From Economic Behaviour to Behavioural Economics

Paula-Elena Diacon[1]

Abstract: Mainstream economics postulates the existence of an economic man endowed with rational and self-interested behaviour. The aim of this article is to analyze the relevance of this attributes, since the economic behaviour is, both, a form of human action and the object of the study of economics. Moreover, we go further with some particular objectives and examine the role of behavioural economics and the way in which it relates to the traditional model. The current events on the world stage have generated heated debates in the academic world with respect to the adequacy of the analysis of the economic models to reality. Thus, the 2007 financial crisis highlighted some lacks of the neoclassical model, which still dominates the economic analysis, and sent to a reconsideration of its foundations. We found out that, through a multidisciplinary approach, behavioural economics attempts to answer many of these shortcomings, by considering a broader analysis in the study of economic phenomena. Furthermore, the article shows how this field of study can increase the explanatory power of economics by providing it a more realistic psychological basis, given that the human behaviour is not only the subject of economics, but also of psychology and of the social sciences as a whole.

Keywords: economic behaviour; *homo oeconomicus*; mainstream economics; behavioural economics.

JEL Classification: B0; D01; D03

1. Introduction

The evolution of today's world economies, marked especially by the worst financial meltdown since the Great Depression, has generated a heated debate in the academic world regarding the adequacy of the analysis models of economic behaviour to reality. It also has determined a review of its interdisciplinary study and has caused a reconsideration of its fundamental bases. In other words, the present financial crisis has brought into discussion the need to rediscover that beyond any formal, mathematic and abstract model, economics is a social science (Diacon, 2012, p. 297; Diacon, Donici, Maha, 2013, pp. 27-28) having in its core point the man and his behaviour. Moreover, the latest developments in the fields of psychology and neuroscience made possible a better understanding of the human

[1] PhD Candidate, Doctoral School of Economics and Business Administration, Faculty of Economics and Business Administration, Alexandru Ioan Cuza University of Iasi, Romania, Address: 11 Carol I Blvd., Iasi, Romania, Tel.: +40232201000, Corresponding author: diaconpaula@gmail.com.

behaviour. In these conditions, behavioural economics, a new branch in the field of economics, developed mainly since the 1950s, has increased the interest of the specialists. The specialists try to understand economic decisions and behaviours with instruments mainly from psychology, but also from other social sciences (such as sociology, politics, anthropology, philosophy, biology, or neuroscience). In this respect, Davis appreciated that "behavioural economics only became a research stream in the mainstream via paradoxes in rational choice theory, though psychological theory has been around forever" (Davis, 2008, p. 59).

The aim of this article is to examine how behavioural economics can enhance the realism of the economic assumptions using psychological concepts, since the economic behaviour is both the object of the study of economics and a form of human action. Furthermore, the analysis takes into account how this sub-discipline relates with the neoclassical theory and the *homo oeconomicus* model of economic rational behaviour.

2. The Economic Behaviour: Object of the Study of Economics and Form of the Human Action

The mainstream analysis offers to the individual choice theory a predominantly quantitative point of view. In this vision, market behaviour is influenced by economic variables that can be easily measured and analyzed with mathematical operations and equations, i.e. the price and the quantity of the goods or services and the personal income. In addition, its basic principles, namely rationality, objectivity, efficiency etc., constitute a strong support. The neoclassical model shows that from a certain available income the individual will procure goods and / or services at a certain price on the market, in order to meet their needs. The subject of dispute and debate in the academic world is how he does it. It was assumed that the decision of the individual is objective and that he is perfectly rational and informed, being able to operate with mathematical models. He is also guided only by self-interest. Man follows his own individual utility function. In order to maximize his utility he must be able to mentally calculate and compare. These things have made from the *homo economicus* the perfect economic man. But what happens when the individual does not comply with these assumptions? When operating on the market, the real economic agent is conducted by more factors. Thus, the individual economic behaviour (as part of the human one) can be influenced by numerous elements (Cătoiu and Teodorescu, 2004, pp. 47-84). Generally, they are grouped into two categories: external and internal. The external factors which are related to the context or the physical environment, in which the individual operates, include the economic, demographic, socio-cultural, and religious aspects. The internal factors are related to the human psyche and comprise personality, motivation, learning, attitude etc. Anyway, many of the externally influences have become internalized. These behavioural determinants do not occur separately, but form an interconnected network, each determinant having a different degree of importance in various moments.

Anyway, what is most often criticized to the traditional model is the attribute of perfect rationality. Man is endowed with a rational principle that distinguishes him in the world. He has a native faculty to think logically, to know and to understand, to some extent, the meaning and the connection between phenomena. But this rationality (and everything related to all human nature), although perfectible, it can never be perfect, pure or complete. Not all the time the economic decisions are rational from an economic point of view. Furthermore, the actions that define economic behaviour are justified in the economic analysis in terms of two approaches: one is objective and rational (based on Cartesian rationalism, determinism and logical positivism) and the other is subjective and empirical (based on scepticism, relativism and culturalism). In time, the hypothesis of rational economic behaviour, which is based on the maximizing assumption, imposed in scientific circles. This was mainly due to its possibility to generate abstractions and to compress a high number of facts in a corresponding universal law or model like is *homo oeconomicus*. The rationalism and the objective, causal and a priori knowledge considers the comprehension of reality beyond the experience of the observer. Knowledge is gained a priori, independently of experience. In contrast, according to the empiricism and the subjective knowledge, the objective comprehension of reality is affected by the personal perception of the author. However, between these two diametrically opposed views, there is a synthesis performed by the philosopher Immanuel Kant, who argued in terms of a duality of the knowledge process. By invoking the transcendental element, the author proposes a reconciliation vision between subjective and objective, on one hand, and rational and empirical, on the other hand. This, because reason and experience are intertwined in the process of knowledge, they cannot be by their own exclusive way of it (Parthenay, 2008, pp. 26-34). The presence of the individual both as subject and object of the scientific knowledge influences the objectivity of economics and in this respect the remark of von Mises (1998, p. 21) is more than eloquent: “the objectivity of our science consists precisely in its subjectivity”.

3. Is *Homo Oeconomicus* a Reference for the Economic Behaviour?

The onset of the *economic man* or *homo oeconomicus* concept is sometimes associated with the classical period, especially with Adam Smith who in his book *The Wealth of Nations* referred to a sort of self-interested and rational economic behaviour. But Smith also proposed a complex psychological explanation of the individual economic behaviour especially in the *Theory of Moral Sentiments*. In his vision, man is both self interested and altruistic (a state that the author calls it sympathy). It is important to remark that Adam Smith, who has promoted the vision of self-interest as a natural inclination of the human being (which help men to pursue his own economic freedom and, thereby, to increase his earnings), did not deny the men's altruistic feelings and his moral condition - which have their source, according to the author, in "sympathy" (the individual's ability to imagine themselves in the situation of others) (Smith, [1759]2006, pp. 4-5). However, despite its classical roots, the *homo oeconomicus* model is a neoclassical construction. Both, the concept of individual rationality and self-interest, were significantly altered by the neo-classical school. Its representatives sought to reshape economics as a natural science, in order to give it a greater scientific rigor. They developed the concept of *homo economicus*, whose psychology was fundamentally rational and selfish: in his choices, the individual is guided by the alternative action that leads only to maximize its monetary benefits. In this view individuals seem to live mechanic, without having emotions or ethical principles. The model was built on the assumption that the individuals will attempt to maximize their utility in a rational, calculated, well-informed and self-interested manner. Since then, *homo oeconomicus* became a reference model in explaining economic phenomena and behaviours.

Homo oeconomicus has been widely criticized throughout time. The major accusation consists in the fact that the rationality premise is never encountered in reality, and that, despite the elegant decision models based on it, it is just an abstraction which does not capture the feelings that humanize behaviour such as "pride, lust, envy, anger, sloth, greed, selflessness and devotion" (Munteanu, 2001, pp. 124-125). Moreover, its purpose was to capture the reality and to be a replica of it, but it proved to be just the opposite - artificial and irrelevant in accordance of the real events. Some authors considered that the theory of rational choice (with the two major approaches proposed by it: internal consistency and follow-interest) is necessary but not sufficient (Sen, 2005, p. 190). Nevertheless, *homo oeconomicus* has enabled the development of economic theory because, although it neglects a lot of human characteristics, it incorporates those of the perfect economic actor that works to maximize its utility. In this sense, Milton Friedman stated that the economic agents do not take decisions following their optimization calculations, but they behave as they would have done this (Friedman, 1953 in Hausmann, 1993, p. 204). Aristotle states that the man has a rational principle. The human by its nature is endowed with consciousness, but it is complex and contradictory in the same time. Therefore, a need to (re)define the concept of rationality appears that sends us to the meaning of the term, as Stiglitz (2010, p.391) stated "what economists mean by rationality is not exactly the sense that most people give it". In a broad definition of rationality Simon argues that "almost all human behaviour is rational. People have reasons for the actions they undertake and, if asked, they may offer their opinions on these grounds" (Simon, 1995, p. 45). A rational economic decision in a common sense (supported by most economists) is described as one that is not only motivated, but also optimal in order to achieve a goal or solve a problem, knowing as much information as possible about the possible outcomes of the action and choosing the most appropriate means to achieve the purpose (Baciu, 2005, p.177).

Moreover, our century is one of information. Without doubt it is a digital one. The development of technology, especially of the Internet, has opened new perspectives in all aspects of life. We live in a world of information that changes with amazing speed, sometimes from day to day. Can we speak, in these circumstances, of a perfectly informed economic agent?

As Berg (2010, p. 867) explains, the hypothesis of unbounded self-interest is often described as one which holds that individuals only care about their own monetary rewards and are completely indifferent between the allocations of payoffs to different members in a group, as long as their own reward is constant. In present, the economists call into question this assumption and try to study the extent to which individuals pay attention to the general allocation of rewards among participants in a strategic interaction, which is encountered in the literature as the alternative hypothesis of social preferences. Some studies conducted in the branch of behavioural economics (for example the dictator game or the ultimatum game) pointed out that the individuals are not indifferent about the payoffs of others members in a group. This preferences requires both the existence of positive (pro-social) preferences (such as altruism etc.) and negative (hostile) preferences (such as spite, envy etc.). Both increases the psychic gain of the individuals and are forms of social preferences.

Thus, appears a need to shape a more human and emotional *homo oeconomicus*, and to underline that the common individual (that economics analyzes in an everyday decision making process) has not all the attributes given by the neo-classicists, but that he is also driven by intuition and emotions.

4. A New Age of Economics: Behavioural Economics

Behavioural economics is based on the assumptions regarding the human behaviour that reflect the presumptions, results and conclusions from economic and psychological studies along with the findings of other social sciences such as sociology, politics, anthropology, philosophy and biology. Because psychology recurrently examines human judgment and behaviour, it can provide important information about the human characteristics (that are different from those indicated in the traditional economic assumptions). Moreover, it aims to provide fair descriptive hypotheses about cognitive abilities and emotional responses of individuals in their economic decisions, considering in its analysis, both the institutions and the specific context of circumstances (Schwartz, 2007, p. 4). For example, its scholars claim even that the financial crisis started in 2007 is the result of an economic system built on a false premise. Traditional economics assumes that individuals are capable to take the most rational decisions and to make accurate economic calculations even when these must to be made on a short run. The reality is that people do not always take the best decisions, and, even more, they repeat the same mistakes over and over again. They do not know how to calculate risks of economic operations (sometimes not even on long run), and they are often emotionally motivated. There are also evidences that people are repeatedly and irrationally too confident (Arieley, 2010).

In 1950 the Nobel laureate Herbert Simon developed the idea of "bounded rationality" as an alternative for the hypothesis of the (unbounded) rationality and promoted the unification of psychology and economics (Simon, 1955). His theory incorporates the cognitive mechanisms of individual and tries to explain how people look for *satisfaction*, rather than to *maximize* their utility - as mainstream economics postulate. Moreover, the term of "behavioural economics" is generally associated with the pioneering work done by George Katona, who in his work *Psychological Analysis of Economic Behavior* distinguished between "genuine decisions" (made with a complete rationality) and "routine behaviour" (that is influenced by attitudes, habits, customs, etc.). (Katona, 1951) Another seminal work of the emerging area of behaviour economics is considered to be the prospect theory of Amos Tversky and Daniel Kahneman (Kahneman and Tversky, 1979). The authors show that the individuals compare the possible outcomes of different actions in relation to a reference point. Furthermore, when are faced with the possibility of loss, people reveal a higher sensitivity than for the gains - concept known as loss aversion.

However, behavioural economics originates in the works of the classics, a time when microeconomics was closely related to psychology. For example, Adam Smith, as it could be noticed, used psychological complex explanations of human behaviour in general and economic behaviour in particular, including references about fairness and justice. Also, Jeremy Bentham proposed psychological foundations for the concept of utility. The author equals utility with pleasure and disutility with pain. He clearly states that utility refers to the property of an object to produce "benefit, advantage, pleasure, good or happiness", or to prevent "mischief, pain, evil or unhappiness", to the individual (Bentham, [1823]2010, p. 12). Furthermore, even important neo-classical economists operated with suitable psychological explanations of economic behaviour. For example, Irving Fisher promoted the idea that the inter-temporal choice in markets (or the decision between the present and future consume) is determined not only by objective factors (which are characteristics of the income flow), but also by personal factors (namely foresight, self-control, habit, life expectancy, concern for the lives of others and fashion) (Thaler, 1997, p. 439).

Behavioural economics is therefore a branch of economics that challenges traditional economic assumptions and studies how people actually make choices every day. Behavioural economists seek to broaden and improve traditional ideas with decision-making models borrowed from psychology, and through its multidisciplinary approach. However, it abandons some traditional ideas, mainly the ones related to the foundation of the economic rationality in neoclassical design.

It analysis take into account that people are lead in their economic acts by their preferences (which are not stable in time), interests and emotions. Many of the studies conducted in the field of behavioural economists are based on the observation of some anomalies (or paradoxes) besides the standard model. This approach, on one hand, examines the issue in terms of the human limits (especially cognitive) underlying such behaviours (this research uses mainly laboratory experiments and produced convincing evidence that individuals react differently compared to the assumptions of the traditional theory) and, on the other hand, deals with how far the economic analysis must be adjusted to integrate these anomalies in theory and treat them as regularities (Camerer and Loewenstein, 2004, pp. 3-53). Anyway, many studies have demonstrated that, more than to use rationality, people use heuristics. These are rapid mental commands which usually involve focusing on certain aspects of a complex problem and ignoring others. They increase the probability to successfully perform a task, but may or may not lead to the correct solution.

Specifically, what are the differences between conventional economics and behavioural economics? Neoclassical economic analysis assumes that people are rational and seek to maximize utility. The standard economic model of human behaviour is based on three principal unrealistic characteristics (rationality, selfishness, and unlimited will) which are challenged by behavioural economics. If, on one hand, *homo oeconomicus* model is a powerful analysis tool, on the other hand, it has many shortcomings that can lead to unrealistic economic analysis and inconsistent policies. In these conditions, behavioural economics may help explain why people do not always behave selfishly, why they do not always act in the most economically or logical possible way, and why they assign a higher value to some objects than other objects that have the same real value. It therefore seeks to provide relevant answers to the non-selfish behaviours (such as altruism, justice, tastes, ethical spirit etc.), which have been quite enough ignored in traditional theory.

The ultimate goal of behavioural economics is to increase the explanatory power of economics with the help of a realistic psychological base, because human behaviour is not only the subject of economics, but also of psychology and social sciences as a whole. This belief does not imply a total rejection of the neoclassical approach - of the economic theory based on utility maximization, on equilibrium and efficiency. Neoclassical theory is useful because it provides a theoretical framework that can be applied to almost any kind of economic behaviour (and even non-economic).

The notion of rationality (or bounded rationality) has implications for public policy. For example, a study conducted by Eddy (1982 in Etzioni, 2011, p. 1111) in the field of decision making in education showed that most physicians (95 out of 100) “were unable to combine two probabilities to determine the accuracy of a mammography”. And in the literature are many other several studies which support the “liberal choice architecture”. This involve the creation of “organizational arrangements that help people make better choices - without requiring them to process information or learn to control their loss aversion or other emotions” (Etzioni, 2011, p. 1111).

The critics of the theory of behavioural economics and its sphere of application raise several objections (Rubinstein, 2006). One of these headlines the rationality of economic agents. It is argued that empirically observed behaviour has a limited application for policymakers and for market situations. For example, the cognitive theories, such as prospect theory, are not generalized economic behaviours. Another critique is that many of its hypotheses have only been tested in the laboratory, in the condition in which a given controlled environment can influence individuals' response. Moreover, when it comes to the method, a large part of this discipline is based on the observation of behaviour or its verbal expression protocol (as describing alternative fictive options) without any real consequence for the subject.

5. Conclusions

The final purpose of behavioural economics is to increase the explanatory power of economics by providing a more realistic psychological basis, given that the human behaviour is not only the subject of economics, but also of psychology and of social sciences as a whole. In the recent period it was proved that it is a great need for economics to return to its origins, to a more human and emotional economic man.

There is no reason for the economic theory to stop at the border of traditional barriers. Economics can improve and enlarge its explanatory basis and discourse. Behavioural economics is a growing field. But to become truly revolutionary, it must provide a critical insight and always be responsive on the aspects that it blames to the traditional economic theory.

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