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Consumer and Consumer Behaviour in the Neoclassical and Behavioural Economic Approach

Summary

The purpose of this article is to show how the perception of the economic man's behaviour (including consumer choices) has evolved in the neoclassical and behavioural economic models with the development of economics as a science. The structure of the article is as follows. After explaining the concept of consumer as an economic man, the essence and complexity of consumer behaviour are discussed. Next, there are presented consumer choices from the perspective of neoclassical economics, classified as the mainstream economics, and in behavioural economics.

Key words: consumer, consumer behaviour, neoclassical economics, behavioural economics.

JEL codes: D11

Introduction

The consumer and consumer purchasing behaviour are an important area of interest of many scientific disciplines. The process of economic decision making as well as the issues surrounding choices connected with wider human activities are a subject of research in various fields of science. Research on human behaviours that are significant for making choices – in terms of both individual attitudes and group and social behaviour – is conducted in the areas of sociology, psychology, anthropology, operational research, decision theory and other sciences. One of the today's trends as regards the relationship between social sciences is the so-called "reverse imperialism" which is understood as integration, cooperation and interaction of achievements in economics with achievements in other social sciences. As a result of this interaction, a number of branches of economics emerged, including among others: the new institutional economics, behavioural economics, experimental economics, neuroeconomics, etc., and the examples in other social sciences are: the economic sociology, economic psychology, behavioural finance or neuromarketing. The purpose of this article is to show how the perception of the economic man's behaviour (including consumer choices) has evolved in neoclassical and behavioural economic models with the development of economics as a science. The structure of the article is as follows. After explaining the concept of consumer as an economic man, the nature and complexity of consumer behaviour are discussed. The second part of the paper focuses on consumer choices from the perspective of neoclassical economics, classified as the mainstream economics, and behavioural economics. Finally, major conclusions end this text.

Consumer as an economic man

The concept of consumer is one of the fundamental concepts in economics because the consumer is the core market participant along with the producer. The literature dealing with these issues defines the consumer in various ways as the discussion on this concept is undertaken by representatives of many fields of science: lawyers, psychologists, sociologists, anthropologists and economists, to name a few. In legal sciences, consumers are regarded as natural persons performing legal acts with no direct links to their economic or professional activity. In psychological sciences, the cognitive approach to the consumer prevails, which embraces all the elements of perception and decision-making process. A particular emphasis is placed on endogenous forces that stimulate thinking and acting, bodily functions and clarifying the correlation between the physical condition and human action. In sociological studies, in turn, descriptions of the consumer focus on the nature of needs and the ways of satisfying them by individuals as well as on the impact of the environment on individual consumer behaviour. Anthropology concentrates on studying consumers as human beings in their natural surroundings in order to understand their guiding motivations, attitudes and consumer choices. Ethnography makes it possible to capture the complex relationship between an individual and a product in the context created by home/apartment or other places in which consumers exist, and seeks to understand how a product/service can affect the daily lives of consumers. In economic terms, the consumer is understood as an autonomous economic man who is economically separate because of his or her personal property and makes consumption decisions based on his or her own subjective preferences (tastes), inclinations, habits and traditions and existing objective constraints (i.e. disposable income, market prices of goods and services) in order to satisfy his or her needs to a maximum degree and in the most rational way. At the same time, higher-ranked needs are accompanied by their greater substitutability, complementarity, synergy and competitiveness. In other words, the consumer looks for such a basket of goods and services that ensures the greatest subjective satisfaction and is still available, i.e. can be purchased for financial means that allow for real consumption.

The concept of consumer is often considered to be equivalent to such concepts as customer, purchaser, recipient or payer. According to R. Williams (1976: 24) and B. J. Bon and

B. Pras (2001: 150-151), not all of these terms may be used interchangeably as, for example, a person purchasing a good is not necessarily a consumer thereof, whereas the payer and the purchaser are usually the same person. The purchaser is a person who buys, the payer is a person who finalises the purchase and the consumer is a person who uses the product or service. It should also be noted that the term "consumer" is frequently equated with "household", especially in Polish literature on this topic. This was pointed out by J. K. Galbraith (1979: 79) who argued that a household equalled an individual in all neoclassical economics. For all practical purposes, choices made by an individual (i.e. consumer) and a household are identical.

Changing economic, social, political and cultural conditions are affecting consumer behaviour significantly. Today's consumers are increasingly demonstrating adaptive attitudes towards the changes in the goods and services market. Broader access to information by consumers, and in particular their ability to interpret it correctly and translate it to a rational decision, is a reliable verification of skills attributed to appropriate consumer behaviours in the market. According to S. Baker (2004: 24-26), today's consumers, among others, want to experience new feelings, are skilled at using modern media, are aware of their consumer rights, suffer from a chronic lack of time, have more mobility opportunities, show a more rational attitude towards market offers and tend more frequently to refrain from emotional shopping to make well-considered decisions instead.

The nature and complexity of consumer behaviour

Consumer behaviour is an aspect of human behaviour in general, and thus a subject studied by many social sciences such as: economics, sociology, psychology, anthropology or management. "Consumer behaviour" is an Anglo-American term. One of the first persons to use it was American economist W. H. Reynolds. In its broad meaning, the term "behaviour" means any observable response to stimuli from the environment or the aggregate of all the responses and attitudes of a living organism to its environment. It is synonymous with "conduct", which means acting, undertaking certain activities, dealing with someone or something in a certain way (Dictionary of Contemporary Polish Language, 1998: 114). Hence, human behaviour can be understood as various responses to different internal stimuli and external conditions. This means that behaviour is a complex result of individual responses to various factors: economic, social and psychological. The issue of behaviour is associated with many aspects of human life and, therefore, the concept of consumer behaviour refers broadly to human behaviour in all fields of human activity. An economic approach to human behaviour stems from the observation that individual consumers are active in both goods and services market and production factors market (such as labour, capital, land).

Consumer behaviour may be broadly defined as a range of actions and activities intended to meet consumption needs of individuals or groups. This is achieved by acquiring goods and services and correlated with the preferences system and with the way of dealing with purchased goods. Consumer behaviour usually means any response (or the aggregate of responses) by an organism to environmental stimuli and its attitude to the environment. The concept has not been precisely defined as yet; hence it is understood in a variety of ways. According to J. C. Mowen (1987: 5), consumer behaviour is the study focusing mainly on individuals who make subjective decisions about buying goods and services and gain various experiences and ideas, and concentrating on how they consume and dispose of such goods and services. A similar interpretation of consumer behaviour was adopted by F. Hansen (1972: 17), who defined it as all activities and perceptions of individuals that determine the preparation of decisions on product selection as well as actual product selection and consumption. A definition of consumer behaviour that is very similar to that by F. Hansen was adopted by L. G. Schiffman and L. L. Kanuk (2000: 5-6), describing it as activities related to the search for, purchase, use and evaluation of goods and services with the potential to satisfy needs. W. D. Hoyer and D. J. Maclnnis (2004:3) present consumer behaviour in a similar way, explaining that it comprises all people's decisions relating to the purchase, consumption and disposal of goods and services over time. J. F. Engel, R. D. Blackwell and P. W. Minard (1995: 6) also define consumer behaviour as the aggregate of actions strongly correlated with the acquisition, use and disposal of goods and services, including decisions preceding and determining such actions. Consumer behaviour is understood in an even broader sense by G. Antonides and F. van Raaij (2003: 24), who believe that it encompasses mental and physical activities (including motives and causes) of individuals and small groups (consumers). These activities are strongly correlated with obtaining information about products as well as product purchase, use and disposal. In addition, they are associated with household production: means of consumption may come from the market or public sector and the household. Through consumer behaviour, consumers may achieve their goals and make their values a reality. Thus, consumer behaviour allows them to achieve satisfaction and well-being in view of short- and long-term effects as well as individual and social consequences. Consumer behaviour includes, therefore, all activities aimed at obtaining and using means of consumption to meet the diverse consumer needs, also taking into account the appropriateness of such decisions. This definition leads to the conclusion that the contents of consumer behaviour include consumer needs and the ways of obtaining, selecting and using means of consumption. In contrast, J. P. Peter and J. C. Olson (2002: 6-7) argue that consumer behaviour is a dynamic interaction between cognition/perception, conduct and environment, which leads to changes in different areas of individual lives.

In the literature dealing with these issues, three basic types of consumer behaviour are generally distinguished:

1) targeted towards money making, i.e. earning-related behaviour;
2) targeted towards obtaining means to satisfy needs, i.e. supply and production-related behaviour which consists of purchasing (market) behaviour and economic behaviour at the household level;
3) direct consumption (acts of consumption).

It should also be mentioned that determinants of consumer behaviour are marked by relatively strong change dynamics. As a result, many theories and concepts concerning consumer behaviour highlight three regularities (Pinson, Jolibert 2001: 25):

1) economic rationality is not always taken into account by consumers when making decisions on the purchase of goods;
2) consumer behaviour is not, however, random (it is difficult to present it properly by way of stochastic models);
3) consumer behaviour depends, among others, on innate and acquired needs, conscious and unconscious processes and rational and emotional factors.

Consumer choices in the light of neoclassical economics

Neoclassical economics[1], also known as marginal economics, is the dominant trend in economics of the 21st century, building on the classical economics achievements. The precursors of neoclassical economics were W. S. Jevons, A. Marshall and J. B. Clark, who advocated a mathematical analysis of economic processes and the use of the marginal utility theory. Contemporary achievements of neoclassical economics, considered as mainstream economics, are used in microeconomics to study market equilibrium. In order to explain behaviours of the economic man, neoclassical approach to the consumer is based on a set of axioms that – being unfalsifiable empirically – are assumed to describe the consumer and markets in a sufficiently realistic manner. The key assumptions of the neoclassical theory are:

1. Rationality of consumer decisions, meaning choices that maximise utility. Procedural rationality determines each choice, regardless of its objective importance for the well-being or its financial burden. Particularly important decisions are: those concerning the choice between leisure and work (affecting consumer income), the distribution of income between consumption and savings (defining

[1] Neoclassical economics comprises three mutually independent economic schools formed in the 1870s in England, Austria and Switzerland. The first one, bringing together researchers of Cambridge university centre in the UK, was continued by intellectuals in America. Hence, it is called the Anglo-American School. Its founder was William Stanley Jevons and an undisputed master of that approach was Alfred Marshall. The founder of the Austrian School, which was established at the same time at the University of Vienna, was Carl Menger. The school emphasised strongly the psychological conditions of human actions, hence the literature calls it psychological or subjectivist school. The third one was the Lausanne School founded by Leon Walras, who was associated with the University of Lausanne. The Lausanne School is also known as the Mathematical School due to an extensive use of mathematical methods in economics, or the General Equilibrium School because it considered equilibrium at a given moment in the whole economy and in all markets simultaneously.

current and future levels of consumption) and finally the choice of a specific basket of goods (the best in terms of preferences and constraints). As a matter of fact, the rationality postulate expressed as the maximisation (optimisation) principle of human actions means that the economic man is attributed the feature of hyper-rationality, i.e. full and true knowledge and the ability to process it and draw logical conclusions about the choices made.

2. Knowledge of products and information on transaction conditions are complete. The consumer is assumed to know, or be able to know, all market possibilities, along with price variety and specific uses of individual goods. Access to information does not require much time, mental effort or other scarce resources which would complicate the decision-making situation, with the assumption of free access to information. As aptly commented on these constraints by E. D. Beinhocker (2006: 51-52), neoclassical economics assumes incredibly smart people in unbelievably simple situations.
3. Real markets resemble a model of perfect competition where competition eliminates monopoly profits disrupting a competitive distribution of income. In the case of production concentration, market contestability is indicated as a factor ensuring that companies' behaviour does not differ significantly from the model of perfect or monopolistic competition.
4. Underestimation of previous experience made it impossible to avoid or minimise the consequences of certain adverse phenomena that have occurred in history, and also shortened the time frame of research.

The neoclassical theory of choice can be accused of an institutional deficit. According to S. Bowles and H. Gintis (1993: 84), L. Walras, when creating the foundations of the general equilibrium theory, used false assumptions, namely by treating markets as depersonalised entities, and the modern neoclassical theory supports this view. The theory eliminates people with their imperfections, emotions, interests and social baggage from economics. As a result, the maximisation principle together with the concept of equilibrium as a state desired by entities, markets and the economy mean that neoclassical economics was limited to a static, highly formalised analysis. Furthermore, the consumer behaviour analysis method does allow for explicit identification of the purpose of consumer actions or consumer beliefs. According to K. Popper's approach, the underlying rationality principle means acting appropriately to a situation, which neoclassical economics portrays as following the rules defined by conditions for maximising the utility function, which determines consumer preferences and the formal purpose of consumer choices. This approach stemmed from the belief that rationality is a concept not requiring any definition and that being considered as rational means as much as being considered reasonable, appropriate, and compliant with a recognised goal. This supposition seems to be justifiable to the extent that the capability of reasoning is often assumed to distinguish humans from animals. However, there is no consensus as to the nature of such capability.

In the context of the consumer behaviour theory, neoclassical economics uses the achievements of both cardinal and ordinal utility theory, based on the concept of *homo oeconomicus* developed by J. S. Mill. This concept assumes the rationality of consumer behaviour and refers to an individual consumer rather than a group or a whole community. It is based on three fundamental assumptions which show that consumers:

– have specific needs and can define them,
– are able to prioritise their needs,
– make market choices so that their needs are satisfied to a maximum degree.

The neoclassical theory of decision-making is based on the concept of expected utility first defined by D. Bernoulli[2] in 1738 and developed by J. von Neumann and O. Morgenstern in 1944. It is a normative theory of choice founded on a set of axioms of rational behaviour, assuming that acting in accordance with the rationality criterion must conform to the following rules:

1. Completeness (consistency, comprehensiveness) of preferences meaning that, making a choice between different combinations of goods, consumers can specify their preferences in relation to them. This is expressed as follows: $(x_1, x_2) \geq (y_1, y_2)$ or $(y_1, y_2) \geq (x_1, x_2)$ or $(x_1, x_2) \approx (y_1, y_2)$.
2. Reflexiveness of preferences meaning that each basket is considered to be at least as good as itself. In other words, reflexiveness means that two identical baskets of goods are not distinguished within the scale of individual consumer preferences. This is expressed as follows: $(x_1, x_2) \geq (x_1, x_2)$.
3. Transitivity of preferences, whereby consumer preference for goods x over y and y over z implies a preference for x over z. This is expressed as follows: $(x_1, x_2) \geq (y_1, y_2)$ and $(y_1, y_2) \geq (z_1, z_2) \Rightarrow (x_1, x_2) \geq (z_1, z_2)$. Note that transitivity is a simple property of continuity and is quite often applied to the "preferred over" and "as appealing as" relationships.
4. Insatiability of preferences meaning that the consumer always prefers more rather than less, hence prefers combinations of goods that provide more satisfaction to combinations ensuring less satisfaction. This is expressed as follows: (x_1, x_2) and $(\bar{x}_1, x_2)$, where: $\bar{x}_1 > x_1 \Rightarrow (\bar{x}_1, x_2) > (x_1, x_2)$.

The above rules, on the one hand, allow consumers to make choices that maximise their utility and – on the other – form the basis for determining normative rules of behaviour. However, the rejection of the social factor by neoclassical economics resulted in a significant limitation of its capacity to explain certain phenomena. As noted by R. J. Shiller, economists using neoclassical economics cannot understand the mechanism of speculative bubbles since they assume that the market is a place where

[2] D. Bernoulli began a quantitative analysis of the decision-making process in a situation of uncertainty and risk. In this context, when studying the so-called St. Petersburg paradox, D. Bernolulli formulated the principle of expected utility, whereby a participant of a game of chance chooses, from among options offered, a lottery with the biggest expected utility.

rational players take knowledge-based decisions and determine the rational value of goods (Żakowski 2009). In turn, D. Orrell (2010: 24-25) argues that the basic model of neoclassical economics does not represent an economy of human beings but an economy of gods as it assumes that people are highly rational and resistant to emotions. In view of the key assumptions of mainstream economics which are accepted by most economists: the economy can be described by economic laws, it consists of independent entities, is stable, rational and efficient, does not favour any gender, economic risks can be managed through statistics, D. Orrell (2010: 46) puts forward serious objections claiming that neoclassical economics is “like an air bag that works all the time, except when you have a car accident”.

The analysis of criticism of neoclassical economics contained in the literature suggests that changes should be mainly intended to:

- reject the assumption of rational individuals having all necessary information to make choices;
- take into account psychological factors and their impact on the behaviour of individuals, which would allow for making the assumptions realistic;
- abandon purely mathematical approach to economic research and take into account the achievements of social sciences (psychology, sociology, neurobiology), which would allow for inclusion of the social factor in the analysis as well as increasing the importance of qualitative analyses;
- extend the time frame of research.

In conclusion, it should be emphasised that the model of rational behaviour (*homo oeconomicus*) allowed economics for only apparent independence in describing and explaining economic phenomena and processes. The rationality criteria proved to be relative both in historical and civilisation terms and from the point of view of the very mechanisms of development and expansion of scientific knowledge. Observation of modern economics, both mainstream and beyond, may give an inspiration to seek specific solutions for the development of the economic theory in the set directions.

Consumer decisions in the light of behavioural economics

Behavioural economics is a branch of knowledge that links the attainments of economics and psychology. However, behavioural economics should not be confused with economic psychology. Behavioural economics essentially involves building on the achievements of psychology, sociology and neurobiology to explain behaviours and phenomena, where neoclassical economics fails. S. Mullainathan and R. H. Thaler (2000: 3-7) believe that neoclassical economics builds a world populated by maximalists who calculate and are devoid of emotions, known as *homo oeconomicus*. These authors express the view that thereby neoclassical economists have in a way defined themselves clearly as anti-behaviourists. Standard economic models are based on at least three unrealistic assumptions: bounded rationality, unbounded willpower and unbounded selfishness, which in their opinion are a perfect area for changes introduced by behavioural economics. In addition, they argue that behavioural economic research programme is composed of two elements: identification of cases in which behaviours differ from those assumed under the standard neoclassical economic approach and presentation of the role played by such behaviours in economics. In turn, C. F. Camerer and G. Loewenstein (2004: 3) argue that behavioural economics is essentially an attempt to make economic theories more useful by enhancing their capacity to explain and predict behaviours of individuals with more reliable realistic assumptions that take into account the social factor. According to J. F. Tomer (2007: 470-478), this behavioural paradigm differs from the neoclassical one in motives underlying the concept of economics as a science. He discusses some aspects in which differences are observed between the two trends. These are: narrowness, rigidity, intolerance, mechanicalness, separateness and individualism. Narrowness means that analytical methods or research scope are narrowed down. In turn, rigidity involves a strong attachment of research methods to the nature of an issue in question. Intolerance is associated with disrespect of research in the canon of a given discipline and hostility to alternative approaches to scientific practice. Mechanicalness is a characteristic indicating the degree to which behaviours of studied individuals, being subjects of an analysis, are treated as mechanical and pre-determined. Separateness is the degree to which a scientific school is separated from or non-integrated with related non-economic disciplines, mainly related social sciences. The last dimension of comparison relates to individualism meaning that individuals are the key subjects of analysis and different kinds of phenomena can be explained by reference to behaviours and characteristics of individuals.

The roots of behavioural economics go back to the psychological trend known as behaviourism, which focuses on the behaviour and environmental stimuli controlling it. This trend emerged and developed in the 1930s, with J. B. Watson and B. F. Skinner considered being its fathers. The term “behavioural economics” was first used in 1958. The emergence of the new behavioural economics dates back to 1979, when *Prospect Theory: An Analysis of Decisions under Risk* by D. Kahneman and A. Tversky was published. As rightly argued by M. Brzeziński, M. Gorynia and Z. Hockuba (2008: 208), the new behavioural economics is undoubtedly a trend that fits into the so-called reverse imperialism process, which has continued since the 1980s. In this framework, economics learns from, builds on, cooperates with and is sometimes gives in to other disciplines.

Within behavioural economics, there are two main trends representing almost mutually independent disciplines. The first of them developed on the basis of the study of behaviour, combining psychological research methodologies to examine behaviour with the wealth of theoretical economic knowledge. The second approach to research in behavioural economics focuses on the achievements of researchers such as D. Kahneman, A. Tversky and R. Thaler. Within this trend, research focuses on an analysis of deviations from rational behaviour. This internal division of behavioural economics has its main source in research traditions and developments in modern psychology. Of course, the boundaries between the two approaches are blurred to some extent and it is possible, though rarely, to find cross-references that are usually not devoid of criticism. As argued by J. F. Tomer (2007: 463-464), behavioural economics is not a homogeneous school, but a collection of different theories which include: the Michigan School (George Katona), psychological economics (C. F. Camerer, R. Thaler, E. Fehr), behavioural macroeconomics (G. Akerlof, R. Kranton), evolutionary economics (R. Nilson, S. Winter), behavioural finance (R. Schiller) and experimental economics (V. Smith).

Behavioural economics focuses on experimental results that indicate irregularities and deviations from the neoclassical theory, observed on the basis of individuals' behaviour. Moreover, by concentrating on biases and errors in decision-making, it shifts behaviour analyses towards psychological background all the more (Pesendorfer 2006: 712-713). According to N. Wilkinson (2008: 29-30), this does not mean that the current achievements of economics are rejected. On the contrary, a wide range of methods and approaches is used, based on two pillars: (1) classical economics and psychology and (2) numerous borrowings from other fields. Observations and experiments, often carried out with the use of computer simulations and cognitive abilities of the mind, lead to consilience of the behavioural economics concept.

Behavioural economics may provide a response to all gaps that emerged in mainstream economic theories including neoclassical economic theories. It encompasses a set of different assumptions which are linked by three common elements (Brzezicka, Wiśniewski, 2012: 27):

1) questioning the assumption about rationality of human actions (moving away from the *homo oeconomicus* model or attributing previously unknown decision-making capabilities to the economic man);
2) recourse to psychology in order to explain the complexity of human behaviour, especially in the face of crises, uncertainty, lack of clarity and difficulty;
3) contesting mainstream economic theories by examining anomalies and shifting away from simplified economic models.

The main area of interest in behavioural economics is the analysis of motives and principles of human action in complex and uncertain situations which often prevail in today's market. One of the most important concepts that have been developed within behavioural economics is the prospect theory, which has replaced the standard utility function of wealth by another function whereby gains and losses are attributed their perceived value. In the prospect theory, D. Kahneman and A. Tversky (1979) argue that people's decisions are influenced by emotions, attitudes, perceptual errors and a simulation context. In their view, the choices made by individuals are driven by heuristics that work well under normal conditions, but may lead to errors. According to them, people facing a specific decision search their memory for facts and situations that they might compare with the present moment. In their discussion, the researchers conclude that human attitude towards gains and losses may depend on the perspective (context) from which they are considered (prospect theory known as the reflection effect). As regards gains, the reflection effect refers to individuals preferring smaller but more certain gains to gains that are bigger and uncertain. As for losses, consumers tend to prefer bigger and uncertain losses rather than losses that are smaller but certain. According to D. Kahneman and A. Tversky, this dependence of choices on the context (manifesting itself as the reflection effect) proves the irrationality of individuals' decisions (Zaleśkiewicz 2008: 39). Currently, one of the most active representatives of behavioural economics is D. Ariely, who believes it to be based on a rejection of classical views about the rationality of consumer choices. According to D. Ariely (2010: 30-31), despite their best efforts, people are often incapable of making rational decisions due to cognitive biases.

Another theory forming part of behavioural economics is the behavioural life-cycle hypothesis presented by H. M. Shefrin and R. H. Thaler in 1988. This hypothesis is chiefly based on an analysis of actual, not only rational, human behaviour and is founded on three pillars:
– self-control theory,
– mental accounts,
– assumption that the way in which alternatives are presented is important in decision making.

The basis of the economic theory of self-control is the division of the psyche into two fundamental parts: a selfish and extremely short-sighted hedonist (doer) and an individual who calculates and plans in terms of a whole-life strategy (planner). This idea, which builds directly on the agency theory, is treated exclusively as an attempt to describe the issue of unstable preferences. It should be highlighted that H. R. Shafrin and R. H. Thaler (1988) assumed in their hypothesis that every human being acts as if two different individuals were fighting and coexisting in him or her. Thus, the hedonist has direct control over the level of consumption at a particular moment and his or her utility function is independent of the level of consumption in other periods. In turn, the utility achieved by the planner is closely correlated with the utility of each of the hedonists and remains within budget limitations. As a protection against the egocentric attitudes of hedonists, the planner must develop certain strategies to influence them. Otherwise, the short-sightedness of hedonistic activities could disrupt the well-being of other selves. Thus, the planner has two options for action: resort to willpower that is "force" the hedonist to behave appropriately, or refer to certain principles limiting the choice to be made by the short-sighted self. The assumptions made so far can, therefore, lead to a relatively important conclusion that the use of willpower is effective, but directly involves discomfort and reduced utility.

The self-control theory as one of the three foundations forming the basis for the behavioural life-cycle hypothesis assumes that consumers undergo an internal struggle because their preferences are inconsistent in time. The success of such actions is determined by how closely the actual situation will resemble the predictions of the life-cycle hypothesis as defined by A. K. Ando and F. Modigliani. Due to the costs entailed by the use of willpower (which arise in the case of self-limitation), the state assumed in the life-cycle model will never be achieved. The costs of the willpower use decrease as income increases, which results in a violation of the principle of proportionality. Their existence explains excessive vulnerability of consumption to unanticipated income variations and its strong dependence on current income. Inconsistent preferences in the long term and impossibility to ensure complete self-control lead to insufficient savings for old age.

In their hypothesis, H. M. Shefrin and R. H. Thaler (1988) distinguished three basic groups (accounts) known as mental accounts[3] to which households allocate their assets. These include current income, current assets and future income. Current income is understood as disposable income net of retirement savings rate. Current assets mean accumulated savings which are not part of the retirement funds. Future income includes income that will be achieved in the future and the funds accumulated for retirement. The behavioural life-cycle hypothesis assumes that the marginal propensity to consume for each of these accounts is different: current income is most at risk of depletion while such risk for future income is the lowest. The system of mental accounts introduced by H. M. Shefrin and R. H. Thaler can, therefore, be said to have shown that the marginal propensity to consume for the various groups depends on the type of account and is the highest (close to one) for current income, the lowest (close to zero) for future income and intermediate for current assets. Furthermore, according to the logic of mental accounts system, access to each of these accounts is different from a psychological point of view and any spending on current assets or future income leads to discomfort expressed as negative utility (i.e. consumer dissatisfaction). In other words, spending money from these accounts is more painful than in the case of current income. As a consequence, the utility resulting from initial spending of funds in these accounts is lower than the utility resulting from expenditure charged against the current income account.

To conclude, H. M. Shefrin and R. H. Thaler have proved that people perceive income, current and future assets of the same potential value in a different way depending on psychological factors, presentation of information, externally imposed rules or absence of such rules and internally developed principles for the purposes of interpretation of new phenomena.

[3] R. H. Thaler also introduced the term *mental accounting* concerning certain functions in the editing process. This specific metaphor of accounting was used by R. H. Thaler consciously in order to explain how consumers control themselves and evaluate and monitor their financial activities. Consumers create different accounts for different activities as done in accounting.

The system of mental accounts plays an important role when the source of such funds as a bonus and unexpected cash injection are taken into account (Thaler 1999). It should be pointed out here that the essential difference between a bonus and an unexpected cash injection primarily lies with the element of predictability. The bonus system may lead to an increase in the savings rate in two ways. A bonus is not considered by the consumer as ordinary income and is allocated to the current assets account. It should, however, be borne in mind that the marginal propensity to consume is lower for this account. Nevertheless, a transfer of a part of the monthly salary to the bonus reduces current income, which in turn translates to a reduction in current consumption. This is primarily determined by the way consumers themselves perceive these funds. As for unexpected cash injections, the marginal propensity to consume is higher than for ordinary income and also higher than the marginal propensity to consume for a bonus, which can be predicted. According to H. M. Shefrin and R. H. Thaler (1988), the marginal propensity to consume falls as the value of the income decrease goes up, which is logically connected with a change in its perception since it gradually ceases to be cash and becomes assets. This means a transfer from the current income account to current assets.

In *Identity Economics. How our identities shape our work, wages and well-being* published in 2010, G. A. Akerlof and R. E. Kranton make an attempt to expand the research field of economics to other social sciences, especially psychology and sociology. They seek to prove that "identity economics" is a new approach that explains consumer behaviour by incorporating social identities, norms and categories in economics (Akerlof, Kranton, 2010: 25). In their work, the researchers build concepts to explain a relationship between preferences and group identities and, consequently, suggest that the economic men's choices depend on the social context in which they exist, that is on standards of behaviour established there.

Conclusion

The discussion above may lead to the following conclusions:

1. The literature dealing with these issues defines the "consumer" in various ways as the discussion on this concept is undertaken by representatives of many fields of science: economists, sociologists, psychologists and cultural anthropologists, to name a few.
2. The diversity and variability of the consumer behaviour process result in a significant number of studies focusing on how individuals make decisions, allocating their available resources (time, money, effort) to different consumption-related purposes. Hence, the research in this area is interdisciplinary. Psychology emphasises individual aspects of consumer behaviour and endogenous determinants of individuals' behaviour. Sociology focuses on the analysis of relationships be-

tween consumer behaviour and social factors and an influence of external determinants. Economics, in turn, stresses rationality of decisions made by consumers. Generally, consumer behaviour is assumed to be a process consisting of activities related to obtaining and using products in order to satisfy needs of individuals.

3. Neoclassical economics seems to be highly formalised, inflexible and separate from the achievements of other social sciences, with a belief in a closed system of equilibrium and unrestricted individualism of a person.
4. Behavioural economics is based on the assumption that the model of a fully rational person is not consistent with reality. Individuals have partial knowledge of economic phenomena and cognitive constraints result in simplified rules of reasoning (heuristics) that drive their behaviours. According to P. de Grauwe (2011: 2-3), recourse to heuristics is not an irrational behaviour as such, but constitutes mental defence against the world that overwhelms us with data.
5. Behavioural economics will penetrate and enrich standard models based on rigid assumptions with more realistic behavioural attitudes of individuals.

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Konsument i jego zachowanie w ujęciu ekonomii neoklasycznej i behawioralnej

Streszczenie

Celem artykułu jest ukazanie, jak na przestrzeni rozwoju ekonomii jako nauki zmieniło się postrzeganie zachowań jednostek gospodarujących (w tym wyborów konsumentów) w modelu neoklasycznym i ekonomii behawioralnej. Struktura artykułu jest następująca. Po wyjaśnieniu roli konsumenta jako podmiotu gospodarującego, w dalszej części artykułu omówiono istotę i złożoności zachowań konsumenta. Następnie przedstawiono wybory konsumentów w ujęciu ekonomii neoklasycznej zaliczanej do ekonomii głównego nurtu oraz w ekonomii behawioralnej.

Słowa kluczowe: konsument, zachowanie konsumenta, ekonomia neoklasyczna, ekonomia behawioralna.

Kody JEL: D11

Artykuł nadesłany do redakcji w sierpniu 2014 r.

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