131). Szczecin: Wydawnictwo Naukowe Zachodniopomorskiej Szkoły Biznesu w Szczecinie.
- Lee, S.-H., Beamish, P.W., Lee, H.-U., & Park, J.-H. (2009). Strategic choice during economic crisis: Domestic market position, organizational capabilities and export flexibility. *Journal of World Business*, 44, 1-15.
- Luo, Y. (2002). Capability Exploitation and Building in a Foreign Market: Implications for Multinational Enterprises. *Organization Science*, 13(1), 48-63.
- Matysiak, L., & Bausch, A. (2012). Antecedents of MNE Performance: Blinded by the Obvious in 35 Years of Literature. *Multinational Business Review*, 20(2), 178-211.
- Mojena, R. (1977). Hierarchical grouping methods and stopping rules: an evaluation. *The Computer Journal*, 20(4), 359-363.
- Nguyen, Q.T.K., & Rugman, A.M. (2015). Multinational subsidiary sales and performance in South East Asia. *International Business Review*, 24(1), 115-123.
- Orłowski, W., Pasternak, R., Flaht, K., & Szubert, D. (2010). *Procesy inwestycyjne i strategie przedsiębiorstw w czasach kryzysu*. Warszawa: Polska Agencja Rozwoju Przedsiębiorczości.
- Porter, M.E. (1985). *Competitive Advantage*. New York: The Free Press.
- Porter, M.E. (1991). Towards a Dynamic Theory of Strategy. *Strategic Management Journal*, 12(S2), 95-117.
- Porter, M.E. (2006). *Strategia konkurencji. Metody analizy sektorów i konkurentów*. Warszawa: Wydawnictwo MT Biznes.
- Prahalad, C.K., & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review*, 68(3), 79-91.
- Qian, G. (1997). Assessing product-market diversification of U.S. firms. *Management International Review*, 37(2), 127-150.
- Ramaswamy, K. (1995). Multinationality, configuration, and performance: A study of MNEs in the US drug and pharmaceutical sector. *Journal of International Management*, 1(2), 231-253.
- Richard, P.J., Devinney, T.M., Yip, G.S., & Johnson, G. (2009). Measuring Organizational Performance as a Dependent Variable: Towards Methodological Best Practice. *Journal of Management*, 35(3), 718-804.
- Roberts, M., & Tybout, J. (1997). The decision to export in Colombia: an empirical model of entry with sunk costs. *American Economic Review*, 87(4), 545-564.

- Sheehan, N.T., & Foss, N.J. (2009). Exploring the Roots of Porter's Activity-based View. *Journal of Strategy and Management*, 2(3), 240-260.
- Spanos, Y.E., & Lioukas, S. (2001). An examination into the causal logic of rent generation: Contrasting Porter's competitive strategy framework and the resource-based perspective. *Strategic Management Journal*, 22(10), 907-934.
- Trąpczyński, P., & Wrona, T. (2013). From Going International to Being International – Strategies for International Competitiveness. *Poznan University of Economics Review*, 13(1), 89-114.
- Verbeke, A., Li, L., & Goerzen, A. (2009). Toward More Effective Research on the Multinationality-Performance Relationship. *Management International Review*, 49, 149-162.
- Vernon, R. (1971). *Sovereignty at bay*. New York: Basic Books.
- Wach, K. (2014). The Theoretical Modelling of the Firm-Level International Competitiveness in Business Studies. In D. Kiendl-Wendner & K. Wach (Eds.), *International Competitiveness in Visegrad Countries: Macro and Micro Perspectives* (pp. 101-124). Graz: Fachhochschule Joanneum.
- Wan, W.P., & Yiu, D.W. (2009). From Crisis to Opportunity: Environmental Jolt, Corporate Acquisitions, and Firm Performance. *Strategic Management Journal*, 30, 791-801.
- Welch, L.S., & Luostarinen, R. (1988). Internationalization. Evolution of a Concept. *Journal of General Management*, 14(2), 34-55.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180.
- Wernerfelt, B. (1995). The resource-based view of the firm: Ten years after. *Strategic Management Journal*, 16(3), 171-174.
- Williams, C., & Martinez, C.A. (2012). Government Effectiveness, the Global Financial Crisis, and Multinational, Enterprise Internationalization. *Journal of International Marketing*, 20(3), 65-78.
- Wołodkiewicz-Donimirski, Z. (2010). Kondycja finansowa eksporterów. In G. Gołębiowski & A. Zygierewicz (red.), *Kryzys finansowy a handel zagraniczny* (pp. 35-56). Warszawa: Wydawnictwo Sejmowe.
- World Bank (2012; 2015; 2016). *Development Indicators and Global Development Finance*. Retrieved on December 30, 2015 from <http://databank.worldbank.org/data/home.aspx>
- Wrona, T., & Trąpczyński, P. (2012). Re-explaining international entry modes – interaction and moderating effects on entry modes of pharmaceutical companies into transition economies. *European Management Journal*, 40(4), 295-315.
- Zełek, A., & Maniak, G. (2011). Polskie MSP wobec dekonjunkury gospodarczej 2007-2010 - studium przedsiębiorstw Pomorza Zachodniego. In A. Zakrzewska-Bielawska (Ed.), *Wyzwania rozwojowe małych i średnich przedsiębiorstw. Innowacje, technologie, kryzys* (pp. 270-284). Warszawa: Difin.

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Digital Entrepreneurship: Sustainability-related Opportunities and Risks

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Abstract

Advanced digital technologies are fundamentally changing the way we live, work and communicate. As a result of this development, the digital economy and digital entrepreneurship were established, which are increasingly reflected in all sectors of the economy as an important factor supporting the innovation and competitiveness of enterprises. Current development trends indicate the need to modernise the industrial base, taking into account sustainable development principles. Although there are many possibilities for synergies between sustainable development and trends related to the information society, the discussion on the economic and social prospects of ICT development often takes place in isolation from the requirements of sustainable development. The objective of this article is to provide an analysis of the relationship between the concept of sustainable development and digital entrepreneurship, and an indication of both the opportunities as well as the challenges associated with the use of digital businesses, considering the requirements of sustainable development. ICT should be seen not only as a necessity, but also as an opportunity for sustainable development. Therefore, it is important to continue exploration and interdisciplinary studies to develop new models for understanding and minimising the risks and effects associated with the use of ICT.

Keywords: sustainable development; digital entrepreneurship; Information and Communications Technologies; E-business; green IT

JEL codes: L86, M15, Q01

INTRODUCTION

The development of new technologies and the Internet is of crucial importance for the development of society and the economy, affecting consumers and the virtualisation of

their lives, as well as the innovation performance of enterprises. One of the seven pillars presented by the European Commission's Europe 2020 Strategy (European Commission, 2010b) is the Digital Agenda for Europe (European Commission, 2010a). The key goal of the Agenda is to support economic growth, smart growth, as well as inclusive growth, by achieving sustainable economic and social benefits from a digital single market based on the improved use of the potential of Information and Communications Technologies (ICT) (European Commission, 2016a). Information and Communication Technologies encompass a broad spectrum of technologies, ranging from information technology, telecommunications, broadcast media, all types of processing and transmission of sound and image, and ending with network control and monitoring.

Advanced digital technologies are fundamentally changing the way we live, work and communicate. These technologies, recognised as ground-breaking innovation, have a large influence on transformation processes and are among the most important factors for innovation and growth. As a result of this development, the digital economy was established (European Commission, 2016b), which is increasingly reflected in all sectors of the economy. According to the US Census Bureau (Mesenbourg, 2001), the digital economy has three primary components: supporting infrastructure, electronic business processes (how business is conducted), and electronic commerce transactions (online sale of goods and services). A synonym for the digital economy is also the concept of the Internet economy, which, according to the OECD, is defined as a common virtual marketplace where consumers and businesses can benefit from good quality products and services, and providers can sell and distribute their products more efficiently (OECD, 2013, pp. 6-7).

Current development trends indicate the need for modernising the industrial base, taking into account sustainable development principles. The increasing pace of environmental and technological changes, along with broadly defined information technology and globalisation, impacts significantly on all organisations, including businesses (Urbaniec, 2016). The relationship between ICT and sustainable development is very complex and still not well recognised. Taking into account the objectives of sustainable development, existing research can only be seen as an attempt to assess this issue because of the uncertainty of the effects associated with the possibilities and use of ICT in business.

This article aims to provide an analysis of the relationship between the concept of sustainable development and digital entrepreneurship, and an indication of both the opportunities as well as challenges associated with the use of digital technologies and services, considering the requirements of sustainable development. On this basis it will be possible to answer the question of what risks and opportunities are connected with digital developments in companies that undertake sustainability-oriented activities? Methods of analysis and criticism of literature, as well as the analysis of existing data based on secondary documents were used in this research.

THE ROLE AND IMPORTANCE OF DIGITAL ENTREPRENEURSHIP

The development of entrepreneurship depends, to a large extent, on the development of the economy or political system that shapes the conditions for starting and running a business (Wach, 2016). In the era of intense development of the Internet-based economy, companies are increasingly strengthening their competitive position through innovative actions in the field of the digital economy. Starting from the 1990s, one of the

priorities of the development of enterprises to conduct business through digital networks (including executing purchase and sale transactions of its products), led to the dissemination of the Internet or digital business (Romanowska, 2010, p. 12).

According to the definition of the European Commission, developed under the “Digital Entrepreneurship Monitor” initiative, digital entrepreneurship “embraces all new ventures and the transformation of existing businesses that drive economic and/or social value by creating and using novel digital technologies” (European Commission, 2013b, p. 4). Digital enterprises are characterised by the high intensity of use of new digital technologies (in particular social media, big data, mobile solutions and cloud computing) to improve economic activity, create new business models, improve business intelligence, and the commitment of customers and stakeholders. They create jobs and growth opportunities for the future (European Commission, 2016e).

Reinforcement of competitiveness, entrepreneurship and innovation by exploiting the potential of digital technologies was also emphasised in the Entrepreneurship 2020 Action Plan (European Commission, 2013a), developed by the European Commission. The key activities of the digital economy in Europe concern: digital entrepreneurship, the smart use of ICT for SMEs, ICT standardisation, e-Skills as well as e-Invoicing (European Commission, 2016b).

Digital technologies play a strategic role in supporting entrepreneurship and the transformation of all types of businesses in Europe, as is clear from the strategy for promoting digital entrepreneurship in the EU (European Commission, 2016c). On this basis, the European Commission runs studies on digital entrepreneurship development by the “Digital Entrepreneurship Monitor” (European Commission, 2016d), initiated in 2013. The monitoring of digital entrepreneurship conducted can determine how this market is developing in Europe, and in which direction it should head in order to promote knowledge on the current state and evolution of digital entrepreneurship in Europe.

Digital entrepreneurship is based chiefly on technological innovation, improving forms of communication and speeding up information exchange. An important role in creating and implementing solutions to support digital entrepreneurship development is played by consumers (C), business (B) and government (G) as market participants (Ministry of Administration and Digitization, 2012). Business models based on interactions between different actors arise from different motives and activities, and play a key role in stimulating the development of entrepreneurship and the creation of added value, or increasing the efficiency of well-known goods and services manufacturing processes.

The term digital or Internet entrepreneurship is closely linked to the concept of electronic business or e-business, which generally means a business model based on broadly defined ICT solutions (Nojszewski, 2006), especially in Internet applications. In the literature, the term e-business combines concepts such as: e-commerce, e-economy, e-society, e-government, as well as e-banking and e-learning. It must be stressed that e-business is a broader concept than e-commerce and narrower than e-economy (Glinkowska, 2011, p. 32).

In general, e-business comprises all business processes executed electronically. Electronic business does not only refer to the electronic transactions executed, but also applies to all processes leading to such a transaction. The concept of electronic business includes, e.g. the exchange of information between producers, distributors and consumers of products and services, concluding contracts, transfer of documents, teleconferencing, acquisition of new contacts, search for information. Therefore, electronic business

can play a role in any use of information technology (Szulc, Kobylański, 2014, p. 10, 29), ranging from writing texts in a text editor to performing simple calculations using a spreadsheet, through to processing a document on the computer that was received by fax (Akkermans, 2001). E-business is a combination of creating economic value and ICT.

DIGITAL ENTREPRENEURSHIP WITHIN THE CONTEXT OF SUSTAINABILITY

Current development trends indicate the need to modernise the industrial base, taking into account principles of sustainable development (Adamkiewicz-Drwiłło, Kruk, 2010). The increasing pace of technological changes due to information technology and globalisation has a significant impact on all organisations, including businesses (Cyfert, Bełz, Wawrzynek, 2014). In the literature, there are different concepts and research methods on ICT within the context of sustainable development (i.e. ICT4S), which oscillate around two areas¹:

- Sustainability in ICT, i.e. producing information and communication technologies in accordance with the principles of sustainable development,
- Sustainability by ICT, i.e. the use of information and communication technologies in order to encourage the implementation of sustainable practices in society as a whole.

The key element of both areas is the inclusion of sustainable development as a key criterion for optimising system design – alongside traditional criteria such as quality, cost and speed (Szulc, Kobylański, 2014, p. 20). It should be noted, however, that ICT are not intended (from the nature of things) to achieve ecological progress or regression. Their application is comprehensive and includes many opportunities to support sustainable development, ranging from intelligent networks to remote tools.

The emergence of digital technologies and transformation towards sustainable development has a significant impact on changes in the global economy. Both these areas require not only a change in thinking about the nature of goods and services, but also create new opportunities for transforming companies (e.g. virtual firm, Internet firm) and markets, e.g. B2B (business-to-business), G2B (government-to-business), B2C (business-to-consumer or business-to-client), C2C (Consumer-to-consumer), B2E (Business-to-employee), G2C (Government-to-citizen). The relationship between ICT and sustainable development is very complex and still not well recognised. Current research does not provide a clear answer as to whether these technologies can support efforts towards a more efficient and sustainable economy, or contribute to an increase in resource use and emissions? Considering the aims and objectives of sustainable development, existing research can only be seen as an attempt to assess this issue because of the uncertainty of the effects associated with the possibilities and application of ICT in business.

According to Devoteam Consulting, issues pertaining to sustainable development in the context of ICT can be analysed from two perspectives – as “Green for IT” and “IT for Green”² (see Table 1).

¹ These areas are the subject of many international conferences, e.g. “*The international conferences ICT4S – ICT for Sustainability*” (<http://ict4s.org>), as well as the conference series titled “*International Conference on Informatics for Environmental Protection*”, e.g. “The 29th International Conference on Informatics for Environmental Protection”, <http://www.enviroinfo2015.org> (15.10.2016).

² The terms Information Technology (IT) and Information and Communications Technologies (ICT) are often used interchangeably. However, the key difference is that IT is one of the elements of ICT. The ICTs include all

Table 1. Sustainable development activities related to ICT

“Green for IT”	“IT for Green”
how to reduce the impact of IT on the environment	how IT can contribute to sustainable development
Commit the organisation to a sustainable development approach: <ul style="list-style-type: none"> - Carbon Strategy - Green IT strategy - Organise a sustainable development centre - Environmental reporting 	Create new economic and ecological opportunities: <ul style="list-style-type: none"> - Eco-innovation - Eco-design - Optimise the logistics chain - Intelligent buildings
Reducing the impact of technology on the environment: <ul style="list-style-type: none"> - Optimising IS architecture - Energy performance - Responsible purchasing - Management of electronic waste 	Changing our way of working and becoming a responsible business: <ul style="list-style-type: none"> - Distance working - Dematerialisation - Tele-working

Source: own adaptation based on: Devoteam Consulting (2012, p. 6).

Both of these perspectives penetrate one another, which results from the fact that ICTs are used in almost all social and economic business areas and develop dynamically, where new products and applications take over the market at lightning speed. ICTs accelerate contacts on new improvements, and computer-aided manufacturing methods reduce production cycles. Although these technologies are in fact considered “green”, some of the components or models of these technologies are more environmentally friendly than others.

In addition, ICT can and should support the conservation of resources, e.g. through smart systems like IT-based product planning, which can reduce the consumption of energy and other raw materials to a minimum. Regardless of the purpose of ICTs, natural resources are needed for their production, use and disposal. The term “green IT” often means only the optimisation of energy consumption during the use of information and communication technologies. This type of action is insufficient from the point of view of environment-friendly ICT. For example, often more energy is consumed in the production of telecommunication devices than is required for actually running the equipment. Apart from considerable amounts of metals, such as iron, copper, aluminium, nickel and zinc, ICT devices also apply special and noble metals, which are currently only marginally recovered during recycling. Special metals, such as indium, gallium or tantalum, are very difficult to recover (BMUB, 2015, p. 81). Numerous studies are currently being conducted on how to design ICT efficient in natural resources. Ecological effects and problem areas related to ICT infrastructure (especially to terminal equipment) are the subject of numerous scientific studies, as well as a major goal for many manufacturers of electronic equipment.

communication media (Internet, wireless networks, Bluetooth, fixed telephony, cellular, satellite communications technology, audio and video, radio, TV, etc.), as well as media for recording information (memory sticks, hard drives, CD / DVD, tape, etc.), as well as appliances for processing (PCs, servers, clusters, computer networks, etc.) and capable of processing and data transfer. The Ministry of Transport, Construction and Maritime Economy (2014). *Słownik pojęć SRT, Załącznik nr 1 do Strategii Rozwoju Transportu (STR) do 2020 roku (z perspektywą do 2030 roku)*, Warsaw, p. 26.

The motives for entrepreneurial activities in the field of sustainable development are different (Teucher, 2014). Based on international empirical studies, conducted by Devoteam Consulting in 2012, it can be noted that almost 80% of companies see “green IT” as an important issue for sustainable development (Devoteam Consulting, 2012, pp. 4-5)³. Nearly 71% of respondents see the benefits associated with energy efficiency (i.e. an increase of 20% compared to 2011), and 35% perceive an improvement in company image among clients. Only 12% believe that “green IT” applies exclusively to manufacturers of IT equipment, and 9%, that it is a fashionable excuse to cut costs.

The following are among the key reasons why organisations launch “green IT” programs (Devoteam Consulting, 2012, p. 5):

- Financial: Energy, transport, acquisition/purchasing,
- Performance: Optimised processes, facilitated exchanges,
- Symbolic: Attractive image, internal and external communication, staff motivation,
- Innovation: New service offers, tools for product innovation,
- Environment: CO₂, waste, resource management,
- Conformity: Electronic waste, carbon taxes, increased regulation.

In general, more and more companies are becoming aware of the importance of environmentally friendly IT infrastructure as an opportunity to reduce costs or improve their image. Environmentally friendly behaviour, virtualisation and teleworking are no longer just trendy slogans, but are increasingly becoming the standard in how people work and conduct business.

An important role in the implementation of sustainable development through the responsible transformation of ICT is played by the “Global e-Sustainability Initiative” founded in 2001 (GeSI)⁴. This organisation takes action to achieve integrated sustainable, social and environmental development through ICT in collaboration with leading companies from around the world and organisations of the ICT industry⁵. Issues concerning the relationship between ICT (with particular focus on e-business) and sustainable development are also of interest to the international association “DigitalEurope”⁶, founded in Brussels in 1999. It represents the interests of companies in the digital technology industry, supporting the development of the digital market mainly in Europe, taking into account the principles of environmental protection and sustainable development. The association includes nearly 60 international companies, mostly in technology, as well as 37 national professional organisations (Digital Europe, 2016).

The conclusion is that sustainable development encompasses economic, social and environmental aspects not only in terms of ICT, but also in the context of e-business (Akkermans, 2001, pp. 8-10), and can be analysed in different ways, e.g. consumption of resources and energy, transport, waste and land development. Since

³ The study was conducted among 356 respondents from 22 countries (including 11 European countries), representing 270 organisations of all sizes and industries. Most of the respondents represented the following sectors: telecommunications and IT (33%), the energy sector, industry, transport and health (24%), banking and insurance (11%) and public sector (10%). This study has been conducted in three editions since 2009.

⁴ http://gesi.org/About_ICT_sustainability (15.10.2016).

⁵ In 2015 a report was published entitled “#SMARTer2030”, taking into account the analysis horizon until 2030 and a holistic approach to ICT within the context of sustainable development. See: <http://gesi.org/portfolio/project/82> (15.10.2016).

⁶ <http://www.digitaleurope.org> (15.10.2016).

the digital economy⁷, and thus e-business becoming increasingly important in business, it is worth paying attention to the effects (risks and opportunities) arising from the use of ICT in the context of sustainable development.

SUSTAINABILITY-RELATED RISKS AND OPPORTUNITIES OF DIGITAL ENTREPRENEURSHIP

ICTs are an indispensable basis for connecting business processes around the world. Both locally and globally, multimedia systems, Internet or Intranet, create new opportunities to support pro-ecological attitudes, e.g. through motivation by multimedia teaching programs and the opportunity to purchase organic products (Fichter, 2001, p. 11). ICT enables the development of environmentally-friendly products and optimisation of production processes in terms of protecting raw materials or improving working conditions. In addition, ICT also supports the need for skills development. However, there is still much to be done in this field, because ICTs are insufficiently used, e.g. as an opportunity to reduce travel and transportation.

Given the issues of sustainable development, the following risks and opportunities are associated with e-business (see Table 2).

Table 2. E-business risks and opportunities in the context of sustainability

Dimension	E-business opportunities	E-business risks
Economic	<ul style="list-style-type: none"> - development of new technological potential - product customisation - development of future markets for sustainable products 	<ul style="list-style-type: none"> - dynamism and acceleration of economic structures associated with the risk of generating new processes and further shortening the product life cycle - technical pace slows down process improvement applications
Social	<ul style="list-style-type: none"> - easier achievement of balance between work, family and leisure time - new forms of activity - access to information for all 	<ul style="list-style-type: none"> - violation of the right of privacy and data - information overload - addiction to ICT and the Internet - digital divide
Environmental	<ul style="list-style-type: none"> - optimisation of the value chain (increasing resource productivity through smart design, manufacture, use, logistics and recycling processes) - greater transparency of environmental product properties - dematerialisation of physical products through digitisation - greening of markets and promoting integrated product policy 	<ul style="list-style-type: none"> - shortening the production cycles and usage - increasing the transport carriage of goods - increasing energy consumption (e.g. standby) - additive effects (risk of incomplete substitution media or digital products, and therefore conventional physical products – books, newspapers, letters etc. – are only partially replaced by alternatives digital) - rebound effect

Source: own study based on Fichter (2001), Behrendt, Erdmann (2004).

⁷ For detailed information about politics and the challenges of the digital economy in the EU see: <https://ec.europa.eu/digital-agenda/en/digital-economy> (15.10.2016).

Sustainable development therefore contributes to identify the environmental and social impact of the global economy from many perspectives, and assists corporations in the pursuit of improved standards. As a result, sustainable markets are created in supply and demand, where the exchange of goods and services is based, among others, on increasing added value along the entire product life cycle (economic dimension), improving quality of life (social dimension), dematerialisation and increasing eco-efficiency, as well as improving the protection of resources, preventing pollution, and ensuring the natural balance (environmental dimension). These development trends and conditions indicate that the use of natural resources does not proceed rationally and leads to both positive and negative effects.

The current state of development shows that, although there are many possibilities for synergies between sustainable development and trends related to the information society, the discussion on the economic and social prospects of the development of ICT takes place largely in isolation from the principles of sustainable development.

According to Behrendt and Erdmann (2004, pp. 10-12), the fundamental aspects of supporting organisations in the dialogue process for sustainable development within the context of ICT include: a systematic approach that integrates three dimensions of sustainable development, taking into account long-term strategy in decision-making processes, the willingness of companies to take responsibility and create conditions that support these processes. Moreover, a crucial role for sustainable development is played by technological and product innovation that may relate to product optimisation, functional areas or system solutions where a desirable solution to the problem arises as a result of many alternative products combined with services (Urbaniec, 2015). The prevalence of sustainable products and methods of use, however, depends largely on the behaviour of consumers when they purchase and use the products.

CONCLUSIONS

Sustainable development means simultaneously taking into account economic, ecological and social factors, which requires greater corporate responsibility for the environment. Even more importantly, this approach does not only benefit society, but also those companies which, thanks to the global growth of digital entrepreneurship, gain new business opportunities. In today's dynamic and uncertain economic environment, companies and organisations are trying to find new ways to achieve their strategic objectives and ensure their long-term success. Many create strategic alliances with their suppliers and customers to connect to some resources and opportunities, and thus gain a better market position and create a competitive advantage over their competitors.

Digital technologies are often listed as an important factor supporting the innovation and competitiveness of enterprises. The present digital transformation taking place throughout the global economy, is also the basis for the transformation of European industry (European Commission, 2015). New technologies are an important element in the development of markets, competition, and the shaping of social, political and economic trends. Along with ICT, both companies, as well as in individual markets (e.g. virtual enterprise, e-shopping) are undergoing rapid changes. Based on previous studies of the environmental effects of e-business and ICT, it can be stated that the use of new technologies by enterprises does not automatically solve sustainable development problems, neither from the environmental point of view (e.g. energy consumption), nor in social terms.

Although there are many possibilities for synergies between sustainable development and trends related to the information society, the discussion on the economic and social prospects of ICT development often takes place in isolation of the requirements of sustainable development. So far we can see both examples of their positive impact on the environment, as well as of their harmful effects. ICT should be seen not only as a necessity, but also as an opportunity for sustainable development. Therefore, it is important to continue exploration and interdisciplinary studies to develop new models for understanding and minimising the risks and effects associated with the use of ICT.

REFERENCES

- Adamkiewicz-Drwiłło, H.G., & Kruk, H. (2010). Zrównoważona konkurencyjność przedsiębiorstw – ujęcie teoretyczne. *Studia i Prace Kolegium Zarządzania i Finansów SGH*, 98, 16-24.
- Akkermans, H. (2001). Intelligent e-business: from technology to value. 16(4), 8-10. doi: 10.1109/5254.941352.
- Behrendt, S., & Erdmann, L. (2004). Nachhaltigkeit der Informations- und Kommunikationstechnik. Arbeitsbericht Nr. 2/2004, Berlin: Institut für Zukunftsstudien und Technologiebewertung.
- BMUB (2015). Deutsches Ressourceneffizienzprogramm (ProgRess) II: Fortschrittsbericht 2012-2015 und Fortschreibung 2016-2019. Programm zur nachhaltigen Nutzung und zum Schutz der natürlichen Ressourcen, Version RA 10.08.2015. Berlin: Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit (BMUB).
- Cyfert, S., Bełz, G., & Wawrzynek, Ł. (2014). Wpływ burzliwości otoczenia na efektywność procesów odnowy organizacyjnej. *Organizacja i Kierowanie*, 1A (159), 15-26.
- Devoteam Consulting (2012). Devoteam Green IT Survey: Which technologies for sustainable development? Retrieved on 15 October, 2016 from <http://tcodevelopment.com/files/2012/05/European-Green-IT-Survey-2012.pdf>.
- Digital Europe (2016). National Trade Association Members. Retrieved on 15 October, 2016 from <http://www.digitaleurope.org/AboutUs/NationalTradeAssociationsMembers.aspx>.
- European Commission (2010a). A Digital Agenda for Europe, European Commission, Brussels 2010, COM(2010) 245.
- European Commission (2010b). Europe 2020. A European strategy for smart, sustainable and inclusive growth, Brussels 2010, COM(2010) 2020 final.
- European Commission (2013a). Entrepreneurship 2020 Action Plan: Reigniting the entrepreneurial spirit in Europe, European Commission, Brussels, COM(2012) 795 final.
- European Commission (2013b). Methodology Outline to Identify Framework Conditions for Success, European Commission, Brussels.
- European Commission (2015). Digital Transformation of European Industry and Enterprises, A report of the Strategic Policy Forum on Digital Entrepreneurship. Brussels: European Commission.
- European Commission (2016a). Digital Agenda in the Europe 2020 strategy. Retrieved on 15 February, 2016 from <http://ec.europa.eu/digital-agenda/digital-agenda-europe>
- European Commission (2016b). Digital economy. Retrieved on 15 February, 2016 from http://ec.europa.eu/growth/sectors/digital-economy/index_en.htm
- European Commission (2016c). Digital entrepreneurship. Retrieved on 15 February, 2016 from http://ec.europa.eu/growth/sectors/digital-economy/entrepreneurship/index_en.htm

- European Commission (2016d). Digital Entrepreneurship Monitor. Retrieved on 15 February, 2016 from <https://ec.europa.eu/growth/tools-databases/dem/monitor>.
- European Commission (2016e). Stimulating Digital Entrepreneurship. Retrieved on 15 February, 2016 from <https://ec.europa.eu/growth/tools-databases/dem/monitor/project-description>.
- Fichter, K. (2001). Nachhaltige Innovationsstrategien in der Internetökonomie. *Umweltwirtschaftsforum*, 9(3).
- Glinkowska, B. (2011). Tendencje rozwojowe e-biznesu. *Zeszyty Naukowe Uniwersytetu Szczecińskiego*, 651.
- Mesenbourg, T.L. (2001). U.S. Bureau of the Census, Measuring the Digital Economy. Retrieved on 15 February, 2016 from <https://www.census.gov/content/dam/Census/library/working-papers/2001/econ/umdigital.pdf>.
- Ministry of Administration and Digitization (2012). Modele biznesowe w Internecie. Rozwój przedsiębiorczości internetowej w Polsce a polityka regulacyjna. Warszawa: Ministerstwo Administracji i Cyfryzacji.
- Nojszewski, D. (2006). Przegląd modeli e-biznesowych. *E-mentor*, 5(17).
- OECD (2013). Measuring the Internet Economy: A Contribution to the Research Agenda. OECD Digital Economy Papers, No. 226. Paris: OECD Publishing.
- Romanowska, M. (2010). Przełomy strategiczne w przedsiębiorstwie. *Studia i Prace Kolegium Zarządzania i Finansów SGH*, 98, 7-15.
- Szulc, R., & Kobylański, A. (2014). E-biznes. Olsztyn: Uniwersytet Warmińsko-Mazurski w Olsztynie.
- Teucher, T. (2014). Sustainable Entrepreneurship in Deutschland. Retrieved on 15 February, 2016 from <http://www.forum-csr.net/News/9082/SustainableEntrepreneurshipinDeutschland.html>
- The Ministry of Transport, Construction and Maritime Economy (2014). Słownik pojęć SRT. Załącznik nr 1 do Strategii Rozwoju Transportu (STR) do 2020 roku (z perspektywą do 2030 roku), Warszawa.
- Urbaniec, M. (2015). Towards Sustainable Development through Eco-innovations: Drivers and Barriers in Poland. *Economics & Sociology*, 8(4), 179-190.
- Urbaniec, M. (2016). Measuring and Monitoring Effects of Sustainable Development in the European Union. *European Journal of Sustainable Development*, 5(1), 119-134. doi: 10.14207/ejsd.2016.v5n1p1
- Wach, K. (2016). Innovative Behaviour of High-Tech Internationalized Firms: Survey Results from Poland. *Entrepreneurial Business and Economics Review*, 4(3), 153-165. doi: <http://dx.doi.org/10.15678/EBER.2016.040311>

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Sustainable Business Development Process: The Case of the Food and Beverage Industry

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Abstract

The number of SMEs is growing rapidly, because owning one's own business became a trend in the 21st century. Entrepreneurs seek freedom, money and sustainable development, however the U.S. Small Business Administration indicated that more than 95% of SMEs bankrupt in the first 5 years (SBA, 2010). Consumers started to be more aware of health issues and the obesity problem in the world, therefore government interference is inevitable. The recently implemented health taxes in several EU countries largely affected the competitive environment of the food and beverage industry. Therefore, the goal of this paper is to develop a sustainable business development process oriented to the food and beverage industry. The methodology in this study consisted of business strategy development based on a food and beverage industry's case study; the results were elaborated by referring to the Canvas Business Model concept and the Four Factors to Success concept. The Canvas Business model is oriented to all industries and does not consider the health and natural product trend. The authors' created methodology includes legislative issues and elements of business support in the business development process. The developed business model methodology identifies the importance of legislative issues, use of ingredients, the brand's image and distribution strategies based on early adopters. Moreover, a business support system is included in the strategy, which is not considered by other research on the topic.

Keywords: Business development, competitiveness, food industry, beverage industry, SMEs, health.

JEL codes: M13, M21, L66

INTRODUCTION

The 21st century's beginning was considered to be the age of information, however today we see a shift in technology, people's beliefs and activities. Other world famous economists call today the age of entrepreneurship. The entrepreneurship age has appeared for several reasons. The first reason is that communication speed has reached new heights. The basic economic cycle model consists of 4 parts: expenditure, profit, credit, and efficiency. The discovery of the internet, mobile phones has led to the economic cycle's acceleration. The speed of information and money flow has affected this part dramatically. In addition, the well-known research "Nature of the firm" described enterprises in the industrial age (Coase, 1937). Coase stated that large multinational companies will rise because of productivity and the economies of scale effect. However, today when the cost of communication has dramatically decreased, large enterprises are starting to disappear. Today it is more common to see franchises that share responsibility and money with regular people.

The other reason is the effect of baby boomers. Baby boomers are people who were born in the years 1946-1964, the biggest concern for them is health care and pension plans. Today the world is seeing the plan of the industrial age failing and new concepts are being offered to people to ensure their pensions. Therefore, younger people see the consequences for their parents and have a desire to work for themselves and not for a large company. The idea of finding a company and working for it for life was good in the industrial age. However, today it is not uncommon to find people who have changed their professions ten times already.

Another economist, Paul Zan Pizler, predicts where the economy is going and distinguishes three main industries: wellness, internet and direct distribution. The internet's advantage was already listed before, mainly it provides information and speed of money transfer. Direct distribution has a different term in today's economy, it is called I-comers or intellectual distribution. This concept describes how people can distribute information and build an international business by using multi-level marketing schemes.

Lastly, the wellness sector is receiving a lot of attention, because people's beliefs and needs have changed in the recent decade. Many entrepreneurs see potential in the wellness industry for several reasons. The wellness industry's customer segment has grown exponentially, because many people desire to be healthy and sporty. In addition, the government is amplifying the obesity problem that appeared because of the fast food industry. A study regarding the obesity in the world, affirms that an unhealthy diet is the leading risk of death and disability globally. One of the strategy's proposed interventions is to ensure that healthy foods/beverages are more accessible to purchasers and unhealthy ones less accessible via fiscal policy, namely taxation and subsidies. The study recommends to use food taxes and subsidies between 10 and 15% for maximum success (Niebylski, et al., 2015). Moreover, the development of entrepreneurship and direct distribution has led to a rapid growth of SMEs (Krajnakova, 2015). Entrepreneurs seek freedom, money and sustainable development, however more than 95% of them bankrupt in the first 5 years (Silas Titus, 2003). The fast moving consumer goods (FMCG) industry is one of the fastest growing industries and today it is receiving a lot of attention from the government and consumers. Consumers are seeking healthy food and have started reading labels. The government has started to act more on a global scale and is developing health taxes. Due to these facts, the competitive environment has

changed dramatically in the food and beverage industry. Therefore, the goal of this paper is to develop a sustainable business development process oriented to the food and beverage industry. The methodology in this study consisted of business strategy development based on a food and beverage industry's case study; the results were amplified by referring to secondary material analysis, the Canvas Business model concept and the Four Factors to Success concept.

The authors' developed sustainable development process considers the health trend and legislative issues that are now being implemented in the market. Moreover, the implementation of a business support system can achieve sustainable competitiveness in the long run. By using the authors' methodology in the development process of the food and beverage industry, a sustainable competitive advantage can be achieved. The objectives of the study are to:

- Analyse the health tax's impact on the food and beverage industry's competitiveness environment.
- Determine the business model development process structure and singularities that are a concern for the food and beverage industry.
- Conduct a food and beverage industry's case study by considering the impact of the emerging health taxes.

HEALTH TAX IMPACT ON COMPETITIVE ENVIRONMENT

The competitive environment is changing drastically because people tend to read labels and engage in sport activities more often. Many people are seeing on their parents' example that working long hours and not investing in their health has consequences reaching into old age. The World Health Organization's global statistics on health also identify more money spending in the health sector. The life expectancy rate at age 60 has increased on average by 2 years in the whole world. This also led to an increase in expenditures related to health protection – between 2000 and 2012, globally people spent on average 116% more money on health (WHO, 2014). Therefore, the health sector's market size is growing rapidly.

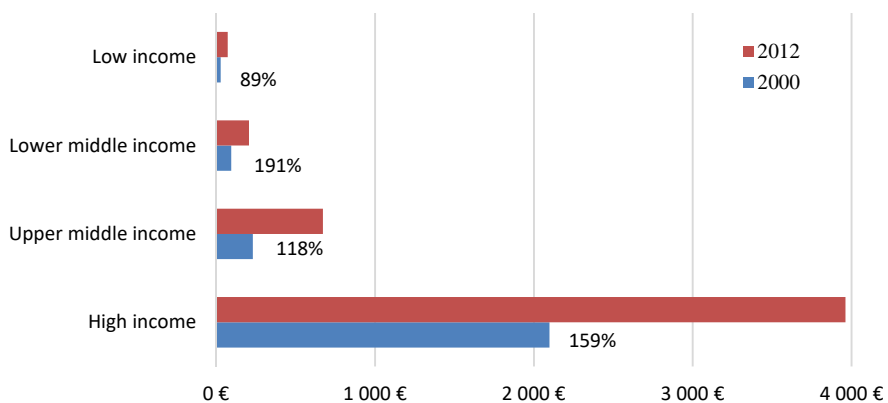


Figure 1. World expenditures on the health sector according to income class, comparison of the 2000-2012 period

Source: World Health report (WHO, 2014)

Moreover, the expenditures according to income class have also changed; new marketing strategies can be based on larger customer segments.

Figure 1 indicates expenditures per income class; as it can be seen every income type tends to spend more money in the health sector with the middle class expenditures growing the most, this is an important fact to consider when developing marketing strategies. Beverage products are usually positioned as premium class, however the newly developing health product segment could also be offered to the middle class.

Eurobarometer's report indicates an increase in activity in non-professional sports. Eurobarometer conducted a survey in 2013 that indicates 48% of people do some form of physical activity at least once a week, while 30% never have any kind of physical activity (Eurobarometer, 2014). Therefore, the consumers' trend towards health has affected expenditures on health, supplements, sports and the food and beverage industry. Today, more and more people try to stay healthier, watch what they eat and try to perform sports regularly. The consumers' trend for health led to a larger supplements' market size. The vitamin and supplement industry is expected to reach an estimated retail value of \$211 billion in 2015, with a potential cumulative average growth rate (CAGR) of 3.0% in the period of 2015-2020. When compared to other fast moving consumer goods (FMCG) industries, consumer health continues to perform very well (Feldman, 2015). It can clearly be seen that there is a growing consumer demand for health and fitness, but does this trend also have an impact on the food and beverage industry? A conducted KPMG report indicated that the health trend is also effecting the food and beverage industry's growth – "while pursuing alternative sales channels and distribution strategies is expected to give revenue a boost, 'healthier' products and those addressing dietary needs will also boost revenue growth" (KPMG, 2013). The health trend is influencing the food and beverage industry's growth. Another important issue is government interference. Today's government has started to act more on a global scale, therefore understanding that the legislative environment of the food and beverage industry is essential. Mainly the European Union legislation will be covered in this study. Legislation concerning the food and beverage industry started forming about forty years ago, when sugar and artificial sweeteners began to be used in the food and beverage industry. Since then, the European Union had formed many regulations related to the food and beverage industry. The main beverage and food industry's legislations are:

- Regulation (EU) No 1130/2011 – approved food additives;
- Regulation (EC) No 1170/2009 – vitamins and minerals;
- Regulation (EC) No 1924/2006 – nutrition and health claims;
- Regulation (EC) No 1334/2008 – flavouring;
- Regulation (EU) No 1169/2011 – information to consumers;
- Directive 2008/100/EC – labelling.

The creation of new food and beverage products is a specific area which requires specialist interference and formula development methods. The government is concerned of the fast food industry that has increased the obesity rate of the world, therefore the regulations are just a small part that affects the beverage and food industry. Another problem is that there is no online ingredient database that shows which ingredients are legal and to what norms. This problem appears due to technology development, new medical research is being conducted daily that discovers new ingredients or analyses well-known ingredi-

ents' functions. The European Union is also regulating the functionality of the ingredient area. This is also related to other legislative issues that describe how consumers should be informed. Regulation (EC) No 1924/2006 Nutrition and health claims made on foods:

- Regulation (EU) No 1169/2011 – The provision of food information to consumers.
- Directive 2005/29/EC – Unfair Commercial Practices Directive.
- Directive 2006/114/EC – Misleading and comparative advertising.
- Commission Regulation (EU) No 330/2010 – Exemption for vertical supply and distribution agreements.

Marketing strategies are necessary for the food and beverage industry, because products can compete with each other. Because of the European Union legislation, it is illegal for enterprises to market the benefits of the products if they are not medically approved. The European Food Safety Authority (EFSA) is the agency of the European Union (EU) that provides independent scientific advice and communicates on existing and emerging risks associated with the food and beverage chain. EFSA is also responsible for official confirmation of ingredients. The marketing concept depends on the country, but mainly without official health claims it is illegal to market the benefits of the drink. The health claims are scientific validations of an ingredient's specific function. Without a scientific claim it is illegal to market the product for its benefits, you can only market what is inside the product and let people make the presumptions themselves. Alternative sponsors and ambassadors may promote the benefits of the product, but it is still important how they conduct the marketing strategy so that it would not be against the law.

The main issue regarding the beverage market is related with consumers' tendency for health and the government concern for obesity. These trends have led to more restrictions in Europe and other countries around the world. The food climate research network analysed how the world is adapting to these consumer changes. They indicated that the government is beginning to operate more on a larger scale than focusing on individuals. Health taxes are one part of government interference. They brought new legislation concerning the beverage and food market, which includes higher taxes for the unhealthy usage of ingredients. One of them is a sugar tax that increased the tax payment if the product has artificial sweeteners or added sugar. "A French tax of 7 cents on all drinks with added sugar or artificial sweeteners led to a 3.3% fall in supermarket sales", (FCRN 2015). The implementation of these taxes has caused discussion, because it is affecting market size, prices and demand. In addition, some people may tend to buy cheaper products that have a lower price, but are not healthy. This situation was analysed by the European Competitiveness and Sustainable Industrial Policy Consortium (ECSIP). The study found that food taxes achieve a reduction in the consumption of the taxed products and in some cases product reformulation aimed at reducing the sugar, salt and fat levels of the product. Another key finding was that product substitution takes place, both through an increase in the consumption of taxed products from cheaper brands and non-taxed or less-taxed product substitutes (ECSIP, 2014). EFSA has also identified and developed rapidly to aid the market in providing healthier consumer goods. Currently the government is implementing various legislations to achieve better health. The unhealthy products may be affected by even more legislation in the future. Therefore, it is essential to consider the health trend and legislative issues in the business development process in individual regions (Ivanová, Koišová, 2014).

BUSINESS DEVELOPMENT STRATEGIES FOR ENTREPRENEURS

Before analysing the business model, it is important to overview what exactly are entrepreneurs and what kind of impact they can have on the economy. Researchers describe differently the entrepreneurship concept, but mainly it can be concluded that entrepreneurs make a large impact on the economy by finding new opportunities and leading innovation (Cooney, 2012). Business expert Peter Drucker described an entrepreneur as someone who actually searches for change, responds to it and exploits change as an opportunity. The trend for owning your own business has led the European Union to interfere and promote the growth. The European Commission's publication of the 'Small Business Act for Europe' (European parliament, 2008) amplifies the SMEs growth and impact on the country's development. Later they developed a concrete plan in 2013 - 'Entrepreneurship 2020 Action Plan' (Adam Mickiewicz University in Poznan Assembly, 2014). The European Union promotes entrepreneurs and funds the training, innovation and universities to promote the entrepreneurship concept and the abilities required of young people. Through this strategy they seek to expand the economy even more. The changing education system and growth of the technology and innovation industries has also made a large impact on the development of the entrepreneurship concept. The internet had changed the speed of information travel, therefore social media helps new ventures develop faster and the consequence of this is a growing economy. The growth of the economy can be seen, however unemployment rates have risen in recent years. This is related more with structural unemployment as a result of a shift of people's skills, and indicates that the education system does not teach the correct skills for today's economy. This is the reason why the European Union promotes the entrepreneurship concept. A statistical analysis was included to further elaborate on this problem. "Based on 57 recent studies of high quality that contain 87 relevant separate analyses, we conclude that entrepreneurs have a very important – but specific – function in the economy. They engender relatively much more employment creation, productivity growth and produce and commercialize high quality innovations. They are more satisfied than employees. More importantly, recent studies show that entrepreneurial firms produce important spill overs that affect regional employment growth rates of all companies in the region in the long run (Mirjam, Versloot, 2007). Therefore, new growth and sustainability of SMEs is essential to economic growth (Kozubiková, 2015; Havierníková, Srovnalíková, 2014).

The next paragraph describes a popular business development methodology. The Business Model Canvas is a strategic management and lean start-up template for developing new or documenting existing business models. It was originally founded by Alexander Osterwalder in 2008. The business model canvas describes essential parts that are necessary for business development. The right side of the template describes the product, while the left side of the template describes the business content (see Fig. 2).

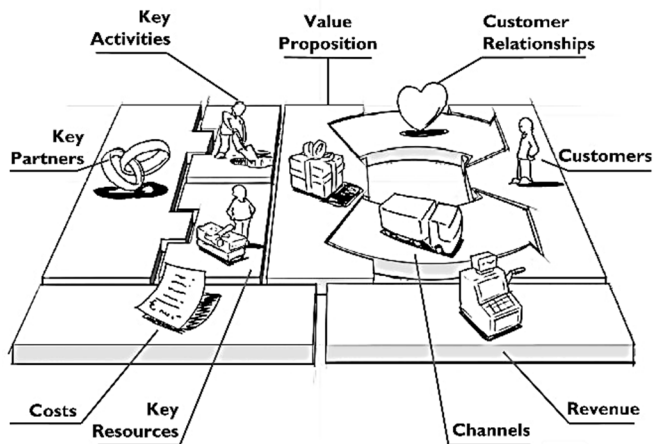


Figure 2. Business Model Canvas illustration

Source: Business model generation (Osterwalder and Pigneur, 2010).

The model firstly describes the value proposition, because it is one of the most crucial parts of business development. It is important to understand what kind of benefits you offer to the consumer and what he can expect from you. Otherwise, if you promote benefits and raise the expectations of the consumer, but do not fulfil them, long-term sustainable competitive advantage cannot be possible. The right part includes the product description and distribution process, while the left part describes the business model concept. Firstly, it is important to determine the target customer segment. The segment depends on the positioning and on the enterprise and value that you offer to them. After determining the customers, it is important to determine how you will build relationships with them. This part mainly consists of the marketing process that describes what kind of activities you should apply in order to build long lasting relationships. Sridevi conducted research on the practice of celebrity endorsements. He wanted to validate the statement that in the past decade celebrity advertisement had been the most prevalent and useful form of advertisement. He conducted a questionnaire with a sample size of 500 consumers. The results of the study proved that celebrity advertisements have a positive effect on the consumers of FMCG (Sridevi, 2014). The distribution channels are also closely related with the customer segment; it is important to choose a channel that will be convenient for the customer. Depending on the value proposition, certain revenue streams can be gathered. It is important to determine exactly from which services or products you will get constant cash flow. The main reason why SMEs bankrupt is that they cannot maintain a constant cash flow and when their income drops for a certain period, they lose all the savings for daily operating costs. The reason is that they spend too much money or they try too much to use the diversification strategy. The left side of the canvas describes the business. The first thing is to determine the key activities that you need to perform in order to provide value for the customers. For this reason, you will need to refer to the key partners segment and key resources.

The resource part describes what kind of ingredient or service you offer your customer, while the partners part describes with whose help you can have the resources or maintain the key activities. This whole part leads up to the cost part. This model is certainly a great tool for new and existing business model development, however the fast moving consumer goods industry has its own singularities that were described in the previous chapter. Therefore, more detail should be added to this model. Research has been conducted on the FMCG market, it amplifies the inability to work on the international market. Michael Porter's five forces analysis offers an overview of business strategy and includes: existing and potential new rival companies, substitutes for the product, buyers, suppliers, and customers. However, this concept is more applicable as an overview of market potential and not for developing business models. Nevertheless, it can be used to adapt the business model to different markets (Oraman, Omer, I.Hakki, 2011).

Wennstrom created another concept that would be useful for business development strategy. In his book, he describes the four factors to success. He wrote that the food and beverage industry needs to consider 4 main aspects to develop a good product (Wennstrom, 2009):

- Need the product. It is important to determine when, who and why your product will be used, otherwise the marketing budget may exceed the sales and failure to launch the new product to the market may await.
- Accept the ingredients? It is important to understand that the product may have new ingredients that may look beneficial for the consumer, however the legislation of the market may cause problems. This is closely related with health claims, and requires scientific proof if you want to promote the benefits of the product.
- Understand the benefits. The ingredients may be effective, however it is important to understand if the consumers understand their benefits and if not how to educate them properly.
- Trust the brand. All these facts have to be evaluated by considering the current brand image status. Some brands may be well known in the market already, however new brands may need specific strategies for success. On the other hand, a bad reputation of the brand may cause even more problems while launching a new product on the market.

However, this research mainly analyses the product part and the promotion aspect, however a deeper adaptation to business process development is needed. The Canvas Business Model analyses the business process, however it does not consider the health trends or the legislative issues. In addition, neither of these methods considers the business support system that is essential for international and long-term success. In the next section, a case study of the food and beverage industry will be conducted to illustrate the new development strategy.

FOOD AND BEVERAGE INDUSTRY'S CASE

The food and beverage industry has been chosen as a case study for several reasons. Firstly, because it is related with the health trend that is widespread today. Consumers have a desire for health and need new products to fulfil their needs. The current market place is filled with cheaper, artificial products that do not fulfil that need. The food industry is shifting from junk food to whole food, therefore old companies will need to change

their products and new companies will need to consider the health taxes and legislation issues. Moreover, in the beverage industry a new category is forming: the functional beverage industry. These beverages can provide additional benefits to the consumer and usually are made from natural ingredients and promote health. The product development and positioning strategy has also shifted quite a lot, e.g. raw materials from natural sources are starting to be used. Customers demand more variety and flavours. Because of this, the manufacturing process has also shifted from artificial preservatives to natural preservation methods like pasteurization, cold aseptic filling (Ashurst & Hargitt, 2009).

A conducted report also amplifies the growing trend: “health and wellness awareness is a trend which has significantly impacted the food and beverage industry in recent years. Not only does the increased focus on health and wellness cause consumers to make replacement choices but it also creates new purchasing occasions through preventative/functional products and meal replacements”, also they projected the growth of the non-alcoholic beverages industry from \$160 billion in 2008 to \$190 billion by 2020, driven by growth in smaller, emerging “better-for-you” brands (Kim, 2008). Lastly, a lot of food and beverage companies have made a significant impact to the economy. The BBC has published a documentary movie about “the food that makes millions”, they reveal that this industry made billions out of a cheap commodity by using marketing strategies. The food and beverage industry involves cheap commodities, however they are being reused every day, therefore sales are not limited geographically, the customer rebuys the product every day, and therefore a constant cash flow can be guaranteed. For example, the Nestle company expanded its manufacturing land in Switzerland by investing 300 million, that led to more job positions and more production (Nestle, 2014). Therefore, the business development process can significantly increase competitive advantage and lead to a growing world economy.

Figure 3 presents a business model adapted to the food and beverage industry. The first step is to describe the business concept. Firstly, for long-term success it is essential to identify key principles that the business will promote. When a company works for the principles that people desire, they tend to attract more and more customers.

Secondly, it is important to determine what kind of benefits the business will offer to the economy. A business needs products or services, in the food and beverage’s case today it must be health, natural resources, variety and additional benefits. A concrete example of this concept is the US brand “Muscle Milk”, which started being distributed about 8 years ago, however it has only just appeared in Europe. The “Muscle Milk” drink promotes rehydration, muscle recovery that does not use preservatives or artificial colouring. Lastly, it is important to have a vision, a long-term goal of what you want to accomplish, otherwise it will be hard to stay on track. Depending on the benefits that you offer, you need to understand and segment your customers. In the beginning, it is essential to determine the early adopters, who will be the innovative ones when you start the distribution of your product. Later it can grow to a niche market. For example, Muscle Milk’s main customers are premium class, professional sportsmen. The demand for healthy drinks grows, however not for everyone as some have a limited budget to buy healthy products. Therefore, when the innovation and technology reaches a more cost effective manufacturing level, the demand will grow even more. When that happens, it is important to have a plan and strategy ready to quickly push the products to all consumers.

SUPPORT SYSTEM	ACTIVITIES	BUSINESS CONCEPT	DISTRIBUTION CHANNELS		
R&D Training Education	Operating Support Development	Principals	Internet Retail Wholesale International market		
PARTNER NETWORK	RESOURCES	Benefits Vision	CUSTOMERS	RELATIONSHIPS	
Suppliers Manufacturers Service providers Credibility	Funding Raw material		Early adopters Niche market Mass segment	Brand image Habit forming Legislation issues	
COST STRUCTURE			CASH FLOW		
Expansion	Support	Operating	Investments	Related industries	Main product line

Figure 3. Food and beverage industry's business development canvas

Source: own elaboration based on (Osterwalder and Pigneur, 2010), (Wennstrom, 2009), (Leschke, 2013)

Putting the product on the shelf will not be enough, therefore relationship building is essential. When promoting the product one must keep in mind two issues. First is the reputation of the brand, is it considered credible in the eyes of the consumer? Moreover, it is important to overview the legislative issues in different markets, e.g. in Europe it is illegal to market a product without health claims, you can only let the consumer make the assumption themselves. You cannot recommend certain doses without scientific proof. In addition, a new unique benefit should be provided for competitive advantage. Then the distribution strategy needs to be made. The wholesale and distribution channels should be overviewed. This part depends on the product type, you may choose someone who is selling to small convenience stores, retail stores or distributing beverages or foods to offices. Secondary retail stores should also be reviewed, tactical places to sell your product should be chosen depending on the early adopters. In the future internet distribution is forecasted to grow, therefore implementation of this distribution channel inside the strategy is essential. Lastly, it is important to select the channels based on the customers' daily routines. People tend to change habits rarely, therefore products which don't require them to change their daily routes would have a higher demand. When the products are selected and the main strategies are planned, it is important to plan the human resources and main activities of the enterprise. You need to plan how you will manufacture and distribute your products. In addition, the business support system has to be implemented. This part is hardly analysed by any studies. The key word here is duplication, it is important to duplicate the business model in every market, therefore the support system is essential.

The resource part is important in the beverage and food industry. Firstly, it is important to mention the capital requirements for the start of the business. Manufacturers may provide only large quantities – that may increase the total costs. At the same time, depending on the distribution channel, large taxes or fees may be paid in order to use the distributor's channels and during this time, it is important to maintain constant marketing flow, if the product will not be sellable, the distributor may cancel the contract. Therefore, not only capital is necessary, but also the assurance of constant cash flow

until the product will be pushed into the market. The next part is the raw materials used in the food or beverages and more attention should be focused towards functional ingredients. Some ingredients may not be known by the consumer, therefore choosing the right ingredients that would appeal to them and wouldn't require informing the consumer about their benefits would be easier to market. However, it may not always be the case, if an enterprise wants to stay unique and maintain a competitive advantage.

Depending on the activities and resources, a partners network needs to be developed. Part of them would be meant for the main activities of development, e.g. renting manufacturing lines and not purchasing ones yourself. In the beginning this could be a wise way to outsource and save costs, however in the long-term expanding your plant is recommended. Moreover, at the beginning the brand may not have credibility, therefore choosing partners just for this reason may also come in handy. The last part is related to the business support system. This area is crucial for the food and beverage industry, without it, sustainable development would not be possible.

The support system consists of three parts. The first part is related with constant development of products, therefore constant investment in research & development sectors should take place. Some functional drinks or food products take years to develop and to overcome all legislative issues, therefore simpler products should be launched first. The second part is related with the training of staff. It is hard to find specialists in the food and beverage industry, because it is a unique market that requires highly scientific knowledge. Therefore, a training system for employees should be implemented inside the enterprise, it is also related with the principles of freedom and self-realisation. If you will treat your employees correctly, they will tend to stay longer at the enterprise. Lastly, it is important to mention the consumer education concept. This area is essential for the growth of functional beverages and whole foods. The consumer may not know some ingredients, therefore informing about benefits is important. Moreover, the recommendations for consumption and daily usage should be also analysed and scientific proof should be provided. This way new habits can be formed that would grow a new market segment for the enterprise. For example, a similar case was done when bottled water, yogurt and corn flakes were presented to consumers.

Cost structure requires planning and analysis of daily costs for the assurance that the product will provide cash flow in the future. It is important to analyse and maintain the daily operating costs so that they will not outgrow the monthly cash flow. The business support part is also important for the system, however it may not provide cash flow, but it would provide sustainable development. Moreover, part of the cash flow should always be put aside for investment, growth and unforeseen expenditures. At first it should amount to 10-20%, however in the future the daily costs should consist of 10-20% and the saved part should amount to 70-80%. Then the business would grow and develop in the future. At first it could be hard to understand how it is possible to fund a business with only 20%, however if you build a system and distribute products, that would provide constant cash flow, it would be possible. The cash flow should come from three places. The first is the main product line, however this area won't make the company wealthy. It will only stop it from bankruptcy. It is important to invest the money in new areas of growth. One of the strategies could be to launch a product for the side industry, e.g. if you distribute food and beverage products for sportsmen you could also sell clothes, smart

watches, apps for sportsmen. Lastly, investment should also be taken into consideration, these investments may be made not in the food and beverage industry, but in another industry that would make the enterprise wealthier. By using this competitiveness methodology in the food and beverage industry, sustainable growth could be achieved.

CONCLUSIONS

The authors' developed methodology for the food and beverage industry offers a strategy for sustainable development. It considers the health trend that is now being a concern in the world. Moreover, the legislation implemented by the European Union changed the competitive environment dramatically, therefore changes need to be made in the development of a business model. Many SMEs are now being established because of the entrepreneurship concept. Government is investing in the education of entrepreneurship, however small investments are being made in the financial education sector. The developed methodology offers to embed a business support system into the current business development model. This support system would help to develop more efficient business processes and qualifications of workers. In addition, the cash flow recommendations to focus on systematic business models can create sustainable development. Other research has been made that offered business models, however only a few of them implemented the business support concept and considered the legislative issues inside the development process. The authors' findings can also be implemented in other fast moving consumer industries, because all these products are reused daily and proper consumer relationship development is essential. The expansion of the business development model to other industries will be analysed in future research. The upcoming industry of 4.0 will also make a huge impact on the future development of the FMCG industry and business development models.

In conclusion, the authors' methodology creates sustainable development strategies for entrepreneurs and ascertains a sustainable business development model for the food industry.

REFERENCES

- Action Plan – Fostering the Entrepreneurial Spirit in the EU, Poland.
Adam Mickiewicz University in Poznan Assembly, 2014. The Entrepreneurship 2020
Ashurst P.R., Hargitt R., Soft Drink and Fruit Juice Problems Solved, Great Abington,
Coase R.H., The Nature of the Firm. *Economica* 4(16), 1937.
Cooney T. M., Entrepreneurship Skills for Growth-Orientated Businesses, Copenhag, Danish Business Authority, 2012.
ECSIP, Food Taxes and Their Impact on Competitiveness in the Agri-Food Sector Final Report, ECSIP consortium, Rotterdam, 2014.
Eurobarometer, 2014. Sport and Physical Activity.
European parliament: The Small Business Act for Europe New Ideas to Boost Smes, Denmark, 2008.
FCRN, Policies and Actions to Shift Eating Patterns : What Works? 2015.
Feldman M., Consumer Health: An End-of-Year Review of 2015 Performance to Advance Market Strategy in 2016 and Beyond, Euromonitor international, 2015.
Havierníková K., Srovnalíková P., The immunity of family business in the conditions of economic crisis. Problems of social and economic development of business. Vol. I. Montreal: Breeze, 2014.

- Ivanová E., Koišová E., Interregional disparities in the Slovak and Czech Republic. Economic & tourism. SGEM conference on political sciences law, finance economics & tourism. Volume IV. Sofia: STEF92 Technology, 2014.
- Kim H., The Evolving Non-Alcoholic Beverage Landscape, First Beverage Group, Los Angeles, 2015.
- Kozubíková, L., Belás, J., Bilan, Y., Bartoš, P. (2015). Personal characteristics of entrepreneurs in the context of perception and management of business risk in the SME segment. *Economics & Sociology*, Vol. 8, No1, pp. 41-54.
- KPMG, Food and Beverage Industry Outlook Survey The Table Is Set for Change, USA, 2013.
- Krajnakova, E., Navikaite, A., Navickas, V. Paradigm Shift of Small and Medium-Sized Enterprises Competitive Advantage to Management of Customer Satisfaction. *Inzinerine Ekonomika-Engineering Economics*. Vol. 26, Issue 3, pp. 327-332, 2015.
- Leschke J., Business Model Mapping: A New Tool to Encourage Entrepreneurial Activity and Accelerate New Venture Creation. *Journal of Marketing Development & Competitiveness*, 7(1), 2013.
- Mirjam C., Versloot P. H., What Is the Value of Entrepreneurship? A Review of Recent Research, Institute for the study of labor, Bonn, 2007.
- Nestle, 2014, Nestlé in Switzerland, Switzerland.
- Niebylski M. L., Kimbree A. R., Duhaney T., Norm R. C., , Healthy Food Subsidies and Unhealthy Food Taxation: A Systematic Review of the Evidence, *Nutrition*, 31(6), 2015.
- Oraman Y., M. Omer I.Hakki I., The Firms' Survival and Competition through Global Expansion: A Case Study from Food Industry in FMCG Sector. *Procedia - Social and Behavioral Sciences*, 24(1), 2011.
- Osterwalder A., Pigneur Y., *Business Model Generation*, John Wiley & Sons, USA, 2010.
- Silas Titus. Key Reasons Why Small Businesses Fail, Accredited Associate. Of The Institute for Independent Business, UK, 2003.
- Sridevi J., Effectiveness of Celebrity Advertisement on Select FMCG – An Empirical Study. *Procedia Economics and Finance*, 11(14), 2014.
- U.S. Small Business Administration, The Small Business Economy: A Report to the President, United States Government Printing office, Washington, 2010.
- Wennstrom P., Four Factors of Success: A Simple Tool to Innovate Healthy Brands, The Centre For Food & Health Studies, London, 2009.
- Woodhead publishing limited 2009.
- World Health organization, World Health Report, Luxembourg, 2014.

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Europeanisation: Its Definition, Research Approaches and Dimensions¹

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Abstract

The paper surveys the extant literature with special emphasis on definitions and dimensions of the studied phenomenon. It presents the standard top-down, bottom-up and circular approaches and distinguishes 12 dimensions of the Europeanization. Five of these dimensions turn out to be Economic (external and internal macroeconomic, mesoeconomic, microeconomic and managerial) and provide the construction framework for the remaining part of the book. Although initiated in the political sciences, since the beginning of 21st century the research into the phenomenon of Europeanisation has been more and more confidently entering the economic sciences. The study is based on a typical literature review using the conventional research methods of deduction, reduction, synthesis and theoretical modelling.

Keywords: Europeanisation, European Union, European integration

JEL codes: F15

INTRODUCTION

Nowadays Europeanisation is a very popular research theme in many scientific fields, mainly in political science and economics or management science, but also in sociology, anthropology, or history. It is useful to identify the context in which the Europeanisation process occurs. Taking into account the assumptions of contextualism, it must be stressed that the interaction context plays a key role in explaining the process [-es] of Europeanisation, as it [they] is [are] formed by a particular context. Hence, an adequate interpretation of the phenomenon of Europeanisation is not possible without taking into account the context in

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which it occurs. There are three main ongoing meta processes in the modern globalised economy understood as a systematic series of actions or a continuous action, operation, or series of changes, namely internationalisation, Europeanisation and globalisation. As they create a complex of three interlinked elements, *ex definitione* they are a kind of triad (Wach, 2014a). All three processes (internationalisation, Europeanisation, globalisation) may have different faces, dimensions, horizons, perspectives and levels.

The main objective of this chapter is to analyse the Europeanisation processes in the wider context and to discuss Europeanisation from the definitional perspective as well as to present current research approaches to Europeanisation and to show its dimensions and effects on everyday life in the European Union from the economic perspective. The study is based on a typical literature review using the conventional research methods of deduction, reduction, synthesis and theoretical modelling.

Defining Europeanisation

In the discourse on the phenomenon of Europeanisation or European economic integration, the taxonomy of the conceptual apparatus is not univocal, its systematics, and sometimes the lack of it, leaves much to be desired, which from the present time perspective is emphasised by K. Holzinger and F. Schimmelfenning (2012, p. 292): “it is astonishing how poor our research and knowledge about the phenomenon is”. A precise determination and sometimes even the delimitation of such related terms as Europeanisation, Europeification, EU-isation, Euroisation, Europeism or European integration itself is of key significance for scientific analysis and research into the Europeanisation process.

Currently, Europeanisation is a trendy and commonly used phrase, however, it may be misunderstood because the term refers to numerous phenomena which are occurring now on the European continent. The research into Europeanisation goes back to the 1970s, although its bloom fell in the last decade of the 20th century and is continued now, which is proven by bibliometric analyses on this². We should agree with K. Dyson’s opinion (2002, p. 3) that in the literature on the subject there is not a scientifically stringent definition of Europeanisation which still remains a relatively “theoretical interest and has produced more questions than answers”.

A. Moravcsik, W. Sandholtz and B. Kohler-Koch are regarded as the main precursors of the Europeanisation concept. Their concepts were established in the European integration theory in the 1990s. The first of them, being a representative of the stream of intergovernmentalism within the regional integration theory, is considered to be the author of the bottom-up, downloading approach explaining the influence of integration processes on individual countries (Moravicsik, 1994). On the other hand, W. Sandholtz’s views in this respect were of adversative character compared to Moravicsik’s views. In his opinion, integration creates new opportunities for domestic entities, resulting in institutional changes and changes in shaping and conducting individual policies. The solution is based on the multi-levelness concept and is identical to the top-down approach (Sandholtz, 1996, pp. 403–429). The third parallel concept, developed by B. Kohler-Koch (1996, pp. 359–380), is based on the idea of the transformation of governance.

² The results of the bibliometric analysis on the circulation of Europeanisation terms in the scientific literature are discussed, among others, in the works (Featherstone, 2003, pp. 5-6; Exadaktylos & Radaelli, 2009, pp. 514-516).

In the author's opinion, not only does integration contribute to a multi-level distribution of the impact but also to the removal of borders between the public and the private sphere, and in consequence of these changes an evolutionary transformation takes place.

When placing the concepts of Europeanisation in a chronological order, we should mention two more figures here. In the mid-1990s R. Ladrech (1999, pp. 69-88) provided one of the first acknowledged definitions of Europeanisation, and C.M. Radaelli (1997; 2000) is regarded as one of the major conceptuologists and propagators of research into Europeanisation, along with figures such as T. Börzel and T. Risse³. He is the author of the now most commonly used definition of Europeanisation from the late 1990s. Their contribution will be discussed in detail in the next parts of this chapter.

After a few years of his own studies and analyses, in 2002 J.P. Olsen asked the question of what Europeanisation exactly is and whether this concept is scientifically useful (Olsen, 2002; 1996). A decade after posing this question for the first time it still remains open, and the literature on that is clearly fragmentary. We can assume that creating the scientific bases of Europeanisation was an answer to the common use of this term, i.e. the methodology of empiricism (of empirical school) was adopted here from management studies. Thus, the concept of Europeanisation in the literature on the subject is defined as "a phenomenon without origin" (Gellner & Smith, 1996, pp. 357-370).

An analysis of scientific studies devoted to that issue allows to adopt a very general definition of Europeanisation, constructed as a real definition. **Europeanisation**, let us call it *ex definitione*, according to K. Dyson (2002, p. 3) is "a process unfolding over time and through complex interactive variables it provides contradictory, divergent and contingent effects". It should be emphasised that this is a very general definition of Europeanisation, even of a generic character, not indicating the dimensions of impact of Europeanisation (the lack of precision is a flaw of this definition). Its generality, however, can be treated as an advantage, because it gives the possibility to apply it according to the needs of almost all scientific disciplines. Similarly, T. Flockhart (2010, p. 788) defines Europeanisation as a dynamic, multi-form process of the diffusion of European thought, procedures and customs in time and space. According to this author, the Europeanisation process has strong historical connotations, especially sociological ones, which was manifested by the reference in the project of the Constitutional Treaty to the origins of the European civilisation, its cultural, religious and humanist heritage of the Roman Empire, Greek Empire or the Enlightenment (European Convention, 2003).

Nowadays, the term Europeanisation more and more often refers to the European Union itself rather than to Europe or the European civilisation, which constitutes a distortion of the etymology of this term. Consequently, some authors postulate to separate Europeanisation and EU-isation, but a great majority of researchers apply those terms interchangeably or, more commonly, only the first term is used. For example, R. Ladrech (1999, p. 71) treats Europeanisation as "an incremental process reorienting the direction and shape of politics to the degree that EC political and economic dynamics become part of the organisational logic of national politics and policy-making". In fact, this is one of the first acknowledged definitions of Europeanisation. Similarly, T. Börzel (1999, p. 574) interprets the phenomenon as "a process by which domestic policy areas become increasingly subject

³ Some of their first works, although based on their earlier studies, are (Börzel & Risse, 2000; Green-Cowles, Caporaso, & Risse 2000).

to European policy-making". S. Bulmer and M. Burch (2001, p. 73) treat Europeanisation very similarly as a set of processes through which political, social and economic dynamics of the European Union display interactions with the logics of national discourse, national identity, domestic political structures and domestic public politicians. This last definition actually combines two definitions, as it uses the bottom-up and the top-down mechanism.

As H. Wallance (2000, pp. 369-382) rightly postulates, in order to avoid an open constraint and ahistorical conceptualisation of the Europeanisation process, we should introduce the term EU-isation for the processes that concern the European Union only⁴. Thus, **EU-isation** concerns the European process related to the institutional dimension of the European Union, both on the community level and on the level of the Member States, manifested mainly in the transfer of institutional and organisational procedures and policies (Flockhart, 2010, p. 791). EU-isation understood in this way is a small but significant section of a much broader Europeanisation process, being, in addition to Americanisation, a particular case of occidentalisation (westernisation). This book adopts the view of S. Bulmer and Ch. Lequesne (2001, p. 10) who prove on the basis of their own analysis of the scientific discourse undertaking the subject of Europeanisation that the term refers now mainly to the study of the impact of the European Union on its Member States, but they emphasise that EU-isation would be a better term here if not for the horrific sound of this neologism. To conclude, in this book Europeanisation will be perceived as the influence of multi-form Europeanisation processes with regard to the European Union, both in the endo- and exogenous dimension, and thus it will be treated as a specific form of Europeanisation.

T. Lawton (1999, pp. 91-112) represents a different approach. Based on the principles of antagonistic analysis, he defines Europeification as the division of power between national governments and the European Union as a supranational body, unlike Europeanisation which he treats as a transfer of sovereignty from the level of the Member States to the community level. His understanding of Europeification is identical to the Europeanisation concept discussed before, based on the model of multi-level governance in the aspect of European integration. The literature on the subject is not univocal here and it is difficult to give the proper meaning of this term.

To sum up, Europeanisation is definitely an ambiguous term, variously perceived and analysed from different points of view. Currently, it is among eagerly undertaken research problems, although it is still poorly structured. This is where the need to attempt to conceptualise and especially operationalise it comes from. In research using deterministic models Europeanisation can be perceived both as a dependent and independent variable, which is undoubtedly directly connected to the perspective of the undertaken research and the research objective itself. In this book, Europeanisation will be chiefly discussed as an explained variable, but it will also be treated as a predictor,

⁴ Humanists rightly postulate the separation of those terms. However, in applied social studies the question is not discussed. The term Europeanisation is in its bloom, which is directly connected to the growing role of the European Union on the international arena, and the term Europeanisation itself is now undergoing the same transformations that the term Americanisation used to undergo. Just like American and Americanisation etymologically refer to the whole continent, or even two – North and South America, in practice the terms are identified with the United States of North America (even among humanists themselves). At present, Europeanisation, and recently even European, more and more often refer to the European Union itself. Therefore, we can be tempted to say that this is an effect of the Darwinian theory of evolutionism according to which the strongest player dominates a given population.

namely an explanatory variable. The above overview of the terms has enabled the deterministic identification of their mutual relationships, which constitutes a basis for the further detailed discussion on economic Europeanisation.

The Main Research Approaches to Europeanisation

Taking into account the philosophical systematics, we can distinguish three main areas of research on Europeanisation, namely ontology, epistemology and methodology. The ontology of Europeanisation deals with studying the structure and character of the Europeanisation process. It provides an answer to the question of what Europeanisation is and what its components are. The epistemology of Europeanisation discusses the method of exploring the Europeanisation process, and in this sense it analyses what the object of the Europeanisation research is, its relations between theory and practice, or what its limits are. Unlike the two mentioned areas, the methodology of Europeanisation is the least developed. It works out the systematic procedures of exploring the Europeanisation process and instruments of improving the research process within that scope.

In the research on the Europeanisation process we can, after R. Holzhaecker and M. Haverland (2006, pp. 1-18), distinguish three waves which in fact constitute three generations of European studies (studies into European integration), the result of which is the formation of a separate, structured theoretical and conceptual framework for Europeanisation as an arising separate research field. We can apply at least three research approaches to the Europeanisation process (Figure 1). The first one is the bottom-up approach, the second one is the top-down approach, whereas the third one is the cycle/circular approach.

BOTTOM-UP APPROACH

The first wave was devoted to the analysis of the European integration process and the institutional development of the European Union, as well as the directions of the evolution of its policy. The research was principally carried out in accordance with the methodology used for international relations, but in that period mainly institutional, legal, economic and politological factors were analysed. The institutional system of the European Union (in fact, of the European Communities) was treated as an exogeneous factor in relation to the Member States. Treating European integration as an exemplification of the regionalisation process in international relations, as B. Nowak and R. Riedel (2010, p. 213) emphasise, was part of this stream.

The democratic approach, initiated in mid-1970s (Haas, 1958; Lindberg et al., 1971), more often defined with reference to Europeanisation as the bottom-up approach, bases on groups of interests and networks of connections which are an instrument by means of which preferences of individual bottom-up groups are considered on the level of the EU, influencing the development of its political structures (Howell, 2004, p. 21). We may assume that the comprehensive theory, being the foundation for this approach, was created by A. Moravcsik, along with a presentation of his liberal intergovernmental approach. The claim that the European Union strengthens national states was his crucial assumption (Moravcsik, 1994). It was, as it seems, one of the most criticised theoretical concepts of European integration, although as a result of the criticism, Moravcsik himself transformed it and completed the model with the missing variables. He perceived European integration from the point of view of R. Coase's theory of transaction costs. He claimed that the European Union is only a

passive negotiation forum for the Member States, which enables them to conclude transactions between each other more effectively by way of a reduction of the transaction costs (Moravcsik, 1993, pp. 507-508). Such an approach is defined as an inductive or gradual approach, meaning that “the causal flow was predominately from state and society of the member states to the regional organization” (Caporaso, 2007, pp. 24-26).

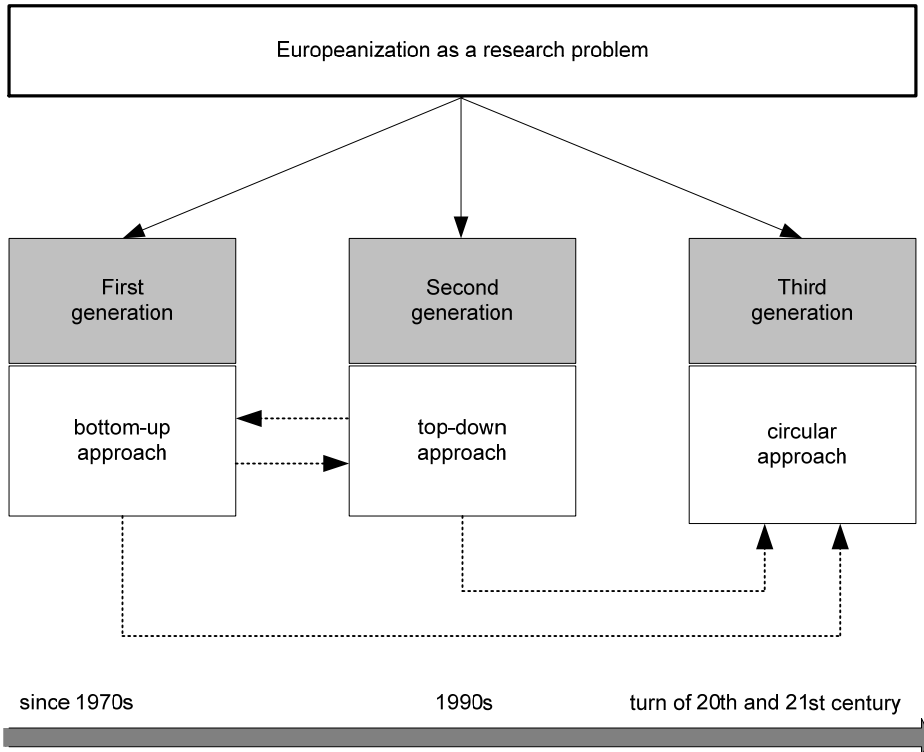


Figure 1. Research approaches to the Europeanisation process from the temporary perspective

Source: own study.

TOP-DOWN APPROACH

The second wave of the research treated Europeanisation as an explanatory factor for the changes occurring at Member State level. Mainly the comparative perspective was used here, based on the scientific methods of comparatistics. In accordance with the assumptions of this stream, the European Union and its institutional system was treated as a separate political system. “A shift of national sovereignty was observed, from a decentralised system in which the major role was played by national executives and ministries influencing the EU within bilateral and multilateral relations”, which was typical for the first stream, towards “a supra- and subnational community which achieved some ability of self-regulation, which was related to the growth and institutionalisation of the decision-making system” (Nowak & Riedel 2010, p. 213).

The centralistic approach, thriving in the 1990s, more often defined in European studies as the top-down approach, is closely connected with the classical perception of

the European integration process, and in this context Europeanisation is a contemporary synonym of European integration (Bulmer & Gamble, 2002, pp. 4-24). It is worth emphasising that an important effect of Europeanisation processes is domestic change in three dimensions, namely in domestic political views (politics), domestic political strategy (policy) and the domestic political system (polity). In this sense, Europeanisation is an independent variable influencing the three mentioned dimensions being dependent variables (Börzel & Risse 2000, pp. 3-5). In this context, K. Dyson and K.H. Goetz (2003) indicate the phenomenon of coercion pressure⁵ that the Member States are subject to. In this stream, Europeanisation is most often defined after T. Risse, M.G. Cowles and J.A. Caporaso (2000, p. 3) as “the emergence and development at the European level of distinct structures of governance, that is, of political, legal and social institutions associated with political problem solving that formalises interactions among the actors, and of policy networks specialising in the creation of authoritative European rules”.

The definition proposed by C.M. Radaelli (2006, p. 58) may be an elaboration of the top-down approach, claiming that: “Europeanisation consists of processes of (a) construction b) diffusion and c) institutionalisation of formal and informal rules, procedures, policy paradigms, styles, ‘ways of doing things’ and shared beliefs and norms which are first defined and consolidated in the making of EU decisions and then incorporated in the logic of domestic discourse, identities, political structures and public policies”, and this is in fact the most frequently cited definition of the Europeanisation process in the literature.

W. Sandholtz (1996, p. 403 and pp. 417-427) had a great impact on the shaping of the top-down approach. According to him, the institutional system of the European Union may influence the Member States in three broadly understood dimensions, namely:

- by making the EU institutions autonomous entities which may use autonomous enforcement mechanisms towards the Member States;
- by creating choices for domestic entities with regard to the selection of allies and arenas of activity, and the EU institutions themselves (most often the European Commission) can be both the initiators and petitioners of the directions of transformations and the political allies;
- by persuading to changes in the domestic policies and institutions which were not established by the Member States before.

W. Sandholtz criticised the bottom-up approach indicating numerous conceptual inconsistencies, while he promoted the top-down approach, at the same time favouring the analysis of the European Union decision-making process in accordance with the theory of policy networks. We should emphasise here that the theoretical bases of the inter-organisational network (the network theory in management studies) are not totally coherent in the case of the European Union either. However, even at the present stage of the development of the European Union we can find numerous analogies to a network organisation, which can be proven by its following attributes (in accordance with the qualities of a network organisation in management)⁶:

⁵ Coercion is a term borrowed from physics where it means the strength of the external magnetic field necessary to demagnetise a ferromagnetic material.

⁶ Qualities of a network organisation cited after (Łobos, 2008, pp. 195-196).

- mutual coordination of operations and the adjustment of operations in the sphere of procedures;
- decisions are taken not only individually but also jointly in the designated area of cooperation;
- repetitive character of exchange and intentions of cooperation comprising a longer time horizon;
- extensive scope of information about the partners of cooperation, accessible to the network entities.

The top-down approach treats European integration as an independent variable in relation to the Europeanisation of the Member States, performing the role of a dependent variable. Integration processes are explicative factors for understanding the changes occurring at national level. The research adopting this approach concerned, using the terminology of statistical methods, as it is defined in the literature of the subject, the goodness of fit – the EU and the domestic one. Thus, the necessity of the occurrence of misfit is implicit to talk about the adjustment to the requirements of the European Union.

CIRCULAR APPROACH

The currently arising third wave in the research on European integration and Europeanisation is the attempt to create a holistic concept, both a description and explication, assuming a mutual link between these processes, and at the same time combining the two prevailing research approaches so far – the bottom-up and the top-down approach. The latest literature on the subject, contrary to the two preceding research waves (which are regarded as the classical approaches to European studies on European integration), separates European integration and Europeanisation, however manifesting far-fetched cause and effect dependencies between them. This burgeoning research approach, although interdisciplinary in its assumptions, is based mainly on the transformations that have taken place in the economic sphere, perhaps in the regulatory (administrative and legal) sphere, which directly or indirectly influences macroeconomic, microeconomic and managerial processes.

R. Holzhaacker and M. Haverland (2006, p. 6), together with their associates, postulate a need to move on to a third generation of research, which they call “a kind of cork-screw rotating continuously”, with top-down and bottom-up processes of interaction between the EU and the national levels of governance. According to T.A. Börzel (2002, p. 193), the Europeanisation process can be simultaneously identified as uploading within the meaning of the development of European Union institutions, and as downloading within the normative European Union regulations. As K.E. Howell (2004, p. 56) observes, the majority of the authors of the bottom-up approach in particular, in their conceptualisations notice the interactivity of both types of Europeanisation. In this context, an interesting concept of three types of the Europeanisation process was proposed by K. Dyson and K.H. Goetz (2003, pp. 14-16). They observed similar mechanisms to the described ones, but in spite of this they developed their own, different systematics. They distinguish two basic approaches, namely the perspective of downloading and the interactive perspective (considering both downloading and uploading). The downloading approach may be discussed narrowly or broadly. In the narrow meaning downloading is of a hierarchical character and should be identified with the top-down

approach discussed before. On the other hand, in a broad sense, downloading is treated as both hierarchical and vertical processes, which, in turn, should be identified with the combined bottom-up and top-down approach, as each time the same downloading mechanism operates here, only the sender is different. A dynamic interaction between individual levels – the European Union one and the domestic one – occurs.

Attention should be paid to the fact that at present horizontal links play a significant role in the process of the Europeanisation of individual Member States. Although the so-called hard instruments of Europeanisation (mainly legislation) are still applied, more and more often the so-called soft instruments, typical for vertical cooperation, are used. These include the open method of coordinating, OMC, benchmarking and the best practice, as well as the exchange of professionalists. The methods give a mimetic effect, to which a lot of attention is currently paid in terms of Europeanisation.

As K. Featherstone and G. Kazamias (2001, p. 1) rightly observe, both domestic and community entities (broadly understood) are co-dependent, and first of all they are involved in networks of links, both horizontal and vertical ones, by which both mentioned approaches (bottom-up and top-down) create an entirety. Similar arguments can be found in other works (Howell, 2002, p. 21). While implementing the methodology of planning within this scope, anchored in management studies, particularly in the aspect of vertical and horizontal links, it is worth making a transposition resulting in the identification of two special approaches (apart from the democratic and the centralistic approach), namely the iterative approach and the multi-level approach. The essence of the methodological iterative approach (the so-called core-periphery approach) is the development of assumptions in agreement with individual levels, the EU and domestic ones, in subsequent steps (iterations). The method is based on cyclically repeating consultations and arrangements among the Member States. Whereas the essence of the multi-level methodological approach is the development of the assumptions simultaneously (parallel) at all levels, both the EU level and the domestic levels, and only then the assumptions created this way are agreed. As K.E. Howell (2002, p. 19) emphasises, Europeanisation means constant interactions or dialectics between the “homogeneity” of the Union and the “diversity” of the individual Member States.

K.E. Howell (2005, pp. 379-392) attempted to order the Europeanisation theories. In addition to the uploading and downloading approach, he also distinguished the crossloading approach. In his opinion, the effectiveness of the uploading process determines the effectiveness of change in response to the downloading process (Howell, 2005, p. 380). Thus, the Europeanisation process must be perceived bipolarly, considering both the horizontal and the vertical impact. Within such a meaning of the Europeanisation processes, which is quite significant, a clear separation of Europeanisation processes from European integration, which triggers them, occurs here (Figure 2). Obviously, methodologically, it is much simpler to conduct empirical research, considering the assumptions of the top-down or the bottom-up approach. The issue becomes much more complicated when it is necessary to apply both sets of methodological assumptions at the same time (*mix of methodologies*). However, the phenomenon of diffusion occurs here, which results in a kind of isomorphism of both perspectives, and in consequence, a necessity to consider both research perspectives.

However, going further in the ordering process, it is worth proposing a modification of the quoted concept, which should be based on three approaches to the Europeanisation process, distinguishing, in addition to the top-down and bottom-up approach, a third

approach, which can be called the circular approach, using both of the aforementioned approaches simultaneously⁷. This concept treats all three approaches a little differently than the ones proposed by K. Dyson and K.H. Goetz (2003), although it derives from them.

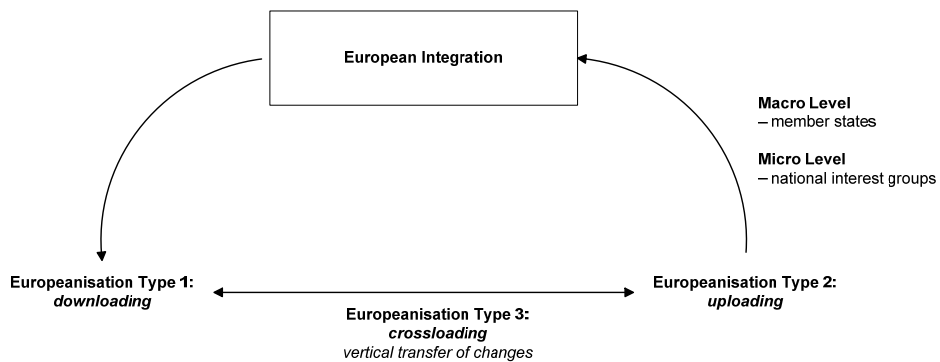


Figure 2. The processes of Europeanisation as European integration mechanisms

Source: Howell (2005, p. 382)

The Economic Dimensions of Europeanisation

An analysis of the literature on the subject of Europeanisation also enables the systematisation of the existing output from the point of view of the operationalisation of Europeanisation in the substantive approach. Analogously, as in the case of the conceptualisation and operationalisation of the development category in economic studies, one not only can but in fact one must adopt the same four designates of economic Europeanisation, both in the macro- and microeconomic perspective. These are:

- the areas of Europeanisation (what Europeanises?);
- the factors of Europeanisation (why does it Europeanise?);
- the mechanisms of Europeanisation (how does it Europeanise?);
- the sense of Europeanisation (towards what does it Europeanise?).

Therefore, considering the subjective criterion, we can distinguish four basic research approaches, namely polyvalent, causative, processual and resultant, although the present literature on the subject does not assign the same attention to them, does not discuss them with equal frequency, and if such research is undertaken, it is fragmentary and conducted mainly from the point of view of political sciences, namely in terms of the macroenvironment. Thus, as it seems, there is an urgent need to undertake research on the Europeanisation process from the perspective of economic studies, especially at firm level (the microeconomic level).

It is worth ordering the areas of influence of Europeanisation, i.e. making an attempt at identifying and structuring the dimensions of Europeanisation. In this context, one may be tempted to distinguish 10 or even 12 basic dimensions of Europeanisation including both non-economic and economic dimensions. This concept is in fact used to

⁷ The majority of authors identify the third approach with the second one (*bottom-up approach*), arguing that it is only the completion of the top-down approach. In economic studies, and especially in management studies, the mentioned research approaches to the functioning of a firm may function separately and independently, thus, it seems justified to distinguish three as opposed to two approaches.

describe changes in many dimensions of life, including geographical, sociological, political, legal, institutional and economic ones (Figure 3).

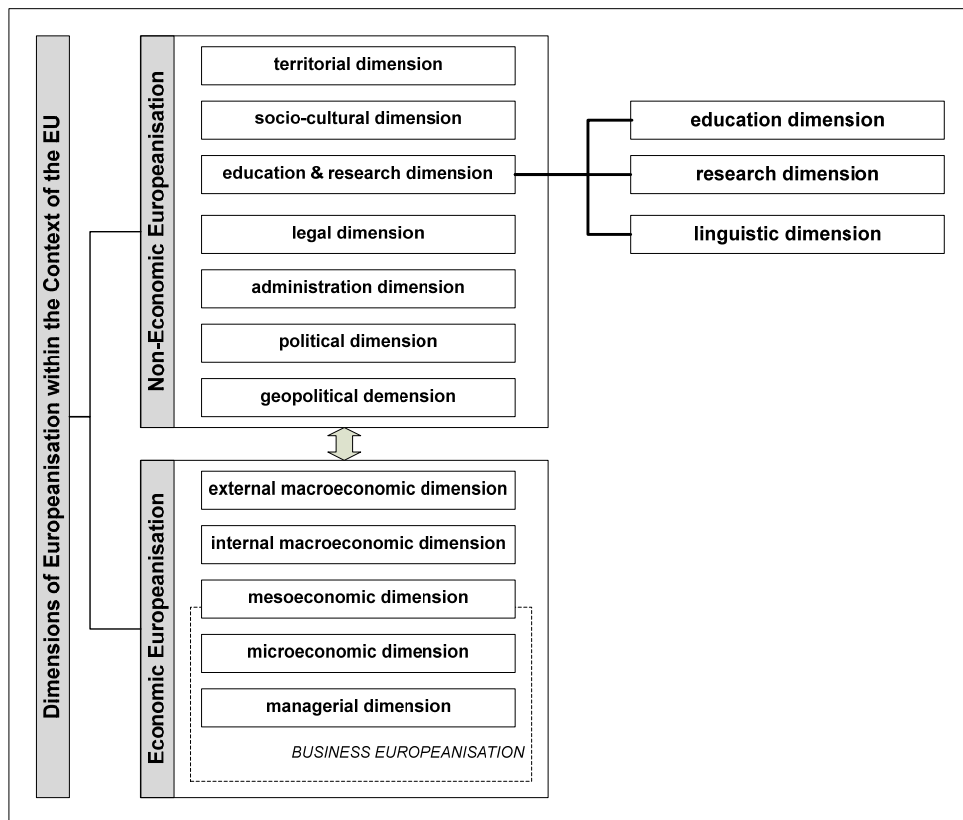


Figure 3. Twelve dimensions of Europeanisation within the context of the European Union

Source: Wach (2015, p. 16).

From the methodological point of view, there are five analytical levels, namely (i) mega, (ii) macro, (iii) meso, (iv) micro, and (v) nano. However, only three of them are mostly used in economics (macro, meso, micro), thus it seems adequate to discuss three processes – macroeconomic, mesoeconomic and microeconomic Europeanisation.

Europeanisation in the **external macroeconomic** dimension is making Europe (and more specifically the European Union) a significant economic centre in the world, identified with the intensification of its role, at least within the existing Triad (United States – European Union – Japan), although with aspirations to play a major role in the world economy, particularly as a response to the globalisation processes, including the growing significance of China and India in the world economy. At present, the share of the EU in the world economy is bigger than of the US or Japan and constitutes 1/5 of the global trade (and considering the intercommunity turnover among the Member States it is as much as 34.2%), whereas EU foreign direct investment constitutes almost half of global direct investment. It is worth stressing that as early as in 2010 China became the main

exporter of telecommunications equipment (USD 180 billion, with annual dynamics of growth of over 400%), and thus for the first time it outran the European Union (EU-27), becoming the main re-exporter of such equipment (WTO 2011, p. 55). In spite of the continuing crisis, in 2010 the export of financial services in the EU-27 increased by 3% and constituted 49% of the global trade of these services (USD 130 billion) (WTO 2011, p. 139).

Europeanisation in the **internal macroeconomic** dimension is creating favourable conditions for, on the one hand, the development of firms in the European Union territory (the European business environment, and to be more exact – Europeanisation of the firm environment), and on the other hand – the convergence of the macroeconomic systems of individual EU Member States. The regulatory function of the European Union plays a significant role here.

Europeanisation in the **mesoeconomic** sense is observed in industries, as most of them are becoming Pan-European and not just national as other European competitors are their direct competitors and industries are regulated in general by the same EU law and the same regulations (e.g. the tobacco industry, mobile communications industry, banking industry). This dimension of mesoeconomic Europeanisation is becoming more and more important.

Europeanisation in terms of the **microeconomic** dimension is identified as the Europeanisation of businesses. By contrast, in terms of microeconomics, Europeanisation is a process of the internationalisation of a business in Europe through its expansion to the European Union markets (a business activity in the common market, the so-called Single European Market) (Harris & McDonald, 2004, p. 73).

Furthermore, there is also a very important **managerial** dimension of Europeanisation, which is connected to the specifics and characteristics of European business (European management style), which is very different from American business or Asian business (Fligstein, 2009; Floyd, 2001; Wach, 2014b; Wach, 2016).

CONCLUSIONS

The European Union is currently facing severe challenges not only in terms of its internal problems, but mainly in relation to its future in the international arena. These concerns are not only expressed by the opponents of European integration, or skeptics who incidentally always expressed so, but these fears are also shared by its supporters, which definitely is a worrying symptom. The current image of the European Union and the challenges it faces are well captured by A. Giddens (2007) in his book *Europe in the Global Age*. Is further and deeper Europeanisation thus compromised? Certainly, the times in which we live today and in which businesses operate are interesting, and at the same time cause enormous challenges for modern economies and businesses.

There has been a transformation of the world economic globalisation processes in a kind of phenomenon semiglobalisation as M.W. Peng (2009, p 20) indicates the need for a variety of strategic business experiments. While P. Ghemawat (2007, p. 31) believes that the prospect of semiglobalisation can help firms to fend off the illusion of a global standardisation (one-size-fits-all), and the apocalypse concerning the downturn in economic growth. Different researchers have focused their attention on global activities, which oppose local activities, and by semiglobalisation they understand the intermediate state on

the way from being a local to a global firm employing full economic integration in the world. However, the percentage (as quantification) identifying the current state is very diverse.

The European Union, but also Europe as a whole, is now facing the great global challenges that primarily relate to economic issues. As stipulated by H. Sirkin, in his world-famous book: *Globality: Competing with Everyone from Everywhere for Everything*, in the near future European, American and Japanese firms will compete not only with each other but also with very competitive Chinese, Indian, South American, and even African firms, which currently is unimaginable (Kotler & Caslione, 2009, p. 29). The forecasts that by 2030 developing countries and emerging economies will reach 60% of global GDP could radically change the global economic configuration. Thus, it can be assumed that the European Union as well as the processes of Europeanisation are now at a crossroads. Not only is fairly close to the forecast for the next less than two decades (with the possibility that the consequences of such a reconfiguration will be felt much earlier), the situation requires a redefinition and reconfiguration strategy as well as anticipatory action to support European businesses and European economies (or even the European economy).

REFERENCES

- Börzel, T. (1999). Towards Convergence in Europe? Institutional Adaptation to Europeanization in Germany and Spain. *Journal of Common Market Studies*, 39(4), 389-403.
- Börzel, T. (2002). Member State Responses to Europeanization. *Journal of Common Market Studies*, 40(2), 193-214.
- Börzel, T., & Risse, T. (2000). When Europe Hits Home: Europeanization and Domestic Change. *EUI Working Papers*, RSC No. 2000/56, European University Institute in Florence.
- Bulmer, J., & Lequesne, Ch. (2001). *New Perspectives on EU-Member State Relationship*, Paper for the European Community Studies Association Biennial Conference, May 31 – June 2, 2001, Madison, Wisconsin.
- Bulmer, S., & Burch, M. (2001). The Europeanisation of Central Government: The UK and Germany in Historical Institutional Perspective. In: G. Schneider & M. Aspinwall (Eds.). *The Rules of Integration: Institutional Approaches to the Study of Europe*. Manchester: Manchester University Press.
- Caporaso, J. (2007). The Three Worlds of Regional Integration Theory (pp. 24-26). In: Graziano, P., Vink M.P., (Eds.), *Europeanization. New Research Agendas*. New York.
- Dyson, K. (2002). Introduction: EMU as Integration, Europeanization and Convergence. In: Dyson, K., (Ed.), *European States and the Euro. Europeanization, Variation and Convergence*. Oxford – New York: Oxford University Press.
- Dyson, K., & Goetz, K.H. (2003). Living with Europe: Power, Constraint and Contestation. In: K. Dyson & K.H. Goetz (Eds.). *Germany, Europe and the Politics of Constraint*. New York, NY: Oxford University Press (series: "Proceeding of the British Academy" 2003, Vol. 119).
- European Convention (2003). *Draft Treaty Establishing a Constitution for Europe*. Luxembourg: Office for Official Publications of the European Communities.
- Exadaktylos, Th., & Radaelli, C.M. (2009). Research Design in European Studies: The Case of Europeanization. *Journal of Common Market Studies*, 47(3), 507-530.
- Featherstone, K. (2003). In the Name of Europe (pp. 3-26). In: Featherstone, K., Radaelli, C.M., (Eds.), *The Politics of Europeanization*. Oxford: Oxford University Press.

- Featherstone, K., & Kazamias, G. (2001). Introduction: Southern Europe and the Process of Europeanisation. In: Featherstone, K., Kazamias, G., (Eds.), *Europeanisation and the Southern Periphery*. London: Frank Cass.
- Fligstein, N. (2009). The Europeanization of Business. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, special issue 49, 107-124.
- Flockhart, T. (2010). Europeanization or EU-ization? The Transfer of European Norms across Time and Space. *Journal of Common Market Studies*, 48(4), 787-810.
- Floyd, D. (2001). Globalisation or Europeanisation of Business Activity? Exploring the Critical Issues. *European Business Review*, 13(2), 109-113.
- Ghemawat, P. (2007). *Redefining Global Strategy: Crossing Borders in a World Where Differences Still Matter*. Boston, MA: Harvard Business School Press.
- Giddens, A. (2007). *Europe in the Global Age*, Polity Press. Cambridge – Malden.
- Green-Cowles, M., Caporaso, J., Risse, T. (Eds.) (2000). *Transforming Europe: Europeanization and Domestic Change*. Ithaca – London: Cornell University Press.
- Haas, E.B. (1958). *The Uniting of Europe. Political, Social and Economic Forces, 1950-1957*. Stanford: Stanford University Press.
- Harris, Ph., & McDonald, F. (2004). *European Business & Marketing*. 2nd ed., SAGE Publications, London – Thousand Oaks – New Delhi.
- Holzhaecker, R., & Haverland, M. (2006). Introduction: Cooperation and Integration among Europeanized States. In: R. Holzhaecker & M. Haverland (Eds.). *European Research Reloaded: Cooperation and Integration among Europeanized States*. Dordrecht: Springer.
- Holzinger, K., Schimmelfennig, F., 2012, Differentiated Integration in the European Union: Many Concepts, Sparse Theory, Few Data, *Journal of European Policy*, 19(2), 292-305.
- Howell, K.E. (2004). Developing Conceptualisations of Europeanisation: A Study of Financial Services. *Politics*, 24(1), 20-25.
- Howell, K.E. (2005). Europeanisation, Policy Transfer, Convergence and Lesson-Drawing: Case Studies of UK and German Financial Services Regulation. *Journal of Banking Regulation*, 6(4), 379-392.
- Howell, K.E., 2002, *Developing Conceptualizations of Europeanization and European Integration: Mixing Methodologies*, Paper presented at ESRC Seminar, Sheffield – November 29, 2002, 19; <<http://aei.pitt.edu/1720/1/Howell.pdf>> (accessed on: 24.03.2012).
- Kohler-Koch, B. (1996). Catching up with Change: The Transformation of Governance in the European Union. *Journal of European Public Policy*, 3(3), 359-380.
- Kotler, Ph., Caslione, J.A., 2009, *Chaotics. The Business of Managing and Marketing in the Age of Turbulence*, AMACOM, New York.
- Ladrech, R. (1999). Europeanization of Domestic Politics and Institutions: The Case of France. *Journal of Common Market Studies*, 32(1), 69-87.
- Lawton, T. (1999). Governing the Skies: Conditions for the Europeanisation of Airline Policy. *Journal of Public Policy*, 19(1), 91-112.
- Lindberg, L.L. et al., (Ed.) (1971). *Regional Integration. Theory and Research*. Cambridge: Harvard University Press.
- Łobos, K. (2008). Organizacja sieciowa (pp. 195-196). In: Krupski, R., (Ed.), *Elastyczność organizacji*, Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Moravcsik, A. (1993). Preferences and Power in the European Community: A Liberal Intergovernmentalist Approach. *Journal of Common Market Studies*, 31(4), 507-508.

- Moravcsik, A. (1994). Why the European Community Strengthens the State: Domestic Politics and International Co-operation. "Working Papers" No. 52, Centre For European Studies – Harvard University, Cambridge.
- Nowak, B., & Riedel, R. (2010). Europeizacja – teorie, mechanizmy, agenda badawcza (Chapter 3), In: B. Nowak & R. Riedel (Eds.). *Polska i Europa Środkowa. Demokracja. Konsolidacja. Europeizacja*. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej w Lublinie.
- Olsen, J.P. (2002). The Many Faces of Europeanization. *Journal of Common Market Studies*, 2002, 40(5).
- Peng, M.W. (2009). *Global Strategy*, 2nd ed., Mason, OH: Cengage Learning.
- Radaelli, C.M. (1997). How does Europeanization Produce Policy Change? Corporate Tax Policy in Italy and the UK. *Comparative Political Studies*, 30(5), 553-575.
- Radaelli, C.M. (2000). Whither Europeanization? Concept Stretching and Substantive Change. *European Integration online Papers*, 4(8), <<http://eiop.or.at/eiop/texte/2000-008a.htm>>, released 17.04.2000.
- Radaelli, C.M. (2006). Europeanisation: Solution or Problem?. In: M. Cini & A. Bourne (Eds.). *Palgrave Advances in European Union Studies*. Houndmills – New York: Palgrave Macmillan.
- Risse, T., Cowles, M.G., & Caporaso, J.A. (2000). Europeanization and Domestic Change: Introduction. In: M.G. Cowles, J.A. Caporaso, T. Risse (Eds.), *Europeanization and Domestic Political Change*. Ithaca – New York NY: Cornell University Press.
- Sandoholtz, W. (1996). Membership Matters: Limits of the Functional Approach to European Institutions. *Journal of Common Market Studies*, 34(3).
- Wach, K. (2014a). Europeanization of Firms as Their International Growth within the European Union: The Empirical Investigation into the Internationalisation Level among Polish Firms (Chapter 1) In: B. Knežević & K. Wach (Eds.). *International Business from the Central European Perspective* (pp. 3-14). Zagreb: University of Zagreb.
- Wach, K. (2014b). Internationalisation and Globalisation as the Wider Context of Europeanization Processes from the Macro- and Microeconomic Perspective. *Horyzonty Polityki*, 5(10), 11-30.
- Wach, K. (2015). Conceptualizing Europeanization: Theoretical Approaches and Research Designs (Chapter 1). In: P. Stanek & K. Wach (Eds.). *Europeanization Processes from the Meso-economic Perspective: Industries and Policies*. Kraków: Cracow University of Economics, pp. 11-23.
- Wach, K. (2016). Europeanization of European Businesses: Economies of Scope and Managerial Implications. *Horyzonty Polityki*, 7(19).
- Wallance, H. (2000). Europeanization and Globalization: Complementary or Contradictory Trends. *New Political Economy*, 5(3), 369-382.
- WTO (2011). *International Trade Statistics 2011*. Geneva: World Trade Organization.

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Innovative Behaviour of High-Tech Internationalized Firms: Survey Results from Poland

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Abstract

The aim of the article is to identify and verify the relationship between internationalization and innovativeness as well as innovative behaviour of high-tech businesses in Polish context. A quantitative research design was employed. A survey was conducted on the sample of 263 firms operating in high-tech industries in Poland. To verify the assumed relationships statistical instruments were used, including descriptive statistics, Chi-Square test, the Kruskal-Wallis test and multivariate regression. The level of innovativeness of investigated hi-tech firms was relatively high. Results suggest that the innovativeness of a business contributes to the intensification of the internationalization process of firms operating in high-tech industries. The regression model confirms the dependence of internationalization on three innovative behaviours, such as the general evaluation of innovativeness of the firm), the pace of innovation diffusion and the number of implemented innovations. Polish high-tech businesses seem to be relatively well internationalized, especially in comparisons to general business population. Policy makers should continue to support innovativeness of Polish economy, but especially these industries which are highly innovative. The research presented in the article seems to be one of the first in Poland investigating into internationalization and innovation in high-tech industries.

Keywords: innovation; innovativeness; i-models; international business; internationalization; international entrepreneurship

JEL codes: F23, O30, M16

INTRODUCTION

Currently, innovations are considered to be the heart of the present-day international entrepreneurship research (Onetti, Zuchella, Jones & McDougall, 2012). Few previous decades have caused that the global economy has undergone a dramatic change, and

the “new economic landscape requires a combination of entrepreneurship, innovation, and internationalization” (Hagen, Denicolai & Zucchella, 2014, p. 111). Innovation, innovativeness and/or innovative resources are widely recognized as a major driver of firm internationalization either in traditional industries (Veglio & Zucchella, 2015) and especially in high-tech industries (Spence & Crick, 2006) or at least in knowledge-intensive industries (Bell, McNaughton, Young, Crick, 20013). Innovation is the key value creation and export performance either for large multinational enterprises (MNEs) (Cano-Kollmann, Cantwell, Hannigan, Mudambi & Song, 2016) or for small and medium-sized enterprises (SMEs) (Kosała, 2015). Nevertheless, the recent empirical evidence and literature show that “the links between innovation and internationalization tend to be less clear” (Zucchella & Siano, 2014) as it is quite difficult to capture empirically these relations.

The aim of the article is to identify and verify the links between internationalization and innovativeness as well as innovative behaviour of high-tech business in Polish realities. Empirical research is based on survey research. The article is designed in three conventional sections. The first section presents the literature review on the potential relationship between innovation and internationalization. The second section introduces the basic description of the material and methods used in the empirical study. The third section discussed the empirical results obtained on the sample of 263 firms operating in high-tech industries in Poland.

LITERATURE REVIEW

According to Schumpeter (1934), one of five forms of innovation is entering new markets, thus internationalization, as the expansion into a new foreign market or markets, can be considered innovation itself (more specifically, marketing innovation, while using a popular 4-element classification of innovation). Usually it is reported that the relation between innovation and internationalization dates back to 1970s (Szymura-Tyc, 2015, p. 70), at first at the macroeconomic level and then in business studies.

Rogers (1962, p. 8186) developed the process of the sequential adaptation of innovation (Innovation-adoption Process, IAP) on which innovation-related internationalization models are based. The introduction of innovation in stages models enabled to isolate the subgroup of innovation-related models which, in their primary assumptions, based on the behavioural theory and the phase internationalization process, therefore, are *de facto* a variety of stages models (Andersen, 1993, p. 212). The stress, however, is differently distributed as for the mechanism of the internationalization process and its explanation (Table 1). Innovation-related models are based on the sequential learning process, with regard to innovation or adaptation, and decisions of the firm about its internationalization are treated as innovations *sensu largo*. Various authors of various innovation-related models distinguish various stages of the internationalization process. Individual stages differ from each other, starting either from the lack of interest in internationalization or export awareness, and as a rule ending with the exploration of farther foreign markets. Reid (1981, p. 104) states that “viewing exporting as innovation adoption gives us richer insight into how exporting is initiated and how it is developed”. The innovation-based stages models treat internationalization *per se* as a process of innovation, especially as a learning process – internationalization by learning (Andersen & Kheam, 1998).

Table 1. The comparison of stages models (U-model) with innovation-based models (I-model)

Criterion		U-model	I-models
Types of scientific explanation		Genetic historicism	
Analytical assumptions	Unit of analysis	No restrictions (SMEs, Large enterprises)	SMEs
	Time	Unlimited	Limited
Causation	Model type	Causative cycles	Explanatory chain
	Explanatory variables	One variable: knowledge of the enterprise	A lot of variables, mostly concerning organizational factors
Scientificity / Utility	Assumptions with regard to enterprise behaviour	Based on behavioural theories, incremental decision-making process with no or little impact of competitive and market factors	
	Correctness of defining the variables	Examples of possible indicators, no operating definitions	Unclear arguments for the classification of procedures or operationalization of explanatory variables
	Accuracy of delimitation between stages	Considerable generality and ambiguity	Basically intuitive argumentation and reasoning
Usefulness / Intuitiveness		Axiomatic logics. Useless for the needs of management and government policy.	
Conformity between: - theory and operationalization - conceptual and operating definitions		Unclear	Some discrepancies, no testing of validity
Specification of variables adopted to determine the impact on the development process		No variables except for causative cycles	Lack of complete list of variables, unclear argumentation why and how variables should differ between stages
Empirical setting		Case studies: measurement of independent variables based on the observation of dependent variables	Cross-section analyses, unclear causality of internationalization phases from their determinants
Tautologies		Some difficulties in delimitation of theoretical concepts	In some cases independent and dependent variables are almost identical
Testing alternative explanatory variables		none	

Source: own compilation based on Andersen (1993, p. 221 & 226).

Literature and various empirical evidence reveal a bipolar dependence, innovation can impact internationalization, but also internationalization can influence innovation, thus there are two main streams of research (Daszkiewicz, 2016, p. 105, Szymura-Tyc, 2015, p. 85):

1. **Innovation as the cause.** Innovativeness and innovative behaviour of firms cause (faster or better) internationalization.

2. **Innovation as the effect.** Internationalization and international experience stimulate innovative behaviour of the firm.

In the literature there is an ongoing debate on the role of innovations and the links between innovation and internationalization and sometimes the empirical results are quite contrary. Based on the sample of 299 internationalized Finish firms and using a cluster analyses Kyläheiko *et al.* (2011) found that most of the firms were replicators (79.8%), not innovators (20.2%), and distinguished four clusters, namely (i) international replicators – 29.3% of the sample, (ii) domestic replicators – 50.5%, (iii) domestic innovators – 11%, (iv) international innovators – 9.2%. Innovative capabilities, especially technological ones, are a major driver of international growth of the firm (Pla-Barber & Alegre, 2007). As for various types of innovations, the most important in the internationalization process are product innovations, or generally technological innovations. It seems that there is a positive relationship between product innovation and export performance as the basic mode of internationalization (Cassiman & Golovko, 2011). Innovation can be classified as hard and soft, what is more the innovative behaviour of the entrepreneur, especially in case of SMEs, also impacts the international performance of the business (Denicolai, Hagen & Pisoni, 2015). High-tech businesses, especially small technology-based enterprises (STEs) are international from the inception and called born globals (Kuivalainen, Saarenketo & Puumalainen, 2012; Zou & Ghauri, 2010), and it is a clear evidence that there is a link between innovations (knowledge, high-technology) and internationalization, at least in case of high-tech industries. Also Li, Qian and Qian (2012) confirmed that technological intensity is positively correlated with the early internationalization (born globals). Li, Qian and Qian (2015) proved that radical innovations are positively correlated with internationalization, as small young technology-based entrepreneurial firms (SYTEFs) that “generate radical innovation are more likely to internalize their foreign operations”. Chetty and Stangl (2010) confirmed that internationalized businesses with limited network relationships have incremental internationalization and innovation, but those with diverse network relationships exhibit radical internationalization and innovation. Literature on the role of innovation in international business is very diverse and rich and deals with many detailed aspects like licencing or research and development (R&D). Pinkwart and Proksch (2014) confirmed that going international is positively related with having patents or licences. The above mentioned variables can be put together and integrated into the basic concept of international entrepreneurship (Wach, 2015, p. 19), which can result in the theoretical modelling of innovative internationalization of the firm (Figure 1).

Both, the literature studies, and especially the review of various empirical studies resulted in the following hypothesis to be tested in the empirical reality in Poland:

- H:** Innovativeness and innovative behaviour of a business contributes to the intensification of the internationalization process of the firm operating in the high-technology industries.

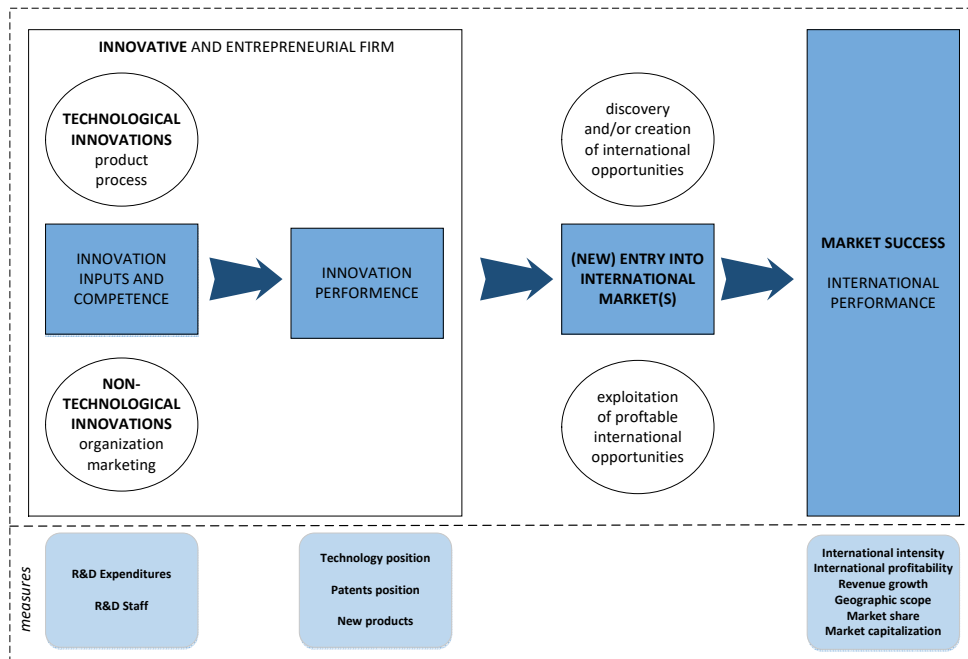


Figure 1. The theoretical modelling of innovative internationalization in international entrepreneurship

Source: own study based on Wach (2015, p. 19) and Gerybadze (2010, p. 15).

MATERIAL AND METHODS

To identify and verify the links between innovation and internationalization of high-technology businesses in Poland survey research was employed. The study was conducted at the end of 2015 using Computer Assisted Telephone Interviewing (CATI). Stratified sampling has been selected according to the following criteria (Daszkiewicz, 2016, p. 124):

- firms performing any international activities (at least exports),
- firms belonging to one of the given classes of business activity (NACE), being classified as high-tech or medium-high-tech industries,
- firms fulfilling at least one out of the following three criteria:
 - a) obtaining patents or signing licensing agreements in the areas identified as high-tech,
 - b) employing highly qualified personnel in terms of science and technology,
 - c) conducting industrial research, research and development (R&D) activities to prepare these studies and work to implement in the economy.

Based on the above mentioned criteria, the target population was selected, and the survey questionnaire was directed to 4075 businesses from the database, of which 857 businesses, in fact were not eligible for the study, or did not have in the database the current phone number, so the net population was only 3218 of internationalized high-tech firms. In the course of surveying we obtained 263 fully completed questionnaires (the return rate was 8.2%), suitable for further statistical processing, as a basis for inferring.

The study uses six different variables (one measuring the internationalization level and five measuring innovativeness and innovative behaviour) such as:

- the transnationality index (TNI) expressed as a percentage (from 0 to 100%),
- the pace of innovation diffusion measured on 7-point Likert scale (DiffPace),
- the number of implemented innovation from 0 to 8 (InnoNumb),
- the innovation scope (business-level, regional, country-wide, worldwide innovations),
- the innovation types (product, process, organizational, marketing innovations),
- the innovation index (INNO) as a continuous variable (1-100%) and an interval variable (low, moderate, high innovators).

The transnationality index (TNI) was calculated as the average of foreign assets, sales and employment to the total ones and being expressed as a percentage based on the formula:

$$TNI = \frac{\frac{A_F}{A_T} + \frac{S_F}{S_T} + \frac{E_F}{E_T}}{3} * 100 [\%] \quad (1)$$

where:

- A_T - total assets;
- A_F - foreign assets;
- S_T - total sale;
- S_F - foreign sales;
- E_T - total employment;
- E_F - foreign employment.

In order to evaluate the real level of innovativeness of the investigated firms, there was a need to create one indicator expressing the innovative behaviour of business. The innovation index (INNO) enabled to evaluate the innovativeness of the responding firms. This synthetic indicator uses two basic dimensions of innovations, namely (i) the range of innovations measured by their types and numbers and (ii) the scope of innovations measured on the tradition 4-category scale (in numbers expressed from 1 to 4). Each innovation was able to provide from 1 to 4 points. 8 different cases of various innovations enabled to provide up to 32 points. The innovation index, as the overall indicator of innovation evaluation, was constructed by the sum of the values at each of the cases (by multiplying the range and the scope of innovations), and then divided by the sum of the maximum achievable points. Ultimately, it resulted in an average total score, standardized in the range of 0 to 1 (expresses as the percentage in the range from 0 to 100). The following weights were adopted: (0;25> – low innovators; (25;75> – moderate innovators; (76;100> – high innovators.

The statistical calculations were made by the use of the statistical software Statistica® PL v. 12.5. In the empirical study, the level of the statistical significance (alpha or α) for statistical hypotheses testing was considered as 0.05. To verify the assumed relations statistical instruments were used such as descriptive statistics, Chi-Square test, the Kruskal-Wallis test, the linear Pearson correlation and the multivariate regression.

RESULTS AND DISCUSSION

As for the size of the investigating businesses, the sample was diversified, and included: 9% of microenterprises, 26% of small enterprises, 47% of medium-sized enterprises and

18% of large enterprises. The share of enterprises belonging to the SME sector of the surveyed businesses is 82% (216 enterprises), while the share of large enterprises is 18% (47 enterprises). Businesses were located in all 16 regions of Poland, with a clear overrepresentation came from three regions: *mazowieckie*, *śląskie* and *wielkopolskie*. Among the surveyed firms, over 75% had exclusively domestic capital, and less than 15% of the surveyed businesses declared that foreign ownership of assets is 100%.

All investigated businesses implemented within the previous 3 years at least one type of innovation. Respondents were given a list of 8 different innovations, to be more specific there were two different innovations of each of 4 basic types of innovations (Figure 2). Altogether it was possible to declare 8 different innovations. Between 1 and 3 innovations were implemented by 26.23 investigated firms, while 4 of 5 innovations were introduced by 33.45% of business and the highest number of innovations, between 6 and 8, were declared by 40.32% of the responding firms. The overall level of innovation implementation was rather high, comparing to general empirical studies of internationalized businesses, but as the study included high-tech companies, so the high level cannot be surprising. The innovativeness level of Polish internationalized businesses operating in various industries (sample of 293) conducted by Szymura-Tyc (2015, pp. 165-170) was a bit lower. Almost all investigated firms implemented product innovation (257 out of 263), while organizational innovations were the least popular (152 out of 263). Either process or marketing innovations were also quite popular among the responding firms (respectively 204 and 222).

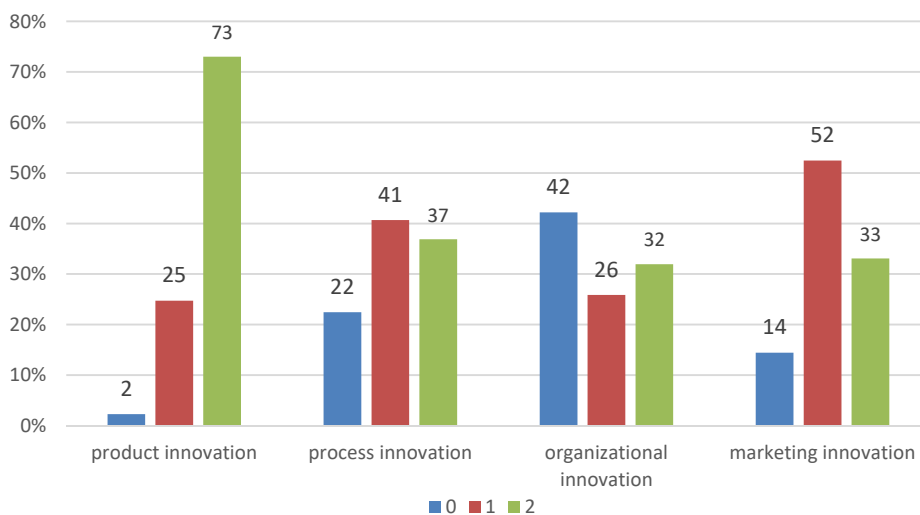


Figure 2. Number of implemented innovations by their types among the investigated businesses (in %)

Note: The numbers do not sum up to 100% as respondents could select more than one answer.

Source: own calculations based on the survey ($n = 263$).

According to the theory of innovation, the scope of innovation is important while judging innovation behaviour of firms. All investigated business implemented at least one type of innovation, however its scope was very diversified:

- a) 14.8% investigated firms implemented business-level innovations (39 cases),
- b) 4.2% investigated firms implemented regional level innovations (11 cases),
- c) 18.3% investigated firms implemented country-wide innovations (48 cases),
- d) 62.7% investigated firms implemented worldwide innovations (165 cases).

The scope of the declaring innovations is indeed very optimistic, especially taking into account the types of the implemented innovations (Figure 3). The product innovations, which are crucial for high-tech firms, were the most frequently implemented in the global scale, which means they were new to the world.

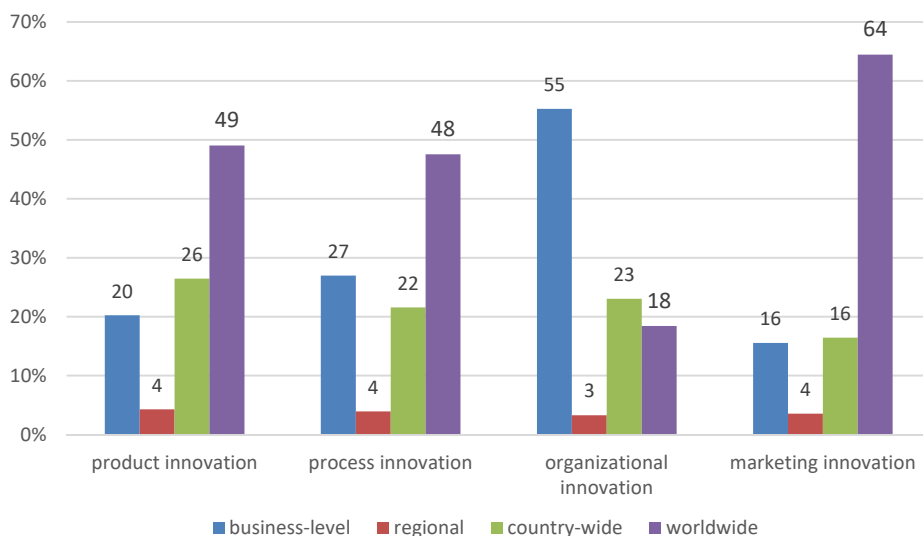


Figure 3. Scope of implemented innovations by their types among the investigated businesses (in %)

Note: The numbers might not sum up to 100% due to rounding.

Source: own calculations based on the survey ($n = 263$).

Rating of the business innovativeness ranges of continuous values from the both sides closed interval in the range of $\langle 1, 100 \rangle$. The innovation index of investigated business ranged from 3.12 to 100 (Table 2). Based on the mean, the median, and the mode, it is obvious that the innovation behaviour of investigated firms was average in most cases. Only one fourth of the firms, exceeded its level amounted to 62.50 and these companies can be considered hyper innovative.

Table 2. Descriptive statistics of innovation index (INNO) of the investigated businesses

Mean	Median	Mode	Frequency of Mode	Minimum	Maximum	Lower Quartile	Upper Quartile	Std. Dev.
43.91	40.62	37.50	24	3.12	100	25	62.50	24.16

Source: own calculations based on the survey and Statistica 12.5 ($n = 263$).

As suggested by prior research there is a theoretical assumption that there is a dependence between the internationalization and innovativeness of firms. The linear Person correlation value between TNI (internationalization level of firms) and INNO (the innovation index of firms) is only 0.31 significant at $p < 0.05$, which means the average correlation between these variables. Also Szymura-Tyc (2015, p. 177) obtained very similar results based on the sample of 293 internationalized business operating in various industries ($r = 0.302$, $p < 0.001$). Taking the 4-category innovation index and using the Kruskal-Wallis test the dependence between the variables of TNI and INNO was also confirmed (Chi-Square = 10.65, $df = 2$, $p = 0.0049$; $H(2, 261) = 969935$, $p = 0.0078$). It was also confirmed by the median test, and the mean ranks for groups were as follows: 118, 130, 173. Studying the "box & whisker" plot it is noticeable that the better innovator is, the higher TNI value it receives (Figure 4). TNI values was the highest for so called high innovators, and the lowest for the low innovators. Therefore, the hypothesis was confirmed, according to which the innovativeness of a business contributes to the intensification of the internationalization process of the firm operating in the high-technology industries.

In order to search for deeper relationships, multiple regression was used. Although the p -value means very strong presumption against neutral hypotheses, the model explains only 5.6% of the dependence of TNI on three innovative behaviours, such as (i) the innovation index (as the general evaluation of innovativeness of the firm), (ii) the pace of innovation diffusion and (iii) the number of implemented innovations. If the innovation index will increase of 1 p.p., TNI will increase in average of 5.47 p.p. *ceteris paribus*. What can be interesting is the fact that if the number of innovation will increase of 1 p.p., TNI will decrease of 1.98615 p.p. Despite the awkward outlook, these results can be explained quite easily, as we can assume, as the investigated firms introduced between 1 and 8 innovations, so some of them were inessential or even unnecessary. Probably organizational and/or marketing innovations, except for being costly, didn't supported the internationalization process, as we could assume.

Table 3. Regression Summary for Dependent Variable of TNI

Effect	R = 0.23656313		R2 = 0.05596211		Adjusted R2 = 0.04494221	
	F(3,257) = 5.0783		$p < 0.0019$		Std.Err. of Estimate: 19.174	
	b*	Std.Err. of b*	b	Std.Err. of b	t(257)	p-value
Intercept			22.0314	3.5214	6.2563	0.0000
INNO	0.2618	0.0894	5.4665	1.8670	2.9279	0.0037
DiffPace	0.1431	0.0617	6.0394	2.6063	2.3172	0.0213
InnoNumb	-0.1915	0.0893	-1.9861	0.9268	-2.1429	0.0330

Source: own calculations based on the survey and Statistica 12.5 ($n = 263$).

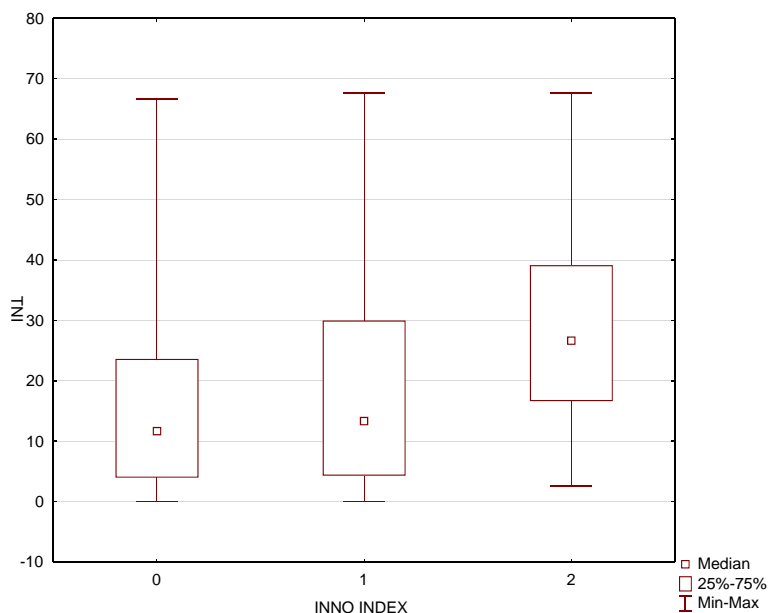


Figure 4. Boxplot by group for the variables TNI and INNO INDEX

Note: 0 – low innovators, 1 – medium innovators, 2 – high innovators.

Source: own calculations based on the survey ($n = 263$).

CONCLUSIONS

Like all research, this study is not without some notable limitations. First of all, the research sample is not representative for the whole population, thus it is not possible to absolutize the result over the whole population of Polish businesses of high-tech industries, but are quite close to generalization. Secondly, future studies should seek to develop longitudinal research designs.

Based on the statistical calculations presented in the article, the following conclusions can be drawn:

1. The overall level of innovation implementation among the investigated firms was rather high, comparing to general empirical studies of internationalized businesses, but as the study included high-tech companies, so the high level cannot be surprising.
2. Almost all investigated firms implemented product innovation, as for high-tech industries this can be obvious.
3. Most of the investigated businesses implemented worldwide innovations, as the widest range of 4-category classification, and again for high-tech industries this is rather expected.
4. The hypothesis stating that the innovativeness of a business contributes to the intensification of the internationalization process of the firm operating in the high-technology industries, was confirmed (linear Pearson correlation, Kruskal-Wallis

test). The higher level of TNI was observed among high innovators and the lowest among low innovators.

5. The regression model showed the dependence of TNI on three innovative behaviours, such as the innovation index, the diffusion of innovation pace and the number of implemented innovation.

The research presented in the article seems to be one of the first in Poland investigating into internationalization and innovation in high-tech industries. The results are in line with the majority of empirical evidence worldwide. The preliminary links between innovation and internationalization among Polish high-tech businesses were confirmed. Further research should seek the links and dependences between technological as well as non-technological innovations and the internationalization intensity.

The empirical results have also great importance for policy makers, as the illustration of Polish high-tech businesses seem to be relatively well internationalized, especially in comparisons to general business population. Policy makers should continue to support innovativeness of Polish economy, but especially these industries which are highly innovative.

REFERENCES

- Andersen, O. (1993). On the Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies*, 24(2), 209-231.
- Andersen, O., & Kheam, L.S. (1998). Resource-based theory and international growth strategies: an exploratory study. *International Business Review*, 7(2), 163-184.
- Bell, J., McNaughton, R., Young, S., & Crick, D. (2003). Towards and integrative model of small firm internationalization. *Journal of International Entrepreneurship*, 1(4), 339-362.
- Cano-Kollmann, M., Cantwell, J., Hannigan, T.J., Mudambi, R., & Song, J. (2016). Knowledge connectivity: An agenda for innovation research in international business. *Journal of International Business Studies*, 47(3), 255-262.
- Cassiman, B., & Golovko, E. (2011). Innovation and internationalization through exports. *Journal of International Business Studies*, 42(1), 56-75.
- Chetty, S.K., & Stangl, L.M. (2010). Internationalization and innovation in a network relationship context. *European Journal of Marketing*, 44(11/12), 1725-1743.
- Daszkiewicz, N. (2016). *Internacjonalizacja przedsiębiorstw działających w branżach high-tech*. Warszawa: PWN.
- Denicolai, S., Hagen, B., & Pisoni, A. (2015). Be international or be innovative? Be both? The role of the entrepreneurial profile. *Journal of International Entrepreneurship*, 13(4), 390-417.
- Gerybadze, A. (2010). R&D, Innovation and Growth: Performance of the World's Leading Technology Corporations. In: A. Gerybadze, U. Hommel, H.W. Reiners, D. Thomaschewski (Eds.), *Innovation and International Corporate Growth*. Berlin – Heidelberg: Springer.
- Hagen, B., Denicolai, S., & Zuchella, A. (2014). International entrepreneurship at the crossroads between innovation and internationalization. *Journal of International Entrepreneurship*, 12(2), 111-114.
- Kosała, M. (2015). Innovation Processes as a Stimulant of Internationalization Process of Firms. *Entrepreneurial Business and Economics Review*, 3(2), 65-84. doi: 10.15678/EBER.2015. 030206
- Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2012). Start-up patterns of internationalization: a framework and its application in the context of knowledge-intensive SMEs. *European Management Journal*, 30(4), 372-385.

- Kyläheiko, K., Jantunen, A., Puumalainen, K., Saarenketo, S., & Tuppur, A. (2011). Innovation and internationalization as growth strategies: The role of technological capabilities and appropriability. *International Business Review*, 20(5), 508-520.
- Li, L., Qian, G., & Qian, Z. (2012). Early internationalization and performance of small high-tech born-globals. *International Marketing Review*, 29(5), 536-561.
- Li, L., Qian, G., & Qian, Z. (2015). Should Small, Young Technology-Based Firms Internalize Transactions in Their Internationalization?. *Entrepreneurship Theory and Practice*, 39(4), 839-862.
- Onetti, A., Zuchella, A., Jones, M., & McDougall, P. (2012). Entrepreneurship and strategic management in new technology based companies. *Journal of Management and Governance*, 16(3), 5-22.
- Pinkwart, A., & Proksch, D. (2014). The Internationalization Behavior of German High-Tech Start-ups: An Empirical Analysis of Key Resources. *Thunderbird International Business Review*, 56(1), 43-53.
- Pla-Barber, J., & Alegre, J. (2007). Analysing the link between export intensity, innovation and firm size in a science-based industry. *International Business Review*, 16(3), 275-293.
- Reid, S.D. (1981). The Decision-Maker and Export Entry and Expansion. *Journal of International Business Studies*, 12(2), 101-112.
- Rogers, E.M. (1983). *Diffusion of innovations*. New York – London: The Free Press.
- Schumpeter, J.A. (1934|2008). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Transl. by R. Opie. New Brunswick – London: Transaction Publishers.
- Spence, M., & Crick, D. (2006). A comparative investigation into the internationalization of Canadian and UK high-tech SMEs. *International Marketing Review*, 23(5), 524-548.
- Szymura-Tyc, M. (2015). *Internacjonalizacja, innowacyjność i usieciwienie przedsiębiorstw: podejście holistyczne*. Warszawa: Difin.
- Veglio, V., & Zuchella, A. (2015). Entrepreneurial firms in traditional industries. Does innovation matter for international growth?. *Journal of International Entrepreneurship*, 13(2), 138-152.
- Wach, K. (2015). Entrepreneurial Orientation and Business Internationalization Process: The Theoretical Foundations of International Entrepreneurship. *Entrepreneurial Business and Economics Review*, 3(2), 9-24. doi: 10.15678/EBER.2015.030202
- Zou, H., & Ghauri, P. (2010). Internationalizing by learning: the case of Chinese high-tech new ventures. *International Marketing Review*, 27(2), 223-244.
- Zucchella, A., & Siano, A (2014). Internationalization and innovation as resources for SME growth in foreign markets: a focus on textile and clothing firms in the Campania Region. *International Studies of Management and Organization*, 44(1), 21-41.

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Entrepreneurial Intentions of Students in Poland in the View of Ajzen's Theory of Planned Behaviour

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Abstract

The purpose of this study is to empirically verify Ajzen's theory in the Polish academic environment, however, the TPB was extended by one more variable – attitude towards risk. We decided to use a survey questionnaire among students. The survey was conducted among seven universities in Krakow. Out of 1,100 sent questionnaires, we received 719 fully completed and corrected questionnaires, it means that the return rate is 65.4%. The questionnaire was divided into 14 thematic blocks – their elements explain the entrepreneurial intentions. The statistical calculations confirmed that three Ajzen's independent variables, such as attitude towards entrepreneurship, subjective norms and perceived behavioural control determine the entrepreneurial intentions of the investigated students. Additionally, we found out that the risk attitude is also a determinant in a similar way, and entrepreneurial intentions differ between business and non-business students. Shaping the entrepreneurial mindset of young people is one of the most important roles of the contemporary education system, including the tertiary education. Future studies should seek new factors influencing the entrepreneurial intentions of students, facts that will be complementary to TPB and EEM models.

Keywords: entrepreneurial intention (EI); entrepreneurship education (EE); higher education; theory of planned behaviour (TPB)

JEL codes: I23, L26

INTRODUCTION

Intention-based models, although derived from social psychology, are used successfully in management research, especially in the study of entrepreneurship. On this basis, one can predict future behaviour, which is important for both managers, economic analysts and policy

makers responsible for the creation of an appropriate entrepreneurship support system, including its important element which is entrepreneurship education (Wach, 2013; 2014; 2015) whose main task is to develop appropriate entrepreneurial attitudes. A suitable educational system stimulating entrepreneurship is important for economic practice. For many years such solutions have been recommended by the European Union (Wach, 2014b; Najda-Janoszka & Wach, 2008), but also in Poland the implementation of these recommendations is gaining in importance, not only in the business school (Kosała & Pichur, 2008), but also in non-economic fields of studies (Płaziak & Rachwał, 2014), especially in the context of the internationalisation and Europeanisation of Polish universities (Marona & Głuszak, 2014; Sadowska, 2016). The contemporary task of the university is to develop entrepreneurial attitudes and to inspire creative thinking (Żur, 2014), as well as to awaken entrepreneurial intentions among students (Kuehn, 2008). Entrepreneurship education is not only important in the development of entrepreneurial attitudes, but in stimulating entrepreneurship in general (Daszkiewicz, 2014; Urbaniec, 2014), and especially in the family business (Rachwał, 2010).

The purpose of this study is to empirically verify Ajzen's theory of planned behaviour (TPB) in Polish realities, however, we extended the TPB by one more variable – attitude towards risk. In the study we used a questionnaire survey conducted among students of seven different universities in Krakow, including both economic and non-economic fields of studies, as well as of different years ($n = 719$).

The first section of the paper includes the literature review on entrepreneurial intentions from the perspective of behavioural sciences. The second section discusses the methodological assumptions of the empirical studies, among them the hypotheses, the research design and the sampling. The third section elaborates on the empirical results of the survey and the statistical calculations, followed by the conclusions in a typical layout consisting of final remarks, research limitations and suggestions for further studies.

LITERATURE REVIEW

To understand what mechanisms govern the entrepreneurial intentions of individuals, usually various researchers take advantage of a well-established psycho-sociological concept originated in the mid-1980s – namely, the theory of planned behaviour developed by Ajzen (1987, 2011). According to this theory, behavioural intentions depend on three antecedents (i), that is the attitude towards a given behaviour, (ii) the perceived behavioural control, sometimes called feasibility, and (iii) social norms that shape the perception of such a behaviour. The first two factors (i.e. the attitude toward the behaviour, but rather the attitude towards the results associated with the behaviour and the perceptions of social norms with respect to this behaviour) reflect the desirability and the desired occurrence of such a behaviour. The third factor reflects the personal perception of the ability to control the behaviour and is usually called self-efficacy.

TPB is one of the most popular concepts while studying entrepreneurial intentions (Karimi et al. 2016; Piperopoulos & Dimov, 2015; Lima, Lopes, Nassif & de Silva, 2015). There is no clear and universal definition of an entrepreneurial intent in the literature. Thompson (2009, p. 676) defines an individual entrepreneurial intent or an entrepreneurial intention as “a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future”. Intention among potential entrepreneurs is seen as a “conscious state of mind that precedes action” (Shook, Priem

& McGee, 2003, p. 380). This general concept of the intentional behaviour is very popular among researchers analysing entrepreneurial intentions. Similarly, Krueger (1993) defines entrepreneurial intentions as the tendency to have the potential to start your own business in the near future. Koçoğlu and Hassan (2013) emphasise that entrepreneurial intentions depend indeed on three above mentioned variables (attitude towards entrepreneurship, subjective norms, perceived behaviour control), but in addition, they also depend on personal factors, mainly on how a person perceives their present conditions and the possibilities leading to a desired state (Ajzen, 1987, 1991; Retan, 1997). Byabashaija and Katono (2011), but also Bae et al. (2014) emphasise a particular role of situational factors (such as employability and the ability to make sacrifices and liabilities), as well as personality features (such as desirability, feasibility, effectiveness), which promote entrepreneurial intentions and their conversion to specific behaviour, in other words to set up your own business.

The second also frequently cited theoretical conceptualisation of entrepreneurial intentions is the entrepreneurial event model (EEM), often referred to as the concept of SEE (Shapero's entrepreneurial event), as this concept was initially created by Shapero (1975), and then developed by him together with his colleagues (Shapero & Sokol, 1982), although Krueger (1993) contributed to the development of this framework by introducing external factors, thus, this concept is sometimes referred to as the Shapero-Krueger model (Krueger, Carsrud & Reilly, 2000). Shapero's model assumes that inertia drives human activity, until there is an action disturbing the balance that usually has a negative context (e.g. loss of a job). Such impulses force a person to act (Heuer, 2012). Apart from entrepreneurial intentions, the credibility of a behaviour is also very important. Credibility is understood dichotomously as desirability and feasibility. These factors shape entrepreneurial intentions. An individual entrepreneurial intent is shaped in a broader context, it is to take into account a number of factors, both personal and behavioural (Elfving et al., 2009).

The theory of planned behaviour (TPB) and the entrepreneurial event model (EEM) are "the two most extensively tested competing theories that have been used to explain entrepreneurial intention" (Schlaegel & Koenig, 2013, p. 292). The co-creator of the latter concept also thinks so (Krueger et al., 2000). Intention-based models are implemented successfully not only in social psychology, but also in marketing and management (Krueger, Reilly, Carsrud, 2000, p. 416).

Prior research revealed very interesting empirical conclusions. Schlaegel and Koenig (2013, p. 318) studying all the determinants indicated in the TPB and EEM models showed "that the different determinants included in the two theories have a positive effect on entrepreneurial intentions". Pfeifer, Šarlija, and Zekić Sušac (2016) found that the main predictors of entrepreneurial intentions in Croatia are the strength of entrepreneurial identity aspiration and entrepreneurial self-efficacy. Siger and Monsen (2015) found that young people across various European countries perceive academic employment as an intrapreneurial career path (Perlman, Gueths, & Weber 1988), thus, the investigated "students with high levels of entrepreneurial self-efficacy prefer the academic to the employment option and the founding to the academic option" (Siger & Monsen, 2015, p. 45).

MATERIAL AND METHODS

The aim of the empirical research was an attempt to implement the theory of planned behaviour of Ajzen (1987, 1991, 2011) among a group of students in the Polish academic

environment. It is one of the most widely used concepts in analysing the intentions of behaviour, especially entrepreneurial intentions worldwide, and recently this concept is also implemented in Poland (Jiménez-Moreno & Wach, 2014; Wach, 2015; Rantanen, Pawlak & Toikko, 2015; Rachwał & Wach, 2016).

We decided to use a survey questionnaire among students. The survey was conducted by the Centre of Strategic and International Entrepreneurship of the Cracow University of Economics and the questionnaire was developed by Krzysztof Wach as a leader of the research project (Entrepreneurial Intentions Questionnaire, EIQ). However, it was based on the original questionnaires used in TPB and EEM surveys, nevertheless, they were extended and adapted to Polish realities.

The EIQ 2015 survey was conducted in a couple of universities in Krakow, including¹: (i) Cracow University of Economics, (ii) Jagiellonian University, (iii) Pedagogical University of Cracow², (iv) AGH University of Science and Technology, (v) Cracow University of Technology, (vi) University of Agriculture in Krakow, (vii) Jesuit University Ignatianum in Krakow.

The Centre of Strategic and International Entrepreneurship prepared 1,100 questionnaires and sent them to randomly selected professors from seven various universities in Krakow, asking them to distribute the questionnaires among their students during classes. Finally, we received 719 fully completed and corrected questionnaires, it means that the return rate is 65.4%.

The questionnaire consisted of 14 thematic blocks (**A**: Entrepreneurial intention EI; **B**: Attitude towards becoming an entrepreneur; **C**: Attitude towards entrepreneurial risk; **D**: Subjective norms; **E**: Entrepreneurial capacity; **F**: Entrepreneurial self-efficacy ESE; **G**: Entrepreneurial education EE; **H**: Perceived support; **I**: Perceived barriers; **J**: Locus of control; **K**: Proactive personality; **L**: Individual innovativeness; **M**: Entrepreneurial objectives; **N**: Characteristics of respondents). These blocks consisted of 3-20 specific questions, evaluated subjectively by the respondent on a 7-point Likert's scale. Where it was justified (A-L), we transformed the variables of individual blocks into quasi-continuous data using the arithmetic mean (Allen & Seaman, 2007), giving the image of a given trait of individuals. The survey was conducted from January to June 2015, and was followed by the construction of the database, the analyses of the correctness and completeness of the collected statistical data.

The following research hypotheses were assumed to be verified based on the empirical material:

- H1: Attitude (Ajzen's TPB):** The individuals positively disposed towards entrepreneurship are characterised by significantly higher entrepreneurial intentions than those reluctant to entrepreneurship.
- H2: Risk (extension of Ajzen's model):** The higher the willingness of individuals to take the risk, the higher the entrepreneurial intentions.
- H3: Norms (Ajzen's TPB):** The higher subjective standards to private enterprise in the society, the higher the entrepreneurial intentions of the individual.
- H4: Control (Ajzen's TPB):** The higher the belief in a possible control over the potential business activity is, the higher the entrepreneurial intentions of the individual.

¹ The official names of these universities were used (Krakow vs. Cracow).

² The results of the survey at that university are published in Rachwał & Wach (2016).

In order to verify the hypotheses we used descriptive statistics, correlation analysis and multivariate analysis. The calculations were performed in the environment of MS Excel and Stata 12.

RESULTS AND DISCUSSION

Based on the correlation analysis carried out for the full sample (Table 1), we found that students with a very positive attitude towards becoming an entrepreneur (B), assuming that being an entrepreneur has more advantages than disadvantages), have high entrepreneurial intentions (A), meaning that these students are ready to make a lot of efforts to start and run their own business ($r = 0.8$). Those students who are willing to start a business (A), and what is more it would be easy for them due to their entrepreneurial capacity (E), have a high sense of entrepreneurial self-efficacy (F). It is worth adding that these students at the same time declare relatively high ratings of their entrepreneurship education (G). We also noted that the proactive personality (K) accompanied the innovative behaviour of students (L). We found negative correlations between proactivity (K) and innovative individual behaviour (L), as well as between a locus of control (J) and individual innovativeness (L), which in the future should result in a in-depth analysis with regard to more homogeneous control variables.

It is visible that those students who plan to become entrepreneurs significantly stand out from the respondents *in plus* in terms of most of the criteria. In particular, these differences are visible in the case of the questions about entrepreneurial self-efficacy. In the case of the questions about a locus of control, a person willing to become an entrepreneur showed lower scores than the others (Figure 1), which means that these students believe that everything depends on them, not on luck.

Table 1. The correlation matrix of synthetic indicators designed on the basis of particular thematic blocks of questions A-L

	A	B	C	D	E	F	G	H	I	J	K	L
A	1.00											
B	0.80	1.00										
C	0.41	0.40	1.00									
D	0.36	0.40	0.32	1.00								
E	0.59	0.55	0.47	0.41	1.00							
F	0.43	0.42	0.39	0.36	0.67	1.00						
G	0.36	0.28	0.32	0.17	0.59	0.54	1.00					
H	0.35	0.35	0.22	0.26	0.40	0.41	0.39	1.00				
I	-0.20	-0.19	-0.16	-0.16	-0.30	-0.21	-0.22	-0.12	1.00			
J	-0.18	-0.15	-0.22	-0.18	-0.24	-0.24	-0.21	-0.09	0.30	1.00		
K	0.39	0.36	0.46	0.30	0.49	0.45	0.44	0.23	-0.19	-0.36	1.00	
L	0.33	0.30	0.49	0.28	0.42	0.39	0.37	0.16	-0.24	-0.42	0.69	1.00

Note: Critical level of Pearson correlation 0.052 ($\alpha = 0.05$).

Source: own calculations in Stata 12 (EIQ 2015, $n = 719$).

By distinguishing the sample into two sub-samples (students that are studying on economic/business studies and others), we assume that these two groups differ significantly in some cases. Particularly, we observe big differences in the case of entrepreneurial intentions, entrepreneurial self-efficacy and entrepreneurship education. Those who study economics/business are characterised by higher average values of these variables (Figure 2).

According to the first regression model (Table 2), the higher attitude (B) towards becoming an entrepreneur (i.e. satisfaction, being one's own boss rather than having a secure job), the higher entrepreneurial intentions (A) are.

Similar results were noted in the case of the attitude towards entrepreneurial risk (C). The more willing to take a risk, experience-oriented, courageous students are, the more often they state that their goal is to be an entrepreneur and to create their own business in future. Statistically significant and positive coefficient corresponding to (E) means that high entrepreneurial capacity influences entrepreneurial intentions.

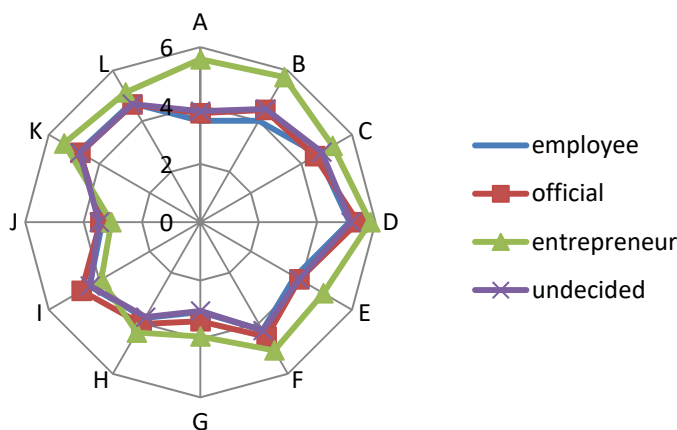


Figure 1. Radial diagram of the average values A-L and the desired career path

Source: own study (EIQ 2015, $n = 719$).

Moreover, controlling the education background by using *Economic_studies* variable³, we assume that those who study economics/business have significantly higher entrepreneurial intentions than others. The presented model explains variance of (A) in almost 70%. According to the second regression model (Table 3), these students who are more willing to take a risk, especially with regard to money, and who are looking for new experiences (C), aim to be entrepreneurs and to create their own businesses in future (A). We obtained similar results in the case of subjective norms (D). Students that claim that their family, friends and colleagues would admire their decision to start own business, have higher entrepreneurial intentions. Statistically significant and positive coefficient corresponding to (E) means that high entrepreneurial capacity influences entrepreneurial intentions. We also checked the education background as a control variable, as we assume also in this case that those who study economics/business have significantly higher entrepreneurial intentions than others. The presented model explains variance of A in almost 40%. Although this model explains rather low part of A variance, it indicates that

³ Binary variable: 1 if a respondent studies economics/business, 0 otherwise.

D factor has got significant positive impact on the explained variable. In the first model this variable was omitted because of high correlation between B and D factors.

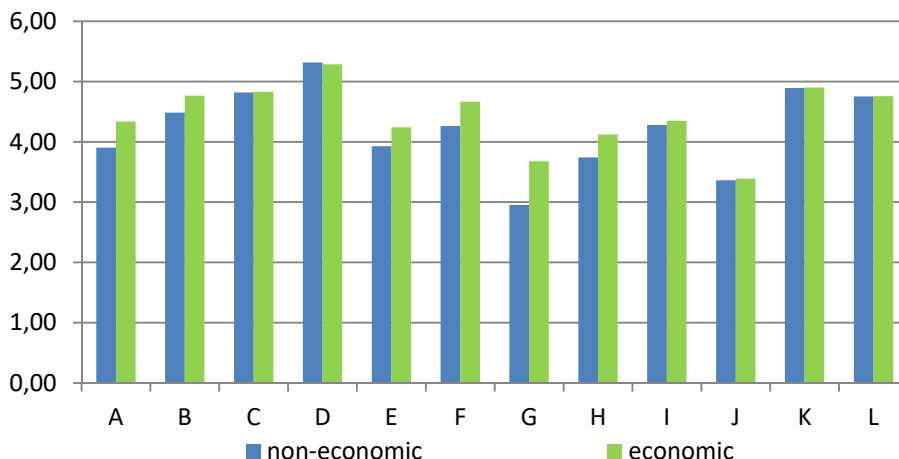


Figure 2. Bar diagram of the average values A-L by economic and non-economic studies
 Source: own study (EIQ 2015, n = 719).

Table 2. The multiple OLS regression explaining entrepreneurial intention (version 1)

dependent variable: A	coef.	st. err.	t-stat	p-value	conf. interval.	
const	-0.795	0.179	-4.430	0,000	-1.147	-0.443
B	0.747	0.030	25.000	0,000	0.688	0.805
C	0.085	0.034	2.470	0.014	0.017	0.152
D	-0.003	0.029	-0.100	0.919	-0.061	0.055
E	0.244	0.036	6.840	0.000	0.174	0.314
Economic_studies	0.147	0.063	2.350	0.019	0.024	0.270
Adj. R-squared	67.3%	F-stat & p-value	296.48 [0,000]	MSE	0.826	

Source: own calculations in Stata 12 based on EIQ 2015 survey (n = 719).

The results of our study are intuitive and in line with other research in this field. Karim et al. (2016, p. 195) using structural models, on a sample of 205 students from 6 Iranian universities, showed that there are positive effects of social norms, attitude towards entrepreneurship and perceived behavioural control on entrepreneurial intentions. Based on a sample of 454 students from one Croatian university, Pfeifer, Šarlija, and Zekić Sušac (2016, p. 108) found that entrepreneurial intentions are impacted mainly by entrepreneurial self-efficacy. Similar results were obtained by Piperopoulos and Dimov (2015, p. 970) using a sample of 114 students from major British universities, however, they evidenced that “higher self-efficiency is associated with lower entrepreneurial intentions in the theoretically orientated courses and higher entrepreneurial

intentions in the practically orientated courses". We tested this issue in general, so it can be beneficial to test also the impact of the course character (practical vs. theoretical).

CONCLUSIONS

The statistical calculations confirmed that three Ajzen's independent variables, such as attitude towards entrepreneurship, subjective norms and perceived behavioural control determine entrepreneurial intentions of the investigated students. Additionally, we found out that the risk attitude is also a determinant in a similar way, and entrepreneurial intentions differ between business and non-business students. All four hypotheses were confirmed. Based on the empirical material, we can draw the following detailed conclusions:

- There is a strong positive relationship between entrepreneurial intentions (A) and attitude towards entrepreneurship (B), and moderately strong between entrepreneurial intentions (A) and perceived behavioural control (E).
- Students thinking of or planning to become entrepreneurs in the future are characterised by higher than in other groups variables such as attitude towards entrepreneurship (B), risk propensity (C), subjective norms (D), perceived behavioural control (E), entrepreneurial self-efficacy (F), and lower variables such as perceived barriers to entrepreneurship (I) and a locus of control (J).
- There are differences between students of economics/business and non-economic fields of studies. The differences manifest in particular in categories A, B, F, G, H, where individuals in the study fields of economics/business showed higher values.
- Estimated models indicate that the individual entrepreneurial intent is positively influenced by such factors as B, C, D, E, as well as the fact of being a student of economics/business study fields.

Like any empirical studies based on perception, also the one presented and discussed in the article, has its research limitations. First, the sample was relatively large, but did not include the entire student population of Krakow, and the same was not fully representative, however, it was randomly selected. Second, statistical inferencing on the basis of perception, although fully acceptable by psychologists and having a lot of confirmations in fact, still does not allow to absolutise in entrepreneurship research. The collected empirical material and, above all the findings indicate a possible extension of the research by new research topics, such as positive and negative motives in making decisions about starting a business. In the next study it will be crucial to confront Ajzen's TPB with Shapiro's EEM, as well as to add new variables into these well-established models, such as proactiveness and innovativeness of individuals.

REFERENCES

- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behaviour in social psychology. *Advances in Experimental Social Psychology*, 20, 1-63.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, 26(9), 1113-1127, <http://dx.doi.org/10.1080/08870446.2011.613995>

- Allen, I.E., & Seaman, C.A. (2007). Likert scales and data analyses. *Quality Process*, 40(7), 64-65.
- Bae, T.J., Qian, S., Miao, Ch., & Fiet, J.O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship Theory and Practice*, 38(2), 217-254.
- Byabashaija, W., & Katono, I., (2011). The Impact of College Entrepreneurial Education on Entrepreneurial Attitudes and Intention to Start a Business in Uganda, *Journal of Developmental Entrepreneurship*, 16(1), 127-144.
- Daszkiewicz, N. (2013), Education as a Stimulating Factor for Entrepreneurship Development. *Horyzonty Wychowania*, 13(26), 165-177.
- Elfving, J, Brännback, M., & Carsrud, A. (2009). Toward A Contextual Model of Entrepreneurial Intentions (chapter 2). In: A.L. Carsrud, M. Brännback (Eds.), *Understanding the Entrepreneurial Mind: Opening the Black Box* (International Studies in Entrepreneurship Series, vol. 24). New York: Springer Verlag.
- Heur, A. (2012). *Perspectives on Parameters Influencing Entrepreneurial Intentions*. Doctoral Dissertation. HEC Management School University of Liege, Liege.
- Jiménez-Moreno, J.J., & Wach, K. (2014). The Entrepreneurial Profile of Students Participating in the Academic Entrepreneurship Course: Pilot Study Results. *Horyzonty Wychowania*, 13(26), 121-143.
- Karimi, S., Biemans, J.A., Lans Th., Chizari, M., & Mulder, M. (2016). Entrepreneurial Intentions and Opportunity Identification. *Journal of Small Business Management*, 54 (1), 187-209.
- Koçoğlu, M., & Hassan, M.U. (2013): Assessing Entrepreneurial Intentions of University Students: A Comparative Study of Two Different Cultures: Turkey and Pakistani, *European Journal of Business and Management*, 5(13), 243-252.
- Kosała, M., & Pichur, A. (2008). Analiza działań przedsiębiorczych i postrzeganie prowadzenia działalności gospodarczej wśród młodego pokolenia – wybrane aspekty. *Przedsiębiorczość – Edukacja*, 4, 347-354.
- Krueger, N. (1993). Impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-21.
- Krueger, N.F., Reilly, M.D., & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432. [http://dx.doi.org/10.1016/S0883-9026\(98\)00033-0](http://dx.doi.org/10.1016/S0883-9026(98)00033-0)
- Kuehn, K.W, (2008). Entrepreneurial Intentions Research: Implications for Entrepreneurship Education. *Journal of Entrepreneurship Education*, 11, 87-98.
- Lima, E., Lopes, R.M., Nassif V., & de Silva, D. (2015). Opportunities to Improve Entrepreneurship Education: Contributions Considering Brazilian Challenges. *Journal of Small Business Management*, 53(4), 1033-1051.
- Marona B., & Głuszak M. (2014). The Ties that Bind? Real Estate Education in Europe and Regulatory Framework in Poland. *The New Educational Review*, 35(1), 187-201.
- Najda-Janoszka, M., & Wach, K. (2008). Lifelong Learning in the Field of Tourism in the European Union taking Poland into Special Consideration (pp. 45-58). In: M. Bednarczyk (Ed.), *Entrepreneurship in Tourism and Sport Business*. Kraków: Fundacja dla Uniwersytetu Jagiellońskiego.
- Piperopoulos, P., & Dimov, D. (2015). Burst Bubbles or Build Steam? Entrepreneurship Education, Entrepreneurial Self-Efficacy, and Entrepreneurial Intentions. *Journal of Small Business Management*, 53(4), 970-985.
- Perlman, B., Gueths, J., & Weber, D.A. (1988). *The Academic Intrapreneur: Strategy, Innovation, and Management in Higher Education*. New York: Praeger.

- Pfeifer, S., Šarlija, N., & Zekić Sušac, M. (2016). Shaping the Entrepreneurial Mindset: Entrepreneurial Intentions of Business Students in Croatia. *Journal of Small Business Management*, 54 (1), 102-117.
- Płaziak, M., & Rachwał, T. (2014). Entrepreneurship Courses in Spatial Management Studies in Polish Universities. *Procedia - Social and Behavioral Sciences*, 110, 710-718, <http://dx.doi.org/10.1016/j.sbspro.2013.12.915>
- Rachwał, T. (2010). Entrepreneurship Education as a Growth Stimulus for Family Firms (chapter 9). In: A. Surdej, K. Wach (Eds), *Exploring the Dynamics of Entrepreneurship*. Toruń: Marszałek Publishing House (pp. 139-156).
- Rachwał, T., & Wach, K. (2016). Badanie intencji przedsiębiorczych młodego pokolenia: wyniki ankietyzacji wśród studentów kierunków nieekonomicznych. *Przedsiębiorczość – Edukacja*, 12.
- Rantanen, T., Pawlak A. & Toikko, T. (2015). The Significance of Social Welfare Attitudes in Young People's Entrepreneurial Intentions. *Entrepreneurial Business and Economics Review*, 3(1), <http://dx.doi.org/10.15678/EBER.2015.030104>
- Sadowska, M. (2016). Edukacja w zakresie przedsiębiorczości w polskim systemie kształcenia oraz w państwach europejskich. *Przedsiębiorczość Międzynarodowa*, 2(1), 149-164.
- Schlaegel, Ch., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: A Meta-Analytic Test and Integration of Competing Models. *Entrepreneurship Theory and Practice*, 38(2), 291-332.
- Shapiro, A. (1975). The displaced, uncomfortable entrepreneur. *Psychology Today*, 9, 83-88.
- Shapiro, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In: C.A. Kent, D.L. Sexton, & K.H. Vesper (Eds.), *The encyclopedia of entrepreneurship* (pp. 72-90). Englewood Cliffs, NJ: Prentice-Hall.
- Shook, C.L., Priem, R.I., & McGee, J.E. (2003). Venture creation and the enterprising individual: A review and synthesis. *Journal of Management*, 29(3), 379-399.
- Sieger, P., & Monsen, E. (2015). Founder, Academic, or Employee? A Nuanced Study of Career Choice Intentions. *Journal of Small Business Management*, 53(1), 30-57.
- Thompson, E.R. (2009). Individual Entrepreneurial Intent: Construct Clarification and Development of an Internationally Reliable Metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694.
- Urbaniec, M. (2014). Współczesne wyzwania edukacji na rzecz przedsiębiorczości w szkolnictwie wyższym. *Horyzonty Wychowania*, 13(26), 209-230.
- Wach, K. (2013). Edukacja na rzecz przedsiębiorczości wobec współczesnych wyzwań cywilizacyjno-gospodarczych. *Przedsiębiorczość – Edukacja*, 9, 246-257.
- Wach, K. (2014). Europeanisation of Entrepreneurship Education in Europe – Looking Back and Looking Forward. *Horyzonty Wychowania*, 13(26), 11-32.
- Wach, K. (2015). Środowisko biznesu rodzinnego jako stymulanta intencji przedsiębiorczych młodzieży akademickiej. *Przedsiębiorczość i Zarządzanie*, XVI(7[III]), 25-40.
- Żur, A. (2014). Exploring the Role of Inspiration in Entrepreneurship Education. *Horyzonty Wychowania*, 13(26), 179-194.

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Who Doesn't Want to be an Entrepreneur? The Role of Need for Closure in Forming Entrepreneurial Intentions of Polish Students

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Abstract

The objective of this paper is to broaden our understanding of the factors that shape entrepreneurial intention (EI). Specifically, we analyse how the need for cognitive closure (NfC) influences EI. We test our hypothesis using hierarchical regression models, based a sample of 129 Polish business students, controlling for a number of individual-level variables (i.e. gender, entrepreneurial role models, educational profile, entrepreneurial self-efficacy and locus of control). We find support for the assertion that NfC negatively influences the level of EI. In comparison with the baseline model (control variables only), the explanatory power of the model including the NfC is significantly higher. Individuals that score higher on the need for cognitive closure declare lower entrepreneurial intentions. This study suggests that EI is to a large extent influenced by relatively stable, dispositional, personal-level variables, thus indicating potential barriers to fostering entrepreneurship through institutional measures. However, further studies investigating the interactions between individual level and institutional level variables are needed in order to assess the impact of such measures on entrepreneurial intentions and behaviours. Such research will bring important practical insights into entrepreneurial education and public policy.

Keywords: entrepreneurial intention; personality; need for cognitive closure; students; entrepreneurship education; Poland

JEL codes: M13

INTRODUCTION

One of the key elements of entrepreneurial activity is the process of forming the beliefs regarding the chances to succeed in a given venture (Schumpeter, 1911/1960). Therefore

the fundamental questions asked in the entrepreneurship literature regard the ways in which these beliefs are formed and how they further translate into entrepreneurial behaviours (Shane & Venkataraman, 2000). Most of entrepreneurship scholars agree that the entrepreneur is the key to understand this phenomenon. This is why entrepreneurship, at first being predominantly investigated by economists and sociologists, in the last 30 years has received much attention in psychological literature. Numerous studies in this stream of research investigate individual differences as determinants of entrepreneurial behaviours. However, the rich body of literature on psychological determinants of entrepreneurship has yielded ambiguous results and there are still important knowledge gaps, relating mostly to cognitive and motivational antecedents of entrepreneurial behaviours.

The aim of this paper is to contribute to the discussion on psychological antecedents of entrepreneurial intentions by focusing on the role of the need for cognitive closure. Based on a sample of 129 Polish business students, using hierarchical regression analysis, we investigate the need for cognitive closure (NfC) as an antecedent of entrepreneurial intentions (EI), while controlling for entrepreneurial self-efficacy, locus of control, entrepreneurial role models, gender and educational profile. We find support for the notion that the need for cognitive closure is negatively related to entrepreneurial intent. To the best of our knowledge, this is one of the first studies incorporating the need for cognitive closure in explaining entrepreneurial intentions.

The article is structured as follows. We first present the literature review and develop our hypothesis. Next, we discuss the data collection procedure, sample, and operationalisation of variables. Then, we provide the results of the regression analysis. We also discuss both the theoretical and practical implications of our findings and the limitations of our study.

LITERATURE REVIEW

Entrepreneurial Intention as a Domain of Studies

Entrepreneurship has been defined as founding new organizations (Gartner, 1988), conducting entrepreneurial activity at ones' own sake (Zhao & Seibert, 2006) or discovering, evaluating and exploiting opportunities (Shane & Venkataraman, 2000). Global Entrepreneurship Monitor (GEM) defines entrepreneurship as "Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business" (Reynolds, Hay & Camp, 1999, p. 3). All these definitions are behavioural, i.e. they relate to a specific behaviour or an intent to behave in a particular way (Rauch & Frese, 2007).

Following the notion that "intention is the best single predictor of behaviour" (Fishbein & Ajzen, 2010), a lot of research in the field of entrepreneurship has been focused on entrepreneurial intentions, defined as "the expressed behavioural intention to become an entrepreneur" (Zhao, Seibert & Lumpkin, 2010, p. 383). The dominant theoretical frameworks in this stream of research are Ajzen's Theory of Planned Behaviour (Ajzen, 1991), originating from social psychology, and Shapero's Entrepreneurial Event Model (Shapero & Sokol, 1984), originating from the entrepreneurship literature. These models to a great extent overlap (Kautonen, van Gelderen & Fink, 2015) and have recently been integrated in a meta-analytical study by Schlaegel and Koenig (2014).

The rich body of literature on entrepreneurial intentions has been reviewed by Liñán and Fayolle (2015). Most influential papers in this field of research have been categorized into five groups. The first category covered papers discussing theoretical and methodological issues in IE research and testing the core models of IE. The second category covered papers focusing on personal-level variables, such as gender (Wilson, Kickul & Marlino, 2007), family role models (Carr & Sequeira, 2007), social capital (Liñán & Santos, 2006) and personality traits (Segal, Borgia & Schoenfeld, 2005). The third group of studies focused on the role of entrepreneurial education (Pittaway & Cope, 2007). Papers falling into the fourth category investigated the role of context and institutions, covering multi-country samples (Engle *et al.*, 2010). The last group of papers analysed intention-behaviour links, indicating that entrepreneurial intention is indeed a strong predictor of entrepreneurial behaviour (Kolvereid & Isaksen, 2006).

Based on their extensive review, Fayolle and Liñán (2014) indicated the importance of individual-level variables, especially those grounded in cognitive psychology.

Psychological Antecedents of Entrepreneurial Intentions

The potential of integrating insights from psychological research to study economic phenomena has been signalled by the award of the Nobel Prize in economics to Daniel Kahneman for his work on judgment and decision-making under uncertainty. The cognitive approach, focusing on cognitive structures, cognitive styles, cognitive biases and heuristics and decision-making logic, has recently become the dominant perspective in entrepreneurship (Baron, 2004). This perspective focuses on how entrepreneurs “think”. Busenitz and Barney (1997) pointed out that entrepreneurs use intuition more extensively than managers. They also manifest more “overconfidence” and representativeness biases and are less concerned about the facts.

Literature on entrepreneurial cognition overlaps to a certain extent with a broad stream of research focusing on the role of personality in entrepreneurship. Studies investigating the relationships between personality traits (e.g. risk preferences, achievement motivations) and entrepreneurship started in the 1960s (Litzinger, 1965; Wainer & Rubin, 1969). However, by the late 1980s, this stream of literature had brought very few conclusive findings. As a result, numerous scholars raised serious doubts about the legitimacy of trait-based approach to study entrepreneurship. In his widely cited paper, Gartner (1988) stated: “I believe that attempt to answer the question ‘Who is an entrepreneur?’, which focuses on the trait and personality characteristics of entrepreneurs, will neither lead us to a definition of the entrepreneurs nor help us to understand the phenomenon of entrepreneurship” (p. 48).

Recently, interest in the role of personality in entrepreneurship re-emerges (Zhao, Seibert & Lumpkin, 2010). This has been attributed to two phenomena (Kaczmarek & Kaczmarek-Kurczak, 2012): the popularisation of meta-analysis as a technique allowing for analysing and integrating results from previous research, as well as the increasing legitimacy of the Five Factor model (FFM) as a coherent framework describing personality dimensions. This model includes five broad personality traits: emotional stability, extraversion, openness to experience, agreeableness, conscientiousness (Costa & McCrae, 1992).

Zhao *et al.* (2010) have performed a meta-analysis of studies investigating the relationships between personality and entrepreneurial intentions and performance. They ground their study in career choice theory (Holland, 1997) and person-environment fit theory (Kristof, 1996). Both theories indicate that people choose career environment they fit and

therefore, that vocational choices are to a certain extent reflection of personality. Based on the “task demands” and “work roles” related to the “job” of entrepreneur (i.e. goal achiever, relationship builder, risk taker, innovator), Zhao *et al.* (2010) formulate a set of hypotheses linking personality traits (i.e. Big Five and risk propensity) with entrepreneurial intentions and performance. Their meta-analysis indicated that emotional stability, extraversion, openness to experience, conscientiousness and risk propensity were positively related to entrepreneurial intentions. Moreover, all of these traits (with the exception of risk propensity) were positively related to entrepreneurial firm performance.

Rauch and Frese (2007) argue that broad traits, such as Big Five, are “distal and aggregated” and therefore they are not suited to predict specific behaviours, such as starting a business. They point at a number of specific personality traits, such as need for achievement, risk-taking, innovativeness, autonomy, locus of control, and self-efficacy, that are more directly linked to specific entrepreneurial behaviours. They call for the inclusion of other theoretical constructs in models explaining entrepreneurial behaviours, indicating the potential role of entrepreneurial cognition.

Need for Cognitive Closure

Recent contributions from cognitive psychology have brought a number of theoretical constructs that may be particularly relevant to explaining entrepreneurial intentions and behaviours. One of such constructs is the need for cognitive closure (Kruglanski, 1990).

Kruglanski (1990, p. 337) defines the need for cognitive closure as a desire for “an answer on a given topic, any answer, compared to confusion and ambiguity”. NFC may be seen as a dimension of individual differences relating to individual's 'motivation with respect to information processing and judgement' (Webster & Kruglanski, 1994, p. 1049). The term 'need' does not refer to the deficit, but to a motivated tendency (urgency tendency and permanence tendency) (Kruglanski & Webster, 1996).

People that are characterised by high need for cognitive closure manifest a preference for structure, quick decision-making, predictability, rigidity of thought and low tolerance for ambiguity. Webster and Kruglanski (1994) propose that need for cognitive closure is a one-dimensional instrument with five facets: preference for order, preference for predictability, discomfort with ambiguity, closed-mindedness, decisiveness. Therefore, they conceptualise the NFC as a single latent variable, manifesting itself in various ways. Need for closure correlates positively with authoritarianism (characterized, by rigidity, conventionalism, and intolerance of those who violate conventional norms), intolerance of ambiguity, dogmatism (i.e. closed belief systems), impulsivity (i.e. tendency to be careless and impulsive, as opposed to cautious and reflective), and need for structure (i.e. desire to structure the environment); and negatively with cognitive complexity (i.e. capacity to interpret social behaviours in a multidimensional way), fear of invalidity (i.e. fear of making judgmental errors) and need for cognition (i.e. the extent to which one 'enjoys thinking') (Webster & Kruglanski, 1994).

Tolerance for ambiguity have been found to influence entrepreneurial attitudes, intentions and behaviours, both in student and non-student samples. It was positively related to entrepreneurial intentions of Spanish (Espíritu-Olmos & Sastre-Castillo, 2015) and Turkish (Gürol & Atsan, 2006; Koh, 1996) students. Gupta and Govindarajan (1984) in their study of determinants of strategic business units (SBUs), found that tolerance for ambiguity contributed to effectiveness of strategy implementation in SBUs aimed at 'building' (i.e. increasing

market share) and hampered the effectiveness of strategy implementation in SBUs aimed at 'harvesting' (i.e. maximizing short term profit and cash flow). Teoh and Foo (1997) in their study of entrepreneurs in small and medium-sized businesses in Singapore, found that tolerance for ambiguity moderated the relationship between role conflict and perceived performance, that is entrepreneurs with more tolerance for ambiguity were better positioned to 'neutralise' negative effect of role conflicts upon performance outcomes.

While the aforementioned studies focus on one facet of NfC, that is tolerance for ambiguity, literature on the role of NfC in entrepreneurship, using the construct offered by Kruglanski (1990) is limited to very few studies. Schenkel, Matthews and Ford, (2009), using the Panel Study of Entrepreneurship Dynamics (PSED), found that NfC (measured with single-item proxies) was positively related with nascent entrepreneurial activity.

The exploratory study of Schenkel *et al.* (2009) enforces the idea that incorporating "cognitive factors rooted in the lay epistemic motivations of individuals" (p. 67) offer an opportunity to enhance the underlying nature of entrepreneurial behaviour. In discussing the limitations of their exploratory study, Schenkel *et al.* (2009) call for further research that would use the complete NfC scale grounded in psychology literature, employing a number of control variables.

The NfC construct is grounded in the social learning theory, assuming that individuals are motivated to avoid unpleasant stimulation and seek positive stimulation (Rotter, 1966). NfC involves two tendencies: urgency and permanence. Therefore, we follow Shenkel *et al.* (2009, p. 59) in arguing that NfC may pose a barrier to undertaking entrepreneurial activity, since "such situations will frustrate the desire to have order and predictability, prevent decisiveness, and produce feelings of discomfort resulting from ambiguity."

Entrepreneurship is inherently concerned with dealing with extreme uncertainty (Knight, 1921) and bringing about 'creative destruction' (Schumpeter, 1942/1976). Therefore, based on career choice theory (Holland, 1997) and person-environment fit theory (Kristof, 1996) we may expect that people who score high on the need for cognitive closure are less attracted to entrepreneurship and more inclined to pursue a more 'conventional' and predictable career path. We therefore formulate the following hypothesis:

H: Need for cognitive closure is negatively related to entrepreneurial intentions.

MATERIAL AND METHODS

Data Collection and Sample

The questionnaire was addressed to 140 full-time MA students of the Faculty of Management, University of Warsaw, participating in the course of Strategic Management. The questionnaire (pen-and-paper, group study) was administered in December, 2014. Respondents who run their own businesses at the moment of the study ($n = 8$), as well as those which were incomplete ($n = 3$) were excluded from the analysis. The final sample comprised of 129 students (108 female and 21 male students), with average age of 22.6 (SD = 1.45). While the purposeful sampling has limitations, it yielded a sample that was to a large extent homogeneous in terms of age, current education profile, nationality, and place of residence.

Measures

The dependent variable, i.e. Entrepreneurial Intention was measured with a 4-item scale (EI) elaborated by Łaguna (2006a). Respondents were asked to assess, on a 5-point Likert scale, the degree to which they agree with the following statements: (1) 'I intend to start my own business', (2) 'I will use the opportunity to start own business', (3) 'I will try to start my own business', (4) 'I decided to start my own business'. The final result is computed as a mean of individual item scores. High scores in EI scale correspond to high entrepreneurial intention.

Need for cognitive closure was measured with a shortened Need for Closure Scale, elaborated by Kruglanski, Webster and Klem (1993), adapted by Jaworski (1998). This scale comprises of 20 items (e.g. 'I think that having clear rules and order at work is essential for success', 'I don't like situations that are uncertain', 'I enjoy having a clear and structured mode of life'), assessed on a 6-point Likert scale. The final result is computed as a sum of individual item scores. High scores in this scale correspond to high need of cognitive closure.

Following the findings of previous studies indicating the role of gender (Wilson *et al.*, 2007), education and family background (Wach, 2015) in forming entrepreneurial intentions, we control for gender (dichotomous variable), previous education (dichotomous variable: business *versus* non-business) and entrepreneurial role models (dichotomous variable assessed with a question 'My mother / my father owns or used to run her / his own business' and entrepreneurial self-efficacy).

Moreover, we control for two of the variables (namely: locus of control and entrepreneurial self-efficacy), originating from the psychological literature (Rotter, 1966; Bandura, 1997) and extensively used in studies investigating the link between personality and entrepreneurship.

The importance of locus of control to entrepreneurship stems from the fact that the belief in controlling one's future increases people's motivation to actively shape one's environment. Rauch and Frese (2007) conducted a meta-analysis of 20 studies and found a small, yet significant difference between owners and non-owners locus of control.

Locus of control (ELOC) has been measured with Internal-External Locus of Control scale elaborated by Rotter (1966). This is a 29-item scale, with 23 diagnostic items with dichotomous structure. Respondents choose between pairs of statements relating to everyday situations (e.g. 'When I make plans, I am almost certain that I can make them work.' *versus*: 'It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow'; 'Many of the unhappy things in people's lives are partly due to bad luck.', *versus*: 'People's misfortunes result from the mistakes they make.'; 'The idea that teachers are unfair to students is nonsense.', *versus*: 'Most students don't realize the extent to which their grades are influenced by accidental happenings.'). High scores in I-E Scale correspond to external locus of control.

Entrepreneurial self-efficacy positively correlates with the propensity of becoming entrepreneur (Chen, Greene & Crick, 1998) and achieving high (profits) in entrepreneurial activities (Markman, Balkin & Baron, 2002). It also proved to be the key determinant of entrepreneurial intentions of Polish students (Wąsowska, 2016).

Entrepreneurial self-efficacy (ESE) was measured with a 21-item Entrepreneurial Self-Efficacy Scale, elaborated by Łaguna (2006a), based on Gatewood, Shaver & Gartner,

(1995). This scale is designed to 'measure perceived self-efficacy in carrying out tasks aimed at a new venture creation' (Łaguna, 2006a, p. 123). It has been originally validated on a group of participants of courses in entrepreneurship (aged 18-55) (Łaguna, 2006a) and subsequently used in studies on samples of unemployed (Łaguna, 2006b). Considering the fact that similar scales of entrepreneurial self-efficacy (Chen *et al.*, 1998) have been used in student samples (Kaczmarek & Kaczmarek-Kurczak, 2014), we believe that it is appropriate use this scale in our study. The scale has a 3-factor structure, corresponding to self-efficacy in three distinct narrow domains of entrepreneurial activity, i.e. (1) gathering marketing information, (2) managing financial and legal matters, and (3) setting up business operations. Respondents assess their efficacy beliefs on a 100-point scale, from 0 ('cannot do') to 100 ('highly certain can do'). The final result is computed as a mean of individual item scores. High scores in this scale correspond to high entrepreneurial self-efficacy. Correlation matrix and descriptive statistics are presented in table 1.

Table 1. Correlations and descriptive statistics

	EI	ESE	NFC	ELOC
<i>r-Pearson correlations</i>				
EI	1	0.326**	-0.234**	-0.310
ESE	0.326**	1	-0.133	-0.171
Nfc	-0.234**	-0.133	1	0.21*
ELOC	–	–	–	1
<i>Descriptive statistics</i>				
Mean	12.868	65.108	87.171	13.783
SD	3.904	10.602	12.010	3.915
Minimum	4.000	36.190	41.000	2.000
Maximum	20.000	87.143	115.000	22.000

Significant codes: $p < 0.001$; ** $p < 0.01$; * $p < 0.05$

Source: own calculations in SPSS.

RESULTS AND DISCUSSION

A hierarchical regression analysis was performed to test the research hypothesis. We first run the baseline model (Model 1, Table 2), comprised of control variables only (respondent's gender, education profile, entrepreneurial role models, self-efficacy and locus of control). In the full model (Model 2, Table 2) we add the main tested variable, i.e. need for cognitive closure. We also examined potential multi-collinearity problems by calculating the value inflation factors (VIF's). Moreover, we tested the autocorrelation of residuals with (Durbin-Watson test) and the normality of residuals (Kolmogorov-Smirnov test). We analysed the plot of residuals versus predicted values to check the assumptions of homoscedasticity and linearity.

The baseline model (Model 1, Table 2) is statistically significant ($F = 3.247$, $p < 0.01$) and explains 8,1% of the variance of entrepreneurial intention. The full model (Model 1, Table 2) is statistically significant ($F = 3.913$, $p < 0.001$) and explains 12% of the variance of entrepreneurial intention. In comparison with the baseline model (Model 1), its explanatory power is significantly higher (F-Change is statistically significant). As evidenced by the results, need for cognitive closure has a negative and significant influence on EI, and therefore, our research hypothesis is supported.

Our findings support the notion that individual cognition shapes entrepreneurial intention. Individuals that score higher on the need for cognitive closure declare lower entrepreneurial intentions. This result is in line with the career choice theory (Holland, 1997) and person-environment fit theory (Kristof, 1996), both suggesting that people are attracted to jobs that best suit their personality and needs. In this, our findings echo studies investigating the relationships between the Big Five personality traits and entrepreneurial intention (Zhao, Seibert & Lumpkin, 2010). However, in line with the recommendations of Rauch and Frese (2007) and following Schenkel *et al.* (2009), instead of studying broad, general personality traits, we focus on a cognitive-motivational construct of NfC. Using a psychometrically validated measure of NfC (Kruglanski, Webster & Klem, 1993; Jaworski, 1998) and number of control variables, we respond to calls formulated in the pioneering study by Schenkel *et al.* (2009). However, contrary to Schenkel *et al.* (2009) who find a positive correlation between NfC and nascent entrepreneurial activity, we observe a negative relationship between NfC and entrepreneurial intentions. Our results support the notion that, since both the urgency and permanence tendencies implied by NfC are not satisfied by entrepreneurial activity, people scoring high on NfC will be less inclined to pursue 'entrepreneurial' career path.

Table 2. Linear regression analysis

	Model 1 (baseline model)			Model 2 (full model)				
	Beta	t	Sig.	Beta	T	Sig.	Tolerance	VIF
gender	-0.004	-0.041	0.967	0.041	0.472	0.638	0.909	1.100
ESE	0.327	3.747	0.000	0.306	3.569	0.001	0.936	1.069
Role model	-0.048	-0.555	0.580	-0.048	-0.561	0.576	0.945	1.058
Education	-0.083	-0.974	0.332	-0.104	-1.234	0.219	0.972	1.029
ELOC	0.034	0.390	0.697	0.075	0.875	0.383	0.928	1.077
NfC	–	–	–	-0.223	-2.552	0.012	0.899	1.112
Model	–	–	–	–	–	–	–	–
R2	0.117	–	–	0.161	–	–	–	–
Adj R2	0.081	–	–	0.120	–	–	–	–
F	3.247	–	–	3.913	–	–	–	–
Sig. of F	0.009	–	–	0.001	–	–	–	–
Change in R2	–	–	–	0.045	–	–	–	–
F-Change	–	–	–	6.514	–	–	–	–
Sig. of F-Change	–	–	–	0.012	–	–	–	–

Source: own calculations in SPSS.

CONCLUSIONS

The objective of this paper was to shed more light on psychological antecedents of entrepreneurship, by investigating relationship between NfC and EI. We find that NfC negatively influences EI, thus supporting our research hypothesis. To the best of our knowledge, this is one of the first attempt to explore the role of the need for cognitive closure in forming entrepreneurial intentions.

Our findings are tempered by a number of limitations. First, as we use a student sample, the representativeness of our results is limited. Second, we study entrepreneurial intentions and not the actual behaviour. Our findings should be now tested on larger,

representative samples. Third, future studies might follow alternative conceptualisations and measurements of NfC. For example, Webster and Kruglanski (1994) originally treat NfC as a single latent variable. However, in line with more recent studies decisiveness may be treated as a separate factor, and studied independently from NfC. Fourth, it would be interesting to investigate the relationships between the need of cognitive closure and the actual behaviour (i.e. starting a business) and its outcomes (i.e. performance results). Fifth, we acknowledge that the predictive power of NfC as an antecedent of EI, as well as the predictive power of the overall regression model presented in the current study is low. This is a common limitation of studies on EI (Krueger, Reilly & Carsrud, 2000), especially those focused on a specific topic (e.g. entrepreneurial cognition) and testing a limited number of variables (Łaguna, 2006c).

In order to increase the predictive power of the model, a number of both individual-level and contextual variables should be included. In line with the person/context interaction approach (Shaver & Scott, 1991), there have recently been numerous calls for research combining both contextual and personal characteristics as antecedents of EI (Liñán & Fayolle, 2015). In our study we use a relatively homogeneous sample of Polish students, while controlling for context-specific variables such as previous education and family background. Further research is needed to better understand the interaction between personal-level (i.e. demographics, personality traits) and institutional-level (e.g. institutional support) variables.

Research efforts examining the antecedents of entrepreneurial intentions, including the present study, are informative to business practitioners. Following Krueger *et al.* (2000, p. 429), we believe that “The entrepreneurs themselves should gain considerable value from a better understanding of their own motives. The lens provided by intentions affords them the opportunity to understand why they made certain choices in their vision of the new venture”.

Further research on the role of cognitive closure may bring important practical insights into entrepreneurial education and public policy. More specifically, in designing entrepreneurial education programs it is necessary to know, to which extent entrepreneurial behaviour and its outcomes can be shaped by external institutional factors. Our current research suggests that entrepreneurial intentions of Polish business students are to a large extent influenced by relatively stable, dispositional, personal-level variables, thus indicating potential barriers to fostering entrepreneurship through educational or institutional measures. However, further studies, incorporating both individual level and institutional level variables are needed in order to assess the impact of such measures on entrepreneurial intentions and behaviours.

REFERENCES

- Ajzen, I. (1991). Theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman and Co.
- Baron, R. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship's basic “why” questions. *Journal of Business Venturing*, 19, 221-239.
- Busenitz, L.W., & Barney, J.B. (1997). Differences between entrepreneurs and managers in large organizations: biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12(1), 9-30.

- Carr, J.C., & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach. *Journal of Business Research*, 60(10), 1090-1098.
- Chen, C.C., Greene, P.G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13(4), 295-316.
- Costa, P.T. Jr., & McCrae, R.R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five Factor Inventory (NEO-FFI) professional manual. Odessa, FL: PAR.
- Engle, R.L., Dimitriadi, N., Gavidia, J.V., Schlaegel, C., Delanoe, S., Alvarado, I., He, X., Buame, S., & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behaviour and Research*, 16(1), 36-58.
- Espíritu-Olmos, R., & Sastre-Castillo, M.A. (2015). Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *Journal of Business Research*, 68(7), 1595-1598.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67, 663-666.
- Fishbein, M., & Ajzen, I. (2010). Predicting and Changing Behavior: The Reasoned Action Approach. New York, NY: Taylor and Francis Group.
- Gartner, W.B. (1988). "Who is an entrepreneur?" is the wrong question. *Entrepreneurship Theory and Practice*, 12(2), 47-68.
- Gatewood, E., Shaver, K., & Gartner, W. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10, 371-391.
- Gupta, A.K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27 (1), 25-41.
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education + Training*, 48(1), 25-38.
- Jaworski, M. (1998). Polska adaptacja Skali Potrzeby Domknięcia Poznawczego. *Przegląd Psychologiczny*, 41(1-2), 151-163.
- Kaczmarek, M., & Kaczmarek-Kurczak, P. (2012). Przegląd metaanaliz dotyczących związku cech osobowości i przedsiębiorczości. W stronę modelu badań. *Management and Business Administration. Central Europe*, 1(108), 49-63.
- Kaczmarek, M., & Kaczmarek-Kurczak, P. (2014). The self-efficacy (generalized as well as context specific), the big five traits and the effectiveness of the entrepreneurship education). *Psychological Studies*, 52(4), 39-46.
- Kautonen, T., van Gelderen, M., & Fink, M. (2015). Robustness of the Theory of Planned Behavior in Predicting Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice*, 39(3), 655-674.
- Koh, H.C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11(3), 12-25.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into selfemployment. *Journal of Business Venturing*, 21(6), 866-885.
- Kristof, A.L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1), 1-49.
- Krueger, N.F., Reilly, M., & Carsrud, A.L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411-432.
- Kruglanski, A.W. (1990). Lay epistemic theory in social-cognitive psychology. *Psychological Inquiry*, 1, 181-197.

- Kruglanski, A.W., Webster, D.M., & Klem, A. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, *65*, 861-877.
- Kruglanski, A.W., & D.M. Webster. (1996). Motivated closing of the mind: 'Seizing' and 'freezing'. *Psychological Review*, *103*, 263-283.
- Łaguna, M. (2006a). Skala Skuteczności Przedsiębiorczej. *Roczniki Psychologiczne*, *9*, 107-128.
- Łaguna, M. (2006b). Ogólna samoocena czy przekonanie o skuteczności? Uwarunkowania gotowości do działań przedsiębiorczych u osób bezrobotnych. *Przegląd Psychologiczny*, *3*, 259-274.
- Łaguna, M. (2006c). Nadzieja i optymizm a intencja założenia własnej firmy. *Przegląd Psychologiczny*, *49(4)*, 419-443.
- Liñán, F., & Santos, F.J. (2007). Does social capital affect entrepreneurial intentions? *International Advances in Economic Research*, *13(4)*, 443-453.
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions : citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, *11(4)*, 907-833.
- Litzinger, W.D. (1965). The motel entrepreneur and the motel manager. *Academy of Management Journal*, *8*, 268-281.
- Markman, G., Balkin, D., & Baron, R. (2002). Inventors and new venture formation: the effects of general self-efficacy and regretful thinking. *Entrepreneurship Theory and Practice*, *4*, 149-165.
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education – A systematic review of the evidence. *International Small Business Journal*, *25(5)*, 479-510.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, *16(4)*, 353-385.
- Reynolds, P., Hay, M., & Camp, S.M. (1999). *Global Entrepreneurship Monitor. Executive Report*. Kansas City, MO: Ewing Marion Kaufmann Foundation.
- Rotter, J.B. (1966). Generalized Expectancies for Internal versus External Control of Reinforcement. *Psychological Monographs*, *80(1)*, 1-28.
- Schenkel, M.T., Matthews, Ch.T., & Ford, M.F. (2009). Making rational use of 'irrationality'? Exploring the role of need for cognitive closure in nascent entrepreneurial activity. *Entrepreneurship and Regional Development: An International Journal*, *21(1)*, 51-76.
- Schlaegel, Ch., & Koenig, M. (2014). Determinants of Entrepreneurial Intent: a meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, *38(2)*, 291-332.
- Schumpeter, J. (1911/1960). *Teoria rozwoju gospodarczego*. Warszawa: PWE.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour and Research*, *11(1)*, 42-57.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25(1)*, 217-226.
- Shapero, A., & Sokol, L. (1982). Social dimensions of entrepreneurship. In C.A. Kent, D.L. Sexton & K.H. Vesper (Eds), *Encyclopedia of entrepreneurship* (pp. 72-90). Englewood Cliffs (NJ): Prentice Hall.
- Shaver, K.G., & Scott, L.R. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship: Theory and Practice*, *16(2)*, 23-45.

- Teoh, H.Y., & Foo, S.L. (1997). Moderating effects of tolerance for ambiguity and risk-taking propensity on the role conflict–perceived performance relationship: Evidence from Singaporean entrepreneurs. *Journal of Business Venturing*, 12(1), 67-81.
- Wach, K. (2015). Środowisko biznesu rodzinnego jako stymulanta intencji przedsiębiorczych młdzieży akademickiej. *Przedsiębiorczość i Zarządzanie*, 16(7), 25-40.
- Wainer, H.A., & Rubin, I.M. (1969). Motivation of R&D entrepreneurs: determinants of company success. *Journal of Applied Psychology*, 53(3), 178-184.
- Wąsowska, A. (2016). Społeczno-poznawcze uwarunkowania intencji przedsiębiorczej. *Problemy Zarządzania*, 13(4), 101-114.
- Webster, D.M., & Kruglanski, A.W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049–1062.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory and Practice*, 31(3), 387-406.
- Zhao, H., & Seibert, S.E. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259-271.
- Zhao, H., Seibert, S.E., & Lumpkin, G.T. (2010). The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review. *Journal of Management*, 36(2), 381-404.

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The Systems Approach Perspective on Legality

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Abstract

A turbulent environment and very limited ability to make accurate forecasts triggers the need for building highly responsive organizations. What is more, there is much pressure exerted on the costs' reduction as one of the aftermaths of the crisis 2008+. The main goal of the article is to make a contribution to the stream of research devoted to creating capabilities needed for being lean and agile as response to contemporary challenges. The design of this research is based on in-depth literature review. The system approach was deployed to include lean and agile, both concepts and practices, under one consistent model. The detailed problem under discussion was meeting logistics requirements of customers. The Ashby Law suggests having differentiated responses to turbulent environment than only lean and agile. This also affects meeting requirements of customers in the supply chain. The originality of this work lies in showing the implications of identifying logistics requirements of customers for contributing to full flexibility within the system under discussion. The consequences of the Ashby Law for reactive and proactive behaviours of agents within the system should be further discussed in future research.

Keywords: agility; complexity; lean organization; system approach

JEL codes: M19, D23, L22

*Reality is made up of circles but we see straight lines.
Peter Senge*

INTRODUCTION

The strategies of combating the crisis 2008+ was based on the series of quantitative easing efforts as a result of which the global economy didn't suffer from a steep decline, however, the growth slowed down. Consequently, there is much pressure exerted on seeking efficiency through costs' reduction. We have also been witnessing the progress of the Industry 4.0 called even the fourth industrial revolution that consists of a bundle of technologies including internet of things, cloud computing, augmented reality, humanoid robots. Simultaneously, demographic changes with the growing number of both single and double incomes with no kids households in line with the raising number of consumers benefiting from e-commerce convenience translate into new demand patterns. The consumers are increasingly sensitive and determined to obtaining a product meeting their individual needs. This, in turn, has been exerting pressure on extension of brand range and the choice on the retailers' stores shelves with new product developments. The latter is also combined with getting shorter shelf time of products. The trend towards products customization is reflected by growing a number of components and relations to cover within a supply chain.

The business environment is turbulent and it is sometimes called volatile, uncertain, complex, ambiguous. Growing complexity means the emergence of problem areas within which cause-effect relationships are subtle, and where the consequences of actions are not obvious within various timeframes. Taking this into consideration, forecasts cannot be more accurate and any predicted optimization point will be of a temporary status.

Having all above points in mind, we state that there is a need to be both lean and agile at the same time. Higher responsiveness is a driver of agile solutions, whereas pressure on costs reduction is a trigger of leanness. Agility is the key factor that gives an advantage for winners over losers in a complex, uncertain, ambiguous, volatile environment. Consequently, successful organizations should focus on building capabilities that support not only leanness but are also agile.

The demand-driven supply chain plays an increasing role in winning a competitive advantage by securing higher responsiveness. What is more, it should be also not cost intensive. As a result, the necessary capability of winning organizations is meeting customers' requirements within whole supply chain including customers' logistics requirements.

LITERATURE REVIEW

Agility is a business-wide capability that embraces organizational structures, information systems, logistics processes, and, in particular, mindsets. A key characteristic of an agile organization is flexibility. Indeed, the origins of agility as a business concept lies in flexible manufacturing systems (Christopher, 2000). However, agility should not be confused with leanness. Lean is about doing more with less. The term is often used in connection with lean manufacturing. Paradoxically, many companies that have adopted lean manufacturing as a business practice are anything but agile in their supply chain. (Christopher, 2000).

While leanness may be an element of agility in certain circumstances, by itself it will not enable the organization to meet the precise requirements of the customer more rapidly. Webster's Dictionary makes the distinction clearly when it defines lean

as “containing little fat,” whereas agile is defined as “nimble.” One of the biggest barriers to agility is the way that complexity tends to increase as companies grow and extend their marketing and logistics reach. Often, this complexity comes through product, brand proliferation, logistics including transportation, warehousing and customer service, but it also can come through the organizational structures and management processes that have grown up over time (Christopher, 2000).

The simultaneous work of lean and agile principles can support the effective and efficient management (Olhager, 2003; Narasimhan, Swink & Kim, 2006) and relationships within a supply chain (Wikner & Tang, 2008), balancing efficiency and responsiveness (Olhager, Selldin & Wikner, 2006). Researchers have addressed differently the links between agility and leanness. Agility was defined as a ‘post-lean paradigm’ (Jain, Benyoucef & Deshmukh, 2008), which incorporates lean principles to cope with a turbulent environment. In some other studies, we can find an approach which highlights the difference between agility and leanness (Goldsby, Griffis & Roath, 2006) where leanness is a philosophy essentially focused on eliminating all waste including time, while agility is a way to use market knowledge to exploit profitable opportunities in a volatile marketplace. Agility could be seen as an effect of entrepreneurial orientation (Žur, 2013).

The existing literature allows us to assume that the co-existence of lean agile models is needed to adapt in the complex environment. The main goal of the article is to make a contribution to build capabilities needed for being lean and agile by including logistics requirements of customers.

METHODOLOGY

The co-existing of lean and agile practices and concepts triggers building models that could link both approaches with each other. Some authors suggest to deploy the segmentation approach. For example, the implications of segmentation concept for supply chain management are raised by Gattorna (2009, 2010). If customer groups exist with differing service requirements, then it makes sense to optimally match requirements through some form of differentiated supply chain strategy (Gattorna & Walters, 1996; Godsell & Harrison, 2002), so that the customers’ requirements are triggers of supply chain segmentation. However, the segmentation idea is based on isolated approaching of the selected group of customers which could result in suboptimized solutions. In order to avoid suboptimization pitfalls, we argue to deploy the system approach. General system theory, cybernetics, dynamic systems, non-linear dynamics theory, systems methodology are the components of the system approach (Schwaninger, 2006; François, 1999; Laszlo & Krippner, 1998). The history of system approach could be interpreted in terms of efforts towards solving complex problems (Wycislak, 2013). Having all these assumptions in mind, we follow the methodology based on the system approach, which is presented on Figure 1.

The last of the distinguished stages reflects the link between microscopic and macroscopic levels. From the system approach point of view, this manifests itself by a topic of translating the change in behaviour of agents (eg. employees) into a patterns wide-spreading within a whole system (macroscopic level).

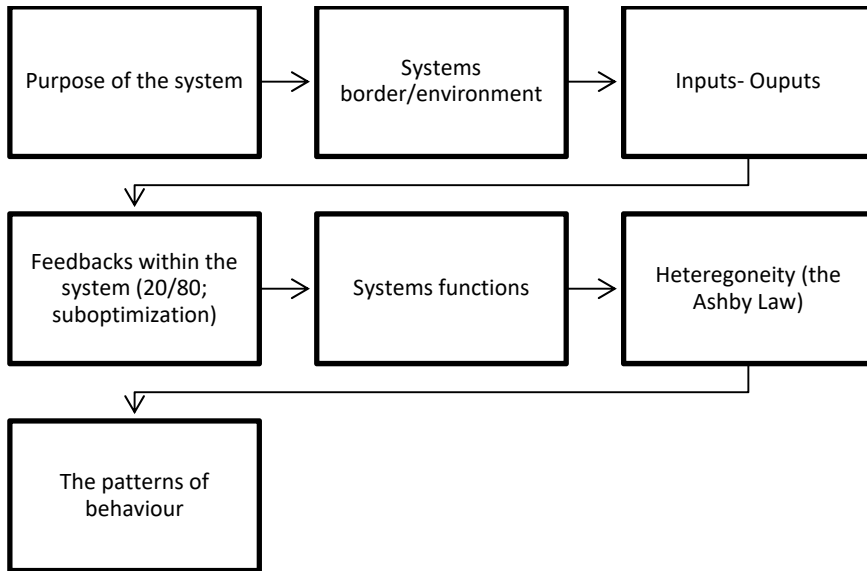


Figure 1. The methodology of the research

Source: own elaboration.

ANALYSIS

Purpose of the complex logistics adaptive system is meeting logistics requirements of customers. Consequently, we assume a set of activities dedicated to meeting logistics requirements of customers as a complex system. The next stage of the procedure must be done to identify the boundaries of the system. Taking into consideration the cooperation within the supply chain the boundaries between system and its boundaries are ambiguous and inconclusive. Moreover, assuming that the objectives of the company should be oriented towards the outside, the scope of an external impact the company is extended. The constituting of boundaries means creating a difference in the sense that internal relations are less complicated than the external ones.

In terms of inputs, in regard to logistics system, we assume that a way of thinking of customers is based on the two main criteria: space and time. As a result, respectively, the ratio of SKU/m² and shelf life trigger the logistics requirements of customers. The shelf time translates into logistics requirements of customers in terms of lead time, delivery frequency, on-time delivery, order placement, SKU preparation, logistics labelling, delivery quality (Christopher, 2011). The ratio of SKU/m² affects order size, pallet heights, picking ratio, deploying of sandwich pallets (Christopher, 2011). In terms of outputs – meeting of logistics requirements of customers is measured by Customer Case Fill On Time (El Sayed, 2013).

The feedbacks within a system are reflected by suboptimization principle, and manifests itself by sales peaks. The latter is a result of certain patterns in behaviour of the sales staff due to the pressure on meeting monthly targets. As customers are aware of the latter, they wait for the months endings in order to get the highest possible discounts. As a result, customer service needs to secure resources for additional work on

entry and validation of orders. Consequences are twofold: higher costs and increase in the number of errors. Logistics also need to secure additional transportation capacities from the spot market, which translates into higher costs. Transport Service Providers even run of capacities and are not able to ensure the proper service levels. What is more, the trucks are not fully loaded which means waste. The additional warehousing capacities should be secured, which translates into more resources to commit. As the additional temporary resources are primarily secured by employment agency, new employees are not skilled enough, and the training is time consuming. Consequently, productivity is on the downward spiral, and costs witnessing the growth.

The principle of 20/80 implies that we should focus on 20% of customers generating 80% of turnover. In this sense, it is reasonably to differentiate services towards customers. The latter is also strictly connected with the Ashby law which is reflected by the quotation:

$$V_r \geq V_d - V_o$$

V_r – variety of potential responses;

V_d – variety of problems;

V_o – variety of outcomes tolerable by the essential variables.

Consequently the variety of logistics services both predicted and existing ones should be higher than variety of logistics requirement of customer. In other words, to predict logistics requirements of customers and to be prepared to what customers would want, and proactively manage over the customers' expectations.

The Ashby law called also the law of requisite variety reflects the conditions of ensuring business continuity through setting up full flexibility.

However, our own business practice observations of the implications of the Ashby law on the differentiation of the logistics services enables us to distinguish four options: lean, standard, agile, super agile solutions. For example, for lead time we can differentiate four options: lean – 48 hours, standard – 24 hours, agile – 12 hours, super agile – 6 hours; respectively for picking it is full pallet – lean; layer – standard; cartoon – agile; single item – super agile.

Qualitative and quantitative ranges of logistics requirements of customers – the scope of variety – are affected by the following factors:

- the negotiation power in the supply chain;
- stock management;
- geography.

The control over suppliers is a criterion behind the logistics requirements of customers. This is an effect of customers' position strength within the supply chain. For example, if discounters cover the prevailing part of retail sales, they force suppliers to follow very short lead times, high delivery frequency (including delivery during weekends), high number of urgent orders, and very short delivery time slots or even delivery on –time.

The stock management strategy deployed by customers affects their logistic requirements. For example, some drugstore chains dispose about very advanced logistics solutions. Therefore, their orders are large and of high homogeneity. As the ratio of SKU/m² is high for drugstores (accounting for about 35-40), they repack products from pallets of high homogeneity to dedicated boxes (cages) in their own warehouses. This also means that drugstores chains tend to keep stocks in the warehouses for the period

of several days. In adverse, discounters follow the strategy of minimizing inventory *days*. This means that the ratio of days on hand accounts for one, or two days.

Finally, geography and as a result travelled distances, terrain as well as climate conditions impact the exact numbers staying behind the logistics requirements of customers. The differentiated service offerings should include existing and a forward-looking catalogue of services. In these terms, it should be the response towards the growing variety of logistics customers' requirements. The first link between logistics requirements of customers and systems' response is the way how customers make orders, and how it translates into logistics complexity and logistics costs. In an ideal situation, it should be a perfect order. The latter is achieved when the customer's service requirements are met in full. Order fragmentation is the consequence of growing logistics requirements of customers, and is one of the indicators of logistics complexity within a supply chain. The order fragmentation is reflected by ratios as follow: orders invoiced per month, stock keeping units/order. The number of orders invoiced per month translates into a need for higher number of trucks and operational workloads including transport planning, consolidation of loads, handling in and handling out.

SKUs/order ratio mirrors orders' homogeneity. Various packaging sizes, material packaging types and temperatures result in higher logistics complexity levels. The modes of deliveries encompass central stock (distribution centre of customers), direct customers' shop deliveries, and customers' cross dock. Delivering directly to shops means higher complexity levels comparing to delivering to the distribution centre of customers. In business practice, the dedicated promotional actions are supported by direct delivery to customers' shops. Temperature levels also impact the model of delivery. The temperature regimes include ambient, chilled, and frozen modes. If deliveries follow various temperature regimes, it means high logistics complexity. This is because of different requirements for trucks, depots, and modes of deliveries.

The second link between logistics requirements of customers and system response is the level of customers' requirements fulfilment. Delivery time, order management, delivery quality are the crucial components of customers service required. Lead time, delivery frequency, on-time delivery translate into delivery time parameter within the logistics service level required. Whilst including pallet heights, pallet weight, mixed pallets, sandwich pallets, logistics labelling, order placement, and SKU preparation stay behind the second parameter – order management, and delivery quality is measured by the ratio of claims/delivery notes.

There is a trade-off between logistics complexity and logistics trade terms. Logistics trade terms are a sum paid to customers for homogeneity of orders and order size. General rule is as follow: the higher logistics trade terms, the lower logistics complexity, and lower direct logistics costs. Logistics trade terms are a part of trade terms.

Taking into consideration – logistics complexity, logistics costs and logistics trade terms on the microscopic level, we can distinguish four patterns of behaviour on the macroscopic level. In the first step, we observe the quick wins that are results of high potential of costs savings. This reflects the lean approach. However, after exploiting low hanging fruits, the meeting of logistics of customers is achieved either by higher complexity or higher logistics trade terms. Complex sophistication should involve lean, agile, super agile and standard approaches. However, the pressure on costs reduction results

in the discontinuity changes like setting up logistics centralized control tower. This new emerging order means new possibilities for quick wins, however (Figure 2).

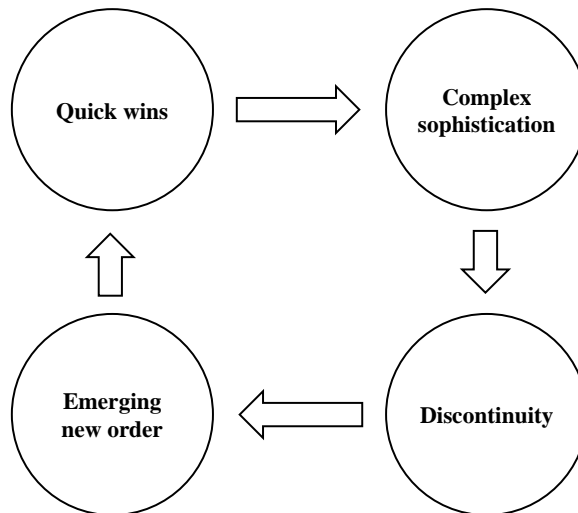


Figure 2. Patterns of behaviour in the complex adaptive logistics system
Source: own elaboration.

DISCUSSION

Both Christopher (2011) and Gattorna (2015) don't deploy the system approach to resolve the problem of being lean and agile. What they suggest is the segmentation of customers based on selected criteria. What is more, Christopher and Gattorna don't include the logistics costs and logistics complexity versus logistics trade terms by covering lean and agile solutions.

Krupski (2008) suggests existing different levels of flexibility, and points out agility as one of the potential components of defining flexibility. Flexibility is also strictly and directly connected with customers driven supply chains. As customers gained influence, and the balance of power in the supply chain began to shift their way, suppliers struggled to provide the desired extra flexibility demanded by customers (Gattorna, 2015). The application of the system theory points out the importance of the Ashby Law. As a result, the difference between being both lean and agile versus flexible is a result of ignoring standard and super agile solutions (Figure 3).

Flexibility could be perceived as reactive and proactive organization activities in terms of time, content, scope that are better tailored to the turbulent environment than existing ones. In this sense, the paper develops the approach to flexibility suggested by Krupski (2008).

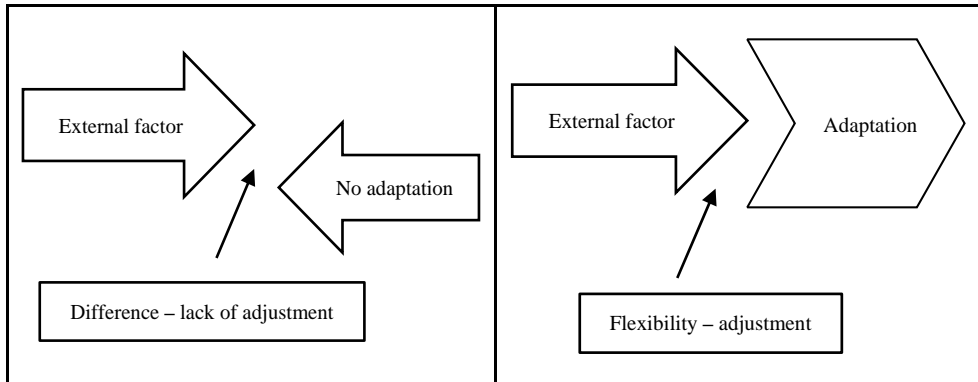


Figure 3. Flexibility including lean, standard, agile, very agile options
Source: own evaluation.

CONCLUSIONS

The starting point of this paper suggested that co-existence of lean and agile models is needed to adapt in complex and hyper changing environments. However, in order to ensure the full flexibility for meeting logistics requirements of customers, we should have lean, standard, agile, and super agile solutions. The detailed factors affecting qualitative and quantitative ranges of logistics requirements of customers are as follow: the negotiation power in the supply chain, stock management, geography. There are two links between logistics requirements of customers and the system response, the first one – is the way how customers make orders, and how it translates into logistics complexity and logistics costs; and the second one is the level of customers' requirements fulfilment. Having in mind logistics complexity, logistics costs and logistics trade terms on the microscopic level, we can distinguish four patterns of behaviour on the macroscopic level.

Applying the system approach to solve problems of being lean and agile by including logistics requirements of customers we considered the implications of the Ashby law. This paves the way to develop the concept of full flexibility in meeting logistics requirements of customers by including logistics complexity, logistics costs, logistics trade terms on the microscopic level and four pattern of behaviour on the macroscopic level.

REFERENCES

- Christopher, M. (2000). The agile supply chain: competing in volatile markets. *Industrial marketing management*, 29(1), 37-44.
- Christopher, M. (2011). *Logistics and Supply Chain Management*. Harlow, England: Pearson Education Limited.
- El Sayed, H. (2013). Supply Chain Key Performance Indicators Analysis. *International Journal of Application or Innovation in Engineering & Management*, 2(1), 201-210.
- François, Ch. (1999). Systemics and Cybernetics in a Historical Perspective. *Systems Research and Behavioral Science*, 16(3), 203-219.
- Gattorna, J. (2009). *Dynamic Supply Chain Alignment*. London: Gower Publishing.

- Gattorna, J. (2010). *Dynamic Supply Chains: delivering value through people*. London: FT Prentice Hall.
- Gattorna, J. (2015). *Dynamic Supply Chains: How to design, build and manage people-centric value networks*. Harlow: FT Publishing.
- Gattorna, J.L., & Walters, D.W. (1996). *Managing the Supply Chain: A Strategic Perspective*. Basingstoke: Palgrave.
- Godsell, J., & Harrison, A. (2002). Customer responsiveness: an exploratory view of a supply chain strategy for the new economy. In H. Boer & J.K. Christiansen (Eds.), *Operations Management and the New Economy 2002*. Proceedings of the EUROMA Conference in Copenhagen, 1: 615-624.
- Goldsby, T.J., Griffis, S.E., & Roath, A.S. (2006). Modeling lean, agile, and leagile supply chain strategies. *Journal of Business Logistics*, 27(1), 57-80.
- Jain, V., Benyoucef, L., & Deshmukh, S.G. (2008). A new approach for evaluating agility in supply chains using fuzzy association rules mining. *Engineering Applications of Artificial Intelligence*, 21(3), 367-385.
- Krupski, R. (2008) (Ed.). *Elastyczność organizacji*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego.
- Laszlo, A., & Krippner, S. (1998). Systems Theories: Their Origins, Foundations, and Development. In J.S. Jordan (Eds.), *Systems Theories and A Priori Aspects of Perception*. Amsterdam: Elsevier Science.
- Narasimhan, R., Swink, M., & Kim, S.W. (2006). Disentangling leanness and agility: an empirical investigation. *Journal of Operations Management*, 24(5), 440-457.
- Olhager, J., Selldin, E., & Wikner, J. (2006). Decoupling the value chain. *International Journal of Value Chain Management*, 1(1), 19-32.
- Olhager, J. (2003). Strategic Positioning of the Order Penetration Point. *International Journal of Production Economics*, 85 (3), 319-329.
- Schwaninger, M. (2006). System Dynamics and the Evolution of the Systems Movement. *Systems Research and Behavioral Science*, 23(5), 583-594.
- Wikner, J., & O. Tang (2008). A Structural Framework for Closed-loop Supply Chains. *The International Journal of Logistics Management*, 19 (3), 344-366.
- Wyciślak, S. (2013). *Efekt zarazania a działalność organizacji*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- Żur, A. (2013). Entrepreneurial Orientation and Firm Performance: Challenges for Research and Practice. *Entrepreneurial Business and Economics Review*, 1(2), 7-28. doi: <http://dx.doi.org/10.15678/EBER.2013.010202>

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Positive Leadership and Corporate Entrepreneurship: Theoretical Considerations and Research Propositions

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Abstract

The objective of the paper is to describe the approaches to positive leadership and propose research directions on its impact on corporate entrepreneurship. There is much debate within positive leadership domain and the question arises if positive style of leadership supports the entrepreneurship within corporations conceptualised as entrepreneurial orientation. The main method employed in the paper is critical literature review. Based on that, some research propositions are formulated. Four research propositions concern the possible impact of positive leadership on corporate entrepreneurship. It is proposed that authentic leadership, fundamental state of leadership, psychological capital and positive deviance all positively influence corporate entrepreneurship. The main implications of the paper concern future research in corporate entrepreneurship domain. Moreover, the indirect impact is expected on managerial practice in future research results concerning supporting corporate entrepreneurship by enhancing positive leadership behaviours. The paper opens new line of research on the cross-roads of positive organizational scholarship research and entrepreneurship theory. The main contribution of the paper is to draw attention to the models of leadership that might be critical for entrepreneurship inside organisations.

Keywords: corporate entrepreneurship; positive organizational scholarship; positive leadership; psychological capital; authentic leadership; fundamental state of leadership; positive deviance

JEL codes: L26

INTRODUCTION

While leadership is one of the leading issues in positive organisational scholarship (POS), there has been a lot of confusion and chaos in that regard. Moreover, rapid development of

positive leadership theories has been observed in the last decade since the statement that “the understanding, developmental process, and implementation of needed positive leadership still remains largely under-researched by both the leadership and recently emerging positive psychology fields” (Luthans & Avolio, 2003, p. 241). Additionally, few papers concern the impact of positive leadership on other phenomena at organisational level, for example firm level entrepreneurship. Therefore, the objective of the paper is to describe the approaches to positive leadership and propose research directions on its impact on corporate entrepreneurship of firms. The objective is of theoretical and practical importance, as the debate on supporting entrepreneurship in enterprises are being looked for by managers. The question of style of leadership that enhances corporate entrepreneurship is in line with very recent research directions proposed by leading scholars (Levie, 2016).

The paper presents the theory of positive organisational scholarship (POS) with the focus on positive leadership. Some of the leadership concepts preceding POS but corresponding to it are presented as well, such as transformational leadership or servant leadership. The main body of the paper presents three positive leadership concepts: fundamental state of leadership, authentic leadership and positive deviance. Moreover, the construct of psychological capital (PsyCap) is presented. Additionally, research propositions on impact of positive leadership on corporate entrepreneurship are presented. The research was carried out within research project 2014/13/B/HS4/01618 funded by National Science Centre in Poland.

As the paper is of conceptual nature the main method applied is critical literature review. The material for this review are mainly papers and book chapters published under the banner of positive organisational scholarship, however, the review is not limited to that sources. The main purpose of literature review is to uncover the processes in which positive leadership contributes to entrepreneurship inside organisations and to formulate research propositions. The paper does not list the studies undertaken in this regard before, as they are not available.

LITERATURE REVIEW AND THEORY DEVELOPMENT

Positive Organisational Scholarship and Positive Leadership

POS is an umbrella concept and has its main inspiration in positive psychology that proposes different perspective, not replacing traditional approach, but attempting to supplement it. It redirects focus from what is wrong with people toward emphasizing human strengths that allow people to build the best in live, thrive and prosper. POS proposes a new philosophy of organisation. While it doesn't reject the organisational and social phenomena, such as greed, selfishness, manipulation, distrust or anxiety, it emphasizes the “positive” ones, e.g. appreciation, collaboration, virtuousness, vitality, meaningfulness, trustworthiness, resilience, wisdom, loyalty, respect and honesty (Cameron, Dutton & Quinn, 2003; Cameron & Spreitzer, 2012). POS proposes new approach both in ontology and epistemology of organisational science, it sheds new light on what organisation is and how to get to know it. It is not a single theory, more of a viewpoint putting emphasis on positive and dynamic social and organisational phenomena, encompassing attention “to the enablers (e.g., processes, capabilities, structures, methods), the motivations (e.g., unselfishness, altruism, contribution without regard to self), and the outcomes or effects (e.g., vitality, meaningfulness, exhilaration, high-quality relationships) associated with positive phenomena” (Cameron *et al.*, 2003, p. 4).

Cameron and Spreitzer (2012) argue that the convergence in understanding positivity can be summarized in four approaches: (1) adopting a unique lens or an alternative perspective that puts more emphasis on positive phenomena and attributes more importance to them, (2) focusing on extraordinarily positive outcomes or positively deviant performance, outcomes dramatically exceeding common or expected performance, (3) an affirmative bias that fosters resourcefulness – elevating the resources in individuals, groups, and organisations to build capacity, and (4) the examination of virtuousness or the best of the human condition with eudaemonic assumption.

The careful analysis of the POS underlying philosophy brings to a conclusion that at the core of focus of the notion are human strengths that result in extraordinary organisational performance. Moreover, founders of POS always stress the critical importance of uplifting interpersonal relationships, especially relationships between leaders and their followers (Quinn, 2005; Cameron, 2008). POS scholars also refer to some earlier leadership theories developed mainly in 1970s, especially to transformational leadership and servant leadership.

Pre-Pos Positive Leadership Approaches

Transformational leadership theory stresses the fact, that leadership is a process by which a person interacts with others and is able to create a relationship that results in a high degree of trust, that will later result in an increase of motivation, both intrinsic and extrinsic of both leaders and followers. The core of transformational leadership theories is the assumption that leaders transform their followers (instead of just transacting with them as in transactional theories) through their inspirational nature and charismatic personality. Rules and regulations are flexible, guided by group norms. These attributes provide a sense of belonging for the followers as they can easily identify with the leader and its purpose. Transformational leadership theory rests on the assertion that certain leader behaviours can arouse followers to a higher level of thinking (Bass, 1985; Burns, 1978). By appealing to followers' ideals and values, transformational leaders enhance commitment to a well-articulated vision and inspire followers to develop new ways of thinking about problems (Piccolo & Colquitt, 2006).

Probably the most wide-spread model of transformational leadership was proposed by Bass (1985). He was interested in the extent to which a leader influences followers. Followers go after a leader because of trust, honesty, and other qualities and the stronger these are, the greater loyalty they have for the leader. The leader transforms the followers because of having these qualities. Not only is the leader a role model, but he exhorts the followers to challenge the existing order, the revolutionary being a stark example of this. While the leader may have democratic motives in mind, he can assume a transaction leadership style at the same time, directing the followers to do things. Bass stressed following aspects of transformational leadership: (1) Individual consideration is the degree to which leaders attend to followers' needs, act as mentors or coaches, and listen to followers' concerns. Individual consideration, where there is an emphasis on what a group member needs. The leader acts as a role model, mentor, facilitator, or teacher to bring a follower into the group and be motivated to do tasks. (2) Intellectual stimulation is the degree to which leaders challenge assumptions, take risks, and solicit followers' ideas. Intellectual stimulation is provided by a leader in terms of challenge to the prevailing order, task, and individual. Leader seeks ideas from the group and encourages them to contribute, learn, and be independent. The leader often becomes a teach-

er. (3) Inspirational motivation is the degree to which leaders articulate visions that are appealing to followers. Inspiration by a leader means giving meaning to the follows of a task. This usually involves providing a vision or goal. The group is given a reason or purpose to do a task or even be in the organisation. The leader will resort to charismatic approaches in exhorting the group to go forward. (4) Idealized influence is the degree to which leaders behave in charismatic ways that cause followers to identify with them. Idealized influence refers to the leader becoming a full-fledged role model, acting out and displaying ideal traits of honesty, trust, enthusiasm and pride.

Servant leadership philosophy was founded by Greenleaf in the essay "The Servant As Leader". Greenleaf (1977), a practitioner with a forty-year career in AT&T, compiled his observations to stimulate dialogue and build a better, more caring society. He described himself as a lifelong student of organisations and how things get done (Greenleaf, 1977, p. 336). Although Greenleaf (1977) never formally defined servant-leadership, others have described it as valuing individuals and developing people, building community, practicing authenticity, and providing leadership that focuses on the good of those who are being led and those whom the organisation serves. The strength of servant-leadership in encouraging follower learning, growth, and autonomy "suggests that the untested theory will play a role in the future leadership of the learning organisation" (Bass, 2000, p. 31).

Main Positive Leadership Approaches

As said before, leadership is one of the leading topics in positive organisational scholarship. However, a couple of partly competing and partly supplementing each other theories have been developed in the last decade and a half that introduces some degree of disorder. Probably the most widespread approach is that of authentic leadership. It was also the only positive leadership theory included in original POS foundation book by Cameron *et al.* (2003): "this is the only chapter in this book on positive organisational scholarship that deals directly with leadership, and there are no entries in the recently published Handbook of Positive Psychology" (Luthans & Avolio, 2003, p. 241).

Authenticity itself is one of the pillars of positive organisational scholarship. All the other phenomena discussed within POS have no value and meaning if they are not true and authentic. POS researchers trace back authenticity to ancient times and modernism. Positive psychologists conceive authenticity as both owning one's personal experiences (thoughts, emotions, beliefs) and acting in accord with the true self (behaving and expressing what you really think and believe) (Harter, 2002). Therefore, authentic leadership is purely based on authenticity, authentic leaders do not try to coerce or even rationally persuade associates, but rather the leader's authentic values, beliefs, and behaviours serve to model the development of associates.

Authentic leadership is an approach to leadership that emphasizes building the leader's legitimacy through honest relationships with followers which value their input and are built on an ethical foundation. Generally, authentic leaders are positive people with truthful self-concepts who promote openness. By building trust and generating enthusiastic support from their subordinates, authentic leaders are able to improve individual and team performance. Luthans and Avolio (2003) provide a wide range of characteristics of authentic leaders. They are confident, hopeful, optimistic, resilient, transparent, moral/ethical, future-oriented and associate building. However, perhaps the most robust model of authentic leadership was proposed by Walumbwa, Avolio, Gardner, Wernsing

and Peterson (2008). They highlight and introduce a measure of four principles of authentic leadership: (1) self-awareness: an ongoing process of reflection and re-examination by the leader of own strength, weaknesses, and values; (2) relational transparency: open sharing by the leader of own thoughts and beliefs, balanced by a minimization of inappropriate emotions; (3) balanced processing: solicitation by the leader of opposing viewpoints and fair-minded consideration of those viewpoints; and (4) internalized moral perspective: a positive ethical foundation adhered to by the leader in relationships and decisions that is resistant to outside pressures.

A careful analysis of the dimensions of authentic leadership brings to a conclusion that the concept partly overlaps with some previous approaches, namely transformational leadership and emotional intelligence. With the first concept it shares balanced processing that corresponds to individual consideration. Emotional intelligence brings to authentic leadership self-awareness and empathy that corresponds to balanced processing.

Another positive concept of leadership that was created a little bit later by Quinn (2005) and is more difficult to grasp is fundamental state of leadership. The essence of it is answering four questions: "Am I results centred? (Am I willing to leave my comfort zone to make things happen?) Am I internally directed? (Am I behaving according to my values rather than bending to social or political pressures?) Am I other focused? (Am I putting the collective good above my own needs?) Am I externally open? (Am I receptive to outside stimuli that may signal the need for change?)" (Quinn, 2005, p. 75). Quinn claims that "asking and answering these questions tends to change the being state. New feelings, thoughts, behaviours, and techniques then emerge. The person makes deep change and exerts new patterns of influence." (Quinn & Anding, 2005, pp. 489-490).

However, the critical question in reaching fundamental state of leadership is: Who am I? (What are my values? What would I never compromise?). In this sense fundamental state of leadership draws from emotional intelligence self-awareness being the basic component. Also other focus is based on one of the components of emotional intelligence – empathy.

Quinn (2005) opposes fundamental state of leadership to ordinary state. He also argues that "people who observe excellence from the normal state see only what their conceptual tools allow them to see. (...) Normal thinking, based on the assumptions of transaction and analyses is going to capture the part and not the whole. Normal thinking lacks the requisite variety, the complexity to capture what is there." (Quinn & Anding, 2005, p. 494). Therefore, fundamental state of leadership should be treated as a higher state of awareness, that, however, can be achieved by combining four components: (1) results orientation, (2) internal direction, (3) other focus, and (4) external openness. Two more attributes of fundamental state of leadership should be noticed. First, Quinn argues that it might not be fully conscious. People could enter fundamental state of leadership without even knowing it. Second, it is a temporary state. People enter and exit it as victims of entropy.

The final concept that can be qualified as positive leadership theory is positive deviance. Originally it was created as an approach to behavioural and social change based on the observation that in any community, there are people whose uncommon but successful behaviours or strategies enable them to find better solutions to a problem than their peers, despite facing similar challenges and having no extra resources or knowledge than their peers. These individuals are referred to as positive deviants (Tuhus-Dubrow, 2009). To augment positive deviance from the individual to the firm level, the operational defini-

tion of corporate deviance consists of three specific and measurable components: intentionality, departure from referent group norms, and of either a harmful or an honourable nature. Positive deviant behaviour, by definition, has to be “voluntary, purposeful, and discretionary, rather than forced or coerced” (Spreitzer & Sonenshein, 2004, p. 842).

The most comprehensive model of positive deviance was presented by Cameron (2008). He states that positive leadership: (1) refers to the facilitation of positively deviant performance, (2) refers to an affirmative bias, and (3) focuses on facilitating the best of the human condition, or on fostering virtuousness. Cameron also presents four leadership strategies that enable positive deviance: (1) positive climate (fostering compassion, forgiveness and gratitude), (2) positive relationships (building energy networks and reinforcing strengths), (3) positive communication (obtaining best-self feedback and using supportive communication), and (4) positive meaning (affecting human well-being, connecting to personal values, highlighting extended impact and building community) (Figure 1). Enhancing one of the strategies tends to positively impact the other three.

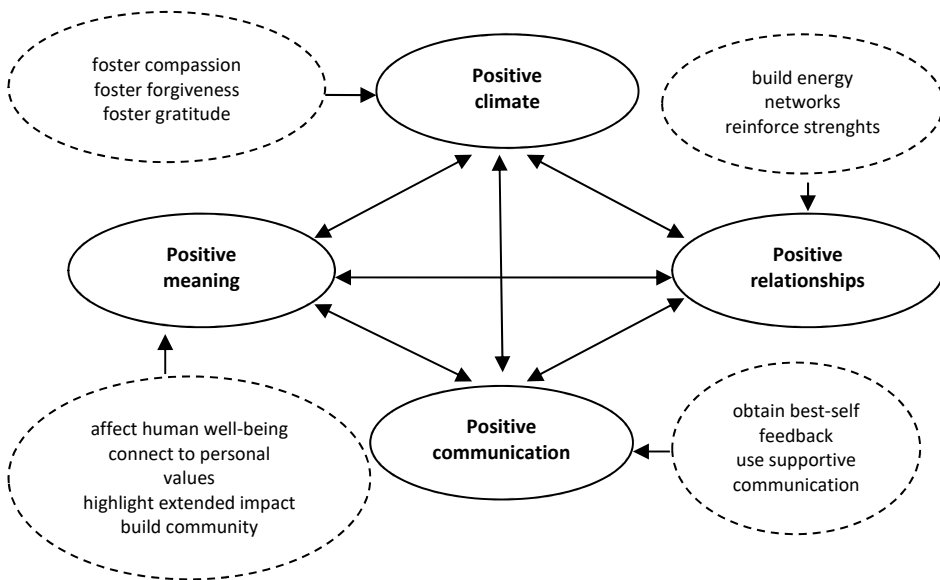


Figure 1. Four leadership strategies that enable positive deviance

Source: Cameron (2008, p. 14).

Psychological Capital

Luthans and Avolio (2003) define authentic leadership in organisations as a process that draws from positive psychological capacities and a highly developed organisational context, which results in both greater self-awareness and self-regulated positive behaviours on the part of leaders and followers, fostering positive self-development. By positive psychological capacities they understand mainly psychological capital (PsyCap), construct that replaced positive psychological capacities a year later (Luthans & Youssef, 2004). This composite construct has been defined as “an individual’s positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the nec-

essary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans, Youssef & Avolio, 2007, p. 3). It should be also emphasized here, that there has been a discussion going on about what psychological capital really is: more a trait or more a state. Luthans, Avolio, Avey and Norman (2007, p. 544) argue that on the continuum from trait, through trait-like and state-like to state, it is state-like, “relatively malleable and open to development; the constructs could include not only efficacy, hope, resilience, and optimism, but also a case has been made for positive constructs such as wisdom, well-being, gratitude, forgiveness, and courage as having “state-like” properties as well”.

Impact of Positive Leadership on Corporate Entrepreneurship

For some scholars the essence of corporate entrepreneurship and a source of entrepreneurial behaviour at organisational level is entrepreneurial orientation. It is an ideology that generate strategic criteria of importance, desirability, feasibility, legitimacy, relevance of opportunities and actions. Moreover it channels and distributes decision making into a specific set of procedures and practices. Finally, it provides the institutional strategic framework for understanding the situations that motivate action and interpret meaning. Some researchers operationalized the behaviour of entrepreneurial firms as consisting of product-market innovation, proactiveness of decision making, and risk-taking. They maintained that the level of entrepreneurship presented by a firm was the aggregate total of these three sub-dimensions: “the extent to which top managers are inclined to take business-related risks (the risk-taking dimension), to favour change and innovation in order to obtain a competitive advantage for their firm (the innovative dimension), and to compete aggressively with other firms (the proactive dimension)” (Covin & Slevin, 1988, p. 218). Entrepreneurial orientation has been later operationalized as five-dimensional construct (Lumpkin & Dess, 1996) or three-dimensional one (Kreiser, Marino & Weaver, 2002) and a prerequisite and critical factor of corporate entrepreneurship. In the project corporate entrepreneurship will be conceptualized as a construct which dimensions work in configuration with positive behaviours in the process of moderation between high performance factors and the actual performance of the organisation.

The question on supporting corporate entrepreneurship by applying positive leadership is an important one, as researchers and business practitioners are looking for new ways of supporting innovativeness, proactiveness and willingness to take risk. It should be noted here, that positive leadership and corporate entrepreneurship are concepts at different levels of analysis. Positive leadership is typically analyzed at individual level and corporate entrepreneurship at organisational level. Therefore, supporting entrepreneurial orientation by creating positive leadership should be directed at institutional solutions: recruiting and training positive leaders. Moreover, the effects of such processes might not be homogenous within the entire organisation – the level of corporate entrepreneurship might differ according to the degree of ‘positivity’ of local leader.

The impact of psychological capital on entrepreneurship is perhaps the most widely investigated among approaches to positive leadership. For example Hayek (2012) states that while the constructs that form the psychological capital construct, hope, resilience, optimism, and self-efficacy are all revered characteristics and highly associated with entrepreneurs, the consequences of these being applied to situations where the individual actually has a misplaced

sense of control may have dire consequences. In broader sense, psychological capital might contribute to corporate entrepreneurship in a number of ways. Self-efficacy allows pursuing risky and difficult business opportunities, hope and optimism allow to interpret strategic events as opportunities instead of threats (Bratnicki, 2006) and resilience allows to continue to further develop ventures in the environment of pressure and crisis. Therefore, I propose that:

Proposition 1: Psychological capital of managers contributes to corporate entrepreneurship.

There is no empirical evidence on the impact of authentic leadership on corporate entrepreneurship. However, this kind of contribution can be assumed, taking into consideration the components of authentic leadership. The assumed influence especially concerns the followers of authentic leader and the component most likely to be of importance here is balanced processing. It allows employees to express their opinions, which, in turn allows for bottom-up creation of new ventures. Moreover, Hmieleski, Cole and Baron (2012) in their study of top management teams of new ventures and their impact on performance state that authentic leadership may be particularly beneficial when shared among team members. Therefore, I propose that:

Proposition 2: Authentic leadership of managers contributes to corporate entrepreneurship.

Similarly, there is no evidence on relationship between fundamental state of leadership and corporate entrepreneurship. Also in this case components of the concept might be relevant for corporate entrepreneurship, especially other focus and external openness. The first of them introduces the atmosphere of respect and understanding that is necessary for the development of new ventures. External openness is in turn important for receiving information and inspiration for new ventures. It constitutes a phenomenon by some called entrepreneurial alertness. Therefore:

Proposition 3: Fundamental state of leadership of managers contributes to corporate entrepreneurship.

Finally, positive deviance is expected to contribute to corporate entrepreneurship. I argue that the entire concept of positive deviance is entrepreneurial, as it means doing something in a different, extraordinary and new way. The same principles lie at the core of entrepreneurship, including corporate entrepreneurship. Unfortunately, there is no empirical evidence on the support for corporate entrepreneurship from positive deviance. The only partial piece of evidence comes from Nam, Parboteeah, Cullen and Johnson (2014) who argue that innovation is an outcome of positive deviance. I therefore propose that:

Proposition 4: Positive deviance of managers contributes to corporate entrepreneurship.

CONCLUSIONS

The field of positive leadership and its relations with phenomena at organisational level is largely under-researched. I argue that this line of study has a huge potential and might be fruitful in explaining firm level entrepreneurship at scientific level and supporting it at practical level. So far, the field is characterized by high degree of complexity and disorder. What is critical in this line of research, is the configuration of positive leadership approaches and its combined impact on corporate entrepreneurship. There is some empirical evidence that positive leadership types work in synergy and reinforce each other. For instance Jensen and Luthans (2006) argue that

psychological capital supports entrepreneurs' authentic leadership. Therefore relationships in this area should be investigated comprehensively, with regard to other approaches.

There is an important question on the level of analysis of impact of positive leadership on corporate entrepreneurship. It might be studies on individual level, where positive behaviours of the leader contribute to his entrepreneurial spirit, which in turn mobilizes the followers to develop new ventures. On the other hand, positive leadership taken to organisational level might directly contribute to entrepreneurial orientation of the whole organisation. Important argument for the second approach is delivered by Memili, Welsh and Luthans (2013, p. 1291) who introduce the concept of organisational psychological capital (OPC) arguing that "group-level collective PsyCap can develop through interactive and coordinative dynamics and leadership in a firm that can foster desired behaviours and performance outcomes".

The main weakness of the study is the lack of literature in the field of positive leadership. The paper is therefore based on available literature sources that might not be fully exhaustive. The main contribution of the paper is to draw attention to the models of leadership that might be critical for entrepreneurship inside organisations. That question, however, goes beyond that and also considers individual entrepreneurship and leadership skills necessary to start up and develop an enterprise.

REFERENCES

- Bass, B. (2000). The future of leadership in learning organizations. *Journal of Leadership Studies*, 7(3), 18–40.
- Bass, B.M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bratnicki, M. (2006). *The dialectics of organizational entrepreneurship*. Katowice: University of Economics in Katowice.
- Burns, J.M. (1978). *Leadership*. New York: Harper & Row.
- Cameron, K.S. (2008). *Positive leadership. Strategies for extraordinary performance*. San Francisco: Berrett Koehler.
- Cameron, K.S., Dutton, J.E., & Quinn, R.E. (2003). *Positive organizational scholarship. Foundations of a new discipline*. San Francisco: Berrett-Koehler Publishers, Inc.
- Cameron, K.S., & Spreitzer, G.M. (Eds.) (2012). *The Oxford handbook of positive organizational scholarship*. Oxford/New York: Oxford University Press.
- Covin, J.G., & Slevin, D.P. (1988). The influence of organization structure on the utility of an entrepreneurial top management style. *Journal of Management Studies*, 25(3), 217-234.
- Greenleaf, R. (1977). *Servant-leadership: A journey into the nature of legitimate power and greatness*. New York: Paulist Press.
- Harter, S. (2002). Authenticity. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of positive psychology* (pp. 382-394). Oxford, UK: Oxford University Press.
- Hayek, M. (2012). Control beliefs and positive psychological capital: Can nascent entrepreneurs discriminate between what can and cannot be controlled? *Journal of Management Research*, 12(1), 3-13.
- Hmieleski, K.M., Cole, M.S., & Baron, R.A. (2012). Shared authentic leadership and new venture performance. *Journal of Management*, 38(5), 1476-1499.
- Jensen, S.M., & Luthans, F. (2006). Relationship between entrepreneurs' psychological capital and their authentic leadership. *Journal of Managerial Issues*, 18(2), 254–273.

- Kreiser, P.M., Marino L., & Weaver, K.M. (2002). Assessing the psychometric properties of the entrepreneurial orientation scale: A multi-country analysis. *Entrepreneurship Theory and Practice*, 26(4), 71-94.
- Levie, J. (2016). *What drives entrepreneurship inside organisations?* Paper presented at 2016 ENTRE Conference in Kraków.
- Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Journal*, 21(1), 135-172.
- Luthans, F., & Avolio, B. (2003). Authentic leadership development. In K.S. Cameron, J.E. Dutton & R.E. Quinn (Eds.), *Positive organizational Scholarship. Foundations of a new discipline* (pp. 241-258). San Francisco: Berrett-Koehler Publishers.
- Luthans, F., Avolio, B.J., Avey, J.B., & Norman, S.M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541-572.
- Luthans, F., & Youssef, C.M. (2004). Human, social, and now positive psychological capital management. *Organizational Dynamics*, 33, 143-160.
- Luthans, F., Youssef, C.M., & Avolio, B.J. (2007). *Psychological capital*. New York: Oxford University Press.
- Memili, E., Welsh, D.H.B., & Luthans, F. (2013). Going beyond research on goal setting: A proposed role of organizational psychological capital of family firms. *Entrepreneurship Theory and Practice*, 37, 1289-1295.
- Nam, D., Parboteeah, K.P., Cullen, J.B., & Johnson, J.L. (2014). Cross-national differences in firms undertaking innovation initiatives: An application of institutional anomie theory. *Journal of International Management*, 20(2), 91-106.
- Piccolo, R.F., & Colquitt, J.A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49(2), 327-340.
- Quinn, R.E. (2005). Moments of greatness: Entering the fundamental state of leadership. *Harvard Business Review*, July-August, 75-83.
- Quinn, R.E., & Anding, J.M. (2005). An Interview with Robert E. Quinn Entering the fundamental state of leadership: Reflections on the path to transformational teaching. *Academy of Management Learning & Education*, 4(4), 487-495.
- Spreitzer, G.M., & Sonenschein, S. (2004). Toward the construct definition of positive deviance. *American Behavioral Scientist*, 47, 828-847.
- Tuhus-Dubrow, R. (2009). The Power of Positive Deviants: A promising new tactic for changing communities from the inside. *Boston Globe*. November 29.
- Walumbwa, F.O., Avolio, B.J., Gardner, W.L., Wernsing, T.S., & Peterson, S.J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34, 89-126.

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Social Capital Impact on Entrepreneur's Innovation: A Test of Chinese Entrepreneurs in Italy

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Abstract

According to the theory of Burt (2005), brokerage and closure are two main features of social network and metaphor of social capital. The purpose of this research was to investigate how immigrant entrepreneur's social network may affect entrepreneur's innovation. The relationship between social capital and entrepreneur's innovation can be mediated by trust and information diversity. These relationships are especially relevant in the case of immigrant entrepreneurs, which function in multiple groups and networks. The hypothesised relationships were examined with data from 91 Chinese entrepreneurs in Italy (Rome, Milan, Venice and Florence). This research aimed to prove the relationship between entrepreneur's social network and innovation. This research distinguishes two types of social network which are closure and structural hole, and two components of social capital which are trust and sharing diversity information. Through applying Burt's theory about types of social network and dimensions of social capital, it shows the two types of entrepreneur's social network are all positively associated with innovation. The obtained results confirm prior hypothesis. The value added of this research is an indication that in the case of immigrant entrepreneurs social capital which derives from social networks positively impacts entrepreneur's innovation.

Keywords: social capital; trust; tacit knowledge; innovation; Chinese entrepreneur

JEL codes: L31, O35, D83

INTRODUCTION

Innovation is nature to entrepreneurship and its fundamental feature according to Schumpeter's definition (1934). From the point of competition, innovation puts the firm in the lead. Incremental innovation, which continues to improve existing products

and service, can extend the product life cycle. Radical innovation, has the potential to fundamentally drive down costs (Zaltman *et al.*, 1973; Henderson & Clark 1990). Innovation in SMEs is of particular interest because of the key role SMEs play in creating jobs, new firms, products and industries and often expanding the market beyond its domestic boundary (Bloch & Bhattacharya, 2016). On the social side, innovation, especially radical innovation, also facilitates knowledge spillovers improving quality of living and resolving social problems. Therefore, in the interest of both economic and social benefits, it is important to foster innovation in entrepreneurship.

One route toward increasing the level of entrepreneur's innovation authors point to extending their vision through receiving more diversified information. Diversity is the key to creativity. Living in a new culture, connecting with local people, exchanging information can make entrepreneurs more creative. Many research tested that diverse teams produce more creative results than teams in which all members are from a similar background (Fitzsimmons, 2013; Giridharadas, 2010; United Nations Statistics Division, 2011). Diversified information come together in a mental process to create a new and useful idea.

Another route is to build trust based relationships in entrepreneur's social network. Trust facilitates informal relational contacts enabling people to exchange their informal information and tacit knowledge which in turn can facilitate to create new ideas. At the same time, the innovation process involves risk both for the R&D running the process and employees participating in the process.

Based on these two routes, this study address the following three research questions: first, do social networks improve innovation of immigrant entrepreneurs? Second, does social capital increase innovation of immigrant entrepreneurs? Third, is this effect the same for women and men entrepreneurs? To address these questions, this study relied on OLS regression based on statistical data, which was collected from 91 Chinese entrepreneurs in Italy, to test the relationship between social capital and entrepreneur's innovation.

LITERATURE REVIEW AND HYPOTHESES

Social Capital: Closure (Trust) and Brokerage (Information Diversity)

Capital is a necessary condition of everyone economic and social activity and a result of human labour, as human labour can increase the capital. It was classified in the past as economic capital, human capital, intellectual capital and social capital. The notion of social capital can be traced to Marx who saw capital as part of the surplus value captured by capitalists or the bourgeoisie based on the exploitive social relations between two classes (Lin, 2001, p. 4, 19). Others see social capital as a social asset by virtue of actor's connections and access to resources in the network or group of which they are members. This social asset in view of Bouedieu and Wacquant (1992) is the sum of the resources, actual or virtual that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Burt, 2005, p. 5). Social capital come from and can be increased by social connections and relations. Social capital is the contextual complement to human capital in explaining that the people who do better are more able individuals, intelligent, attractive and skilled. Social capital explains that people do better also result from better connection with other people (Burt, 2005, p. 4). This connection as a function of prior contact, exchange and attendant emotions form formally or informally a social structure.

There are defined two features of social structure by Burt: closed network within the group and structural holes as the empty spaces beyond the group.

Relationships are the fundamental elements in any network. They can be measured for strength and context. Granovetter (1973) defined the strength of a tie as a combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services which characterize the tie. A bridge is a (strong or weak) relationship that spans a structural hole (Burt, 2005, p. 25). Relations can be measured for strength and context such that they can be sorted into three categories: bridges, bonds, and something else (more than a bridge and less than a bond). A strong relationship in a closed network is a bond between the people connected (Burt, 2005, p. 25).

Brokerage is the action of coordinating across the hole with bridges between people on opposite sides of the hole (Burt, 2005, p. 18). Social capital of structural holes comes from the opportunities that holes provide to broker the flow of information between people, and shape the projects that bring together people from opposite sides of the hole. People whose networks bridge the structural holes between groups have an advantage in detecting and developing rewarding opportunities. Information arbitrage is their advantage, they are able to see early, see more broadly and translate information across groups. Burt (2005, p. 38) provided evidence through supply-chain managers that managers whose network spanned structural holes tended to enjoy salaries higher than peers, had more positive performance evaluations than their peers, and odds of promotion higher than their peers. Brokerage across structural holes provide a vision of options otherwise unseen. New ideas emerge from selection and synthesis across structural holes. The social capital of structural holes comes from the opportunities that holes provide to broker the flow of information between people, and shape the projects that bring together people from opposite sides of the hole.

Burt (2005, p. 25) described that bridges are valuable for creating information variation, they separate non redundant source of information. Bonds (a strong relationship connected in a closed network) are valuable for eliminating variation and protecting connected people from information inconsistent with what they already know. Relations within closed network are more dense than beyond the group. The higher the density of relations within groups, information circulates more within than between groups, more greater homogeneity within than between groups. However closure increases the odds of a person being caught and punished for displaying belief or behaviour inconsistent with preferences in the closed network. In so doing, closure reinforces the status quo, protects against decay in new relations between friends of friends, and amplifies strong relations to extremes of trust and distrust. Bonds can facilitate the trust and collaborative alignment. Trust is a fundamental feature of closed networks.

Immigrant community, because of language, culture, education, and economic condition are usually closed networks relying on family, kin, fellow villager and friendship. Newcomers can get emotional and cultural support and various information for example initial housing, job opportunities and legal aid. Within this closed network, they communicate redundantly the same information and stories repeated by different members in their community. The more consistent the information and story one hears about, the more certain one can be about trusting later. The more members' behaviour illustrates shared beliefs and reflect the story, the higher mem-

ber's social identity. The more a person is predicted to behave in a way consistent with shared beliefs, the less risky it is trust to this person.

Trust Versus Tacit Knowledge in Innovation

Innovation is an outcome of learning and thus knowledge acquisition or knowledge accessing via the utilization of knowledge assets (Grant & Baden-Fuller, 2004). However, innovation is something more than the acquisition or generation of knowledge. Knowledge must be put into action to make a genuine difference (Nielsen & Nielsen, 2009). Human knowledge is usually classified into two types (Nonaka & Takeuchi, 1995, p. 8). One is explicit knowledge, which can be articulated in formal language and thus can be transmitted across individuals formally and easily. A more important kind of knowledge is tacit knowledge which is hard to articulate with formal language, is personal and embedded in individual experience and involves intangible factor such as personal belief, perspective and the value system. Tacit knowledge is hard to formalize, making it difficult to communicate or to share with others. Transmission of tacit knowledge requires strong relationship and contacts during long time to. Nielsen and Nielsen (2009) pointed that trust not only directly facilitates learning, but also conditions the effect of knowledge tacitness on innovative outcomes. Thus innovation depends on the quality of relationship (trust) between partner in team or community.

Burt held the point that there were reasons why closed network could create trust. You trust someone when you commit to a relationship before you know how the other person will behave (Burt, 2005, p. 93). Anticipated cooperation is implicit in this definition. The more unspecified, taken-for-granted, the terms, the more trust is involved. Granovetter (1973) defined that trust is strong relations. Trust builds over a period of years. Trust more easily take place within closed network. Within closed network people have reliably early and low cost to protect the innocent providing scarecrow warning about abusive people or squeeze them out of the network (Burt, 2005, p. 105). Putnam (1993, 2001) also preserved the focus on action facilitated by social structure: "Social capital here refers to features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated action" (Putnam, 1993, p. 167). Gossip in the closed network is the sharing of news. Wong and Ellis (2002) describe the tendency for Hong Kong companies entering China to more quickly decide between alternative venture partners when their information comes from family or close friends rather than casual friends or acquaintances.

The closed network occurs where a set of people have contacts through whom they are strong directly or short connected. Burt (2005) evidenced, by a manager citing a colleagues as someone with whom he or she would discuss potentially damaging personal information, that older relationships are more likely to be cited for trust or distrust, however brokerage requires trust within a much shorter time frame even minutes (Burt, 2005, p. 104).

Immigrate community is a closed network, because of the problem of language and culture, they meet more difficulty in the living and working, they have more contact and exchange information in the hosting country, therefore their reciprocal helps produce the mutual confiding. Within this closed network, redundant communication enables numerous stories of entrepreneur get around quickly, further, one learns from stories repeated by different members a richly detailed account of entrepreneurs' behaviour, at the same times, detecting misbehaviour. Redundant contacts ensure reliability. Small-

bone *et al.* (2005) also have studied trust in an immigrant business community. Hans-Hermann, Höhmann and Welter (2005) investigated that trust has a decisive impact on entrepreneurship from a West-East perspective.

Information Diversity Verse Explicit Knowledge In Innovation

Knowledge comes from information, information come from data. Information is a flow of messages, knowledge is created by that very flow of information, anchored in the beliefs and commitment of its holder (Nonaka & Takeuchi, 1995, p. 58). Cleveland (1982) stated that information is the sum total of all the facts and ideas that are available to be known by somebody at a given moment in time, knowledge is the result of somebody applying the refiner's fire to the mass of facts and ideas, selecting and organizing what is useful to somebody, wisdom is integrated knowledge –information made super-useful by creating theory. In the theory of DIKW pyramid, "wisdom in terms of knowledge, knowledge in terms of information, typically information is defined in terms of data" (Rowley, 2007).

Drucker (1985, p. 23) described entrepreneur's innovation as "doing something different not doing better what is already being done". But, Nonaka and Takeuchi (1995, p. 6) believed that innovation was not a one-act drama for successful Japanese companies. Rather continuous improvement and upgrading (continuous innovation) leads to competitive advantage of Japanese companies. These companies accumulate knowledge from the outside and share widely within the organization, stored as part of the company's knowledge base, and utilized by those engaged in developing new technologies and products.

Burt (2005, p. 16) pointed that structural holes are gaps between social groups in the structure of information flow. It means that the people are focused on their own activities such that they do not attend to the activities of people in the other group. The value potential of structural holes is that they separate non redundant sources of information. People on either side of a structural hole can access to a wider diversity of information. Brokerage is the action of coordinating across the hole with bridges between people on opposite sides of the hole.

A "small world" structure coined by Milgram (1967) is the tendency for people at different geographic locations to be connected through a few intermediaries. Grannovetter (1973) drove the point home with respect to "weak ties" providing the key intermediary. This weak ties can take more diversity information than your closed network.

Immigrant entrepreneur is a broker who is on both sides of a structural hole between the immigrant community and the local people. Through their brokerage they remain aware of interests and need of the local group and create value for them. Immigrant entrepreneur is familiar with activities in the community and local groups. They are more likely to see new beliefs and behaviors that combine elements from both groups. For example it is primarily an import-export business. Burt (2005, p. 62) believed that people whose networks span structural holes have early access to diverse, often contradictory information and interpretation gain a competitive advantage in seeing and developing good ideas. Immigrant entrepreneur's creativity by brokerage involves moving an idea mundane in one group to another group where the idea is new and valued.

Conceptual Model and Hypothesis

Just as mentioned above, social network is classified into closed network and structural holes, which can create social capital. Trust within closed network and sharing diverse

information through brokerage can have positive impacts on immigrant entrepreneur's innovation. Therefore, this study constructs the following conceptual model (Figure 1), consistent with the conceptual model, this paper makes some hypotheses as follows:

- H1:** Closed social network has a positive impact on trust derived from the social capital of closure.
- H2:** Structural holes in a social network have a positive impact on sharing diversity information.
- H3:** Trust derived from the social capital of closure has a positive impact on innovation of immigrant entrepreneur.
- H4:** Diversity information derived from the structural holes has a positive impact on innovation of immigrant entrepreneur.

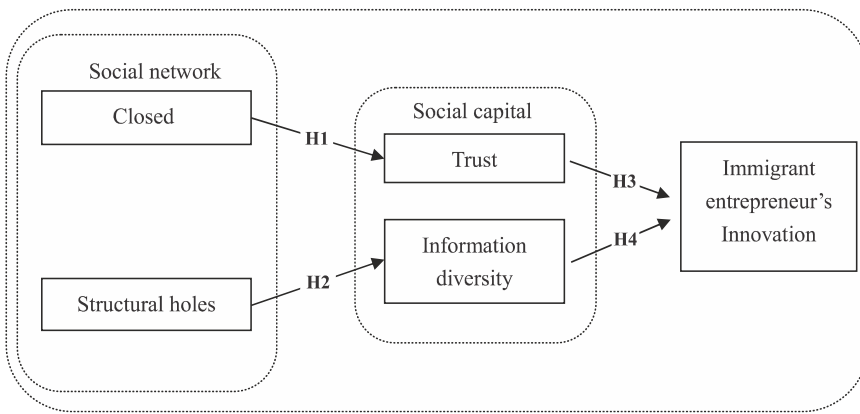


Figure 1. The conceptual model: network of entrepreneurs

Source: own study.

Sample and Data Collection

For the purpose of testing the hypothesized relationships, data was collected by means of questionnaire interviews among Chinese entrepreneurs in Italy. The author conducted structured interviews with 121 entrepreneurs, in which 91 valid interviews took place in Rome, Milan, Vince and Florence. 64% of the respondents were men, 20 were from Rome, 35 from Milan, 14 from Vince, 22 from Florence. These data was collected in summer of 2014.

Dependent Variables

According to Schumpeter's conceptualization (1934), this paper considers immigrant entrepreneur's innovation including the following items: (1) introducing new products; (2) exploring new client/market; (3) taking new methods of management.

Independent Variables

Second to the degree of relations, social networks are classified by closed and structural holes (Burt, 2005). This paper considers Chinese community as a closed network, in which there are strong relations based on kinship-fellow village based network, and considers Chinese entrepreneurs interact with their hosting country as structural holes,

where there are weak relations based on work relationship. The questionnaire employ a five-point Likert scales to indicate the social relations, 1 = interact with Italian business partner, 2 = with Italian friends, 3 = with Italian classmate, Chinese friends, 4 = with fellow villager and classmate, 5 = with kin and family members, the later three type are defined to a closed network, other two to structural holes.

Mediator Variables

Trust is metaphor of social capital of a closed network, brokerage is metaphor of social capital of structural holes where there are flow of diversity information (Burt, 2005). On this base, this paper use five of five-point Likert scales to measure trust and sharing diversity information. To measure trust, the paper used two items: (1) if there are no third guarantee, do you trust him/her? (2) would you introduce your friends who need help to him/her?

Control Variables

According to relevant prior researches, this research select the amount of years when immigrant entrepreneur live in Italy, level of education, Italian language and gender as control variables.

RESULTS

This research relied on OLS regression to test above hypotheses. Three models were estimated. Model 1 is the baseline model including only the control variables. Model 2 adds to the control variables two independent variables: close network and trust. Model 3 adds to independent variables of structural hole and sharing diversity information (Table 1).

Hypothesis 1 states that the closed social network has a positive impact on trust derived from the social capital of closure. As shown in model 2 in table, the coefficients of closed social network and trust are positive and statistically significant ($p=0.000<0.001$), suggesting that entrepreneur's closed social network is positively associated with trust. Model 2 is statistically significant ($F=54.264$; $p=0.000<0.001$). Therefore, this sample support this hypothesis regarding the positive effect between closed social network and trust.

Hypothesis 2 states that the structural holes in a social network have a positive impact on sharing diversity information. As shown in model 3 in table, the coefficients of structural holes and sharing diversity information are positive and statistically significant ($p=0.004<0.01$), suggesting when entrepreneurs are in structural hole with their Italian social network, they can share more diversity information. Model 3 is statistically significant ($F=7.559$, $P<0.001$). Hence, this result support the hypothesis regarding the positive effect between structural hole and sharing diversity information.

Hypothesis 3 states that the trust derived from the social capital of closure has a positive impact on innovation of immigrant entrepreneur. As shown in model 2 in table, the coefficients of trust among entrepreneur and their innovation are positive and statistically significant ($p<0.001$), suggesting that trust derived from the social capital of closure is positively associated with their innovation.

Hypothesis 4 stated diversity information derived from the structural holes has a positive impact on innovation of immigrant entrepreneur. As shown in model 3 in table, the coefficients of sharing information with Italian and entrepreneur's innovation are positive and statistically ($p<0.001$), suggesting that entrepreneurs share diversity information with local people is positively associated with their innovation.

Table 1. Regression analysis: effects of social capital on IE's innovation

	Model 1	Model 2	Model 3
<i>Control Variables</i>			
Gender	1.123	-.259	1.346
Years in IT	-.737	-.611	-.461
Language	.090	.957	.133
Education	.181	.383	2.587*
<i>Independent Variables</i>			
CN→Trust(T)		7.366***	
T→IE's innovation		7.075***	
SH→Diversity information(DI)			2.749**
DI→IE's innovation			3.034***
<i>Model Statistics</i>			
R square	.102	.488	.156
Adjusted R square	.007	.497	.135
F	1.078	54.264***	7.559***

Note: Values represent unstandardized B coefficients. p<0.1; *p<0.05; **p<0.01; ***p<0.001

Source: own calculation.

DISCUSSION

The purpose of this research was to investigate how immigrant entrepreneur's social network may affect entrepreneur's innovation. This research aimed to prove the relationship between entrepreneur's social network and innovation. Through applying Burt's theory about types of social network and dimensions of social capital, it shows the two types of entrepreneur's social network are all positively associated with their innovation. The results confirm the prior hypothesis. This research distinguishes two types of social network, which are closure and structural hole, and two components of social capital, which are trust and sharing diversity information.

Results suggest that trust has a positive effect on innovation. That is to say trust can enhance entrepreneur's innovation. Trust can trigger strong emotions in entrepreneur's social network and commit to a relationship before they know how the other person will behave (Burt, 2005). When entrepreneurs create revolutionary products or technologies, they take on the great risk because they create new markets. Therefore building trust also in entrepreneur's social network is essential to successfully bringing new products and services to market. In the closed social network, there is more trust among members. Past cooperation is a basis for future cooperation such that trust is correlated with the strength of a relationship. In a closed network, interconnected people tell stories and nonessential (often trivial) news. A closed network provides wide bandwidth for the flow of stories as packets of people data. Detection is the trust-relevant feature of the flow. The omnipresent hydra-eyes of a closed network makes it difficult for misbehaviour to escape detection (Burt, 2005).

Results also suggest that diversity information sharing has a positive effect on entrepreneur's innovation. That is to say immigrant entrepreneur can enhance their innovation through contacting with host people and can get more diversity information which is source to creative thinking and innovation. There are holes in the structure of information flow between clusters where entrepreneurs contact. These holes usually happen in contacting with hosts, because of language and blood relation, immigrant entrepreneurs live within their community network and not focus on relationship with host people. They attend seldom to the activities of host people in their group. Thus, it builds some structural holes between immigrant community and host community. Host on either side of structural hole circulate in different flows of information. These information are usually non redundant and diversified.

However, as the result show, there is two control variables, language and education, which also positively affect entrepreneur's innovation. However these are seldom statistically significant except entrepreneur's education when testing diversity information sharing effect on innovation. Better host language which entrepreneur can speak, more performance of entrepreneur's innovation; higher education which entrepreneur have gotten, also more performance of entrepreneur's innovation. When entrepreneur speak well the host language, they can communicate deeply to exchange information. At the same time, their knowledge helps them to discover useful new information and also trust.

But, there is no positive relationship between years when immigrant entrepreneur live in host country and their innovation. That means if entrepreneur can speak well host language and have a higher education, they could discover quickly useful diversity information when they contact with host people.

CONCLUSIONS

Entrepreneur's social capital is one condition and challenges to their creative thinking and innovation. This research enhances some understanding which social network through trust and diversity information sharing can improve entrepreneur's innovation. Although social capital and trust are concepts widely studied in business and management, the existing studies did not connect social capital to innovation.

Based on data from Chinese immigrant entrepreneurs in Italy, the results show that closed social network within their community and structural holes with host people all contribute to entrepreneur's innovation. Immigrant entrepreneur span more structural holes with host people, exposes the individual to more diverse information and perspectives, which can then be brought together in new ways to yield a creative insight. But closure is a complement to brokerage such that the two together define social capital in a general way in terms of closure within a group and brokerage beyond the group (Burt, 2005). Facilitating the trust and collaborative alignment need to deliver the value of brokerage.

And the results also suggest that more trust and sharing diversity information, the more performance of entrepreneur's innovation, and that the level of immigrant entrepreneur' language and education are all important to build social network which contribute to their innovation. This study explains how innovation benefit from diversity information and trust in the social networks. But this paper did not study how entrepreneur build their the social network which provide trust and diversity information. Therefore the advanced study should be involved in building social network and network services which provide

lucrative or emotionally rewarding relationships and make immigrant entrepreneurs not "bowling alone" and more contribution to innovation and human life.

REFERENCES

- Anot, D.C. (2007). Research on trust: a bibliography and brief bibliometric analysis of the special issue submissions. *European Journal of Marketing*, 41(9/10), 1203-1240.
- Bloch, H., & Bhattacharya, M. (2016). Promotion of Innovation and Job Growth in Small and Medium-Sized Enterprises in Australia: Evidence and Policy Issues. *The Australian Economic Review*, 49(2), 192-199.
- Bouedieu, P., & Wacquant, L. (1992). *An Invitation to Reflexive Sociology*. Cambridge: Polity Press.
- Burt, B. (2005). *Brokerage and Closure*. New York: Oxford University Press.
- Cleveland, H. (1982). Information as a resource. *The Futurist*, 16(6), 34-39.
- Drucker, P.F. (1985). *Innovation and entrepreneurship*. New York: Harper & Row.
- Fitzsimmons, S.R. (2013). Multicultural employees: A framework for understanding how they contribute to organizations. *Academy of Management Review*, 38(4), 525-549.
- Giridharadas, A. (2010). New leaders find strength in diversity. *New York Times*, May 6. Retrieved from: <http://www.nytimes.com/2010/05/07/us/07iht-currents.html> (06.05. 2016).
- Granovetter, M.S. (1973). The strength of weak ties. *American Journal of sociology*, 78, 1360-1380.
- Grant, R.M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of Management Studies*, 41(1), 61-84.
- Henderson, R.M., & Clark, K.B. (1990). Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms. *Administrative Science Quarterly*, 35(1), 9-30.
- Höhmann, H.H., & Welter, F. (Eds.) (2005). *Trust and Entrepreneurship: A West-East Perspective*. Cheltenham: Edward Elgar Publishing.
- Lin, N. (2001). *Social capital: a theory of social structure and action*. Cambridge: Cambridge University Press.
- Milgram, S. (1967). The small world problem. *Psychology Today*, 22, 61-67.
- Nielsen, B.B., & Nielsen, S. (2009). Learning and Innovation in International Strategic Alliances: An Empirical Test of the Role of Trust and Tacitness. *Journal of Management Studies*, 46(6), 1031-1056.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford university Press.
- Putnam, R. (1993). *Making Democracy Work*. Princeton, NJ: Princeton University Press.
- Putnam, R. (2001). Social Capital: Measurement and Consequences. *Canadian Journal of Policy Research*, 2(1), 41-51.
- Rowley, J. (2007). The wisdom hierarchy: representations of the DIKW hierarchy. *Journal of Information Science*, 33(2), 163-180.
- Schumpeter, J.A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*, Cambridge, MA.: Harvard University Press.
- Smallbone, D., Lyon, F., & Li, X. (2005). Trust, co-operation and networking in an immigrant business community: the case of Chinese-owned businesses in the UK. *Trust and Entrepreneurship: A West-East Perspective*, 235.
- United Nations Statistics Division(2011). UNSD demographic statistics. Retrieved from: <http://data.un.org> (11.04.2012).

- Wong, P.L.K., & Ellis, P. (2002). Social ties and partner identification in Sino-Hong Kong international joint ventures. *Journal of International business studies*, 33(2), 267-289.
- Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and Organizations*. New York: John Wiley and Sons.

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Responsibility in the Activities of Transnational Companies

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Abstract

The activities of transnational corporations bring many benefits, but also threats in the host countries and the world. The phenomenon of CSR, SRI and FT has been growing rapidly in recent years. The objectives of the article are: a description of the participation of transnational corporations in raising the level of stratification of society in the rich North and the poor South as well as an analysis of processes related to liability and justice – Corporate Social responsibility (CSR) and Socially responsible investing (SRI), including the concept of Fair Trade (FT) 3.0. Descriptive method was applied in respect to the first goal, in the case of second objective, the phenomena of CSR, responsible investing and Fair Trade 3.0. were examined and described. This study confirms prior voices that it is necessary to develop a new economy – the economy of social development – oriented to increase the standards of living and prosperity, and to stimulate economic growth and social development influencing positively the reduction of social inequalities. The originality of this work lays in proposal a new concept of Fair Trade 3.0 and indicates its theoretical assumptions. This is new concept of foreign trade is based on responsibility “towards others” and “for others”.

Keywords: transnational companies; CSR; Fair Trade; responsible investment

JEL codes: F23, M14, F14

“There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud”.

– Milton Friedman

INTRODUCTION

In the era of globalisation and internationalization of enterprises, the liberalization of international trade and the removal of barriers to international flows of goods, services, capital and people growing division of the world into countries of the rich North and the poor South (Mbaruku, & Mutalemwa, 2015; Ulman, & Šoltés, 2015). North are economically developed countries with democratic traditions, characterized by a high standard of living, but with the demographic challenges of an aging population. South are economically undeveloped countries, often affected by poverty, low and often decreasing standard of living, threatened anarchy, wars or conflicts. The observed disparities in economic potentials, technological and civilization of these two parts of the world are the cause of imbalance and a huge disproportion relationship. Also growing criticism of the international financial institutions and transnational corporations (TNCs), which – especially since the outbreak of the financial crisis of 2008 – are regarded as organizations maintaining the current world order. In the face of these developments, tensions and threats in the activities of those entities are becoming more frequent ideas of responsibility and justice in business operations. The components of the described processes include, among others, corporate social responsibility (CSR), responsible investment (Socially Responsible Investment – SRI) and the movement of Fair Trade (FT).

The objectives of the article are: a description of the participation of transnational corporations in raising the level of stratification of society in the rich North and the poor South and an analysis of processes related to liability and justice – CSR and SRI, including the concept of Fair Trade 3.0. Descriptive method was applied in the first goal, in the case of second objective. Article provides an overview of selected literature, a description of the activities of TNCs and their impact on the processes of stratification of the population and the ideas of justice and accountability in the activities of those companies.

LITERATURE REVIEW

World literature presents numerous studies on the relationship between the transnational corporation's activities and an issue concerning CSR, SRI and FT. Table 1 shows examples of a synthetic summary of the selected studies results focused on this subject.

Table 1. Summary of research results focused on the relationship TCN's - CSR, SRI and FT

Reference	Subject	Conclusions
Garriga & Melé (2004)	Classifications the main CSR theories.	The findings suggest the necessity to develop a new theory on the business and society relationship, which should integrate 4 dimensions: instrumental, political, integrative and ethical theories.
Brammer, Jackson & Matten (2012)	Study the potential contributions of institutional theory to understanding CSR as a mode of governance.	Corporations may support a business case for a lot of activities resulting in what is commonly referred to as CSR. Business responds by reflecting and shaping institutions which govern the broader economic, social and political systems.
Jušcius & Snieška (2008)	Presentation the scheme of the formation of corporations' competitive advantages connected with CSR.	The role of CSR in the processes of competitive advantages formation on the academic ground, the following traditional models of competitive abilities analysis can be used: the model of five forces, the model of resource based approach and the model of network approach.
Jastrzębska (2012)	Connections between transnational corporations (TNC) and Fair Trade.	Bringing TNC into the Fair Trade system is a controversial issue, not always perceived positively. Concept of Fair Trade is aimed against the policies of giant TNC.
Forno & Graziano (2014)	Social movements in the current economic crisis.	Description of analytical framework which will combine social movements and political consumerism theories by focusing on two basic dimensions: consumer culture and identity and organisational resources.
Dziawgo & Dziawgo (2015)	Selected aspects of CSR in the financial market.	After many years of CSR promotion on Polish financial services market – the level of knowledge and range expectations is low.
Capelle-Blancard & Monjon (2012)	Popularity of SRI in newspapers and academic journals.	The papers on SRI focus on financial performance, more research is needed on a conceptual and theoretical ground, in particular the aspirations of SRI investors and the relationship between regulations and SRI.
Child (2015)	Comparison of FT and SRI	Three hypotheses: the relation motivations hypothesis, the material interests hypothesis, and the organization of credibility hypothesis.
Zasępa (2013)	Effectiveness of investment in an index of socially responsible companies on the example of Polish Respect Index.	The analysis of rates of return and risk Respect Index compared to other Warsaw Stock Exchange main indexes indicates the achievement by companies applying CSR higher returns with lower risk.
Berry & Junkus (2013)	Study of importance of Socially Responsible Investing (SRI) for an investor.	Environmental and sustainability issues dominate as the major category associated with SR investing. Investors prefer to consider the SRI question in more holistic terms rather than using the exclusionary format favoured by most SRI funds.
Zysk (2015)	CSR, SRI and responsible tourism in Visegrad Group (V4).	Developing CSR, SRI and responsible tourism in Poland, the Czech Republic, Hungary and Slovakia can start a new era in fairer trade on the international level.
Rogowski & Ulianiuk (2012)	Analysis of the effectiveness of socially responsible investment.	Observed differences between the effectiveness of classic investment funds and SRI funds are small and / or statistically insignificant.
Bieler (2013)	The role of TNC in Free Trade and Fair Trade.	In the long-term the way production itself is organized, needs to be transformed. This will require completely different trade arrangements, challenging more fundamentally the capitalist social relations of production.
Rodriguez, Siegel, Hillman & Eden (2006)	Complex relationship between international business (MNEs) and society.	An agenda for additional theoretical and empirical research on politics, corruption and corporate social responsibility – three lenses on the MNEs.
Lund-Thomsen & Lindgreen (2013)	CSR in global value chains.	The drivers, main features, and conceptual underpinnings of CSR. Measures proposed in the new cooperation paradigm are unlikely to alter power relationships in global value chains.

Source: own study.

MATERIAL AND METHODS

In the face of – mentioned in the introduction – processes, tensions and threats in the global economy they are increasingly present the ideas of accountability and justice, also undertaken by transnational corporations. The objectives of the article are:

1. a description of the participation of transnational corporations in raising the level of stratification of society in the rich North and the poor South;
2. an analysis of processes related to liability and justice (CSR, SRI) – including the new concept of Fair Trade 3.0.

The author makes the following hypotheses: transnational corporates activity is an important factor affecting the deepening division of the world into rich and poor, companies will develop activities in the area of CSR (especially in Version 3.0) and SRI with a growing number of investors willing to trust companies that pursue a strategy based on a system of ESG factors (Environmental, Social, Governance) and indices that facilitate this type of choices. But in the area of FT (with growing turnover year after year) should be proposed new idea: foreign trade based on responsibility “towards others” and “for others” – Fair Trade 3.0.

In the article has been used statistical data available from annual reports of organizations dealing with the problems described here (EUROSIF, USSIF, Fairtrade International), data from UNCTAD and the report of The Fortune Global 500 Companies List in 2015.

RESULTS AND DISCUSSION

Transnational Corporations, Global Value Chains and Social Inequalities

The today’s world economy is the interdependence of multiple systems and components. Globalisation in the economic sense is a global system of flows of goods, services, capital and people (Wach, 2014). We observe the growth of the phenomenon of internationalization processes of marketing, sales, production, logistics and distribution. Companies operating in this environment introduce and implement holistic strategies for global action on an international scale. Global value chains allow companies to specialize in the implementation of these processes where they are most competitive, which often means separation of the different stages of the production process geographically distant countries or regions. One of the elements described according to the relocation of actions taken by the company to produce and sell certain product or service (Porter & Kramer, 2006, pp. 78-92). Is distinguished by the following set of forms of relocation modules value chain enterprises (Oshri *et al.*, 2009, p. 15):

1. in-house sourcing – delocalisation of module value chain through internal ownership structure the company and the country in which it is located; it applies to greenfield investments, brownfield investments, joint ventures, strategic alliances, cooperation agreements;
2. outsourcing – delocalisation of the company's value chain module to an external provider located in the same country as an investor, the scope of analogous as in “1”;

3. offshoring – the delegation of the module value chain within the ownership structure of the company, but outside the country in which it is located; it applies to contracts for suppliers and cooperation;
4. offshore outsourcing – the transfer process and/or function of the value chain to an external provider located abroad, the scope of analogous as in “3”.

The activities of major market participants (transnational corporations and their foreign affiliates, banks, financial institutions and investment funds) brings many positive effects, such as reducing the distance of civilization, the impact on economic development, creating and liberalize international trade, increase competitiveness, the development of techniques and technologies, the creation of jobs, introduction of modern management methods and improving the quality of goods and services. On the other hand, the above-mentioned groups of companies are in a very special way responsible for your interactions with the countries of operation and for local communities, because they have a significant impact on the shape of the reality in which we live. Famous international scandals such as tax avoidance¹, evasions, creative accounting practices (due to principle “greed is good” – guided by short-term benefits), overstating profits, manipulations of emissions in diesel engines (the latest Volkswagen’s scandal), giant billions in violation of tax laws in Luxembourg, environmental devastation and destruction of livelihoods of the population (last deforestation in Indonesia; it has had massive environmental and social impacts), human rights violations, deliberate bad risk assessment or creating fraudulent financial instruments. Often companies intentionally causing local conflicts (especially in the fight for access to natural resources), deprive wages, acquire land and crops (coffee, cocoa, bananas), they did not consult its activities with local communities, and in the case of litigation do not pay court-awarded damages – which in turn leads to a deepening social inequalities and deterioration in the standard of living societies. Transnational corporations and their affiliates generate approx. 70% of the turnover of world exports and imports (UNCTAD, 2015), often their revenues exceeds the average GDP of countries² – it is impossible not to notice the correlation between the activity and the reality of the entities described economic, political, social and ecological modern world.

As already mentioned the activities of these powerful – as demonstrated above – companies leads to social inequalities in the world and worsens the living standards of populations and living conditions. Rich corporations changing their business strategies, cost, wage (and pricing models) and with effective use in practice the idea of accountability and justice could affect even a small increase in real incomes the poorest sections of societies.

Justice and Accountability in The Activities of Transnational Corporations

Because of the actions of corporations in the mortgage market, speculations financial institutions and excessive creation of money by the banks appeared the global financial crisis of 2008-2010. It changed the system of economic forces in many economies and infringed the balance of global economic relations. This situation calls to ask questions

¹ Corporations avoiding paying corporate income tax in Poland might deprive even 46 billion PLN annually, according to a report for the European Commission (European Union, 2015).

² For example GDP in 2014 (billions USD): Norway – 499, Austria – 437, Iran – 416, Thailand – 405; revenues in 2014 (billions USD): Walmart – 485, Sinopec Group – 447, Royal Dutch Shell – 431, China National Petroleum – 428 (Fortune, 2015; UNCTAD, 2015).

about the goals of further development of the economies and the roads leading to the realization of these tasks. Times of crisis and recession, most often tend to in-depth analyses about the role of companies operating globally. Part of transnational corporations realizes that the higher position in the global market also increases their responsibility for the environment and relations with stakeholders. In order to improve these relations and improve its image of a company involved in the promotion of such forms of action as corporate social responsibility (CSR), investment socially responsible (SRI) and in its doings take into account created by the International Community Fair Trade movement (Fair Trade). What is important – consumers (and stakeholders) have become more aware of the possibility of corporations and their impact on the environment. Consciously they began to require economic operators a fair, transparent and ethical code of conduct – instead prefer to purchasing goods, using the services and investing in the assets of those companies that take into account the proposals discussed in their business strategies. Hereby the customers have an impact on the development of the economy.

The latest form of corporate social responsibility is the idea of CSR 3.0, which further broadens the activities of companies. Version 3.0 has evolved from classic CSR activities (CSR 1.0) with idea “good behavior, because it is good” and from CSR 2.0 with the concept of responsibility for promoting joint relations with customers and suppliers (Garriga & Melé, 2004, p. 54; Brammer *et al.*, 2012, p. 4; Juščius & Snieška, 2008, p. 36). In the concept of CSR 3.0 there are no longer local initiatives undertaken within the framework of good cooperation with local governments, but global cooperation corporations, governments and international organizations to create new commercial connections, as financial and social. Partnership “state – corporation – NGO” as a determinant CSR 3.0 gives synergies and aims solution described in this paper problems of inequality on a global scale. In case of a financial crisis in 2008-2010, the effects of which are felt to this day, governments reduced their involved in activities to improve the quality and standard of living in the poor countries of the South and allocated funds to stabilize their economies. Corporations have decided to fill the gap in the activities of governments and non-governmental organizations, however, is not just a philanthropic activity, as part of the CSR strategy 3.0. Taking into account the rapidly changing market, corporations want to create links with insignificant today, customers who in the future may become an important business partner. An example of partnership between the state – corporates action in the US, where the project is implemented in the field of energy under the name “Power Africa” (USAID, 2015). Project includes the collective resources of the US Government, African governments, the World Bank, the African Development Bank, the Government of Sweden, the European Union, the African Union, the United Nation’s Sustainable Energy for All, and more than 100 private companies, e.g. Citi, General Electric, Goldman Sachs, JCM Capital, Nedbank, Shell, Standard Bank, Symbion Power. Another example of cooperation between corporations, governments and NGOs is the activity of The Climate Group. The Climate Group (2015) is an award-winning, international non-profit with offices in Greater China, North America, India and Europe. This organisation helps leaders to pass to a prosperous low carbon economy, driven by the rapid scale-up of clean and renewable energy. In September 2015 CDP³ and The Climate

³ CDP (formerly the Carbon Disclosure Project) is a global not-for-profit organization, founded in 2000 and headquartered in London. It pioneered and provide the world’s only global natural capital disclosure system

Group released a report showing that over 170 major companies (e.g. Bloomberg, Dell, HP, IKEA, HSBC, Nike, Phillips, Procter & Gamble, CECEP), states, regions and cities around the world have committed to reducing their greenhouse gas (GHG) emissions by 80-100%, or procuring 100% of their power from renewable sources.

Since the nineties the twentieth century socially responsible investing is gaining popularity both in Europe and in the United States and other countries. According to data from European SRI Study 2014 (Eurosif, 2014), European Responsible Investing Fund Survey 2015 (KPMG, 2015) and Report on US Sustainable, Responsible and Impact Investing Trends 2014 (USSIF, 2015) in the years 2002-2014 SRI market size in Europe grew from 0.3 to 13.6 trillion EUR, and in the USA in the period 1995-2014 grew from 0.6 to 6.5 trillion USD (Zysk, 2015, p. 171). It is worth noting that investors who take into account the criteria of ESG factors (Environmental, Social, and Governance) in the structure of the investment portfolio, they need quality information about CSR strategy pursued by the company. An increasing number of socially responsible indexes is a result of growing interest in the topic of SRI (Capelle-Blancard & Monjon, 2012, p. 242; Berry & Junkus, 2013, p. 709). The purpose of such indices is to provide global standards for identifying the socially responsible, invest in them, and measuring their results in the area of economic, social and environmental. In addition, also they serve as part of facilitating investment decisions, and also allow minimizing the costs of acquiring information.

Companies aspire to qualify for social indices. This requires on their part undergo voluntary social audit, and what that entails making available a range of information, the involvement of significant resources, properly prepared staff and time. The company's membership to socially responsible index confirms its social orientation and the desire to build long-term value for shareholders, taking into account the social aspects. There is an increasing number of indexes in the world, which role is to promote and disseminate the essence of corporate social responsibility. Among socially responsible indexes we should mention the Dow Jones Sustainability Indexes (the world's first stock index listing of socially responsible companies, specifies 10% leading companies in the field of sustainable development of the 2500 world's largest corporations belonging to the Dow Jones Global Total Stock Market Index), The MSCI KLD 400 Social Index (the world's first American index based on ESG criteria, includes 400 companies⁴), the FTSE4Good Index (designed to measure the performance of companies demonstrating strong ESG practices), and The Ethibel Sustainability Index (contains a variable number of shares from companies that are included in the Russell Global Index and display the best performances in terms of CSR, the index collects companies from Europe, North America and Asia Pacific.). These indices are authoritative and consequently are the most commonly used in making an investment decision (Rogowski & Ulianiuk, 2012, pp. 64-81) and they are becoming more and more popular, as evidenced by the above-cited data.

The Fair Trade movement promotes the idea of fair rules of the game in the area of international trade (Mohan, 2010, p. 19). The phenomenon of Fair Trade becomes the impetus to liberalization of access to markets in rich countries of North and covers more and

where over 4,500 companies, representing over 50% of the market capitalization of the world's largest 30 stock exchanges, and 110 cities from 80 countries (CDP, 2015).

⁴ Founded as Domini 400 Social Index in 1990.

more countries around the world (Moore, 2004, pp. 73-84; Dragusanu *et al.*, 2014, p. 220). The international Fairtrade system includes three producer networks, 25 Fairtrade organizations, Fairtrade International, and FLOCERT, the independent certification body of the global Fairtrade system (Fairtrade, 2015). According to a recent report “Global change, local leadership, Annual Report 2014-2015” prepared by the organization Fair Trade International in 2014 customers in more than 125 countries developed economically spent on Fair Trade products (32,000 types of goods) for 5.9 billion EUR. This is an increase compared to 2013 by 10%. Figure 1 shows the change in sales of goods FT in the world in 2004-2014.

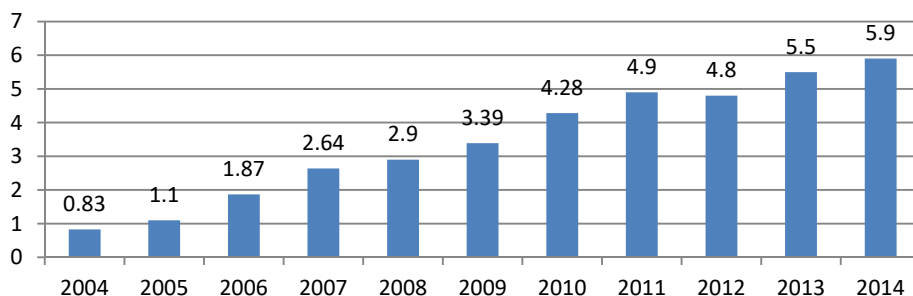


Figure 1. Fair Trade turnover worldwide in 2004-2014 (in billion EUR)

Source: author's calculations based on Fairtrade International Annual Reports, years 2003/2004-2014/2015 (WFTO, 2016).

Turnover of Fair Trade goods in the world from 2004 to the end of 2014 was almost seven times larger (from 0.83 billion to 5.9 billion EUR).

FT creates **opportunities for economically disadvantaged producers, ensures no child labour, forced labour and good working conditions. One of the basic principles is respect for the environment (WFTO, 2015).** The Fair Trade market has many documented benefits for a farmer, including a guaranteed floor price and access to credit. In the initial phase of development of the Fair Trade movement one could reach conclusions that besides the fight against unfair practices by corporations selling fair products was not associated with activities of these companies. However, it turned out that corporations have opted to join this rapidly growing movement instead of an active struggle against him. Preferred care about their positive image than entering into conflict. There are situations when companies use the Fair Trade mark only for marketing purposes, i.e. bring to market several products with the symbol of FT, thereby building their own ethical face of the brand, but the rest of the production run in a manner that contradicts the principles. Sometimes there is also the use of double standards – certification includes manufacturers, but does not include employees' rights in supermarkets and coffee networks that sell a product Fair Trade⁵.

FT growth shows the commercial viability of an approach to business based on transparency and respect. Purchasing Fair Trade goods gives consumers a direct way to help reduce poverty around the world. It's more than just trade. It's about relationships between buyers and sellers – let's call this model Fair Trade 1.0. However, the branding

⁵ The outstanding challenge for Fair Trade is to harness the corporate conscientisation evident in initiatives like the Starbucks-backed Fairtrade Access Fund (Bowen, 2013).

and mass production of the FT labels has made it difficult for the market to retain the solidarity connection between producers and consumers. It has been unable to create the kind of economic independence necessary for farmers to escape from periodical debt. Nowadays, fair trade labels are often employed simply to target ethical consumerism, and they seldom reflect a sincere relationship between producers and consumers. So – at West Virginia University (WVU) in the USA – appeared the idea to use the coffee industry as a tool for promoting international solidarity and cooperative development. It was decided to call this initiative WVU Fair Trade 2.0 (WVU Fair Trade, 2015). The project concept involves direct cooperation between with cooperatives from Central American countries that produce coffee, co called “First Hand Coffee”. The group is now selling the coffees under the label First Hand Coffee at multiple retail locations on the WVU campus, through a partnership with the university’s dining services department. The concept of “First Hand Coffee” shows that producers not only receive a base price above that offered by fair trade labelling, but that the large percentage of profits normally allocated for marketing and branding (around 80%) is instead absorbed by volunteer labour and reinvested into coffee producing communities.

This is definitely a small – although lofty – local initiative, but has affected the author's idea for a new concept: Fair Trade 3.0. Assumption idea is to exclude intermediaries (which are often transnational corporations) and use in the development of responsible international trade in so-called “power of big cities”. According to the AT Kearney report “Global cities. The race accelerates” more than half of world’s population lives in cities, and by 2025 that number is projected to reach 60 % (ATKearney, 2015). According to the McKinsey Global Institute “Urban world: Mapping the economic power of cities” from 2011 only 600 urban centres generate about 60 % of global GDP (McKinsey & Company, 2011). While 600 cities will continue to account for the same share of global GDP in 2025, this group of 600 will have a very different membership. Over the next 15 years, the centre of gravity of the urban world will move south and, even more decisively, east.

Theoretical assumptions of the project Fair Trade 3.0 are as follows:

1. the greatest cities in the world use their strength (“power of big cities”) and begin to cooperate with manufacturers of the products Fair Trade;
2. there are created urban companies (for example companies dealing with energy, water, litter) and they trade FT goods delivering them directly to end users in schools, universities, local institutions and offices or ordinary customers (e.g. vending machines for coffee, cocoa, bananas, flowers, tea or juice);
3. it is used volunteer and student placement as a form of public education, as well as prison labor as a kind of re-education;
4. producers receive a good base price above that offered by fair trade labelling and transnational corporations;
5. in the further municipal companies would form joint ventures with producers in poor countries of the South, would be organized a system of certification and own logistics (TSL industry).

So organized process would exclude many traders (wholesalers, retailers) and as a result would be profitable for all parties of the transaction. This is new concept of foreign trade based on responsibility “towards others” and “for others”. Author of

the concept realizes that the idea requires the creation of accurate pricing models and calculations; they will be the subject of further research.

CONCLUSIONS

The world economy at the present time is a system of connected vessels. The processes of globalization and internationalization of business activities resulted in rapid growth of transnational companies. Methodology of planning and organization of production, management methods and creating strategies has been changed, which gave effect to increase productivity and maximize profits. In addition to the many positive effects of the phenomena there are also negative effects of these processes: opening of the income shears, impoverishment of a large part of the world's population, expansion of the disparities between the countries of the rich North and the poor South and the degradation and over-exploitation of the environment.

One of the many proposed solutions – which can be identified as a result of this article – aimed at eliminating these disparities are: the development of corporate social responsibility, responsible investment and promote Fair Trade movement (maybe the concept of FT 3.0) – especially in times of economic crisis. The crisis has deepened the unethical behaviour of transnational corporations, no sense of responsibility for their decisions, excessive desire to get rich at any cost, ordinary theft and fraud. It is worth to remember requirements of the new economy – the economy of social development – oriented in business practice on increasing the standard of living and prosperity, and which stimulates economic growth and social development influences the reduction of social inequalities. The author is fully aware that concept of Fair Trade 3.0 is not scientifically justified - this issue will be the subject of further research.

REFERENCES

- ATKearney (2015). *Global Cities 2015: The Race Accelerates*. Retrieved from: <https://www.atkearney.com/documents/10192/5911137/Global+Cities+2015+-+The+Race+Accelerates.pdf/7b239156-86ac-4bc6-8f30-048925997ac4> (30.12.2015).
- Berry, T.C., & Junkus, J.C. (2012). Socially Responsible Investing: An Investor Perspective. *Journal of Business Ethics*, 112, 707-720.
- Bieler, A. (2013). *Global Corporations, Trade and Investment: Free Trade to Fair Trade?* Paper presented at the first meeting of the Futures Commission on Alternatives to Neoliberalism; Johannesburg/South Africa, 24 and 25 June 2013. Retrieved from: <http://andreasbieler.net/wp-content/files/Futures%20Commission%20-%20free%20trade%20paper.pdf> (30.12.2015).
- Bowen, A. (2013). *Do transnational corporations have a place in fair trade?* Retrieved from: <http://www.whyydev.org/do-transnational-corporations-have-a-place-in-fair-trade> (30.12.2015).
- Brammer, S., Jackson, G., & Matten, D. (2012). Corporate Social Responsibility and institutional theory: new perspectives on private governance. *Socio-Economic Review*, 10, 3-28.
- Capelle-Blancard, G. & Monjon, S. (2012). Trends in the literature on socially responsible investment: looking for the keys under the lamppost. *Business Ethics: A European Review*, 21(3), 1-20.
- CDP (2015). *Catalyzing business and government action*. Retrieved from: <https://www.cdp.net/en-US/Pages/HomePage.aspx> (30.12.2015).

- Child, C. (2015). Mainstreaming and its Discontents: Fair Trade, socially Responsible Investing, and Industry Trajectories. *Journal of Business Ethics*, 130(3), 601-618.
- Dragusanu, R., Giovannucci, D., & Nunn, N. (2014). The Economics of Fair Trade. *Journal of Economic Perspectives*, 28(3), 217-236.
- Dziawgo, D., & Dziawgo, L. (2015). Wybrane aspekty CSR na rynku finansowym. Wyniki badań na reprezentatywnej próbie polskiego społeczeństwa. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 395, 84-93.
- European Union (2015). *Tax Reforms in EU Member States 2015 Tax policy challenges for economic growth and fiscal sustainability*. Luxembourg: Publications Office of the European Union. doi:10.2765/274179.
- Eurosif (2014). *European SRI Study 2014*. Brussels: Eurosif A.I.S.B.L. Retrieved from: <http://www.eurosif.org/wp-content/uploads/2014/09/Eurosif-SRI-Study-20142.pdf> (30.12.2015).
- Fairtrade (2015). *Who we are*. Bonn: Fairtrade International. Retrieved from: <http://www.fairtrade.net/about-fairtrade/who-we-are.html> (30.12.2015).
- Forno, F., & Graziano, P.R. (2014). Sustainable community movement organisations. *Journal of Consumer Culture*, 14, 139-157.
- Fortune (2016). *Global 500*. Retrieved from: <http://fortune.com/global500> (30.12.2015).
- Garriga, E., & Mele, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1), 51-71.
- Jastrzębska, E. (2012). Korporacje transnarodowe a Fair Trade. *Kwartalnik Kolegium Ekonomiczno-Społecznego. Studia i Prace*, SGH, Warszawa, 4(8), 29-49.
- Juščius, V., & Snieška V. (2008). Influence of Corporate Social Responsibility on Competitive Abilities of Corporations. *The economic conditions of enterprise functioning, Engineering Economics*, 3 (58), 34-44.
- KPMG (2015). *European Responsible Investing Fund Survey 2015*. Luxembourg: KPMG Luxembourg. Retrieved from: http://www.alfi.lu/sites/alfi.lu/files/European-Responsible-Investing-Fund-Survey-2015_1.pdf (30.12.2015).
- Mbaruku, M., & Mutalemwa, D. (2015). Success Stories of Tanzanian Women Entrepreneurship Programs in Alleviating Poverty: Insights from WORTH Program. *Entrepreneurial Business and Economics Review*, 3(1), 87-105.
- Lund-Thomsen, P., & Lindgreen, A. (2013). Corporate Social Responsibility in Global Value Chains: Where Are We Now and Where Are We Going? *Journal of Business Ethics*, 123(1), 1-12.
- McKinsey & Company (2011). *Urban world: Mapping the economic power of cities*. Retrieved from: http://www.mckinsey.com/~media/McKinsey/Global%20Themes/Urbanization/Urban%20world/MGI_urban_world_mapping_economic_power_of_cities_full_report.ashx (30.12.2015).
- Moore, G. (2004). The Fair Trade movement: parameters, issues and future research. *Journal of business ethics*, 53(1-2), 73-86.
- Oshri I., Kotlarsky J., & Willcocks L.P. (2009). *The Handbook of Global Outsourcing and Offshoring*. Hampshire: Palgrave Macmillan.
- Porter, M.E., & Kramer, M.R. (2006). Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility. *Harvard Business Review*, December 2006, 78-92.
- Rodriguez, P., Siegel, D.S., Hillman, A., & Eden, L. (2006). Three lenses on the multinational enterprise: politics, corruption, and corporate social responsibility. *Journal of International Business Studies*, 37(6), 733-746.

- Rogowski, W., & Ulianiuk, A. (2012). Społecznie odpowiedzialne inwestowanie (SRI) – próba charakterystyki. *Część III: Efektywność inwestycji społecznie odpowiedzialnych, Studia i Prace Kolegium Zarządzania i Finansów. Zeszyt Naukowy 114*, SGH, Warszawa, 64–81.
- The Climate Group (2015). *The Climate Group works with leaders to create a net zero emissions world*. Retrieved from: <http://www.theclimategroup.org> (30.12.2015).
- Ulman, P., & Šoltés, E. (2015). The Monetary and Non-Monetary Aspects of Poverty in Poland and Slovakia. *Entrepreneurial Business and Economics Review*, 3(1), 61-73.
- UNCTAD (2015). *Gross domestic product: Total and per capita, current and constant (2005) prices, annual, 1970-2014*. Retrieved from: <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96> (30.12.2015).
- USAID (2015). *Private Sector Partners*. Retrieved from: <https://www.usaid.gov/powerafrica/privatesector> (30.12.2015).
- USSIF (2015). *Report on US Sustainable, Responsible and Impact Investing Trends 2014*. Retrieved from: <http://www.ussif.org/trends> (30.12.2015).
- Wach, K. (2014). Internationalisation and Globalisation as the Wider Context of Europeanisation Processes from the Macro- and Microeconomic Perspective. *Horyzonty Polityki*, 5(10).
- WFTO (2015). *10 Principles of Fair Trade*. WR Culemborg (The Netherlands): World Fair Trade Organization. Retrieved from: <http://wfto.com/fair-trade/10-principles-fair-trade> (30.12.2015).
- WFTO (2016). *Annual reports*. Retrieved from: <http://www.fairtrade.net/resources/annual-reports.html> (30.01.2016).
- WVU Fair Trade (2015). *About*. Retrieved from: <http://wvufairtrade.blogspot.com/p/about.html> (30.01.2016).
- Zasępa, P. (2013). Analiza efektywności inwestycji w akcje spółek społecznie odpowiedzialnych na przykładzie indeksu RESPECT. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 311, 212-220.
- Zysk, W. (2015). Global and European Trends in the Area of Responsibility and Justice in the Activities of Enterprises: Implications for V4 Countries (chapter 11). In: A.S. Gubik & K. Wach (Eds.), *Institutional Aspects of Entrepreneurship* (pp. 165-176). Miskolc: University of Miskolc.

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Antecedents and Factors of Social Innovation: Theoretical Considerations within Social Entrepreneurship Research

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Abstract

In the last two decades, social entrepreneurship (SE) theory has become a broad and multifaceted stream of research. Social entrepreneurs approach social problems through novel ways, introducing innovative solutions that couple social capital and market instruments. Taken that innovation is considered by many the backbone of successful entrepreneurial ventures, the study of innovation in SE context is much needed to understand the distinctive features and origins of SE ventures. Social innovation profoundly changes the routines, resource combinations of the social system in which it occurs.

Based on extensive literature review, this paper aims to establish if, why and how, in given environmental and market contexts, social innovation occur. The study explores the building blocks and dynamics of social innovation in SE context. It starts with conceptualizations of social problems as sources of any social entrepreneurial venture. It then turns to the identification of necessary components of social innovation. The article presents an integrated process-based view of social innovation and its antecedents. The findings will hopefully lead to stretching the existing theory beyond an often-travelled path and allow the formulation of testable hypotheses.

Keywords: social entrepreneurship, social enterprises, social innovation

JEL codes: L31, L26

INTRODUCTION

The subject of this study is the domain of social enterprises, which function at the intersection of various economic sectors in different legal forms, either for-profit, non-profit or not-for-loss, often in multiple organizational forms simultaneously (Battilana & Lee,

2014). Social entrepreneurship (SE) has been recognized in the last two decades by numerous authors as a successful pathway of tackling world's both local and global social problems (Dees, 2007, Curtis, 2007, Short et al., 2009). Their fundamental objective is profound and lasting structural social change (Praszkier & Nowak, 2012, p. 64). Social enterprises use economic means to introduce social change and thus transform market, human and social resources into social capital (Stryjan, 2004). Innovation stands out as a key feature of successful entrepreneurship and SE is no exception. Authors emphasise the role of innovation in bringing forth structural deep change in social systems and changing ways things are done. Dees (2007) argues that only through continuous innovation can social enterprises play the role of change agents in the social sector. Some scholars imply that SE is an innovative activity by definition and conceptualizes it as an innovative social-value creating activity (Stevenson et al., 2007).

Most social entrepreneurship conceptualizations are broad and inclusive in character, which is why scholars emphasize the need to deepen our understanding of social entrepreneurship phenomena, "to bridge the gap between our current understanding of social entrepreneurship and an enhanced knowledge that could aid in researching this emerging field (Short et al, 2009: 162). Researchers have identified numerous exploration avenues to narrow that gap and one of them is the identification of innovation pursued by social enterprise to fulfill their social goals (Bull, 2008; Short et al., 2009). This research is an answer to that call.

All forms of entrepreneurship require exploration of both micro level (socio-cognitive, emotional) and macro level (institutional, environmental) antecedents (Battilana, 2006). This study adapts a holistic view and takes the entrepreneurial opportunity lens to social entrepreneurship, since the notion of opportunity creation, recognition and exploitation are traditionally and continuously associated with entrepreneurship. Understanding the nature of opportunities is important, because it can enhance our understanding of the origins and distinctive features of all entrepreneurial acts. Authors have noted that research focus strictly on the firm, may be useful for some domains such as strategic entrepreneurship which compares performance between competitive firms, but it does not add enough insight into the entrepreneurship nexus (Shane & Venkataraman, 2000). Opportunity as unit of analysis in entrepreneurship research allows the assessment of entrepreneurial acts and provides a deeper understanding of its dynamics. Social entrepreneurship as an entrepreneurial act is always a response to perceived opportunity and as such requires an opportunity-based approach as well. Moreover, research evidence suggests strongly that innovative organizations are characterized primarily by an active, continuous and systematic search for opportunity and change (Francik, 2003, p. 57).

The main goal of this paper is to explore and identify the building blocks and dynamics of social innovation, the antecedents and conceptualizations of social innovation phenomenon. The driving research question is: why and how, in given environmental and market contexts, does social innovation occur?

The paper starts with introducing social enterprises, their hybrid nature and various tensions. Then it turns to opportunity as unit of analysis, just as a significant bulk of entrepreneurship theory does. It explores the antecedents of social innovation development to sum up with a proposal of a research model. The major contribution of this

study lies in extending the existing body of social entrepreneurship research providing a new perspective, placing innovation in the center of the discussion.

METHODOLOGY

Social entrepreneurship (SE) has emerged as an important area of research and practice. In recent years social entrepreneurship theory has emerged as sub-stream of entrepreneurship research. Parallel to that social innovation research has been growing in scope contributing largely to the development of social innovation theory.

The focus of this study is on the discussion and elaboration of social entrepreneurship and social innovation concepts. In its main objective it aims to identify the necessary components of social innovation through a process-based view. The leading method employed in this study is critical literature review.

Scientific research requires a procedure according to pre-determined steps in order to obtain the most valuable cognitive effects of the research process (Babbie, 2012, pp. 112-113). The nature of the study is multidimensional, it realises exploratory, descriptive, analytical and predictive purposes (Collis & Hussey, 2009, p. 5). The thorough literature study was prepared in order to conceptualise and operationalise the research objective. A five-stages model of a critical literature review proposed by Fisher (2010) was employed in this study (Table 1).

Table 1. Methodological background of the research process

1.	Preliminary search for sources	Keywords: social entrepreneurship, social innovation, social enterprise
2.	Mapping and describing the literature	- Identifying main definitions, Contrasting existing conceptualizations, - Evaluating applicability
3.	Evaluating the literature	- Critical review of arguments and their soundness, - Identifying competing and completing arguments, - Comparing and evaluating arguments.
4.	Radical critique	- Identifying contradictions, - Identifying gaps, - Problematizing the stance - Drawing conclusions
5.	Summary and Revision	

Source: own evaluation based on Fisher et al. (2010, pp. 94-130).

The literature review was followed by logical reasoning and inference, which resulted in the formulation of the proposed proces-based view model of social innovation.

SOCIAL ENTREPRENEURSHIP: CONCEPTUAL CHALLENGES AND ORGANIZATIONAL TENSIONS

Social entrepreneurship has been recognized in the last two decades by numerous authors as a successful way of transforming the social sphere by addressing both local and

global social problems (Dees, 2007, Short et al., 2009, Yunus, 2011, Praszkie & Nowak, 2012). Social entrepreneurship had been defined in the past as a process of employing market-based methods to solve social problems (Grimes et al., 2013). By blending initiative, innovativeness, community involvement and resource mobilization, social enterprises introduce solutions that can work more effectively than state or charity standard approaches. Their advantage over government programs is autonomy, flexibility and access to private resources (Dees, 2007). The primary advantage over charity lies in the problem-solving nature rather than providing aid nature of these organizations (Yunus, 2011). The number of articles published on social enterprise in academic journalism grew from 37 in 1997 to 529 in 2000 to 14,264 in 2012 (Battilana & Lee, 2014). The increasing popularity of social enterprise has also resulted in regulatory activity aimed at supporting the development of a social enterprise field. For example, new legal forms have been created in order to better address the needs of social enterprises that are neither typical corporations nor typical not-for-profits. Yet new research is still needed. In spite of twenty years of research, it still remains fragmented and polyphonic.

Because definitions of SE have been developed in different domains (non-profit, for-profit and public sectors) a unified definition has not emerged. There are however certain features of SE phenomena that form the foundation of this research area, delineate its boundaries and lay foundations for definitions:

- first, they extend the “opportunity exploitation logic” of entrepreneurship onto the social sphere (Praszkie & Nowak, 2012, p. 52),
- second, they blend social and financial objectives (Dees, 2007), yet the generated profit serves merely as a mean of extending the social value added (Yunus, 2011, p. 47),
- third, all coexisting conceptualizations of social enterprises refer to the ability of leveraging resources to address social problems (Dart, 2004).

And thus social entrepreneurship has been described in the past as “an innovative, social-value creating activity that can occur within or across the non-profit, business or government sector” (Stevenson et al., 2007: 4) or as a “process of creating social value by exploring and exploiting opportunities and combining resources in new ways” (Mair & Marti, 2006: 37). Both these popular definitions are overlapping and completing in nature, referring to the essence of entrepreneurship, yet cannot serve as clear guidelines for SE recognition. In spite years of research, the distinction of social enterprises remains blurry and unclear and this is why for the purpose of this study, following the opportunity-based view of entrepreneurship, social enterprises have been defined as self-sustainable enterprises (with at least 50% of income generation) which primary goal is to create innovative social value solutions to existing social problems through the pursuit of entrepreneurial opportunity. This conceptualization remains very closely related to the dominant thread of general entrepreneurship theory. The distinction between traditional (commercial) and social enterprises lies in the intent of the founder(s) (Light, 2008, p. 8).

The fundamental difference between traditional and social entrepreneurship is the primacy of goals. Traditional entrepreneurs through opportunity identification and exploitation seeks to achieve economic commercial goals and generate economic market value added. Social entrepreneurs through the same processes seeks to achieve social goals and generate social value added. Both types of entrepreneurs are characterized by proactive attitudes, the will to change the current state of equilibrium, and readiness to bear calculated risk. The

major difference lies at their priorities. Social entrepreneurs are driven by the primacy of social goals, but they do not deny profit generation. Their economic activity and revenue streams serve their social mission. They apply market instruments within the social arena. Traditional entrepreneurs are driven by the primacy of profit generation, although they do often introduce positive social changes in their environment (e.g. by providing employment opportunities or various CSR initiatives), which are side-effects of their economic activity.

The existing literature depicts very specific features of social enterprises that distinguish them in many aspects from strictly business-oriented ventures, cause internal tensions and present a set of very unique organizational challenges. First of all, they pursue social goals; although they are a part of a market economy, their mission and goals lie beyond it (Hausner et al, 2008). Social enterprises are highly contextual, embedded in local relationships and networks (Praszkier & Nowak, 2012, p. 136) and highly dependent upon their various stakeholders (Stevenson et al, 2007). These include the founders, funders, partners, beneficiaries, suppliers, local community and authorities. The interests of these organizations are not always aligned (di Domenico et al, 2010). Social enterprises take numerous legal forms and cut across all sectors of the economy (Defourny & Nyssens, 2010). Their financial resources are varied ranging from private capital and profit generation to government subsidies and charity donations (Leś, 2008). What's more, its customers are often not the sources of their revenue and their profit distribution is highly limited (Defourny & Nyssens, 2010).

Authors point out that social entrepreneurs respond in fundamentally different ways to adverse contextual conditions than their commercial counterparts. They are cooperative, participative and inclusive rather than rival in character (Short et al., 2009). These features are also reflected in their management style. As observed by Praszkier & Nowak (2012) social enterprises often rely on a new type of leadership, which the authors refer to as "empowering leadership" characterized by a high level of social empathy, focused on activating the potential of social groups and communities. These leaders assume the role of facilitators and enablers rather than "front men" of their organizations.

The coexisting normative definitions are numerous. The most common set of criteria depicting the characteristics of social enterprises are: the centrality of social mission, innovation, fragmented heterogeneous financing, blending social and commercial approaches, dispersed governance, stakeholder-dependence and others. In order to further distinguish the distinctive features of social entrepreneurship, to understand their nature and origin, the study focuses on the heart of the entrepreneurial act to study the origins of social innovation.

SOCIAL INNOVATION

Since Schumpeter (1934) used the term innovative to characterize the role of entrepreneurs, innovation has held a key position in entrepreneurship research. The Merriam-Webster dictionary defines innovation as the act or process of introducing new ideas, devices or methods.

For years innovation has been recognized by many as a key competitive factor in business. It improves entrepreneurial productivity and returns (Salavou & Avlonitis, 2008). Lately authors are claiming that innovation plays just as crucial a role in social progress (Dees, 2007). Innovation involves deliberate application of information,

imagination and initiative to deliver new value. Social innovation refer to the process of introducing bold, novel and lasting solutions in the social sector. In numerous communities individuals constantly come up with new ideas in response to the perceived social problems. When these ideas are implemented through an intentional strategy and succeed in introducing a lasting change, we can refer to them as social innovation (Westley & Antadze, 2010). There is no better example than the Grameen bank, which introduced the notion of microcredits and transformed the economic situation of millions of people through providing access to start-up capital for those, who had no choice for any type of credit (Yunus, 2011). Therefore social innovation is oriented towards making a change at the systemic level and crosses multiple boundaries to reach more people, more organizations nested across sectors and linked in social networks (Christensen et al., 2006).

Innovation literature follows the early distinction introduced by Schumpeter to distinguish between:

- product innovation – important changes in the features of produced goods and/or services or radically new products and/or services,
- process innovation – changes in the production and/or distribution processes,
- managerial innovation – changes in the practices and/or in the organization of the workplace and/or in relations of the company with other companies,
- market innovation – new methods of commercialization and opening of new markets.

Social innovation may refer to all of the above, as social entrepreneurs often introduce completely new services or improve significantly existing ones, introduce new ways of doing things and/or new relationships between actors, as well as access or create new markets. SE often combines several types of innovation to produce deep and long lasting change in the social system. Innovation literature has established that the joint incorporation of several types of innovation can have a revolutionary effect on a firms performance (Damanpour et al., 2009), which would suggest that only a combination of innovation can provide significantly higher results.

Commercial innovations and social innovation both demonstrate creativity, new responses, and originality. Yet there are numerous differences (table 2).

Table 2. Distinctive features of commercial vs social innovation

Commercial innovation	Social innovation
Delivers primarily new market value	Delivers primarily new social value
Created to address customers and company's needs	Created to address the underprivileged social needs
Usually available for few	Available for all
Protected by authors	Shared by authors
Designed to serve a few	Designed to serve all
Market values decreases with diffusion	Social value increases with diffusion
Relies on market forces	Relies on solidarity
Based on market logic	Breaks away from market logic

Source: own evaluation.

Commercial innovation is implemented to address the needs of customers and consumers in order to ensure the company's future income streams. Commercial innovation are protected by the company (through trade secret, employee confidentiality or patent) to ensure the company's exclusive use of it and improve its profits, brand image and competitive position with respect to other companies. With time, as the innovation spreads through imitation or popularization, the market value of it decreases. As the innovation becomes more accessible and popular the prices of the new product or technology falls and the innovation generates less income for companies and presents less economic value.

Social innovation follows a different logic. It is designed to serve many. In social innovation, the new products, processes and solutions have to be available for all interested in their use or application for resolving or addressing social problems. They are not meant exclusively for the benefit of the creators or inventors. And with time, as the innovation spreads, its value grows, since it generates more social value and very often economic value, as in the case of microcredits. Therefore social innovation follows the logic of generosity and solidarity, instead of the logic of profits. Its creators donate them to the service of the society in general and serve as role models and examples for other partakers willing to address similar social needs. Howaldt et al. (2015) suggest that social entrepreneurship is part of the formation of a new innovation paradigm involving the opening up of the innovation process. The diffusion of social innovation multiplies the beneficial effects of innovation by allowing and encouraging everyone to make use of it, breaking away from the logic of the market.

THEORETICAL ANTECEDENTS OF SOCIAL INNOVATION

Mainstream innovation literature depicts two prime groups of factors responsible for the creation and implementation of innovation (Damanpour et al., 2009):

1. internal factors, which relate to the distinctive characteristics of the firms and the entrepreneur and/or top management team; and
2. external factors which are subject to the environment surrounding the firm.

This traditional classification might not capture the domineering factors of SE innovation very well. First of all, innovation factors are not independent, but rather inter-related as for example entrepreneurs might assess the influence of the external environment through their subjective perceptions or attitudes of external business partners might generate certain behaviors towards the environment or the firm itself. As social enterprises are highly embedded in their rich networks, innovation factors might be intertwined and interdependent.

Second, other factors might be somewhere in between internal and external. The group of factors identified as key to social innovation by SE research is social capital, which is a multidimensional concept that embraces the firm's contact network with other firms, institutions, organizations and individuals (Rodriguez & Guzman, 2013). Social capital is at the crossroads of internal and external factors. It enables and promotes exchange, cooperation and collective learning which might be crucial for the development of innovation.

And third, according to some authors, innovation by nature is a multifaceted and interdisciplinary phenomenon, and should be perceived rather as a process. Or

even a social process, which is strongly embedded in the social and cultural framework (Francik, 2003, p. 47). Depicting specific internal and external factors seems to be misleading from this perspective.

Taken the above into consideration, this study aims to add new insight into the antecedents of social innovation by adapting a process-based view, investigating its building blocks suggested by existing literature and adapting the opportunity lens to the research problem.

The first concept that seems to be relevant to each and every SE venture, and hence social innovation, is the social problem that is being addressed. As suggested earlier, the prime difference between commercial and social entrepreneurship lies at the origin of the venture. Social entrepreneurs answer to a specific social condition that they wish to change. Social entrepreneurs go beyond the marketplace and turn their attention to the social arena to identify their venture opportunities. Sources of their opportunities often lie within the social disequilibrium and refer to social problems.

Social problems have been defined by sociology literature twofold: (i) as acts and conditions that violate norms and values presents in a society, and (ii) as societally induced conditions that cause psychic and material suffering for any segment of the population (Eitzen et al., 2010, p. 10). Norm violations refer to the discrepancy between socially accepted standards and reality, such as homelessness, poverty or racial discrimination. As such, what is defined as a social problem differs by audience and by time (for example slavery or women rights). Therefore, social problems by nature are subjective, but they do refer to objective reality.

Having defined the starting point of social innovation which is the social problem that it addresses, this paper adapts a process oriented approach to social innovation, tracing the path of any entrepreneurial opportunity identification/creation and exploitation, which in the case of innovation would be referred to as creation and implementation. The main question addressed hereafter is: what determines the creation and implementation of social innovation? Mainstream entrepreneurship literature referring to opportunity can provide significant insight. Since innovation has been categorized as one of the modes of answering to entrepreneurial opportunity (Drucker, 1994; Shane, 2000), the opportunity "logic" and line of reasoning might be helpful.

It has been asserted in the past that two prime factors influence the probability that people identify and exploit opportunities: the possession of necessary information and cognitive properties of individuals (Shane & Venkataraman, 2000; Shane, 2000; Mitchell et al., 2002). It has been established by entrepreneurship literature that possession of necessary information can be impacted most by the entrepreneur's prior knowledge and experience and his social networks. Opportunity development is a creative process in which the entrepreneur develops new ideas by recombining dispersed bits of incomplete knowledge that is spread among people, places and time, in novel ways that serve to create new value. In order to develop an opportunity, the entrepreneur has to combine and transform the possessed information in new ways. Differences in cognitive processing among people can influence this transformation process and thus individual propensity to identify opportunity. Some people are better than other at understanding causal links, categorizing information or have a bigger imagination.

Certain people will engage the information and experience they possess to develop social innovation. What is it that they have in common and distinctive?

Current SE literature does not provide full insight into this answer. Yet, the emerging social entrepreneurship theory does suggest a line of scientific pursue signaling the affective element of SE antecedents. Numerous papers have emphasized the role of compassion in individual-opportunity nexus dynamics (Grimes et al., 2013) claiming that the process of social entrepreneurship opportunity recognition is embedded in a configuration of individual dispositions, motivations and cognition patterns related to compassion (Dees, 2007). Compassion encourages and channels the engagement of cognition processes towards social problem identification and socially oriented ventures. Compassion has been identified as one of the most distinctive features of social entrepreneurs, distinguishing them from other forms. As depicted earlier in the paper, commercial entrepreneurship and social entrepreneurship share many similarities. However, the latter's focus on social mission alongside market-based instruments separates them from all other ventures. Social entrepreneurship literature consistently points to the theoretical importance of compassion (Mair & Marti, 2006; Shaw & Carter, 2007), as a unique motivator of social entrepreneurship, placing the emphasis on the other, rather than on personal gains. Compassion creates a distinct motivational and driving force that compliments traditional theories of entrepreneurship.

Another factor studied in regard to social innovation, is sociological imagination. Whereas compassion will enable the entrepreneur to recognize a social problem, sociological imagination will enable him to critically assess that problem, identify societal patterns behind it and search for solutions. Sociological imagination is a cognitive individual-level meta-structure which combines an openness to and awareness of diversity across social groups and problems with a propensity and ability to synthesize across this diversity. According to Eitzen et al. (2010, p. 8), individuals who possess sociological imagination: (i) are willing and able to view the social world from the perspective of others, (ii) are capable of perceiving, analyzing, and decoding social environments and societal patterns, (iii) can accurately identify effective actions in the social environment, and (iv) possess the behavioral flexibility and discipline to act appropriately. Sociological imagination is associated rather with the system-blame approach, than person-blame approach of social problems and thus with the will to find solutions and act upon them.

Since compassion and sociological imagination are cognitive abilities involving absorption and transformation of information, it appears critical to the process of opportunity identification in SE contexts and thus to innovation as well. Both of these properties are built on intellectual, psychological and social capital building blocks that take time to develop and constantly evolve with time, as the entrepreneurs experience and relationships change.

Figure 1 synthesizes the above discussion and presents a holistic perspective on social innovation antecedents in SE context. In short, new ideas start with the identification of a social problem and with information based on prior knowledge and new information. Cognition processes can transform these sources of knowledge into completely new ideas. Diverse cognitive abilities, especially compassion and sociological imagination, of the entrepreneur, can enhance the process transforming the social problem into social innovation. Various internal factors, both individual and organizational will play a role in turning ideas into specific innovation. An entrepreneurial mind will search for ways of employing market forces and instruments to trans-

form the ailing social reality. An entrepreneurial mindset, referring to the traits approach of entrepreneurship, will determine whether the social innovation will become reality. Social innovation is the backbone and a constitutional element of social entrepreneurship processes. The implementation of social innovation can give start to social enterprises and/or social innovation can be implemented within existing ones. One way or the another, social innovation fuels the social entrepreneurship arena and in the long term, transforms the social reality and social arrangements. Social capital acts as an enabler of these processes by activating human energy and providing a synergy effect. Figure 1 presents graphically the above reasoning incorporating compassion and sociological imagination into the equation of social innovation.

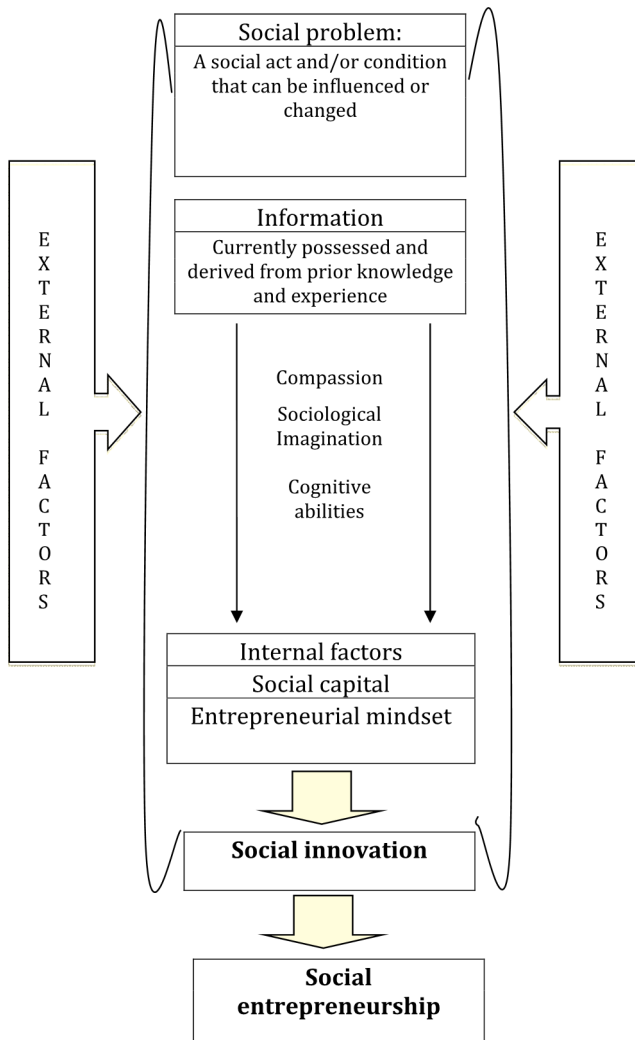


Figure 1. Process-based view of social innovation

Source: own evaluation.

The proposed model draws attention to path-dependency of social innovation diffusion. It shows that the pattern of social innovation development, is driven by the commitment to solving social problems. The social problem remains at the heart of social innovation and is the driving force and compass of the innovation process. The entrepreneur draws from prior knowledge and experience as well as possessed information and is enabled and fueled by compassion, sociological imagination and substandard cognitive abilities. Compassion and sociological imagination will enhance social awareness and determination, being critical to the first phase, innovation creation, in the minds of individuals. But only an entrepreneurial mindset will push individuals towards market-based solutions to the identified social problems. Social capital is a catalyzer of innovative processes that authors numerously point to (Cooke & Wills, 1999; Adler & Kwon, 2002; Curtis, 2007). Therefore, entrepreneurial mindset, skills and social capital trigger the second phase – innovation implementation.

The model is set in a broad environmental context. Naturally, the process of social innovation is highly determined by external factors, both macro level (environmental) and mezzo level (market specific). Environmental and market conditions will largely influence the entrepreneur's decisions. Individual perception and judgment will determine the interpretation of the observed reality.

CONCLUSIONS

The study suggests that social innovation occurs as a result of social problem identification and the perception of that problem in terms of a potential opportunity. The process of social innovation creation and implementation is based on the transformation of knowledge and experience into new ideas and involves various cognitive abilities, among which in the context of SE compassion and sociological imagination appear to be critical.

This study hopes to contribute to the discussion devoted to opportunity-based approach to social entrepreneurship. It synthesizes fragmented pieces of research from the domains of social entrepreneurship, mainstream entrepreneurship and innovation theory and proposes a process-based view of social innovation. The model exposes the role of time in innovation development suggesting that social innovation is a path dependent process strongly influenced by the individual level of compassion, sociological imagination in the preliminary phase and entrepreneurial mindset and social capital in the subsequent phase.

Hopefully, the model can serve as a useful lens for hypotheses formulation and testing within the research domain of social entrepreneurship. It opens up several potential inquiry paths to pursue. All of the variables of the model differ from one individual to another. Based on their earlier experience, individual cognitive properties and social ties, some entrepreneurs can acquire, utilize and process information quicker than others. They can therefore make quicker decisions. Grimes et al. (2013) suggested the need to study how these individual microprocesses interact with macro and mezzo level determinants, for example, when and how macro level determinants will stimulate or restrain these macroprocesses involved in opportunity discovery and innovation creation. Another interesting line of research to pursue is testing if and how individual cognitive skills, including compassion and

sociological imagination contribute to overcoming external limitations in innovation creation. Similarly: if and how social capital enables and stimulates the implementation of social innovation?

Surely, there remains much work to be done in deepening our understanding of social innovation dynamics and various internal relationships within the proposed model. Thus, greater engagement and quantitative studies, preferably transnational, will impact the successful initiation, development, implementation and scaling of social innovation.

REFERENCES

- Adler, P. S., & Kwon, S. W. (2002) *Social capital: Prospects for a new concept*. *Academy of management review*, Vol. 27 No.1, pp. 17-40.
- Babbie, E. (2012). *The Practice of Social Research*. 13th ed., Belmont, CA: Wadsworth Cengage Learning.
- Battilana, J. (2006). *Agency and institutions: The enabling role of individuals' social position*. *Organization*, Vol. 13 No. 5, pp. 653-676.
- Battilana, J., Lee, M. (2014) *Advancing Research on Hybrid Organizing*, *The Academy of Management Annals*, Vol. 8 No 1, pp 397-441.
- Bull, M. 2008. *Challenging tensions: critical, theoretical and empirical perspectives on social enterprise*. *International Journal of Entrepreneurial Behavior and Research*, Vol. 14 No 5, pp. 268-275.
- Christensen, C. M., Baumann, H., Ruggles, R. and Sadtler, T. M. (2006) *Disruptive innovation for social change*, *Harvard Business Review*, Vol. 84 No. 12, pp. 94-101.
- Collis, J. and Hussey, R. (2009). *Business Research: A Practical Guide for Undergraduate & Postgraduate Students*. 3rd ed., London: Palgrave Macmillan.
- Cooke, P., and Wills, D. (1999) Small firms, social capital and the enhancement of business performance through innovation programs. *Small Business Economics*, Vol. 13 No. 3, pp. 219-234.
- Creswell, J. W. (2007) *Qualitative Inquiry and Research Design*. Sage Publications, Thousand Oaks, CA
- Curtis, T. (2007) *Finding that grit makes a pearl. A critical re-reading of research into social enterprise*. *International Journal of Entrepreneurial Behavior and Research*, Vol. 14 No. 5, pp. 276-290
- Damanpour, F., Walker, R., and Avellaneda, C. (2009) *Combinative effects of innovation types and organizational performance: a longitudinal study of service organizations*, *The Journal of Management Studies*, Vol. 46, No. 4, pp. 650-675.
- Dart, R. (2004) The legitimacy of social enterprise. *Non-profit management and Leadership*, Vol. 14 No. 4, pp. 411-424.
- Dees, J. G. (2007) *Taking Social Entrepreneurship Seriously*. *Society*, Vol. 44 No 3, pp. 24-31.
- Defourny, J., Nyssens, M. (2010) *Conceptions of Social Enterprise and Social Entrepreneurship in Europe and the United States: Convergences and Divergences*. *Journal of Social Entrepreneurship*, Vol. 1 No.1, pp. 32-53.
- Di Domenico, M., Haugh H., Tracey, P. (2010) *Social Bricolage. Theorizing Social Value Creation in Social Enterprises*. *Entrepreneurship Theory and Practice*, Vol. 34 No. 4, pp. 681-703.
- Drucker, P. (1994) *Innovation and entrepreneurship*. Routledge.
- Eitzen, D. S., Zinn, M. B., & Smith, K. E. (2010) *Social problems*. Pearson Higher Ed.
- Fisher, C. et al. (2010). *Reseraching and Writing a Dissertation*. 3rd edition. Harlow: Prentice Hall.

- Francik, A. (2003) *Sterowanie procesami innowacyjnymi w organizacji*, Wydawnictwo Akademii Ekonomicznej w Krakowie, Kraków
- Grimes, M. G., McMullen, J. S., Vogus, T. J., & Miller, T. L. (2013) *Studying the origins of social entrepreneurship: compassion and the role of embedded agency*. *Academy of management review*, Vol. 38 No 3, pp. 460-463.
- Hausner, J., Lauriusz, N., Mazur, S. (2008) *Przedsiębiorstwo społeczne. Konceptualizacja*, (w:) J. Hausner (red.), *Zarządzanie podmiotami ekonomii społecznej*, skrypt 2, MSAP UEK, Krakow
- Howaldt, J., Domanski, D. & Schwarz, M., (2015) *Rethinking Social Entrepreneurship: The Concept of Social Entrepreneurship under the Perspective of Socio-scientific Innovation Research*. *Journal of Creativity and Business Innovation*, Vol. 1, p. 88-98
- Leś, E. (2008) *Nowa Ekonomia Społeczna. Wybrane Koncepcje, Trzeci Sektor*, nr 2, Fundacja Instytut Spraw Publicznych, Warszawa
- Light, P. C. (2008) *The Search for Social Entrepreneurship*, Brookings Institution Press, Washington, D. C.
- Mitchell, R. K., Busenitz L., Lant T., McDougall P. P., Morse E. A, Smith J. B. (2002) *Toward a Theory of Entrepreneurial Cognition: Rethinking the People Side of Entrepreneurship Research*. *Entrepreneurship Theory and Practice*, Vol. 27 No. 2, pp. 93-104.
- Mair, J., Marti, I. (2006) *Social Entrepreneurship Research: a source of explanations, prediction and delight*. *Journal of World Business*, Vol. 41 No. 1, pp. 36-44.
- Praszkier, R., Nowak, A. (2012) *Przedsiębiorczość społeczna. Teoria i praktyka*. Wolters Kluwer, Warszawa
- Przedsiębiorstwa społeczne w Polsce. Teoria i Praktyka*. (2008) J. Hausner (red.), Uniwersytet Ekonomiczny w Krakowie, Kraków
- Rodriguez, M. J., and Guzman, C. (2013) *Innovation in social economy firms*, *Management Decisions*, Vol. 51, No. 5, pp. 986-998.
- Shane, S. A. (2000). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
- Shane, S. and Venkataraman, S. (2000) *The promise of entrepreneurship as a field of research*. *Academy of Management Review* Vol. 25 No 1, pp. 217-226.
- Shaw, E., & Carter, S. (2007) *Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes*. *Journal of small business and enterprise development*, Vol. 14 No. 3, pp. 418-434.
- Salavou, H. & Avlonitis, G. (2008) *Product innovativeness and performance: a focus on SMEs*, *Management Decision*, Vol. 46 No. 7, pp. 969-985.
- Schumpeter, J. (1934) *Capitalism, socialism, and democracy*. Harper & Row, New York.
- Short, J. C., Moss, T. W., Lumpkin, G. T. (2009) *Research in Social Entrepreneurship: Past Contributions and Future Opportunities*, *Strategic Entrepreneurship Journal*, Vol. 3, pp. 161-194.
- Shuayto, N & Miklovich, P. A. (2014) *Creating organizational sustainability in social enterprises: the use of evidence-based positioning and market orientation*, *Review of Business and Finance Studies*, Vol. 5 No.2, pp. 109-116.
- Stevenson, H., We-Skillern, J., Austin, J., Leonard, E. H. (2007) *Entrepreneurship in the Social Sector*, Sage Publications, London
- Stryjan J. (2004) *The Practice of Social Entrepreneurship, w: Entrepreneurship, Employment and Beyond*, Jan Targalski (red.), Wydawnictwo Uniwersytetu Akademickiego w Krakowie, Kraków

Westley, F & Antadze, N. (2010) *Strategies for Scaling Social Innovation for Greater Impact*, The Public Sector Innovation Journal, Vol. 15 No. 2, pp. 21-41

Yunus, M. (2011) *Przedsiębiorstwo społeczne. Kapitalizm dla ludzi*, Concorda, Warszawa

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