

The financing structure of companies of the Visegrad Group countries in the years 2005-2014

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ABSTRACT

Objective: The main aim of the article is to compare the financing structure of companies of the Visegrad Group countries in the years 2005-2014, that is in the period before, during and after the global financial crisis.

Research Design & Methods: The paper investigates the structure of financing enterprises operating in the Visegrad Group countries in the years 2005-2014. In the analysis several financial ratios were calculated and analysed, presenting the capital structure and sources of financing companies.

Findings: In spite of the fact that the overall level of debt differs in analysed countries, trends in the shaping of the share of debt ratio were similar in individual countries. The strongest relationship between the ratios concerning enterprises in individual countries was observed in the analysis of the share of financial surplus of the firms and the scope of use of trade liabilities. The weakest in the level of financing with bank credits (long-term and short-term).

Contribution & Value Added: Research into determinants of the financing structure of companies takes a number of factors into consideration, among which the condition of economy is undoubtedly important. Therefore the research included in the paper follows changes in companies' financing structure in the aspect of a financial crisis. Additional a detailed comparative analysis was conducted concerning the financing structure of the Visegrad Group countries.

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INTRODUCTION

Managing the financing structure of an enterprise is still one of most often discussed but at the same time one of the most controversial issues of the contemporary finance. The aim of shaping the appropriate capital structure is primarily the maximisation of the profitability of equity and the firm's market value (Maślanka, 2007, p. 521). However, it should be emphasized that the choice of appropriate sources of financing, in proper proportions, favours the maintenance of financial liquidity, reduces operating expenses and risk. Research into determinants of the financing structure of companies takes a number of factors into consideration, among which the condition of economy is undoubtedly important.

This paper investigates the structure of financing enterprises operating in the Visegrad Group countries, thus also in Poland, the Czech Republic, Slovakia and Hungary. The research period included the years 2005-2014, therefore, the period comprises three pre-crisis years 2005-2007, two years of the global financial crisis, and five years 2010-2014, which can be called the period of overcoming the crisis.

The research used data from the Amadeus database which includes the basic data from financial statements of more than 20 million enterprises all over Europe, which are adapted to one universal format enabling comparisons between countries.

The main aim of the research undertaken was to compare the structure of the sources of financing enterprises, in which attention was paid to two important issues. Firstly, an attempt was made to check similarities and differences in the structure of financing enterprises of the studied countries. Secondly, visible changes were sought in the structure of the sources of financing enterprises, which could be the consequence of the financial crisis taking place in the analysed period.

In the conducted analysis several financial ratios were calculated and analysed, depicting the capital structure and sources of financing companies. The following relationships were taken into consideration: (i) debt ratio measured by total liabilities to balance sheet total, (ii) share of long-term bank credits in balance sheet total, (iii) share of short-term bank credits in balance sheet total, (iv) share of trade liabilities in balance sheet total, and (v) share of net cash flow (net profit + amortisation) in balance sheet total.

In the first place, those ratios were calculated for all the enterprises which for the studied years revealed the needed values, and then, in the division into the studied countries, the mean value and the median of individual ratios were calculated.

LITERATURE REVIEW

As it was indicated above, the main research aim of this paper is to compare the financing structure of enterprises operating in the countries of so-called Visegrad Group. In the past, the countries had a similar economic system, since 1990 they have changed their political and economic system, and since 1 May 2004 they have become the European Union members. Thus, enterprises which will be analysed conduct their activities in different countries, but at the same time they are countries which are characterised by geographical proximity, cultural and economic similarity, as well as common interests arising from belonging to the same region (Grabia, 2014, p. 36). Accordingly, one could think that the financing structure of firms from these countries should be similar.

Yet, on the other hand, findings of numerous research into financing enterprises in the international approach prove the existence of factors specific for a given country and influencing the capital structure of enterprises. The factors are of macroeconomic and institutional character. They determine benefits and costs of using various sources of financing in individual countries. They are called the capital structure determinants at the level of the state, and first of all they include (Lisińska, 2015, p. 213):

- legal system,
- tax system,
- creditor protection level,
- level of the development of financial markets,
- level of the development of the banking sector,
- inflation rate,
- GDP growth,
- ratio of listed companies' capitalisation to GDP,
- information asymmetry costs,
- agency costs.

However, it should be emphasized that there is no agreement among researchers as to the problem of the extent to which the above factors actually influence the capital structure of firms in individual countries.

Due to the above postulates, a detailed analysis was conducted in the paper concerning the financing structure of the studied Polish enterprises, as well as the comparative analysis of this structure between countries.

The other aim of the conducted research was to follow changes in companies' financing structure in the aspect of a financial crisis. Therefore, prior to the commencement of the research, scientific papers and reports on the impact of a crisis on the financial situation of enterprises were analysed.

In the majority of those sources it is indicated that one of the first symptoms of a crisis, a financial crisis in particular, taking its toll on the activities of enterprises, is limiting possibilities to acquire capitals, reducing their availability (Ostrowska & Cymek, 2012; Kaliszczak & Urban, 2011, p. 199; Antczak & Starczewska-Krzysztozek, 2009)

Uncertainty on financial markets and in banks is the reason for which it is more difficult to acquire external financing, including the fact that first of all the possibilities to finance with a bank credit decrease (Leicht, 2011, p. 47). Such a fact should be reflected in a decreased scope of financing firms with a bank credit. Therefore, to analyse the structure of the sources of financing in more detail, changes in debt from bank credits were analysed.

Another symptom of a crisis is a decrease in demand, which is manifested in firms in a decline of production, sales, and leads to the worsening of the financial situation primarily in the area of profitability and financial liquidity (Gryko, 2013, p. 123). Moreover, the consequence of such a situation are payment gridlocks increasing in the enterprises sector, which lead to the growth of the debt level of business entities. When attempting to verify this thesis, the scope of using trade credits (trade liabilities) was analysed to check whether we can talk about increasing payment gridlocks arising from financial problems in enterprises. A possible increase in financing with trade liabilities may be also a result of

an insufficient access to bank credits and loans (Iwin-Garzyńska, 2010, p.48). In such a situation companies could in a way force longer payment terms from suppliers, treating a trade credit as a substitute of a bank credit (Marzec & Pawłowska, 2011, p.36).

A symptom of the worsening of the financial situation of enterprises during a crisis is also lower profitability, reduced possibilities to finance a firm's activity from retained earnings. In order to study the scope of so-called self-financing of enterprises, the ratio of financial surplus to balance sheet total was investigated (Maślanka, 2012, p.218).

MATERIAL AND METHODS

The main aim of the article is to compare the financing structure of companies of the Visegrad Group countries in the years 2005-2014, that is in the period before, during and after the global financial crisis.

The article investigates the structure of financing enterprises operating in the Visegrad Group countries in the years 2005-2014. In the analysis several financial ratios were calculated and analysed, presenting the capital structure and sources of financing companies.

For the purpose of the analysis the statistical data was taken from the Amadeus database.

RESULTS AND DISCUSSION

The analysis of the ratios of the financing structure of companies of the Visegrad Group countries

In the study of companies' financing structure firstly debt ratio, and secondly a few other ratios depicting the scale of the use of various sources to finance company activities were used. For this purpose, the share of long-term and short-term bank credits, trade liabilities and generated financial surplus in financing (liabilities) were investigated. Below, in the subsequent tables, mean values of the ratios described above are shown for enterprises from individual countries.

Table 1 and Figure 1 show medians and mean values of debt ratio in enterprises from the studied countries.

Table 1. Mean values and medians of debt ratio in the studied enterprises of the analysed countries, 2005-2014 (%)

| Country | Measure | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poland | Mean | 52.3 | 52.2 | 51.7 | 52.4 | 51.3 | 52.2 | 52.7 | 51.7 | 49.3 | 45.6 |
| | Median | 52.2 | 51.6 | 51.0 | 51.4 | 49.8 | 50.9 | 51.3 | 50.0 | 47.5 | 43.9 |
| Czech Republic | Mean | 58.7 | 58.8 | 58.2 | 57.1 | 57.1 | 57.7 | 57.4 | 56.6 | 55.6 | 51.6 |
| | Median | 58.2 | 58.4 | 57.5 | 55.8 | 54.7 | 54.9 | 54.2 | 52.3 | 51.3 | 47.2 |
| Hungary | Mean | 57.5 | 52.6 | 53.4 | 55.1 | 57.5 | 59.8 | 60.6 | 65.0 | 57.2 | 56.7 |
| | Median | 52.1 | 52.4 | 51.1 | 51.0 | 50.3 | 51.4 | 51.4 | 52.5 | 50.1 | 48.7 |
| Slovakia | Mean | 66.5 | 66.0 | 65.7 | 65.8 | 68.7 | 70.8 | 72.3 | 73.3 | 73.2 | 69.7 |
| | Median | 69.1 | 68.3 | 67.6 | 67.4 | 69.2 | 70.5 | 71.8 | 72.7 | 71.5 | 67.5 |

Source: own elaboration based on data from the Amadeus database.

By far the most indebted in the studied years were Slovak enterprises. The lowest level of debt concerned Polish businesses. It should be emphasized that in the majority

of cases the mean value of the ratio is higher than the median and the difference is higher each year. It means that the majority of the studied enterprises are characterised by lower debt than the mean for the studied group.

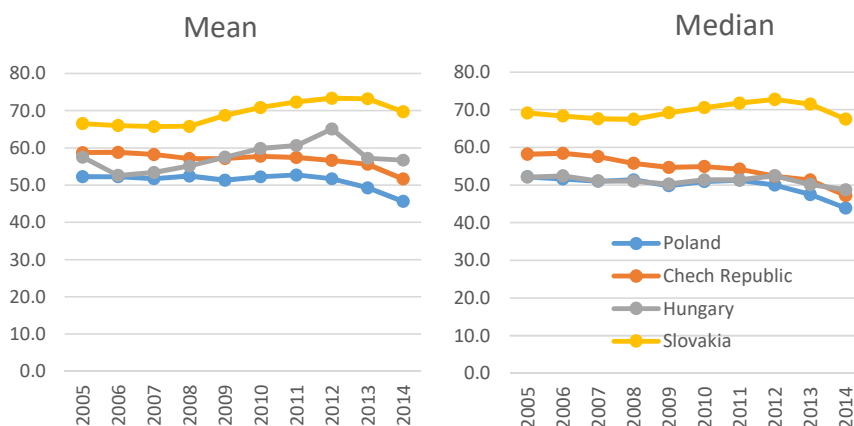


Figure 1. Mean values and medians of debt ratio in the studied enterprises of the analysed countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

In addition, insofar as the share of foreign capitals in financing firms in Poland dropped in almost all the years, in Slovakia the share went up in a significant part of the analysed years. Only the last studied year, 2014, brought a marked reduction of foreign capitals in Slovak enterprises.

A more thorough analysis of the debt level of the firms leads to the conclusion that the percentage of firms indebted to the greatest extent (80-100%) and in more than 100% is two to three times higher in Slovak enterprises than in Polish firms.

In enterprises in Hungary the median of debt ratio is similar to Polish entities. Until 2012 it is stable, that is about 50%, and then in 2013-2014 it decreases significantly. However, what is interesting is that the shaping of the average debt level in Hungarian firms is totally different. After a rapid drop in the ratio in 2006, a long period, lasting as long as until 2012, of the growth of debt begins. The mean value declines only in the last two years.

As for the Czech Republic, enterprises operating in that country have an average debt level in comparison with the remaining countries. The way of the shaping of the mean and median value of the described ratio in Slovak firms is very similar to trends occurring in Polish enterprises. The debt of Czech firms is, however, higher by a few percentage points.

When attempting to compare mean and median values of debt ratio in all the countries, we can find out that in the (whole) studied period the debt dropped in companies of all the countries except for Slovakia. The median of the ratio generally decreased in Polish, Czech and Hungarian firms. The mean value slightly declined in Polish and Czech entities, whereas in firms in Slovakia and in Hungary it went up until 2012 and in the last two years it started to decline visibly.

The second studied ratio was the share of long-term credits in financing enterprises. Mean and median values of the ratios in enterprises of the studied countries are shown below (Table 2, Figure 2).

Table 2. Mean values and medians of the ratio of the share of long-term bank credits in financing the studied enterprises of the analysed countries, 2005-2014 (%)

| Country | Measure | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poland | Mean | 10.7 | 11.4 | 12.4 | 13.6 | 14.1 | 13.6 | 13.5 | 13.3 | 13.1 | 12.2 |
| | Median | 8.5 | 8.8 | 9.5 | 10.0 | 10.6 | 10.1 | 10.2 | 10.1 | 9.9 | 9.3 |
| Czech Republic | Mean | 14.8 | 14.2 | 14.0 | 14.9 | 14.9 | 13.6 | 13.4 | 11.9 | 13.6 | 15.3 |
| | Median | 6.2 | 5.6 | 5.2 | 5.5 | 11.7 | 10.6 | 10.4 | 8.7 | 10.4 | 12.4 |
| Hungary | Mean | 12.2 | 11.2 | 12.3 | 13.2 | 13.4 | 11.9 | 12.0 | 11.9 | 13.0 | 13.0 |
| | Median | 8.5 | 8.4 | 8.7 | 9.9 | 9.9 | 8.9 | 8.2 | 8.5 | 10.4 | 10.8 |
| Slovakia | Mean | 15.3 | 14.3 | 14.4 | 14.3 | 14.4 | 14.0 | 13.3 | 13.8 | 13.7 | 14.3 |
| | Median | 12.6 | 12.0 | 11.8 | 10.6 | 11.7 | 10.8 | 10.8 | 10.4 | 10.8 | 11.4 |

Source: own elaboration based on data from the Amadeus database.

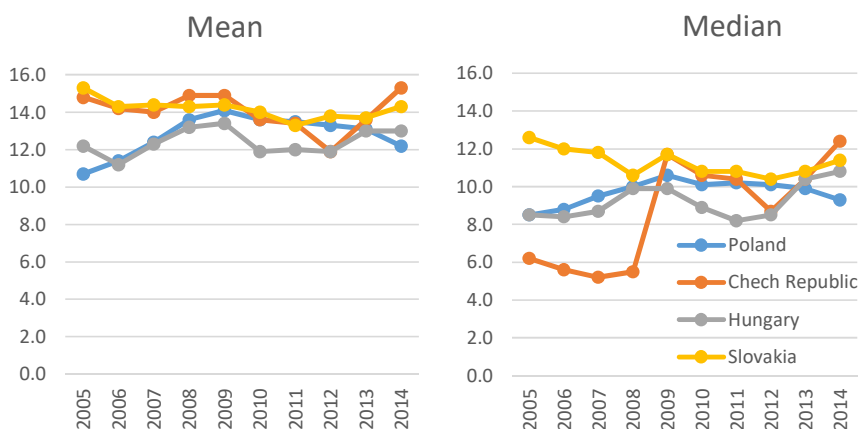


Figure 2. Mean values and medians of the ratio of the share of long-term bank credits in financing the studied enterprises of the analysed countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

The level of the use of long-term bank credits in financing enterprises in the analysed countries fluctuated a lot. As in the case of total debt, those were Slovak firms which used long-term credits to the greatest extent. Only in single years the share of those credits was higher in Czech firms. It should be added that the mean and the median of the ratio in enterprises in Slovakia was most stable. What can be seen here is generally a decreasing trend in the first period (except for the growth in 2009), and then a greater level of the use of those financing sources in the last years of the analysis (mostly 2012-2014).

In general, long-term bank credits were used to the least extent by Hungarian firms. The share of those capitals went up significantly in enterprises in Hungary until the crisis, that is 2009, and then rapidly decreased and stayed on the lower level until 2012-2013. Only then the share of long-term bank credits increased.

The scale of the use of long-term credits in Polish enterprises was average in comparison with the remaining countries. In the shaping of this ratio one can see a similar trend as in Hungarian firms, but in Poland we cannot see such a great collapse after 2009. It is true that a downward trend in the share of the discussed capitals in the financing of firms

began but the changes were much smoother. Besides, in Hungarian firms the last 2-3 years brought again a visible growth of the “interest” of enterprises in a long-term credit, and in Polish firms the share of those capitals decreased until the end of the studied period.

The greatest changes in the mean and median level of the engagement of long-term credits in financing of firms took place in the Czech Republic. The incremental growth of the median of the ratio in 2009 even raises some doubts (as to the correctness of data). Using the calculated mean of the ratio we can say that until 2012 the significance of long-term credits in financing Czech enterprises decreased, except for the an increase in the years 2008-2009, whereas the scale of the use of those credits in the last two years increased significantly.

As the summary of the above we can add that when comparing the last studied year with the first one it was found that in three of the four countries, namely in Poland, the Czech Republic and in Hungary, the share (mean and median) of long-term credits increased, and only in Slovakia it decreased.

The next analysed source of financing are short-term bank credits. Their shaping (mean values and medians) in the studied firms are presented in Table 3 and in Figure 3.

Table 3. Mean values and medians of the ratio of the share of short-term bank credits in financing the studied enterprises of the analysed countries, 2005-2014 (%)

| Country | Measure | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poland | Mean | 10.6 | 10.4 | 10.8 | 11.1 | 11.3 | 11.1 | 11.3 | 11.7 | 11.2 | 11.0 |
| | Median | 8.9 | 8.5 | 8.9 | 9.0 | 9.0 | 9.1 | 9.1 | 9.6 | 9.1 | 9.2 |
| Czech Republic | Mean | 13.3 | 13.6 | 13.8 | 15.4 | 15.5 | 14.5 | 14.5 | 14.8 | 14.6 | 14.3 |
| | Median | 10.9 | 11.0 | 11.1 | 12.4 | 12.4 | 11.3 | 11.5 | 11.7 | 11.7 | 11.6 |
| Hungary | Mean | 15.2 | 12.5 | 13.4 | 13.7 | 14.9 | 14.1 | 14.2 | 13.3 | 11.8 | 10.6 |
| | Median | 11.6 | 10.0 | 10.5 | 10.8 | 11.4 | 10.9 | 10.7 | 10.2 | 8.7 | 7.7 |
| Slovakia | Mean | 13.0 | 12.7 | 13.5 | 14.4 | 15.7 | 15.3 | 16.1 | 15.5 | 15.6 | 16.3 |
| | Median | 10.6 | 9.9 | 11.1 | 11.6 | 11.8 | 12.0 | 12.3 | 11.6 | 11.7 | 12.3 |

Source: own elaboration based on data from the Amadeus database.

Slovak enterprises used short-term credits to the greatest extent. Only during a few years a higher share was marked in Czech firms. The mean share of short-term banks credits in firms in Slovakia generally went up in the studied period. It was observed that only in 2010 and 2012 the values dropped slightly. In the whole analysed period the share of the described capitals increased by over 3 percentage points. The median of the ratio shaped similarly.

The smallest extent of the use of short-term credits took place in firms in Poland. The share did not change much in the studied years, however a slight upward trend can be seen here. The significance of working capital loans in Polish firms dropped in 2010 and it dropped in the two last years of the analysis, namely 2013-2014.

The share of short-term credits changed more in Czech enterprises. In general, the debt arising from that in the firms in this country was a bit lower than in Slovakia and higher than in Poland. It can be seen that since the crisis, that is until 2009, the significance of working capital loans in the liabilities of firms increased, and in 2010 it significantly decreased. Since then it stayed on quite a stable level.

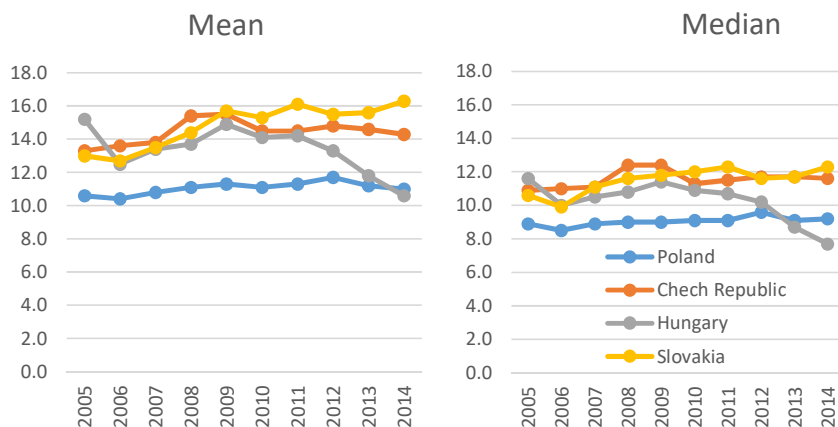


Figure 3. Mean values and medians of the ratio of the share of short-term bank credits in financing the studied enterprises of the analysed countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

The biggest changes in the shaping of the mean and median value of the share of short-term credits in the financing of firms took place in Hungary. Here, after a drop in the share in 2006 a several -year-growth of the share of working capital credits took place. That was the situation in 2009. After that, the trend reversed and the share of the discussed sources of financing decreased significantly year by year.

On the above charts it can be also seen that only in Hungary in the whole studied period there was a significant drop in the engagement of short-term credits in financing enterprises (by about 4 percentage points). The share of those capitals in enterprises of the remaining countries increased slightly.

An important source of financing, in addition to the bank source of debt financing of enterprises, are trade liabilities. Table 4 and Figure 4 compare the ratios showing their share in financing enterprises of the studied countries.

Table 4. Mean values and medians of the ratio of the share of trade liabilities in financing the studied enterprises of the analysed countries, 2005-2014 (%)

| Country | Measure | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poland | Mean | 22.5 | 22.7 | 21.9 | 20.9 | 19.8 | 20.7 | 21.4 | 20.2 | 18.2 | 16.4 |
| | Median | 19.2 | 19.2 | 18.6 | 16.7 | 15.5 | 16.8 | 17.4 | 16.0 | 14.3 | 13.2 |
| Czech Republic | Mean | 22.1 | 21.5 | 20.9 | 18.9 | 17.6 | 18.7 | 18.5 | 17.9 | 17.6 | 16.1 |
| | Median | 17.7 | 17.4 | 16.8 | 14.4 | 12.8 | 14.0 | 14.0 | 13.4 | 13.2 | 12.1 |
| Hungary | Mean | 12.0 | 13.0 | 13.2 | 12.1 | 11.1 | 12.2 | 12.7 | 12.3 | 12.1 | 11.6 |
| | Median | 9.2 | 10.5 | 10.4 | 9.4 | 8.4 | 9.5 | 10.0 | 9.6 | 9.0 | 8.9 |
| Slovakia | Mean | 24.5 | 23.5 | 22.9 | 20.5 | 21.3 | 23.2 | 23.4 | 24.2 | 24.4 | 22.7 |
| | Median | 21.0 | 20.1 | 19.4 | 16.3 | 15.6 | 17.1 | 17.2 | 17.6 | 17.7 | 16.2 |

Source: own elaboration based on data from the Amadeus database.

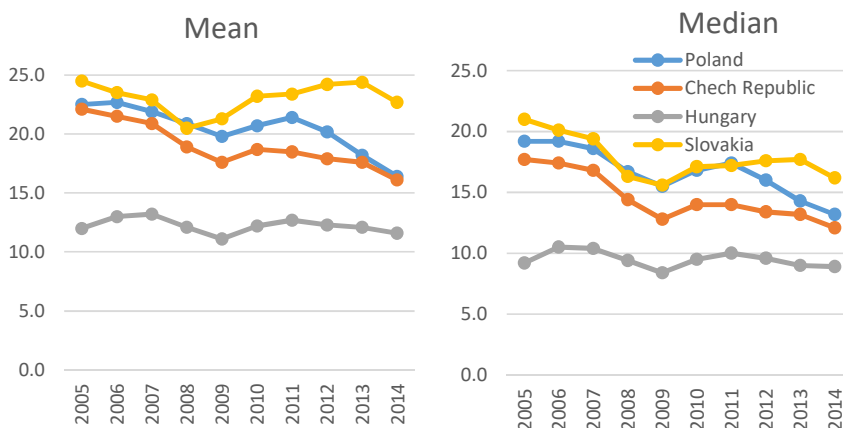


Figure 4. Mean values and medians of the ratio of the share of trade liabilities in financing the studied enterprises of the analysed countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

When starting the comparative analysis of the extent to which the group of the studied countries used trade credits, attention should be paid to very similar trends in the shaping of the share of the discussed sources of financing.

Several sub-periods can be distinguished here: until the crisis, namely till 2009, the share of trade liabilities in the financing of enterprises in all the countries dropped. Then, the share of credits from suppliers visibly went up. In the majority of the countries the period lasted till 2011, only in Slovak firms trade credits took on importance until 2013. The last three years of the analysis (2012-2014), and the last studied year in Slovakia (that is, 2014) brought a gradual decline in the mean level of trade liabilities in financing.

Just like in the case of the total share of foreign capitals, and also as in the case of bank credits, the biggest share of liabilities towards suppliers was observed in Slovak firms. Quite similar, although a bit smaller scope of the use of those liabilities in the financing of firms took place in Poland. The scale of financing with trade credits in Czech firms was even lower than in Polish enterprises. The difference in mean values and in medians was approximately 2 percentage points. The smallest amount of trade liabilities was observed in Hungarian companies (about 5-7 percentage points less than in entities in the Czech Republic).

To conclude, it should be observed that firstly, the shaping of the level of the use of trade liabilities in firms of the studied counties was similar, secondly, there are big differences in mean shares of liabilities towards suppliers in firms of individual countries, and thirdly, in all Visegrad countries the level of the use in the whole period (2005-2014) decreased. The biggest drops concerned firms from Poland and the Czech Republic.

The last analysed ratio is the share of net cash flow in the firms' financing. The ratio aimed to indicate what possibilities of self-financing firms have. Adequate data are shown in Table 5 and Figure 5.

The basic observation and conclusion from the analysis of the above charts is great similarity between the shaping of share of net cash flow ratios in enterprises of individual countries.

Table 5. Mean values and medians of net cash flow ratio in financing the studied enterprises of the analysed countries, 2005-2014 (%)

| Country | Measure | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|---------|------|------|------|------|------|------|------|------|------|------|
| Poland | Mean | 13.5 | 14.0 | 14.9 | 11.8 | 10.3 | 10.4 | 10.2 | 9.5 | 10.3 | 11.8 |
| | Median | 12.2 | 12.4 | 12.9 | 10.5 | 9.6 | 9.4 | 9.2 | 8.6 | 9.4 | 10.5 |
| Czech Republic | Mean | 11.3 | 12.0 | 12.6 | 10.2 | 7.6 | 8.7 | 9.4 | 8.5 | 9.3 | 11.2 |
| | Median | 9.9 | 10.4 | 11.0 | 8.9 | 7.3 | 8.0 | 8.4 | 7.8 | 8.2 | 10.0 |
| Hungary | Mean | 12.2 | 13.3 | 13.2 | 11.5 | 8.2 | 9.2 | 9.5 | 8.1 | 9.6 | 11.2 |
| | Median | 10.9 | 11.6 | 11.2 | 10.1 | 8.2 | 8.5 | 8.4 | 7.7 | 8.5 | 9.5 |
| Slovakia | Mean | 12.1 | 13.3 | 13.4 | 13.3 | 9.2 | 10.9 | 10.3 | 8.7 | 8.4 | 10.0 |
| | Median | 10.7 | 12.2 | 11.9 | 11.7 | 9.1 | 9.8 | 9.3 | 8.0 | 8.0 | 9.2 |

Source: own elaboration based on data from the Amadeus database.

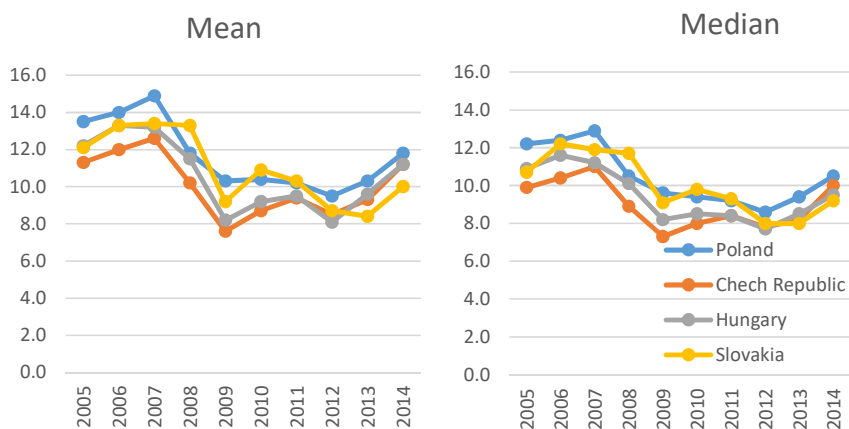


Figure 5. Mean values and medians of net cash flow ratio in financing the studied enterprises of the analysed countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

The first two years of the analysis are characterised by the growing and generally high share of net cash flow in the capitals of the firms, which means the biggest possibilities of self-financing in the studied period. In 2008 and 2009 there is a rapid decline in the share of net cash flow. In 2010 the situation improves, and then in the years 2011-2012 the share of net cash flow slightly decreases again. The last two years of the analysis, that is 2013-2014, bring the substantial improvement of the situation and the growth of the possibilities to finance the activities of enterprises from net cash flow.

However, the above-described course of the ratio of the share of net cash flow in the capitals of enterprises in individual years and countries is a bit disturbed. For example, in Slovak enterprises the mean and the median value of the ratio goes up only in 2006, and in the following year, 2007, it already begins to drop, whereas in other countries growth can still be observed. Besides, the mean level of the ratio drops from 2011 up to and including 2013, and in other counties 2013 brings the rebound and an increase in net cash flow.

Another departure from the described trends is the shaping of the ratio of the share of net cash flow firms in Poland after 2009. In 2010, in comparison with 2009, the situation in Czech, Slovak and Hungarian firms improves, that is the value of the ratio goes up, and in Poland the share of net cash flow in firms' liabilities decreased up to 2012.

When comparing mean values and medians of the described ratios in the studied countries, it was observed that enterprises in Poland had the biggest possibilities of self-financing. Slightly lower values concerned Slovak enterprises. Even lower values concerned ratios of companies in Hungary, and the lowest ones, thus the smallest possibilities of self-financing business activities concerned Czech entities.

Synthetic comparison of the financing structure of enterprises from the Visegrad Group countries

A synthetic summary of this paper is the comparison of the financing structure of enterprises in individual countries. To do this, the mean share of equities in financing enterprises was calculated based on the mean debt ratio. Moreover, mean shares of long-term and short-term bank credits, as well as trade liabilities were compared. The difference between debt ratio and the share of bank credits (long-term and short-term) and trade liabilities was presented in a joint category "other", standing for the remaining capitals. The chart below shows the above-described structure of financing enterprises in individual countries of the Visegrad group (Figure 6).

Based on the data included in Figure 6, a few conclusions were drawn, which constituted the synthesis of the conducted research concerning the financing structure of enterprises in the studied countries. They are presented below.

The biggest share of self-financing is visible in Polish enterprises. The difference between Poland and other countries in this respect is considerably big. It proves high financial independence and higher safety of Polish firms. However, at the same time it is the sign of a conservative financing strategy. A similar share of equities is characteristic for Hungarian and Czech enterprises. Yet, it should be observed that the mean share of self-financing in Czech firms grows year by year, whereas in Hungarian entities the share dropped (thus, the debt went up) in the whole period 2007-2012. The smallest scope of financing company assets with equity took place in Slovak enterprises. In the years 2008-2013 the share of equity in Slovak firms decreased even more.

Long-term bank credits are used to the greatest extent by enterprises in the Czech Republic and in Slovakia. The mean share of those credits in liabilities of firms in those countries is about 14%. Greater fluctuations in the level of the use of those credits took place in Czech firms. A little smaller share of long-term credits concerns Polish firms. Here, the mean share of the described credits for the whole period was a little less than 13%. In the years 2005-2009 a gradual growth of the level of the use of long-term credits is visible in Polish firms, and then the level gradually declines. The smallest amount of assets was financed from long-term bank credits in Hungarian enterprises (mean 12%).

In the study of the share of short-term credits it was also found that they are mostly used in enterprises in the Czech Republic and in Slovakia (just like long-term credits). The mean share of those credits in the whole period is 14.4% for the Czech Republic and 14.8% for Slovakia. Short-term credits are slightly less important for Hungarian enterprises. Here the share of the discussed credits fluctuates significantly, and its mean share in the studied years is about 13%. Polish firms use short-term credits to the least extent

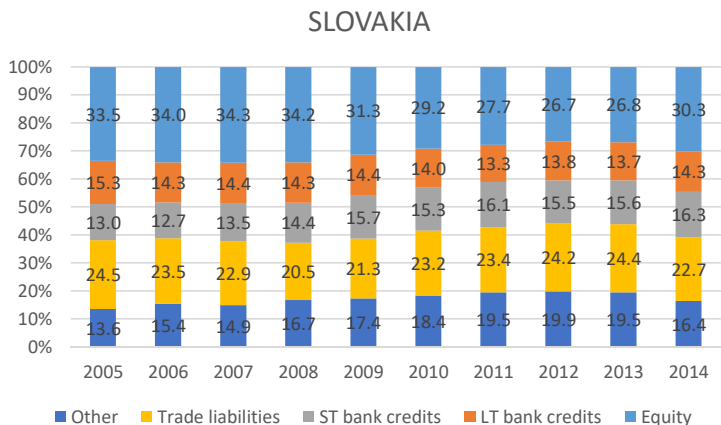
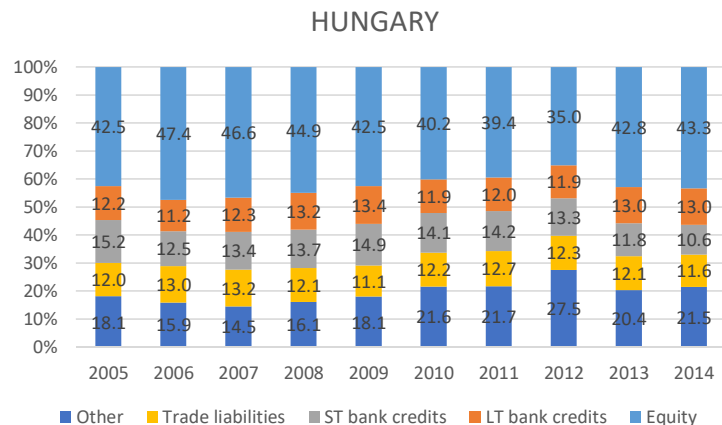
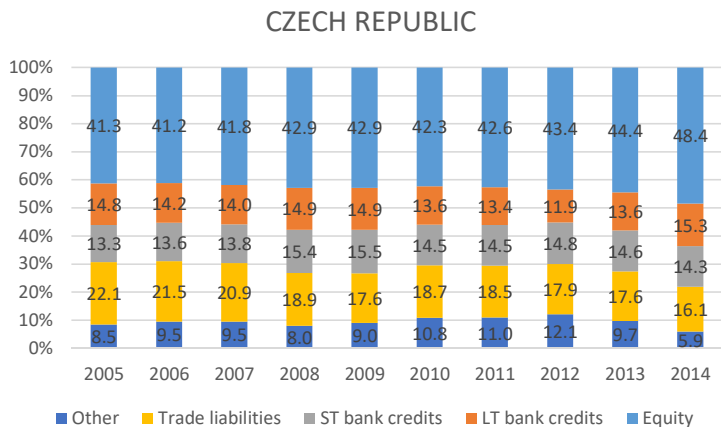
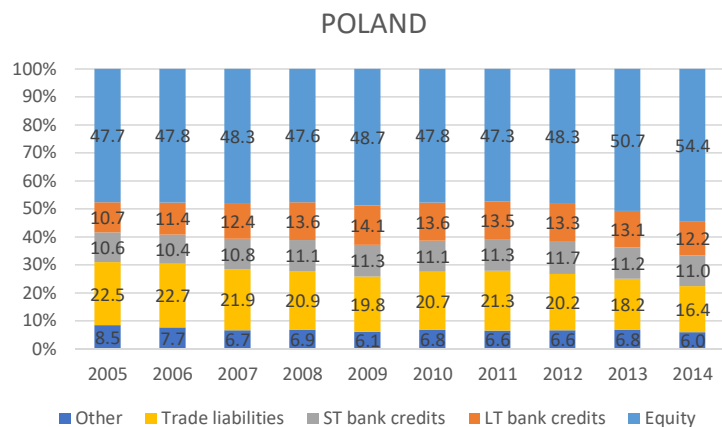


Figure 6. The comparison of the structure of financing enterprises in the studied countries, 2005-2014 (%)

Source: own elaboration based on data from the Amadeus database.

There is a visible difference between the engagement of those capitals in firms in Poland and in the remaining studied countries.

Another isolated source of financing are trade liabilities. It should be emphasized that although the shares of those liabilities are different in different countries, trends in their shaping for the firms of the Visegrad countries are the same. The discussed liabilities are most significant in the financing of Slovak firms. A little less important are credits from suppliers in Polish firms. The third country in this respect is the Czech Republic. Here the mean share of trade liabilities was 19% (Poland 20.5%, Slovakia 23%). By far the lowest share of trade credits is characteristic for the financing structure of Hungarian entities (mean 12.2%).

All other elements of the firms' debt were classified as "Other". Therefore, those are: some long-term liabilities other than long-term bank credits, short-term liabilities, also other than bank credits and liabilities towards suppliers, provisions or accruals. The importance of this form of financing was the greatest in Hungarian and Slovak firms, a bit lower in entities in Slovakia, and the lowest in Poland

CONCLUSIONS

When attempting to synthesise the above analyses, aiming at, among others, the comparison of the financing strategy of enterprises in the studied group of countries, it should be said that in spite of the fact that the overall level of debt differs in those countries, tendencies, trends in the shaping of the share of debt ratio are similar in individual countries.

Similarly, close or even stronger relationship between the ratios concerning enterprises in individual countries was observed in the analysis of the scope of use of trade liabilities, and the strongest in the study of the possibility to finance activities from the generated financial surplus.

The weakest relationship between the ratios calculated for individual countries was observed during the measurement of the level of financing with bank credits (long-term and short-term).

Such extensive research into changes in the sources of financing enterprises in the period comprising 10 years is a very complex task. Based on such an analysis it is particularly difficult to make univocal and final diagnoses. Even when in the studied period a financial and economic crisis takes place.

What is most visible is the impact of the economic slowdown in the examination of the financial surplus of enterprises and its share in the sum of the sources of financing. The biggest changes can be seen here and the changes are negative. In 2008 and 2009 a decrease in firms' profit was significant and, unfortunately, this negative trend maintained until 2012. Such a trend concerned enterprises of all the studied countries.

Moreover, it should be also emphasized that the issue of the financing structure is difficult to change radically in a short period of time. Therefore, in spite of the occurrence of at least two significant drops in the economic situation in the analysed period, we could not expect any significant changes in the share of individual financing sources of the business entities. However, we can assume that the observed fluctuations of the financing structure of the enterprises prove a certain reaction of the entities to the crisis.

Knowledge about the determinants of the financing structure is essential in managing a company's finances. It is very important to identify how strong fluctuations in the economy affect the practice of enterprises.

In next studies, it should be checked whether in the following post-crisis years the structure of financing sources in companies changed. In addition, in the study of the Visegrad Group companies it should be established whether there are any barriers to the obtainability of particular source of financing, including primarily bank loans. It could determine the degree of their use by enterprises.

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