



Research on the Theoretical Framework of Behavioral Economics and Evaluation

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Abstract. The so-called behavioral economics “refers to the economic theory that takes human behavior as the basic research object. It conducts regular research on the economic behavior characteristics of individuals and groups through observation and experimentation. It constructs theories based on reality, “thus getting rid of the shackles of traditional theoretical analysis methods based on abstract assumptions and often unrealistic assumptions”, and injects vitality and vitality into economic research. Behavioral economics advocates and pays attention to the study of human economic behavior, constructing a theoretical framework for modern economics that is “full of humanity and human value”, making economics a science of human beings, and human beings as the main body of economics. “This value orientation achieves the organic integration of science and human nature,” it is a “behavioral revolution” in economics, and “it is also a concrete manifestation of the humanistic spirit of economists.” This paper expounds on the motivation, research content, and research methods of behavioral economics, and makes a brief comment on behavioral economics.

Keywords: Behavioral Economics · Economic Behavior · Experimental Method · Humanism · Humanized Development

1 Introduction

As an interdisciplinary discipline, behavioral economics combines psychology and economics, and plays an important role in understanding how psychological activities affect human economic decisions. The emergence of behavioral economics has challenged the traditional economics based on the hypothesis of the “rational man” and effectively corrected the defects and deficiencies existing in the traditional economic theories and models. In recent years, the study of behavioral economics has made great progress. Behavioral economics theory has moved from the edge of the stage of economics to the center, allowing people to analyze and understand the human factors and their influence on economic activities from more angles. This paper wants to explore the theoretical framework of behavioral economics and its influence on people. The main content of this paper is the formation of behavioral economics, research content, research methods and evaluation conclusions. The main research methods in behavioral economics are about observation method, survey method, and experimental method.

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2 The Reason for the Emergence of Behavioral Economics

Behavioral economics is an economic theory that takes human behavior as its basic research object. It studies the characteristics of individual and group economic behavior by observation and experiment. Behavioral economics largely adopts the methods of psychoanalysis to study people's economic behaviors. Behavioral economics argues that mainstream economics has for half a century based its theories on the dull assumption that people behave by rational, unemotional self-interest. There is another side of human nature, that is, there are emotional, irrational, concept guiding elements in human nature. Human life experience and social practice show that altruism, social consciousness, justice pursuit and other qualities and concepts are also widespread. Otherwise, it cannot explain contemporary social phenomena such as volunteerism and the environmental movement, excessive dedication and devotion, and many "non-material" or "non-economic" motives in human life. People themselves are not so "rational", and therefore economic activity is not so "rational". For example, the stock market does not respond to the reality of a company, but the emotions of investors. However, people's "superficial" thinking, psychological setting and environmental influence often lead to irrational mistakes.

The economic analysis of human behavior can be traced back to Smith's classical economic theory. Smith used this method to analyze the behavior of the "economic man", but he simply understood the individual's economic behavior as making money or profit. In the 1960s, Keynesians argued that governments could stabilize economies and end recessions by tweaking tax and fiscal policy, but they coined a new term: stagflation. Since the 1970s, monetarist assertions, the rational expectations school, and post-Keynesians have all had a fashionable theory, but real-world experiments have failed to deliver the desired results. Even supply-side predictions, based on the Yang Zheng [1], that lower taxes would eliminate the deficit has failed.

Why do traditional mainstream economies face such difficulties? The key to the problem lies in the deviation of the understanding of human behavior and the positioning of the simplification, mechanization, and empty shell of human behavior. When dealing with economic problems, traditional economic scholars frequently regard human behavior as mechanical, or focus on quantitative analysis of capital, resources, markets, price, interest, unemployment, and other factors while ignoring the study of human behavior and psychological effects of economic phenomena. Renowned psychologists Peng Gang [2] and Zhao Lingyun [3] have emphasized that: People's behavior is not only driven by interests, but also influenced by a variety of psychological factors, such as instinct, prejudice, discrimination and jealousy by Levinson [4] But these factors have been intentionally or unintentionally abstracted from traditional economics. Therefore, in reality, many abnormal phenomena cannot be explained by traditional theories, and at the same time, great errors often appear in economic forecasting. Under such circumstances, economists have to find a new way to make their theories fit reality better. A group of western economists cast their research perspective behind economic phenomena, trying to discover the active subjective and psychological factors affecting economic phenomena. Therefore, the behavioral economic theory based on the organic combination of psychological analysis and economic operation rules comes to the fore.

The rise of behavioral economics is no accident. In traditional economic thought, behavior analysis occupies a very important position. For example, the concept of “utility” in neoclassical economics is a psychological and behavioral science term. The “three psychological laws” (diminishing marginal propensity to consume, diminishing marginal propensity to invest and flexible preference), which are the cornerstone of Keynesian macroeconomic theory, are purely psychological and behavioral sciences. According to A. Rees, 1968, “Economics is a social science that studies people and society to seek material needs and desires.” L. Robbins, 1962 argues that “economics studies human behaviour within the relationship between goals and scarce means with multiple uses.” A. Marshall, 1962 points out that “much can be learned from the study of behavior in the study of desire.” E. J. Stigler, 1987 also emphasized that economics “analyzes primarily on people, who in turn are influenced by the practices and policies we analyze.” Under this kind of ideological understanding, and when traditional economics is faced with difficulties, behavioral analysis attracts many scholars with unprecedented charm, which makes behavioral economics come into being and develop.

3 The Study of Behavioral Economics

The research object of behavioral economics is economic behavior, the so-called economic behavior, in the view of economists should be “the decision-making behavior and choice behavior that people make between two kinds of scarce resources to achieve satisfactory utilization”. It is worth noting that is a narrow definition. Although behavioral economists acknowledge that “determining general principles of human behavior is important”, “the most immediate goal is to understand and predict economic processes occurring in a given situation and at a given time”, research interests specific economic behavior refers to specific economic behaviors such as production, distribution and consumption under a given condition.

3.1 Consumer Behavior

Traditional economics puts forward that “consumption expenditure is the function of income” under the same income condition, people will spend the same proportion of income, once income is determined, the total consumption can be accurately predicted. According to behavioral economics, the problem is not so simple as. Consumption expenditure is not only restricted by the amount of income, but also a function of consumption intention, which is influenced by consumption motivation and attitude.

3.2 Advertising Behavior

The purpose of advertising is to change consumers’ consumption attitudes, control their consumption intention, and promote consumption. At present, behavioral economics mainly studies the interaction of affective and cognitive factors in changing consumer attitudes. At present, advertising industry combines rational advertising with emotional advertising, combines rational appeal with emotional appeal advertising strategy, in order to achieve better advertising effects. In fact, this is the specific performance of behavioral economics research results.

3.3 Entrepreneurial Behavior

The current research focuses on decision-making behavior. Traditional economics regards entrepreneurs as fully rational economic people and puts forward the decision making principle of “maximizing value with minimum cost”. Behavioral economics is adopted by H.A. Simon of the ideas of the “bounded rationality”, thought to the reality of entrepreneurial activity environment characterized by uncertainty and incomplete competitive and impossible to obtain the maximum value, minimum cost information, can only be based on limited information seeking the biggest gap between value and cost, seeking satisfaction decisions.

4 Research Methods in Behavioral Economics

Traditional economics constructs mathematical or econometric models by using mathematical tools through theoretical abstraction and hypothesis. With the development of theoretical research, many models have become very complex. And economists need to look for real-world data to test their theories, but the cost of comprehensive statistics is extremely high, and the data provided by the government is not comprehensive enough and is not reliable enough. In this case, methods were born to test economic theories with very cheap observations and experiments. Behavioral economics combines traditional research of economics by referring to and introducing research methods of psychology and sociology. Mainly uses observation, investigation and experiment to study human economic behavior. The use of these methods makes behavioral economic theory more objective and effective.

4.1 Observation Method

Observation method is a general method of economic behavior research. It refers to a method by which researchers observe and record the external performance of economic actors in a purposeful, planned and systematic way under uncontrolled daily living conditions, so as to analyze and judge their behaviors and psychological activities. All kinds of economic behaviors are controlled by certain economic demands and motives. Therefore, researchers purposefully and selectively observed under the condition of spontaneous occurrence, and recorded and analyzed in detail so that the results obtained were relatively objective. Economic activity is a kind of complex social activity, it involves the vital interests of the people sensitivity is very big, on most occasions, is unfavorable to intervention and control by a human is more suitable for observing the natural way for research, to ensure that the research has high “ecological validity” the result can reflect the objective economic reality.

4.2 Survey Method

Another research method commonly used in behavioral economics is the survey method. The investigation method is also a method to understand and obtain evidence of the uncontrolled research object. But the investigation is much more than observation. First

of all, surveyors can understand the psychology and behavior of respondents through verbal communication, such as holding a symposium, and inviting participants to talk about their views on a certain social and economic problem. Secondly, can also be used to conduct a written survey, such as issuing a questionnaire, to understand the public intention. For example, in the motivation research of The Dichter school, there is a method called an “in-depth conversation method”, in addition to in-depth conversation with consumers, but also through some other indirect technology auxiliary. For example, the Rorschach test, word association test, “matching or pairing test”, “drama game” instrument, “role game” instrument and group discussion are used to analyze consumer behavior. The advantage of the investigation method is that the investigation can be carried out in a very wide range, not limited by time and space.

4.3 Experimental Method

This is the most important innovation in behavioral economics compared with traditional economics. The experimental method is a method to consciously adjust and control the condition of the object. An obvious difference between this method and the observation method and the investigation method is: the observation method usually answers the question “what is?”, but cannot answer the question “why?”. It can find the causal relationship between the two factors more clearly. The main advantages of the experimental method are embodied in its basic characteristics, namely, “repeatability” and “controllability”. Repeatability refers to whether other researchers can reproduce the same experiment and thus confirm the individual findings is colloquially known as “Do you see what I see”. To some extent, a lack of repeatability is inherent in all non-experimental observations. For economic research, this point is more obvious, because the data recorded from naturally occurring processes change with the actual background, especially the changes of some unobserved factors, which are generally unique, and the collection and independent verification of economic data usually means extremely high costs. Therefore, carries out repeatable experimental verification at a relatively low cost, and is undoubtedly an exciting research method for professional economists.

5 Discussion

The emergence of behavioral economics has provoked mixed reactions in academia. Many scholars have welcomed it as a “return to sanity” science; Other scholars dismiss it as having little future. In general, the influence of behavioral economics is still expanding: such as Princeton University, the University of Washington, the University of Chicago and other famous universities have set up formal courses in “behavioral economics”; The University of Illinois and the University of Virginia have also begun research in behavioral economics; Business is also interested in behavioral economics using it in advertising, promotional campaigns and pension plans. Prudential Securities in New York hired a psychology professor from Harvard University to analyze stock market trends, and the results were surprisingly good. Clearly, behavioral economics has attracted wide attention; the most obvious example is that behavioral economists Daniel Kahneman and V. Smith [5] won the 2002 Nobel Prize in Economics for their

outstanding research in behavioral economic theory and experimental economics; Earlier in 1978, cognitive psychologist H.A. Simon was awarded the Nobel Prize in Economics for his work on the decision-making behavior of organizations. We have no reason to doubt the existence value and academic status of behavioral economics.

As many economists have said, behavioral economics has attracted academic attention in western countries, which is mainly related to the incompetence of mainstream economics. This is the background of behavioral economics. Compared with traditional economic theories and policy propositions, behavioral economics is more cautious. It does not immediately propose policy propositions to solve economic problems and good governance methods. It only attacks traditional theories in a long-neglected area (human behavior). Even so, it is still epoch-making. Because of its empirical methods of observation and experiment, brings economics, which has been playing around with mathematical formulas for decades, back to the real-life it studies and forces unrealistic theorists to face reality. That's the great contribution of behavioral economics; It is also this point that makes the boring economic theory research an exciting change and adds the due "humanistic" spirit and "humanistic" atmosphere to the economic research.

Famous behavioral economists George Katona people think, such as the modern economy with the biggest difference lies in the economic activities of classical economic foothold fundamental changes have taken place in, the economy is the economy of alternative, from the income, price and other economy thread affects the puppet become the main body of economic activity, any phenomenon in the economic process is nothing more than the economic behavior or aggregation or precipitation of social individuals (or groups). In Katona's words "it is these actors who create the economy through their actions". Therefore, modern economic phenomenon has become a humanistic phenomenon in essence, and economic analysis is "no longer to study the abstract relationship between product quantity and price, savings and circulation, but to discover the characteristics and laws of human economic behavior". The rise of behavioral economics shows that "people and their behavior" are becoming the core of economics research and topic, advocate and pay attention to the study of human economic behavior, modern economics to build a "full of human nature and human values" of theoretical framework, make economics human science, people become the subject of economics. The meaning of "man is subject" is different from that of common sense cognition:

The development of the social economy is constituted by the purposeful economic activities of human subjects; The law of social and economic development is the law of purposeful economic activities of human subjects in the final analysis; The situation of social and economic development ultimately depends on the level of civilization of human subject's own development and the level of conscious awareness of human subject's own independent role in economic activities; Human desire and need is the logical starting point of economics; People are the purpose and attribution of economic activities. Therefore, we can think that although economic research is concerned with resource allocation and wealth creation seems to be the economy of "things", in essence, it is a man who "allocates resources" and "creates wealth". Man plays a decisive role in economic activities. Therefore, economic research should be people-oriented and the

study of people's economic behavior, namely, the study of people's "economic decision-making behavior, investment behavior, saving behavior, consumption behavior and market behavior", the humanization of economics should be the inevitable trend of economic research. The formation and development of behavioral economics conform to this trend.

6 Conclusion

In fact, "behavior" theory has always been a branch of American humanities. In today's society, the convergence of various disciplines is also a trend. Thus, the emergence of behavioral economics is inevitable. The emergence of behavioral economics is just a reflection of this background in the field of economics. The formation of behavioral economics can be considered the "behavioral revolution" in economics, which is promoting the gradual development of economics towards humanization. In a book published this year in the preface of behavioral economics, vol. Including three economists -- Carnegie Mellon's institute of George Loewenstein, California institute of technology Colin Mailer and Matthew Rabin at the University of California, Berkeley, wrote: "we foresee is all economics will be treated as behavioral economics." [6], the winner of the Nobel Prize in Economics in 1992, thinks that economic research has entered the third stage. In the first stage, economics was limited to the study of the structure of production and consumption of materials, or traditional marketing. By the second stage, economic theory had expanded to the full study of the commodity phenomenon, that is, the exchange of money. Now in the third stage, the field of economics encompasses all human behavior and all decisions associated with it. In this view behavioral economics is the backbone of the third stage of economics.

Of course, as a new discipline, behavioral economics still has some shortcomings: It has not formed a complete theoretical system; The scholars concerned do not have sufficient knowledge of psychological and behavioral sciences, or lack the mathematical foundation required for economic research; There is no strict theoretical logic. Therefore, H. A. Simon, winner of the Nobel Prize in Economics, believes that's current behavioral economics is "not a single specific theory, but an empirical test of the neoclassical hypothesis of human behavior, and further revises the theory according to the test results." However, with the further development of research into, behavioral economics should develop and improve, verify the validity of traditional economic theories in experience, and simultaneously establish a new empirical law that can correctly describe human economic behaviors, and form a specific and complete theoretical system.

References

1. Yang Zheng, Research on the Innovation of Behavioral Economics [J]. Nankai Economic Research, 1996 (5).
2. Peng Gang, An analysis of psychological Factors in Economic Development [J]. Teaching and Research 1998 (4).
3. Zhao Lingyun, A review of economic science [J]. Journal of Central South University of Finance and Economics, 1998 (5).
4. Levinson, Mark, 1995, "Science Grabs a Couch", in Newsweek, Apr. 24.

5. Smith V.L. 1990 Experimental Economics Edward Elgar.
6. Becker. Gary S, 1980. Economic Analysis of Human Behavior [M]. Shanghai Sanlian Bookstore, 1995.

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