

Research on the Application and Criticism of Hypothesis of Rational Man

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Abstract: In western economics research, the “hypothesis of rational man” is one of the most important concepts and one of the most fundamental topics in economics. Although the hypothesis of rational man has been violently criticized by scholars since its inception, its connotation has been continuously enriched and expanded after its modification and development, and its uniqueness and irreplaceability have been proved after being adopted for 200 years. Meanwhile, due to the complexity of human nature, there is a trend of cross integration between sociology, psychology, anthropology and economics, and cross disciplines appear in the marginal areas between disciplines. It is particularly important to conduct a comprehensive review of the hypothesis of rational man, to analyze and critique from multiple perspectives, which helps us to have a deeper understanding of the system and characteristics of the development of western economics, so that we can predict new trends in economics.

1. Introduction

The hypothesis of rational man is the basis of western economics and the origin of economic analysis, economic theory, and even logical deduction. But this hypothesis is not perfect, in fact its criticism has never ceased since its inception. The Introduction of psychology, sociology, and anthropology in economic analysis is not ever a new product in recent years. Although many scholars have criticized ,modified the hypothesis of rational man to take possession of it, the author believes that the Introduction of relevant knowledge of evolutionary economics, sociology and economic of happiness, and a dialectical view of the connotation, application, and possible limitations of the hypothesis of rational man hypothesis from a macro perspective still have great significance for the construction of a more complete hypothesis of rational man, the interpretation and prediction of economic phenomena.

2. Explanation of “Hypothesis of Rational Man”

2.1. From a Narrow Point of View

In a narrow sense, the hypothesis of rational man also called the economic man hypothesis, has gradually evolved and developed during a long period of time. Through the emphasis on the theory that selfishness is one of human natures by Bernard Mandeville; the publicity that greed as well as selfish is human being's nature by David Hume; the first systematic application of the economic man hypothesis by Adam Smith and the inheritance and synthesis of John Mill, it has been improved and gradually become perfect in the fiercely questioning voice [1]. As a logic of economic methodology and the analytical premise, the hypothesis of rational man is extremely abstract, the basic characteristic of which is that everyone who engages in economic activities is selfish[2]. Selfishness is a fundamental behavioral motive, determined by biological instinct and beyond the nature of history and systems, whose root lies in the satisfaction of one's own desires.

2.2. From a Broad Point of View

The hypothesis of economic man is not only the basic hypothesis in economics, while it is also possible to become the basic hypothesis which studies other kinds of human behavior. Economics was initially isolated from the social sciences and introduced into other fields, causing numerous intersections with other adjacent disciplines such as psychology, sociology, anthropology and even neuroscience.

It also explains the reason why we find some information in connection with the rational people in a great number of other fields of non-economics. For instance, as is said in the social science hypothesis of Friedman, it seems that the leaves of a tree deliberately position themselves to maximize the amount of sunlight they receive; While Kuleman, who is the representative of the sociological school of rational choice, has mentioned that we can illustrate that purposeful actions theoretically improve the ability of prediction by the maximization benefits; in the fields of political science, the rational decision model becomes the core of public choice theory.

3. The Development and Application of Hypothesis of Rational Man

Only in the field of economics, rational man, as well as economic man, has its basic characteristic which is everyone engaged in economic activities is selfish. Selfishness is a fundamental behavioral motivation, determined by biological instinct and transcending the nature of history and institutions, which rooted in the satisfying one's own desires.

In western economics, the abstract rational man is generally taken as the premise of methodological logic and analysis. Furthermore, it is considered that the economic man pursues the maximum of their own benefit as their principles of behavior. As a consequence, the hypothesis of rational man, also called the economic man hypothesis. Under the universal standards, it is not only a hypothesis emphasizing that individuals always seek to maximize their own target values, but also a basic hypothesis of economics having evolved and developed gradually over a long period, a hypothesis questioned by a large amount of people. In the history of dissemination and development of the “rational man” thought, Bentham put forward the human nature of “going after profit and avoiding harm” and the idea of “utilitarianism”. Nassau Senior and John Mill abstracted the connotation of “economic man”, emphasizing the instrumental value of this hypothesis in the study of economics. While Pareto introduced the proper term “economic man” into economic theories, and the restriction, “marginal rationality”, into the “economic man hypothesis”. With the long period of

development, the connotation of hypothesis of rational man can be summarized into three basic propositions—personal goals: self-satisfaction of utility, personal ability: utility-maximization choice, the coordination between individuals: market equilibrium.

Frankly speaking, the “hypothesis of rational man” is perhaps the most effective and successful tool for explaining human behavior. For example, the “prisoner’s dilemma” based on “hypothesis of rational man” is often used in trials of joint crimes, in the design of public management systems. It’s necessary not only to fully protect the right of “economic man” to be egoistic, but also to regulate and restrict their behavior effectively. In the democratic decision-making and democratic process of western political markets, the “hypothesis of rational man” is the basis of public choice theory. Furthermore, in the field of philosophy, the “hypothesis of rational man” is also applied in the most general and universal sense.

4. Criticisms of the Hypothesis of Rational Man

Because the theoretical basis of western economics is the economic man hypothesis, and the economic man hypothesis has been introduced into many fields, resulting in different schools, and has numerous intersections with other adjacent disciplines such as psychology, sociology, anthropology and even neuroscience, it has been questioned since they came out. As scholars at home and abroad continue to question it, try to overthrow and reconstruct it, the economic man hypothesis has also constantly been reviewed, revised and improved. In this section, we will discuss the criticisms of the economic man hypothesis from the perspectives of evolutionary economics, behavioral economics and social economics.

4.1. From the Perspective of Evolutionary Economics

It is the market process of change and development that evolutionary economics studies. It observes economic phenomena from a historical irreversible perspective.

Criticism from this perspective can be summed up in three aspects. The first is the negation of the view that “human behavior is motivated by egoism”, based on the existence of “altruistic behavior”. However, the construction of the economic man hypothesis is based on the core premise of the “hypothesis of egoism”, and a complete denial of the “hypothesis of egoism” will overthrow the economic man hypothesis[3]. To avoid this consequence, economists have conducted a lot of relevant criticisms and discussions. For example, the contradiction between the egoistic “economic man” and the altruistic “moral man” proposed by Adam Smith is called the Smith Paradox by western economists. Furthermore, economists have reconsidered and corrected the irrational parts in classical economics and put forward the “new economic man hypothesis” on the basis of inheriting the original utilitarian principles: (1) Human has dual motives of “economic interests” and “non-economic interest”. (2) The existence of incomplete information and opportunism. (3) Human is not completely rational. The economic hypothesis under this system is called “Multi-economic man”, which expands the human demand function.

While in China, some scholars have also criticized the economic man hypothesis from different perspectives, rejecting the above-mentioned “hypothesis of egoism”, such as the “real economic man hypothesis” by Jingtong He and Shenyong He; Qinghua Li criticized the thoughts of Becker, pointing out that the methods of Becker have fallen into synonymous repetition. Motivation is endogenous and inseparable from itself. Therefore, fundamentally, human behavioral motivation is egoistic, thus altruistic behavior can only be used as a manifestation of a behavior, or a phenomenon. Whether it is for the purposes of “moral reputation” and “balance of self-compassion”, it can be attributed to the

motivation of egoism. From this perspective, the paradox of “economic man” mentioned by Adam Smith in “The Wealth of Nations” and “moral man” mentioned in “The Theory of Moral Sentiment” does not exist. “Sympathy” and “egoism” actually is for the same purpose[4].

Secondly, the economic man hypothesis minimized the exploitative nature of capitalist society. For example, Hongming Liu considers that the economic man hypothesis caused the economic choice forced to be made by the working class under the capitalist mode of production is theoretically understood as voluntary. The premise of the economic man hypothesis of “egoism” conceals the inequality of the possession of means of production and economic status between the bourgeoisie and the working class under capitalism. The choice of exploitation is no longer a voluntary “behavior of egoism”. It should not be forgotten that the surplus value is the labor created by the working class under the exploitation system and possessed by the bourgeoisie for free.

Thirdly, the economic man hypothesis may lead to the ethicality of social moral. For example, Wujia Zeng believes that the “economic man hypothesis” may lead to the expansion of people’s desire and the loss of moral. She believes that there is always a conflict between personal interests and social interests, and the economic man hypothesis is a thought of pursuing false ego, and the desire and greed spread in the capitalist society under the purpose of “adjusting the egoism to stimulate the economy”. The limitation of the hypothesis of Smith is that it only pays attention to the animality of human beings, while ignores its sociality, which causes the wrong guidance of human nature, and the “invisible hand” of the market gradually fails.

4.2. From the Perspective of Sociology

As a matter of fact, based on the main principles of the “economic man hypothesis”, which are, “the principle of egoism, consistency and utility maximization”, the economic man hypothesis has its limitations. If we analyze from the “principle of egoism”, the “strong reciprocity behavior”, which is purely altruistic, will be difficult to explain with existing economic theories. If we analyze from the principle of consistency, the behavioral game of “prisoner’s dilemma” will show the conflict between individuals interests and collective interests. While the limitations of the two principles above also lead to the limitations of the principle of utility maximum, such as the behavior of sacrificing oneself to protect others.

From the perspectives of sociology, the existence of these limitations can be attributed to two reasons: (1)At the individual level: endogenous factors such as individual sense of worth. (2) At the social level: Institutional, moral and other exogenous social factors. Regarding the limitations at the individual level, Peter Blau revised and distinguished the “external reward” and the “internal reward” to give a reasonable explanation to the limitation of the principle of egoism: “Strong reciprocity behavior” can be taken as an act of sacrificing external interests for internal rewards. As for the limitations on the social level, individual interests are restricted and controlled by the internal ethics and morals and external authorities of organizations, which limits the realization of internal interests to the maximum, thereby maintaining the consistency with collective interests[5].

Combining the criticism of “economic man hypothesis” with the ethical value norms at the social level, as the rules of precise data science for the logical interpretation of the “rational man” are strictly followed by “economic man hypothesis”, leading to the ignorance of the richness of actual individual life and the complexity of the society, “possessive individualism” has been proposed. However, as “possessive individualism” is separated from social relations and opposed to others, Marx reveals the contradictory nature of “people in reality and their social relations” behind the theory, which finally leads to a deeper and more innovative understanding of human society.[6]

4.3. From the Perspective of Economics of Happiness

As an extension of the economics of welfare, it is believed by the economics of happiness that the ultimate purpose of human behavior is for human happiness and wellbeing.” Happiness is the only rational ultimate goal of human beings and the ultimate principle for verifying whether human behavior is correct. However, in order to facilitate research and for other purposes, traditional economics has measured human happiness by utility, and then materialized the utility, which makes economics deviate from the original purpose of human happiness and wellbeing.

From the perspectives of economics of happiness, criticism of the economic man hypothesis focuses on the three elements of the hypothesis: “complete egoism, benefits maximum, and complete rationality.”

Based on “complete egoism”, the element of “economic man”, economists have explored the fact that altruistic behavior exists through many experiments and practices and concluded that the egoistic behaviors in order to find satisfaction are not incompatible with the altruistic behaviors to obtain happiness. The reason for the criticism of traditional economics based on economics of happiness is that the “economic man” of traditional economics is completely egoistic, while the altruistic meaning is added to the “economic man” based on economics of happiness. Thus, the “economic man” is not only egoistic, but also altruistic for his own happiness and satisfaction, which means, the “economic man” is both egoistic and altruistic.

In traditional economics, the “economic man” is completely rational, while in reality, the “principle of rationality” gradually deviates from him. Due to the asymmetry and incompleteness of information, the limitations of human ability of cognitions, and even the opportunistic tendency in human economic activities, it is difficult to predict the consequences of human behavior of egoism and altruism. Our selection criteria for action plans has also dropped from “optimal” to “suboptimal”, and the meaning of complete rationality in traditional economics has thus turned into rationality for happiness.

As the “maximization” and “optimization” cannot be achieved, “utility maximum” is then proposed. In neoclassical economics, utility is equated with happiness, and the utility equivalent to happiness is the decision utility in the decision-making process. But Kahneman believes that utility and happiness are completely different. Happiness is a kind of subjective experience utility. Therefore, not only the decision utility should be measured, but also the level of happiness. With the development of the measurable problem of happiness in the economics of happiness, the problem of happiness measurement based on explicit preferences has also been resolved. Whether people are happy and the factors that lead to their happiness and unhappiness can be clearly expressed, thus the preferences of happiness can be determined. Therefore, from the perspectives of “economic man”, benefits maximum can be turned into utility maximum, and furthermore, the meaning of happiness maximum is given to the “economic man”.

5. Conclusion

Whether from the perspectives of evolutionary economics, sociology or economics of happiness, the criticisms of hypothesis of rational man are mostly combined with its basic elements or main principles, as well as finding out the unreasonable points of the hypothesis from numerous experiments and practical practices. As it has been initially abstracted from the basic facts in an extremely concise and effective way and promoted as an axiom under universal conditions, it’s not surprising that the “highly abstract and out-of-reality part” of the hypothesis of rational man has suffered under the constraints of realistic conditions. Therefore, while criticizing and revising the

hypothesis of rational man, it's suggested to be aware that the hypothesis still has the strongest explanatory and linguistic ability in today's society, and it is still a common origin of human behavior in economic analysis.

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