

An Overview of Behavioral Economics

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Abstract: Behavioral economics is an interdisciplinary discipline that integrates psychology, sociology and mainstream economic theory, focusing on the study of irrational human behavior in economic activities. The emergence of this discipline is partly due to the limitations of traditional economic theories in explaining certain real economic phenomena, especially those seemingly "irrational" behaviors. In order to fill this theoretical gap, some forward-looking economists have begun to introduce the findings of psychology and sociology to explore the various factors that influence people's economic decisions, including cognitive biases, emotional influences, social norms and psychological drives. The development of behavioral economics has not only enriched the theoretical system of economics and provided a more realistic model for explaining economic behavior, but also provided new perspectives and tools for economic policy making and market analysis. Through in-depth investigation of human "irrational" behavior, behavioral economics emphasizes the complexity of human nature in the process of economic decision-making and promotes the transformation of economics into a more comprehensive and humane development.

Keywords: Behavioral economics; economists; irrationality; preferences

1. Introduction

Behavioral economics delves into the study of human decision-making, examining the irrational aspects that deviate from traditional economic models. Integrating insights from psychology and economics, it provides a nuanced understanding of behavioral patterns that shape choices in various contexts. This interdisciplinary approach not only sheds light on individual decision processes but also offers valuable perspectives for improving market dynamics and informing effective policy interventions. The exploration of cognitive biases, emotional influences, and social factors in economic behavior distinguishes behavioral economics as a vital field, contributing to a more comprehensive comprehension of human actions and facilitating the development of innovative strategies in economic and policy domains.

2. Origins of Behavioral Economics

In the early explorations of economics, classical political economists had already noted the close relationship between human psychology and economic action. In his works *The Wealth of Nations* and *The Theory of Moral Sentiments*, Adam Smith analyzed in depth how human psychology affects economic behavior. Similarly, scholars such as Bianchin pointed out the important role of psychological factors in economic decision-making. He argues that when faced with choices, people seek utility, i.e., the level of psychological satisfaction, and this level of satisfaction directly affects the effectiveness of their decisions.

In the emerging field of behavioral economics, Herbert Simon's 1978 Nobel Prize in Economics was a milestone in the early formation of the discipline. Simon's concept of "limited rationality" challenged the traditional assumption of "rational man" in economics, pointing out that people are limited by information, time and cognitive ability in the decision-making process, and therefore usually seek a "good enough" rather than an optimal solution.^[1] It is pointed out that people are limited by information, time and cognitive ability in the decision-making process, and therefore usually seek a "good enough" rather than an optimal solution. This viewpoint explicitly refutes the mainstream economics presupposition of complete rationality, and Becker (2009), in his book *The Economic Analysis of Human Behavior*, suggests that economics has entered a new phase in which all human behaviors and their decision-making factors are included in the scope of the study.^[2]

Behavioral economics is an interdisciplinary field that integrates the theoretical insights of psychology and sociology with the analytical framework of classical economics, focusing on the study of irrational human behavior in the economic decision-making process. Its purpose is not to completely reject the assumption of "rational man" in classical economics, but to add that in the real world, individual economic decisions are often influenced by various irrational factors. Behavioral economics reveals how people, with limited information, cognitive biases and emotional influences, make decisions that are not in line with the expectations of traditional economic theories, and aims to provide a more comprehensive and accurate understanding of human economic behavior.

3. Current status of foreign research

On the micro side, behavioral economics provides an in-depth analysis of decision-making behavior in risky decision theory and game theory, emphasizing the possibility of systematic deviations from expectations in decision-making behavior in uncertain environments. This deviation stems from the individual's judgment of the surrounding environment, which does not always follow the standard of rationality assumed in traditional economics. Prospect theory, introduced by Kahneman in 1981, is a key development in behavioral economics that challenges expected utility theory and aims to more accurately describe people's actual behavior in the face of risk.^[3] Prospect theory reveals people's nonlinear preferences in evaluating gains and losses, in particular, the risk preferences exhibited in the face of potential losses versus the risk-averse behavior in the face of potential gains, which is different from what is portrayed in traditional theory. By introducing concepts such as reference point, loss aversion and probability weighting, prospect theory is closer to reality and can more accurately describe individual economic behavior under risky conditions, providing a theoretical basis for explaining many phenomena that cannot be solved by traditional economic theories.

Behavioral economics deepens our understanding of the economic decision-making process by revealing the psychological mechanisms behind human behavior. Thaler's theory of mental accounts (1980) states that people will handle the same amount of money differently in different situations because of the anchoring effect and the existence of mental accounts.^[4] This suggests that people's economic decisions are not always based on rational assessments of absolute values, but are influenced by psychological factors of how these values are framed. Kahneman (1986) showed that there is a significant difference in people's evaluations of gains and losses, and that the perception of this asymmetry in gains and losses is of great significance in a number of fields of economics and in related policy making.^[5]

The practical applications of behavioral economics have shown that the theories in the field not only help to explain and predict economic behavior more accurately, but also provide effective strategies and solutions for solving practical economic problems, such as commodity pricing and the phenomenon of market overreaction. These research results reflect the significant value and prospects for widespread application of behavioral economics at both the theoretical and practical levels.

4. Status of domestic research

The introduction and development of behavioral economics in China has gone through a transition from preliminary understanding to in-depth research. It was not until 2002, when the Nobel Prize in Economics was awarded to behavioral economists, that Chinese scholars began to study behavioral economics in a more systematic way, and the relevant literature gradually became more abundant. Since 2006, Chinese scholars have begun to explore the theories and applications of behavioral economics applicable to the socio-economic environment with Chinese characteristics (Huang, Zuhui, and Hu, Bao, 2003).^[6] Before 2006, Chinese scholars mainly focused on summarizing the development history and theoretical lineage of behavioral economics, and after that, national scholars began to develop behavioral economics applicable to China's development. He Jingtong (2007) explored the "short-term loss aversion and the mystery of the stock premium" by applying the prospect theory of behavioral economics, which shows that Chinese scholars have begun to try to apply the classical theories of behavioral economics to explain specific phenomena in the Chinese market.^[7] The research and application of behavioral economics by Chinese scholars have demonstrated significant progress in theoretical innovation and practical application. By combining international economic theories with China's unique socio-economic environment, Chinese scholars have not only enriched behavioral economics theoretically, but also demonstrated its ability to solve China's economic problems in practice. Cross-cultural and interdisciplinary research has led to a gradual increase in China's influence in the field of behavioral economics, and has made a positive contribution to the development and application of global

economic theory.

Overall, these studies not only demonstrate the achievements of Chinese scholars in theoretical exploration and practical application, but also reflect the important role of behavioral economics in solving practical economic problems and promoting the development of economic disciplines. With more cross-sectional and empirical studies, it is foreseeable that behavioral economics will provide more theoretical support and practical guidance for the economic development of China and the world in the future.

5. Brief Overview

The applications of behavioral economics span a wide range of fields, from consumer decision-making and individual behavior analysis to market and business behavior, showing its broad reach and application. These studies reveal how behavioral economics provides a deeper understanding and explanation of human behavior by combining psychological research and economic principles.

In terms of consumer decision-making, Ariely in his 2008 book *Predictably Irrational* delves into the irrational consumer behavior people exhibit in shopping, investing, etc. Through a series of experiments and analysis, he reveals that people tend not to adopt the optimal solution even when faced with obvious choices.^[8] Through a series of experiments and analyses, he reveals a consistency bias in people's decision-making process, which tends not to take the optimal solution even when faced with obvious choices. Ariely emphasizes that this irrational behavior, though seemingly random, is actually predictable. From the perspective of behavioral economics, Sun Minghui (2022) deeply analyzed the development history of the blind box economy and the current market situation of the book blind box, and found that the book blind box marketing stimulates consumers' purchasing behavior by creating the experience of expectation and surprise.^[9] The marketing mechanisms of book blind boxes, such as limited edition and thematic diversity, further enhance the attractiveness of the product. Cao Jie (2020) introduced behavioral economics into the analysis of tax reform and tax policy, and put forward optimization suggestions including tax rate structural adjustment, improving tax transparency, and adopting behavioral guidance strategies.^[10] Research in behavioral analysis of actors demonstrates how behavioral economics can deeply explore and explain human decision-making processes in different life domains and the psychological mechanisms behind them. By applying these concepts to specific cases, the research not only makes the complex theoretical content easier to understand, but also provides practical guidance for people to improve their decision-making behavior.

In terms of markets and firms, Camerer (2011) has explored in depth the irrationality of market behavior and individual decision-making processes through experimental economics.^[11] One of the highlights of his research is the "Leaf Grid" experiment, which simulates the formation and bursting of capital market and price bubbles, reveals how market participants make decisions in the absence of complete information, and demonstrates the formation mechanism of market bubbles and its impact on organizational culture. In addition, using a neuroeconomics approach, Camerer explores the patterns of brain activity during the decision-making process through a neuroscience imaging study of gaming behavior, providing a new perspective for understanding the biological basis of human decision-making behavior. Ye Dezhu, Wang Cong et al. (2010) proposed a hyperbolic discounting model based on the behavioral economics theory of time preference, which is particularly important for understanding how people assess the present value of future earnings, especially in explaining market anomalies, such as why people tend to over-discount future earnings, leading to short-sighted behaviors, and thus explaining some market behaviors that are difficult to explain by traditional economic models.^[12] By introducing hyperbolic discounting, these studies provide a theoretical basis for understanding the irrational tendencies of individuals in the face of long-term investment decisions, which in turn provides more in-depth explanations for various phenomena in the financial market, including asset pricing and consumer behavior. Song Chaoying (2010) used behavioral economics to explore the formation and bursting process of real estate bubbles.^[13] He pointed out that irrational behaviors, such as excessive optimism and the herd effect, play an important role in driving the formation and bursting of real estate bubbles. This study provides important insights into understanding the dynamics of the real estate market and provides theoretical support for the formulation of relevant policies to prevent the formation of future bubbles. Dingding Wang (2012) used the framework of behavioral economics to explain economic behavior and provided a large amount of data, and then developed a finite rationality model to explain cooperative behavior, which is widespread in nature, thus providing a new framework for understanding complex social and economic interactions.^[14] Li Yan and Yang Sen (2018) studied the decision-making process of miners' unsafe behavior from the perspective of behavioral economics. Their work provides

an in-depth understanding of miners' behavioral decision-making in high-risk environments, providing a scientific basis for improving work safety conditions and reducing accidents.^[15]

These studies have not only enriched the theoretical system of behavioral economics, but also provided practical tools and strategies for policy making, business decision making and individual behavior improvement, reflecting the wide applicability of behavioral economics in theory and practice.

6. Conclusions

The rise of behavioral economics can be seen as a major expansion and challenge to the rationalist framework of traditional economics. For a long time, traditional economic models often rely on the assumption of "rational man" when analyzing and predicting human behavior, i.e., people are always aiming at maximizing their own interests, and are able to make completely rational decisions. This assumption is based on the Newtonian model of physics and Cartesian philosophy, and pursues a mathematical and axiomatic scientific ideal. However, this idealized model often seems inadequate in explaining complex human behavior and socio-economic phenomena. The emergence of behavioral economics is precisely a reflection and response to this purely rational and scientific ideal. By introducing research results from psychology, sociology and other disciplines, it emphasizes that human decision-making behavior is constrained by a variety of factors, such as cognitive limitations, emotional influences, and social preferences, thus providing a framework for economic analysis that is closer to reality. This framework not only breaks through the time and the closedness of the disciplinary field of traditional economics, but also makes the analysis of economics able to cover the complexity of the real world more comprehensively by examining the social and psychological background of individual behavior. Behavioral economics is thus regarded as a historical necessity, which responds to the intrinsic laws of scientific development and the evolution of human society and civilization, especially at a time when multidisciplinary cross and integrated research is increasingly becoming a trend of scientific progress. The development of this emerging discipline has not only enriched the theory of economics and broadened its research horizons and methodology, but also brought about far-reaching impacts on policy making, corporate decision making and even personal life. Through a more realistic understanding of human behavior, behavioral economics helps to construct more effective economic models and strategies to cope with various economic and social challenges in modern society.

The development of behavioural economics has indeed marked a "behavioural revolution" in the field of economics, which has not only expanded the boundaries of the study of economics, but also deepened the understanding of human behaviour and the economic decision-making process. By combining economics with the research results of psychology, sociology and other disciplines, behavioral economics has injected new vitality into the traditional economic model, emphasizing the complexity and diversity of human nature in the central role of economic activities. Behavioral economics emphasizes the concept of "human being as the main body", which indeed provides a brand new perspective for the study of economics, making economics no longer just a study of the market and price mechanism, but a discipline that explores the psychological and social factors behind the economic behavior of human beings. This transformation makes economics more humane and closer to real life, and helps construct more comprehensive and accurate economic theories and policies. In applying the research methods and theoretical framework of behavioral economics, it is indeed necessary to take into account the specific socio-cultural and economic context. For China, it is undoubtedly a challenging but extremely important task to combine the basic principles of behavioral economics with China's unique socio-economic environment to analyze the behavioral characteristics of Chinese people and the laws of economic activities. This cross-cultural research approach can not only help us better understand Chinese economic phenomena, but also provide a scientific basis for formulating more effective economic policies and management strategies. With the further integration of economics and psychology and other disciplines, we can expect that economics will pay more attention to the study of human behavior and psychological mechanisms in the future, which will in turn guide economic practice and policy making more effectively. Such interdisciplinary exchanges and cooperation will make economics not only a science of wealth, but also a science of how human beings realize personal and social well-being through economic activities.

References

- [1] Herbert A, Simon, Zhan Zhengmao. *Managing Behavior*[J]. *Successful Marketing*, 2004 (7): 48-48.
- [2] Becker G S. *Human capital: A theoretical and empirical analysis, with special reference to education*[M]. University of Chicago press, 2009.

- [3] Tversky A, Kahneman D. *The framing of decisions and the psychology of choice*[J]. *Science*, 1981, 211(4481): 453-458.
- [4] Thaler R. *Toward a positive theory of consumer choice*[J]. *Journal of economic behavior & organization*, 1980, 1(1): 39-60.
- [5] Kahneman D, Knetsch J L, Thaler R. *Fairness as a constraint on profit seeking: Entitlements in the market*[J]. *The American economic review*, 1986: 728-741.
- [6] Huang Zuhui, Hu Bao. *A New Branch of Economics: A Review of Behavioral Economics*[J]. *Zhejiang Social Science*, 2003, (02): 70-77.
- [7] He Jingtong, Na Yi. *Inheritance rather than subversion: from classical and neoclassical to behavioral economics*[J]. *Nankai Journal (Philosophy and Social Science Edition)*, 2007, (02): 122-130.
- [8] Ariely D, Jones S. *Predictably Irrational*[M]. New York: HarperCollins, 2008.
- [9] Sun Minghui. *Behavioral Economics Analysis and Optimization Development Path of Book Blind Box Marketing*[J]. *Publishing and Distribution Research*, 2022, (08): 20-26.
- [10] Cao J. *Policy Optimization of Alcohol Consumption Tax under the Perspective of Behavioral Economics*[J]. *Taxation and Economic Research*, 2020, 25(06): 24-32.
- [11] Camerer C F. *Behavioral game theory: Experiments in strategic interaction*[M]. Princeton university press, 2011.
- [12] Ye Dezhu, Wang Cong, Li Donghui. *Advances in time preference theory in behavioral economics*[J]. *Economics Dynamics*, 2010, (04): 99-103.
- [13] Song Chaoying, Yan Aili. *Irrational Behavior and the Formation of Real Estate Bubble in Dubai- An Analysis Based on Behavioral Economics Perspective*[J]. *Business Research*, 2010, (06): 6-8.
- [14] Wang, Dingding. *Behavioral economics and the generalized choice operator--an introduction to Lecture Notes in Behavioral Economics*[J]. *Social Science Front*, 2012, (02): 67-74.
- [15] Li Yan, Yang Sen. *Simulation analysis of miners' unsafe behavior under the perspective of behavioral economics*[J]. *China Production Safety Science and Technology*, 2018, 14(01): 18-23.