



# Relation of Behavioural Economics and Human Nature

Keyi Qin

*imperial college london*

*\*Corresponding author. Email: 1716306367@qq.com*

## ABSTRACT

Theories in economics relates to understanding human activities in relation to prices, production, consumption and markets. Various laws of economics are based on assumptions like efficient markets and rational persons. Behavioral economics studies our day-to-day activities and identifies the reason behind the choices that we make and how we arrive at economic decisions. With the lens of behavioral economics, our inner biases, our consumption patterns and our decision-making approaches are understood. There is a strong relation of behavioral economics and human nature as theories of behavioral economics are created to study human nature in the context of economics. The purpose of this research paper is to study behavioral economics in context of Human nature and its relationship with human nature. The research methodology used in this study is descriptive research based on available journal articles and books based on this subject. Below are some of the aims and objectives of this research paper: To study the relation of behavioural economics and human nature. Application of behavioural approach in the field of economics and finance. Role of empirical data as well as conceptual formation in predicting human nature in behavioural economics. Contradiction between human nature and rational decision making. With the help of the literature related to this field, the relationship between behavioural economics and human nature is explained in this research paper.

**Keywords:** *Behavioural Economics, Rational Decision Making, Suboptimal Choice, Predicting Human Nature, Bounded Rationality.*

## 1. INTRODUCTION

There has been lot of research in the field of behavioral economics but very few of those research focuses particularly on the relationship between behavioral economics and human nature. This research paper will attempt to explain the relationship between behavioral economics and human nature. It will explain the application of behavioral approach in the field of economics and finance.

This research paper is based on secondary data obtained from journal articles and books related to behavioral economics. Research Methodology used in this research paper is descriptive research and the gap between the literatures in regards to relationship between behavioral economics and human nature is studied in this research paper.

The objective of this research paper is to understand the human nature as a concept that affects the social trends and thereby transforms the understanding prevailing in the world that effects the real changes. This paper will also study the application of behavioral

approaches in the field of economics and finance. With the help of empirical data and conceptual formation, the human nature prediction is studied from the context of behavioral economics. Human Nature, Choice making and rational decision making are related and contradicted with each other. The science of economics and the art of economics are studied together to determine were the behavioral economics stand in comparison to human nature. Economics is a social science, when it talks about human behavior and human nature, however, the science of choice-making and rational decision-making process is a science, hence the balance needs to be established between both of these, and the point at which this balance is arrived is theoretically an important aspect of study for this research paper.

## 2. ANALYSIS

### ***2.1. Human Nature and Behavioural Economics***

In Economic theories, the neoclassical view of the human nature can be deviated with the help of reasons that are responsible for actual changes. Since, there have

been various new developments in the field of behavioural psychology; there has doubts in regards to rational decision making and choice making process of an individual. The core rational calculations remain the same but some of the heuristics are added that simplify the basis on which human decisions are made. Due to these, the concepts like 'suboptimal choice' or 'bounded rationality' have emerged [1].

Traditional economic analysis presumes that people make rational decisions. However, in popular discourse as well as in certain other fields it is assumed that sometimes the people don't make optimal decisions/ and thereby they affect their own utility. Hence, in most of the social sciences, we can observe certain patterns of decisions that are sub-optimal in nature. Sub-optimal decisions arise because of two reasons:

People make mistake/error in prediction of utility that may be attained

People make choices based on some salient rules, those rules does not maximize utility [1]

Bounded Rationality is another term that has gradual increase in the acceptability in various models based on socio-economics in recent times. There remain difficulties in defining the rational decision and irrational decision [2].

## ***2.2. Application of Behavioural Approach in Economics and Finance***

Behavioural economics theory relies on experimentally revealed variations in the human behaviour from the version of human behaviour expected in accordance with neo-classical theories. These variations are known as cognitive biases. Till now, behavioural economics do not have a well-tested approach that can model the behaviour of various economic agents by considering the cognitive biases [3].

In the development of economic theories, there is a role of assumptions and it has also been based on scenarios of optimization, where the scarce resources with alternative uses are dealing with unlimited and recurring human wants [4]. It is also assumed that rational choices can lead to equilibrium situation. Although in this assumptions, human behaviour is over simplified, but it has helped in evaluating the market dynamics to a greater extent. However, the economic theory that is based on modelled thinking is considered deficient as it has inability to relate with the reality. Economic factors that are regular in nature, significantly differs from the economic model based on representative agent. Hence, the factors that are considered irrelevant are essential in analysis of financial markets [5]. Stock brokers and the traders are the practitioners that have known since long that investors do make biased decisions and then they also justify their poor choices. Still, academics continue

to remain sceptical in regards to the findings derived from this 'irrational' pattern of making decisions. Psychologists and economists that started to collect facts that are based on experiment, questionnaire or observation for several decades have findings in regards to empirical evidences that understand this element of human decisions [4].

Several studies are made to uncover the anomalies involved in the understanding of the heuristics. Various other groups have studied the primary question like how human beings perceive money as well as how it is utilized by them. For enriching our notion in regards to financial markets, we need to add human element into it. Eventually, economics, by giving attention to behavioural elements, could undertake a paradigm shift in its methodology. Richard Thaler [6] hopes this in this essay written by him named 'The end of Behavioural finance'. The cognitive psychology and its application enrich and inform the ways in which economists perceive the economic actors as well as markets as different institutions. Behavioural finance can provide practitioners and academicians with better perspectives in regards to its predictive and explanatory components of the fundamental question that – how individuals make decisions and make choices within the markets [4].

## ***2.3. Role of Empirical data and Conceptual Formation***

Behavioural economics studies the elements of psychology and economics that helps to understand the behaviour of people in the real world. It is different from the neoclassical economics as neoclassical economics makes assumptions in regards to individual being rational, well informed, has preferences that are well-defined and they make decisions based the preferences in their self-interest [7]. The concept of behavioural economics is to combine two subjects, economics and psychology together to understand the human behaviour in real world while taking economic decisions [7].

The grounds of behavioural economics are based on the empirical data of human behaviour which demonstrates that individuals do make sub-optimal decisions and their decisions are not always in line with what neo-classical economists considered as the rational or the optimal decisions, even though the individuals have all the information and the tools to make optimal decisions with them [8].

## ***2.4. Human Nature and Rational Decision Making***

Neo-classical economists assumed that human beings are rational, but with the advent of behavioral economics, the basic premise of rationality in human behavior is in question as humans don't always make rational decisions. There are various other concepts that we need to

understand the human behavior and decision-making process, they are:

**Availability Heuristic:** It is an idea which states that individuals often rely on information that is easy to recall, and not on the actual data, when the likelihood is to be evaluated of a particular outcome.

**Bounded Rationality:** It mentions that individuals have limit to their cognitive abilities, time and information and they don't always make correct decisions as per the views of economists, even though information is provided, it would take them towards taking a particular action. Even, the individuals cannot synthesize the new information in a quick manner as they ignore them and they go with their gut feelings or they have limited time to do full research of all available alternatives. Herbert A. Simon had coined this term in 1955 [9]. There are also certain concepts like bounded self-interest and bounded willpower, which explains sub-optimal choices are made by the individual in real life economic scenarios.

**Loss Aversion:** It is a concept that individuals are more averse to losses as compared to their eagerness to earn profits.

**Prospect theory:** There was series of empirical research conducted by Kahneman and Tversky in 1979 about asking hypothetical questions to individuals in the situations that involves losing or winning, in order to allow them to characterize their human behavior in economic parlance. Loss aversion is considered to be the key factor in prospect theory [10].

**Sunk Cost Fallacy:** It's an idea that individuals will keep investing in losing project only because they are invested heavily on it already, even though such decision may mean that they are risking towards more losses [8].

**Mental accounting:** It's an idea that individuals consider money as different in different circumstances. For instance, if gas prices go down, they may start buying premium gas rather than saving that advantage amount that occurred due to fall in gas prices [11].

Decision making process by humans are generally studied as the outcome that comes out after careful analysis and evaluation of various alternatives available in terms of their likelihood of occurrences and the value that gets associated with those outcomes. The decision made by human beings can be done so explicitly when the individual makes a conscious decision by combining the beliefs and the value associated in order to take a course of action. It can also be made implicitly when an individual relies more on ritualistic responses to make the decision often guided by traditions, habits or certain other things [12].

With the discoveries based on empirical evidences, the concept of maximizing utility, no longer remains at the core of the human rationality theory and thereby the

theory of bounded rationality is emerging as a replacement in the making choices and in its process. Still, there is a huge task to re-organize our view of social and economic processes and to craft new empirically sound theories by adding new facts. Even, new tools are required for conducting of empirical inquiry and for constructing the models that can be incorporated [13].

### 3. DISCUSSIONS

The characterization drawn about human nature through behavioral economics is in contrast to traditional economic theories that had treated individuals as mere rational actors that perfectly controls themselves and always keeps the long run goals in mind or they are the individuals who make occasional errors randomly that get cancelled out in the long term. Various principles have emerged from the study of behavioral economics and its research has helped economists to understand economic behavior of humans in better way. Behavioral economics is also linked with the subject of human psychology along with the economics; hence it is the hybrid subject that is composed of two subjects. With the help of behavioral economics principles, businesses and governments have devised policies that encourage individuals to make specific choices.

Rationality has been the assumption in almost all neo-classical economic theories. However, bounded rationality and various other terms like that are the subject matter of behavioral economics as mostly sub-optimal choices are made by the individuals rather than optimal choices as assumed in the concept of rationality. Also, there is a difference between rational thinking and rational behavior. An individual can be a rational thinker but still in certain places he may not adhere to the norms of rational behavior. Furthermore, rationality has a positive relationship with information and these two are linked, with more information, the decisions can be nearer to the optimal decisions. However, pure rationality cannot be expected from an individual as there is no concept of pure rationality in practical decision making, however it do have significance in theories.

Behavioral economics deals with economic decision making by the human beings. As we can see this decision making or choice making as a problem that needs to be solved. To solve this problem, human mind is governed with various programs that organize various simple information processes in an orderly manner and in complex sequences that adapt and respond to the task environment along with the data that is extracted through the environment to develop sequences. The secret to solve is the problem is that there are no secrets, it needs to be done through various complex structures of simple as well as familiar elements to learn the decision process and this learning keeps adding [14].

From the point of view of Rationality, [14] Simon states that, the choice making is a process that selects an alternative behavior for each moment. For that, possible alternatives are to be selected, their consequences are to be evaluated and the consequences of each alternative are to be compared. To determine the consequences of the decisions that are taken are too complex as for that we need to know the actions that other human beings and firms will take. Hence, with the logic of the limits to rationality, it is not possible for an individual to attain high rationality in decision making [15].

#### 4. CONCLUSION

Human Nature is too complex, subjective and has various nitty-gritty involved in it that is like a puzzle that is too complex to solve. Economics and human psychology meet at crossroads and that cross-road is 'Behavioral Economics'. There is significant importance to study the human nature in behavioral economics and it is found that human beings act in such a way that they do not always make optimal economic choices as assumed by neo-classical economists. Hence, the sub-optimal choices are made and that is not in accordance with the concept of 'Pure Rationality', so pure rationality is an ideal theoretical concept that is considered as one of the assumptions in almost all the major theories developed by neo-classical economists. However, in behavioral economics, we study bounded rationality and certain terms related to it as pure rationality is not feasible to be attained. Also, as Simon stated, the secret to solve problem is no secret, hence there has to be complex human process that individuals go through before making choices and before making decisions. These patterns can differ for different individuals and it cannot be combined together in the form of rules or standards. As Economics is a social science and has relation with human psychology, it cannot have rigid laws/rules that are likely observed in pure sciences.

#### ACKNOWLEDGEMENTS

This scientific research paper has been accomplished with the guidance and support of my supervisor and professor. The concepts of behavioral economics, human psychology and human nature have been applied in economic parlance in this research paper. This paper has been prepared for the subject 'Behavioral Economics' and has helped in furthering the learnings of this course in depth.

#### REFERENCES

- [1] Hsee, C. K., Rottenstreich, Y., & Stutzer, A. (2012). Suboptimal Choices and the Need for Experienced Individual Well-Being in Economic Analysis. IZA Discussion Papers .
- [2] Ballester, C., & Hernandez, P. (2012). Bounded Rationality. *Revista Internacional De Sociologia* , 27-38.
- [3] Shastitko, A. (2017). Behavioral Economics: Application of the Methods of Cognitive Psychology to Economics. *Social Sciences* , 142-151.
- [4] Kuriakose, F. (2017). Behavioural Finance: Beginnings and Applications. SSRN .
- [5] Thaler, R. H. (2015). *Misbehaving: The Making of Behavioural Economics*. New York: WW Norton & Company.
- [6] Thaler, R. H. (1999). The End of Behavioural Finance. *Financial Analysts Journal* , 12-17.
- [7] Mallard, G. (2017). *Behavioral Economics*. Newcastle upon Tyne : Agenda.
- [8] Young, S. (2018). *Behavioural Economics*. New York: Taylor & Francis Group.
- [9] Godelier, M. (2014). *Rationality and Irrationality in Economics*. Atlantic: Verso.
- [10] Teversky, A., Shafir, E., Lewis, M., & Kahneman, D. (2018). *The Essential Teversky*. Cambridge: The MIT Press.
- [11] Hashtings, J. S., & Shapiro, J. M. (2012). *Mental Accounting and Consumer Choice: Evidence from Commodity Price Shocks*. Cambridge: Mass: National Bureau of Economic Research.
- [12] Cabrales, A., Kernohan, D., & Garza, P. B. (2015). *Experimental Economics: Economic Desicions*. Hampshire: Palgrave Macmillan.
- [13] Simon, H. A. (2000). Bounded Rationality in Social Science Today and Tomorrow. *Mind & Society* , 25-39.
- [14] Simon, H. A. (1979). Rational Decision Making in Business Organizations. *American Economic Review* , 498-513.
- [15] Simon, H. A. (1947). *Administrative Behavior: A Study of Decision Making Processes in Administrative Organization*. New York Fress Press .

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

