

# Indifference in economics: Between praxeology and the neoclassical presentation of a consumer's choice

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## ABSTRACT

**Objective:** The objective of the article is to present the differences in the research approach concerning consumer behaviour from the perspective of neoclassical economics and the Austrian school of economics.

**Research Design & Methods:** The article applies the qualitative approach based on comparative analysis of the subject literature. While selecting research material, the author considered major works presenting the neoclassical theory of a consumer's choice as well as those representing the Austrian school, criticizing neoclassical views.

**Findings:** The article explains the methodological approaches leading to alternative interpretations of indifference in neoclassical economics and the Austrian school.

**Implications & Recommendations:** Indifference constitutes the key category that enables readers to understand positions adopted by neoclassical economists and representatives of the Austrian school of economics. The conducted analysis implies that different understanding of indifference constitutes the main source of the dispute regarding the theories of a consumer's behaviour in the analyzed concepts.

**Contribution & Value Added:** The value added of this article lies in showing the causes of divergence between the theory of a consumer's choice developed in neoclassical economics and its criticism expressed by representatives of the Austrian school of economics.

**Article type:** research article

**Keywords:** indifference analysis; praxeology; neoclassical economics; Austrian school of economics; methodology of economics

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## INTRODUCTION

When in the 1940s von Mises presented his opus magnum *Human Action: A Treatise on Economics* (Mises, 1998), economists of the Austrian school were explaining the essence of choice emphasized praxeology – a concept deeply rooted in sociology and philosophy. Simultaneously, supporters of neoclassical economics used quantitative analysis to build a model explaining microeconomic consumer behaviour, which is currently part of most academic courses on microeconomics. Both the Austrians and the neoclassic prefer the microeconomic approach, rooted in the analysis of an individual's rational behaviour. In both cases, the economic agents aim at obtaining an arbitrarily defined goal using the most effective means. Constructing their theories, they rely on the induction method. Criticizing neoclassical economists, supporters of the Austrian school of economics point to the principle of indifference as the main weakness of the model explaining the behaviour of an individual in economic space. They emphasize that indifference contradicts the explanation of an individual's behaviour offered on the grounds of praxeology.

This article aims to reconstruct the model of a consumer choice from the methodological perspective. While analyzing the consumer's choice theory in the paradigm of neoclassical economics, I will try

to prove the thesis that the assumption of indifference does not constitute an obstacle in developing an adequate model explaining the behaviour of an entity in the economic dimension. Moreover, indifference is not a factor disturbing the decision-making process, as its essence lies only and exclusively in determining the choice space, within which an individual makes optimal decisions.

To accomplish the research goal, I sought answers to the following questions:

- RQ1:** How do representatives of neoclassical economics and followers of the Austrian school of economics understand indifference?
- RQ2:** Does indifference constitute a convincing argument for weakening the cohesion of the neoclassical theory of rational choice?

## RESEARCH METHODOLOGY

The article is a theoretical study that can be classified as primary research. I based the analysis of the development of the economic theory describing the behaviour of a rational consumer on the qualitative comparative method. Within this analysis, I performed a rational reconstruction of the views of representatives of neoclassical economics and the Austrian school of economics. The source materials were articles and books, interpreted chronologically. To explain methodological differences between supporters of neoclassical economics and representatives of the Austrian school of economics, the analytical part devoted to indifference was preceded by the discussion of praxeology and the research approach characterizing neoclassical economics. This discussion aimed to demonstrate methodological differences determining conclusions on indifference within the presented schools of thought.

## LITERATURE REVIEW

By adopting the subject criteria, I selected articles and books, which served as the foundation on which the neoclassical theory of a consumer's choice was reconstructed. The theory was criticized by representatives of the Austrian school of economics, who postulated the application of praxeology as a method explaining the motives behind human activity in economic space.

The term 'Austrian school of economics' refers to representatives of the intellectual movement initiated in the late nineteenth century by Menger and subsequently developed by von Wieser and von Böhm-Bawerk. The works of von Mises and Rothbard and those of contemporary economists mainly associated with the Mises Institute are most crucial to understanding the Austrian critique of the principle of indifference. In the context of the discussed issue, it is also worth highlighting the contributions of Czech thinkers Čuhel and Engliš (Doležalová, 2018; Bažantová, 2015). Čuhel criticised the cardinal utility theory, advocating for the ordinal utility theory, which underpins modern welfare economics as Pareto interpreted. Čuhel's work, published in German in 1907, remains a significant study on utility theory and consumer behaviour (Cuhel, [1907]/2017).

The term 'neoclassical economics' used in the text reflects the perspective proposed by Colander (2000). He rightly distinguished the neoclassical school, developed from the 1870s to the 1930s, from neoclassical orthodoxy. The presented interpretation of the indifference principle adopts the standard interpretation of the consumer choice theory in contemporary microeconomics textbooks, *e.g.* Varian (2010).

The model of a rational consumer is the legacy of marginal revolution, within which such economists as Menger (1871), Jevons (1871), and Walras (1874), developed the theory of utility, seeking relations between subjectively interpreted marginal utility and demand for goods and services. The theory of a consumer was largely developed by Marshall (1890). Other economists perfected analytical tools allowing them to formalize the utility theory and budget constraint. Meanwhile, Edgeworth (1881) presented the indifference curve. Axiomatic justification for the indifference curve proposed by him was provided by Johnson (1913). His concept was popularized by Bowley (1924). The analysis of a consumer's choice within budget constraints was presented by Slutsky (1915), and his concept was further developed by Hicks and Allen (1934), Schultz (1935), Allen (1936), and Hicks (1939). In the 1930s, a formalized version of the neoclassical theory of a consumer's choice was established, still

prevailing in microeconomics textbooks (Varian, 2010). After the Second World War, Samuelson (1948) proposed the revealed preference theory (Wong, 2006). An in-depth analysis of Slutsky-Hicks theory, based on the axiomatic approach, was developed by Debreu (1954; 1959). The history of the theory of a consumer's choice was presented by Moscati (2003).

Postulating the recognition of praxeology as a method allowing us to explain human activity, von Mises criticized the views of neoclassical economists. In 1940, he published the German edition, followed by the English edition in 1949, of *Human Action* (Mises, 1998). In the mid-1950s, Rothbard criticized the principle of indifference, basing his reasoning on methodological postulates of the Austrian school of economics (Rothbard, 1956). A detailed analysis of the methodology of the Austrian school of economics in the context of praxeology was presented by Nozick (1977). Supporters of the Austrian school of economics formulated several polemic arguments against indifference interpreted in the spirit of neoclassical economics. The dispute was attended by such scientists as Block (1980; 1999; 2022), Hoppe (2005), O'Neill (2010), Machaj (2007), and Wysocki (2021).

Currently, the academic discourse concerning principles of indifference is characterized by the active participation of the Austrians, who raise a number of arguments critical of the neoclassical orthodoxy. However, neoclassicists hardly notice this criticism.

## RESULTS AND DISCUSSION

### Praxeology of the Austrian School Versus the Research Approach of Neoclassical Economics

In economics, analyses of indifference are inextricably linked with the theory explaining consumer behaviour. From the philosophical point of view, an individual choosing economic space is driven by motivation rooted in utilitarianism propagated by Bentham in the times when the British Isles witnessed the origin of classical political economics (Stark, 1946). In 1789, Bentham published *Introduction to the Principles of Morals and Legislation* reinforcing the belief that the superior ethical imperative is to seek maximization of pleasure and avoid pain. In the first chapter of *Introduction to the Principles...* titled 'Principle of Utility,' he writes:

Nature has placed mankind under the governance of two sovereign masters, pain and pleasure. They alone point out what we ought to do and determine what we shall do; the standard of right and wrong, and the chain of causes and effects, are both fastened to their throne. They govern us in all we do, all we say, all we think; every effort we can make to throw off our subjection to pain and pleasure will only serve to demonstrate and confirm it. (...) The principle of utility recognizes this subjection, and makes it the basis of a system that aims to have the edifice of happiness built by the hands of reason and of law (Bentham, 1823, p. 6).

The interpretation of utilitarianism presented by Bentham had a wider than economic context. It contained ethical justification for stimuli determining people's behaviour in public space, which is currently analyzed by social philosophy, sociology, political science, and economics. Moreover, Bentham also consolidated the belief shared by most economists that individuals run a benefit and cost account allowing them to choose the best available option. In this sense, humans maximize the function of purpose.

The analysis of the motives for human behaviour constitutes a central point in contemporary microeconomics, but also in other social sciences. The term praxeology and the research field it deals with is owed to the disciple of Comte and Spencer – sociologist Alfred Espinas, who in 1890 published an article titled *Les origines de la technologie* (Espinas, 1890). In the same year, on the other side of the English Channel, an economist from Cambridge, A. Marshall published *Principles of Economics*. His book directed the development of neoclassical economics and set methodological standards for contemporary microeconomics. Concerning the subject of economics, A. Marshall's views reveal some similarities to those of praxeology supporters. Both the former and the latter were inclined to expand the area of economic analysis to include issues that go beyond the maximization of wealth and prosperity. The economist from Cambridge identified economics as not only the science of wealth, which in the British tradition was the legacy of A. Smith. Marshall believed that it covers a wide spectrum of human behaviour (Marshall, 1890).

For representatives of the Austrian school of economics, supporters of individualism and free-market economy, the superior value is to ensure wide autonomy for an individual, thus allowing them to accomplish their arbitrarily determined goals. The method of their accomplishment was determined by imperatives formulated on the grounds of praxeology. The use of praxeology as a research approach in economics was introduced by von Mises.<sup>1</sup> The term praxeology originates from *praxis* – a Greek Word denoting an intentional action. Mises and his followers considered praxeology as a method allowing to provide a reality-adequate explanation of human behaviour determined by both rational and irrational factors. In this way, a holistic concept of human behaviour was presented. In the political sphere, Mises's theory constituted an alternative to the historical materialism of the Marxist style in the 1930s.

Therefore, it seems that the similarities between neoclassical economics and the Austrian school of economics should lead to the convergence of those ways of thinking. In practice, it looks quite different. The Austrian school of economics is a separate entity remaining in the orbit of heterodox schools. This is even though both the Austrian school, the neoclassical school, and also the mathematical (Lausanne) school appeared due to the Marginal Revolution in the 1870s. The views represented by the Austrians are not widely presented in most contemporary textbooks on microeconomics and macroeconomics.<sup>2</sup> What could have then determined the polarization of the views of neoclassical economics rooted in Marshall's tradition and the views of the Austrian school supporters?

The differences between these two schools of economic thought refer mostly to methodological aspects behind which there are specific epistemological premises. Before becoming an economist, Marshall was a mathematics lecturer in Cambridge. He promoted the formal presentation of economic issues, presenting his views in the form of graphs and formulas, as did Walras and supporters of the mathematical school. The economic narration changed. The relations between economic variables were perceived differently (Vazquez, 1995). The cause-and-effect analysis dominating the Austrian economists group was replaced by neoclassicists with mathematical functions.<sup>3</sup> The formalization of the discourse allowed to construct more and more complex models which, over time, were filled with data. The apriorism stressed by Menger yielded to empiricism which, according to the postulates of the German Historical School and then American Institutionalism, emphasized observation and gathering facts that could make a foundation for theoretical generalizations.

To explain the reasons that distinguish the neoclassical economics and the Austrian school of economics research approach, we need to analyze their attitude towards naturalism.<sup>4</sup> Neoclassicists followed natural science much more than the Austrians, trying to discover the laws determining social behaviour analogically to those formulated in natural science. Physics, with its deeply rooted Newtonian idea of equilibrium, became an economic model (Redman, 1993). Descriptions of how markets operate are full of physics jargon. Markets automatically aim at achieving the equilibrium state and remain in it as long as the supply and demand forces balance each other. von Mises and his supporters questioned this physical interpretation of the market mechanism. They rejected the formalization of economics and placed special emphasis on the deduction method and the description of the economy in natural language. Mises was also sceptical of econometrics – the science that was growing in significance in the first half of the twentieth century.

The evolution of the research approach in economics that took place in the 1930s accounted for the fact that economists used the language of mathematics more frequently. The best example illustrating this process was the interpretation of Keynes' book *The General Theory of Employment, Inter-*

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<sup>1</sup> Apart from the economic interpretation of praxeology, a key role in developing this method was played by Polish philosopher Kotarbiński, who established Centre of Praxeology. Since 1962 'Materiały Prakseologiczne' [Praxeology Text] journal has been published (after 4 years it changed its title to 'Praxeologia' [Praxeology]).

<sup>2</sup> Snowdon and Vane: *Modern Macroeconomic* (2005) is one of few textbooks which, in addition to traditional presentation of macroeconomics in neoclassical economics and Keynesian economics, also includes the presentation of the Austrian school views. See chapter 9 *The Austrian school*.

<sup>3</sup> Marshall placed mathematical formulas and graphs in notes to *Principles of economics* rather than in the main text. Currently, especially in advanced papers on economics the formal approach dominates. The notes usually include interpretation of the formal presentation. The way mathematics found its way to economics was aptly presented by Weintraub in his work: *How Economics Became a Mathematical Science* (2002).

<sup>4</sup> The term naturalism is used in this article in line with the interpretation presented in (Beed & Beed, 2000).

*est and Money* (1936), by Hicks, conducted in his article: *Mr. Keynes and the 'Classics; a suggested interpretation* (1937). The narration of Keynes' book was based on verbal description that left a large area for interpretation both for supporters and opponents of Keynes' ideas. With his impressive analytical skills, Hicks needed only 12 pages to provide a brilliant interpretation of Keynes' views, presenting them in the form of an IS-LM model, which still remains the may form of presenting the essence of Keynesian economics. Using mathematical formulas and graphs presenting relations between economic variables, he made the scientific discourse more precise. Since then, economists have frequently resigned from the language of social philosophy and replaced it with mathematics. The formalization of economics only aimed at making the message more unambiguous. In the 1930s, empirical research based on statistics and econometrics gained popularity in an attempt to understand economic processes and to be able to shape them. The economic challenges of the 1930s necessitated the use of quantitative analysis tools. This especially concerned the Great Depression of 1929-1933 and related issues of economic situation and unemployment fluctuations. It was also then that economic data was collected on an unprecedented scale and national accounts were established, which was manifested in the popularity of the GDP ratio.

Along with the collection of economic data, on 29 December 1930, quantity-oriented economists established the Econometric Society in the USA and appointed I. Fisher to be its first president.<sup>5</sup> The development of the research conducted by members of the Econometric Society led to quick growth in interest in quantitatively oriented empirical research using econometrics. The critical attitude to econometrics presented by Mises (Mises, 1977) and to more broadly interpreted quantitative analyses accounted for the fact that the Austrian school, albeit strongly oriented towards market solutions and methodological individualism started to drift away from neoclassical economics and moved to economic heterodoxy grounds.

Mises' scepticism concerning econometrics also stemmed from the argumentation formulated in the dispute on the possibility of running a rational economic account in a centrally-planned economy. This dispute was the core issue in the socialism versus capitalism debate. It was initiated by Mises' article *Die Wirtschaftsrechnung im sozialistischen Gemeinwesen* (1920). He accused supporters of the socialist centrally-planned economy that by eliminating the market mechanism, in fact, they eliminated the mechanism generating prices understood as parameters allowing rational allocation of resources. Replying to Mises' accusations, Lange formulated the model of quasi-market socialism (Lange, 1936; 1937). According to this model, the central planner used quantitative analysis methods to balance demand-supply transactions so as to establish equilibrium quantities and equilibrium prices in the whole economy. Lange is renowned as one of the pioneers of econometrics. He believed that the quantitative analysis tools would enable us to solve the practical problem related to the allocation of resources. Mises' disciple, von Hayek indicated that the logical cohesion of the model presented by Lange does not determine the feasibility of such a solution (Boettke, 2020).

Pointing at the limitations of knowledge, the Austrians claimed that in practice Lange's solution would not ensure the accomplishment of the set goal, namely the optimum allocation of resources in a socialist economy. The socialism versus capitalism debate was one of the most important debates in the history of Western Europe. To a large extent, it explained the cause of the collapse of the socialist states that started in 1989. The debate was also the only debate in the twentieth-century history of economics in which the precision of economic argumentation supported by quantitative analysis methods yielded to the philosophical argumentation referring to broadly understood freedom and rationality of individuals, on which the market economy system is based.

### The Essence of the Principle of Indifference

When in the 1970s Nozick published *On Austrian Methodology*, in the third part titled *Preference, Choice and Action* (Nozick, 1977, pp. 369-378), he presented the interpretation of human behaviour, referring to the axiomatic presentation of consumer rationality. He pointed at the axiomatic nature of

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<sup>5</sup> The history and significance of the Econometric Society was presented in *On the Founding of the Econometric Society* (Bjerkholt, 2017).

weak preference and strong preference (weak axiom of preference and strong axiom of preference), which constitutes the foundation of the theory of consumer behaviour. We can see strong preference when a consumer who can choose two goods: A and B, clearly chooses, for example, good A over good B. Weak preference is when in the consumer's opinion good A is at least as good or even better than good B. This is due to the fact that in *weak preference* we can observe the appearance of indifference (Nozick, 1977, p. 370). Nozick's argumentation started a discussion among supporters of the Austrian school, and arguments in it drew from praxeology.

The Austrians were critical of the principle of indifference, pointing at Rothbard's *dictum*, in which he claimed.

Indifference can never be demonstrated by action. Quite the contrary. Every action necessarily signifies a choice, and every choice signifies a definite preference. Action specifically implies the contrary of indifference. The indifference concept is a particularly unfortunate example of the psychologizing error. Indifference classes are assumed to exist somewhere underlying and apart from action. This assumption is particularly exhibited in those discussions that try to 'map' indifference curves empirically by the use of elaborate questionnaires (Rothbard, 1956, p. 14).

Rothbard developed his critical argumentation in the context of prosperity, basing it on neoclassical economics. Can we therefore consider the statement that 'Indifference can never be demonstrated by action' as justified? And is it really an 'unfortunate example of the psychologizing error?'

Answering the above questions we must observe that neoclassicists did not interpret indifference in psychological criteria but in logical ones. It is an integral part of the presentation of the transitivity axiom, according to which if we prefer A over B, and B over C, then, based on the transitivity axiom, we should prefer A over C. Analogically, if we are indifferent to the choice between A and B, just as we are indifferent to the choice between B and C, the same indifference should be seen in our choice between A and C.

Referring to praxeology, Rothbard negated indifference, claiming that if a consumer is indifferent to the choice between, for example, A and B, there are no stimuli pushing him or her to perform a particular action.<sup>6</sup> However, are consumer preferences a sufficient premise for economic choice? Consumer preferences are a necessary condition, but insufficient for a rational consumer to make optimal choices on the grounds of economics. We need something more to see the difference between economic choices and choices made in any other sphere of human life. Economic choice consists of the fact that when we satisfy our preferences, we also do so in the context of some limitation (usually – the income-price limitation). Not every choice we make is an economic one. For example, when making ethical decisions we do not necessarily have to take into account the costs of our decision. We can simply adopt a moral imperative and consider it as superior. Similarly, in psychology we can examine particular decisions, justifying them with something else than just the benefit and cost account.

Economic goods are goods of instrumental nature. They are used to accomplish other goals. In the case of non-economic choices, for example, ethical choices, we often pursue autotelic values, not taking into account costs, or, to be more precise, their adequacy concerning the values preferred by us. Undoubtedly, praxeology allows us to understand the motives determining an individual's behaviour in the decision process. However, if we pass over the costs of such decisions – which is the essence of economic analysis, we may have doubts about whether such a description is an adequate description of behaviour in economic space. Or maybe it blurs the border between behaviour analyzed on the grounds of economics and behaviour considered from the perspective of other social sciences.

Contrary to the Austrian school, neoclassical economics uses indifference only to provide a description of a formal structure of preferences of a rational consumer and to determine indifference curves. The concept of indifference curves was first introduced by Edgeworth (1881, p. 28). However, he did not present any deeper justification in the form of axioms determining the shape of such curves. The axioms of rational behaviour were proposed in an article titled *The Pure Theory of Utility Curves* (John-

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<sup>6</sup> Literature devoted to the Austrian school sometimes considers the indifference along with the principle of homogeneity. As rightly observed by O'Neill, goods may not be homogeneous, but they may be perceived as those that provide the same level of satisfaction. Therefore the choice between them may be indifferent to the consumer (O'Neill, 2010).

son, 1913) and constitute the foundations of the contemporary axiom system allowing indifference curve modelling.<sup>7</sup> The system of indifference curves composes the so-called indifferent map, which, as any other map, does not determine our choices – our destination. It only shows potential options we can choose from. It constitutes a space of freedom, within which individuals make decisions aimed at providing them with maximum satisfaction.

Apart from indifference curves, another integral part of the neoclassical model of consumer behaviour is budget constraint, which demonstrates which of the preferred commodity bundles can be purchased by a consumer, as well as the optimization rule, known as Gossen's second law. According to this rule, a consumer optimizes the structure of consumption, equaling relations of marginal utilities with the price for all purchased goods.<sup>8</sup> Therefore, the economic choice of a particular commodity is determined not only by our preferences, but also by which potential commodity bundles we can obtain within the existing budget constraint, and what relation to price the commodity bundle we intend to buy has. In other words, the statement that for a consumer two commodity bundles are equally good even though their compositions differ does not constitute an obstacle in making a rational choice. The consumer will pick the commodity bundle which, because of the price they have to pay for it, will bring them greater satisfaction.

The criticism of indifference also contains one more doubt concerning the generalized interpretation of the axiom system. There are two approaches, based on different visions of constructing a scientific theory, in the discussion on axioms of rational behaviour. The first approach assumes that a scientific theory is a result of the deduction method, in which it is vital to adopt particular axioms. Our image of a rational consumer was built a priori. This tradition dates back to Edgeworth and Johnson and we can see it in contemporary neoclassical theories presented in most textbooks on microeconomics.

On the other hand, the second tradition is anchored in a conviction that an adequate image of a rational consumer can only be built by observing their behaviour first and then analyzing the cohesion of their choices. This is known as an empirical approach and a posteriori knowledge. The second approach was proposed in the 1940s by Samuelson (1948). His theory is known as the theory of revealed preferences. Samuelson claimed that what we can observe is not our preferences reflected by the indifference curve, but only commodity bundles we acquire/prefer in a situation when we have to pay a particular price for each such bundle. The manipulation of the budget constraint line and the observation of our choices allow us to build a model of a rational consumer. Currently, in the theory of revealed preference, we also deal with certain postulates determining the rationality of a consumer. These are the Weak Axiom of Revealed Preference (WARP) (Varian, 2010, p. 124) and the Strong Axiom of Revealed Preference (SARP) (Varian, 2010, p. 128).

These two presentations of consumer behaviour differ significantly, as can be seen in Varian's textbook. The former is discussed in chapter 3 titled Preferences (Varian, 2010, pp. 34-53), whereas the latter approach is analyzed in chapter 7: Revealed Preference (Varian, 2010, pp. 119-135). Indifference, though understood differently in those two approaches, does not constitute an obstacle to building a cohesive model of consumer behaviour.

## CONCLUSIONS

In the interpretations of indifference proposed by neoclassical economics and the Austrian school of economics, the issue concerns whether a consumer can make a rational choice when two goods have the same utility. Austrians, pointing to Rothbard's dictum, criticize the principle of indifference, referring to the interpretation of human action based on praxeology. In the case of neoclassical economics, indifference is only one of the possible preference arrangements, allowing the construction of an indifference

<sup>7</sup> The following axioms determine the shape of indifference curves: completeness (individuals can compare all the available alternatives), reflexivity (any bundle is certainly at least as good as an identical bundle), transitivity (If X is preferred to Y and Y is preferred to Z, X is preferred to Z), monotonicity (a rational agent prefers more than less). The Assumption of these axioms provides justification for indifference curve reflecting the so-called well-behaved preferences (Varian, 2010, pp. 44-48).

<sup>8</sup> The mathematical presentation of this formula is as follows:  $MU_X/P_X = MU_Y/P_Y = \dots = MU_Z/P_Z$  where:  $MU_X$  denotes marginal utility of good X;  $P_X$  is the price of good X. Analogically we can denote marginal utilities and prices for goods Y and Z.

curve (a mathematical image of their preferences). The indifference curve is insufficient for the consumer to choose the most preferred commodity bundle. The information about the price of the preferred goods is still needed to plan. Only the ratio of marginal utility to price is a stimulus determining a rational human choice. Based on neoclassical economics, human action is not interpreted by the postulates of praxeology. It is considered in terms of equilibrium taken from the natural science – physics.

The neoclassical theory of consumer choice is a logically cohesive model rooted in the axiomatic system. It is within the transitivity axiom that we can observe indifference which only shows that a rational consumer may equally value two commodity bundles even though they differ in the structure of the goods composing them. These commodity bundles may have the same level of total utility for the consumer. In this approach, the statement that ‘Indifference can never be demonstrated by action’ cannot be justified. Indifference curves and indifference maps developed based on axioms do not determine the consumer’s choice. They only represent potential states of the world, which, considering particular income and price constraints, can be accomplished. A rational consumer will choose from available options the one that allows them to equal the marginal utility of the last of the used goods with its price. The theory of revealed preferences proposed by Samuelson modifies and widens the above-quoted approach. It lays the foundations for empirical research on consumer behaviour, for example, on the grounds of behavioural economics.

In both cases, the motive behind our action (or decision not to act) is not only consumer preferences but the relation of what we desire to what we can sacrifice to satisfy our desires. This corresponds with the utilitarian philosophy of Bentham, who claims that when taking a decision we always weigh benefits (philosophically – pleasure) and costs (represented by pain). This reasoning is also consistent with Friedman’s economic motto: ‘there’s no such thing as a free lunch.’

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The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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