

## REVIEW

by Prof. Dr. Daniela Nikolova Bobeva

at Paisii Hilendarski University of Plovdiv

of a dissertation for awarding the educational and scientific degree "doctor"

in the field of higher education Social, economic and legal sciences professional direction 3.8.

Economy doctoral program History of Economic Sciences

**Author:** Aygun Naji Ertürk- Mincheva

**Topic: "The Concept of Homo Economicus in Richard Thaler's Behavioral Economics"**

**Research supervisor:** Prof. Dr. Plamen Dimitrov Chipev, Plovdiv University "Paisiy Hilendarski"

### 1. General description of the presented documents

By order No. PD-21-452 dated 01.03.2023 of the Rector of Plovdiv University "Paisiy Hilendarski" (PU), I have been appointed as the chairman of the scientific jury for ensuring a procedure for the defense of a dissertation work on the topic "The Concept of Homo Economicus in the behavioral economics of Richard Thaler" for the acquisition of the educational and scientific degree "doctor" in the field of higher education "Social, economic and legal sciences", professional direction 3.8. Economics, doctoral program "History of economic sciences".

The author of the dissertation is Aigun Naji Ertürk-Mincheva - a full-time doctoral student at the Department of Economic Sciences with supervisor Prof. Dr. Plamen Dimitrov Chipev from Plovdiv University "Paisiy Hilendarski".

The set of paper materials submitted by PhD student Aygun Naji Ertürk-Mincheva is in accordance with Article 36 (1) of the Regulations for the Development of the Academic Staff of the PU, includes the following documents:

- a request to the Rector of the PU to disclose the procedure for the defense of a dissertation work;

- curriculum vitae in European format;
- minutes from the department council related to reporting the readiness to open the procedure and preliminary discussion of the dissertation work;
- dissertation work;
- abstract;
- a list of scientific publications on the subject of the dissertation;
- copies of scientific publications;
- list of noticed citations (none);
- declaration of originality and authenticity of the attached documents;
- certificate of compliance with the National minimum requirements for the educational and scientific degree "doctor".

The doctoral student has attached 6 (six) publications.

The submitted materials for the competition correspond to the requirements and provide an opportunity for the overall assessment of the dissertation work and the candidate.

## **2. Short CV of the applicant**

The dissertation student holds a bachelor's degree from Plovdiv University "Paisiy Hilendarski" majoring in "International Economic Relations" and a master's degree in "International Trade" majoring. In 2019, she was enrolled as a doctoral student in the Department of Economic Sciences, after which she held the position of assistant in the same department and conducted exercises in the disciplines of Economic Theories, Labor Economics, Public Sector Economics, Behavioral Economics and "Institutional economics" and at present.

During the period of the doctoral studies, the candidate fulfilled her annual plans despite the heavy lecture load. He is actively involved in all areas of activity of the Department of Economic Sciences, including conferences, scientific projects, candidate-student campaigns, meetings, the development of new curricula and programs, publishing and social activities. Mrs. Mincheva is a highly valued member of the department.

## **3. Actuality of the topic and appropriateness of the set goals and tasks**

The relevance and importance of scientific research for the development of economic science and its applications in society is solidly argued in the dissertation work. The dissertation work is strongly influenced by the modern currents of behavioral economics and the focus on man in unraveling the mechanisms of his behavior.

Behavioral economists argue for the need to "nudge people's decisions"; they open access to the personal space of people from different organizations, management decisions and policy making, creating separate units for nudges that advise governments, institutions and organizations on the application of behavioral economics approaches.

It is no coincidence that behavioral economics is one of the most discussed topics in modern economic literature, which makes the PhD student's research as relevant as it is complex. The vacillation in homo economicus leads those sympathetic to psychology to seek other explanations for the decisions of individuals and society beyond conventional macroeconomic understandings. We would add to the argumentation of the relevance of the dissertation work the development of the digital economy, which poses the question of the digital homo economicus, whose decisions are not only transmitted digitally, but are also increasingly made with the use of big data, machine learning (machine learning), artificial intelligence (AI), etc.

The doctoral student has set herself six main tasks, which also create the overall structure of the study. Their performance creates an impression of completion of the dissertation work.

#### **4. Knowledge about the problem**

The structure is built with particular precision, in which the first chapter occupies a central place, not only in terms of volume, but also in importance, and the second and third logically develop the results of the first, reaching the justification of "pushing" policies in Bulgaria. The opinions of the authors criticizing and supporting behavioral economics are presented with extreme depth, and it can be considered that the approach is not unilaterally critical of the classical view of the homo economicus paradigm, and to a certain extent it can be appreciated as balanced.

A huge volume of literature has been studied. The presentation is clear and understandable despite the complexity of the theories explored. Citations are correct. I found no plagiarism. Dissertation meets high standards of in-depth academic work.

With a slightly more romantic conception of man and the economy, including "sympathy and altruism, emotions and the limiting role of society on selfishness," Thaler's theory caught the PhD student's interest.

Rationality is presented as selfishness and feelings are given place and the social side of man is taken into account. The contrast with the further development of the traits of homo economicus is sought. However, it is unlikely that the doctoral student finds in Thaler's theory an alternative to classical economics, rather another point of view towards the economy that does not deserve to be ignored.

## **5. Research methodology**

The methodology of the research is determined by its specificity with a clearly expressed theoretical character. Formulated hypotheses also determine the scientific tools with which they can be verified. According to the dissertation author, Richard Thaler's model of a different homo economicus is applicable to social behavior, that a more behavioral model is flexible enough to respond to dynamic variables in contemporary settings, and that the tools of behavioral economics have the potential to long-term change in the behavior of economic agents.

The historical approach is applied for the purpose of revealing the development of the theories preceding Thaler. The research strictly adheres to the topic of the PhD program "History of Economic Sciences".

Comparative analysis is applied in the identification and classification of different streams of learning. Institutional analysis has also found wide application, including in relation to the analysis of behaviorist methodology. Documentary analysis supports the implementation of tasks. Inductive and deductive approaches are combined in the assessment of trends and characteristics.

## **6. Characteristics and assessment of the dissertation**

The dissertation has a volume of 263 pages, of which the introduction, three chapters and the conclusion are 234 pages. The research used 313 sources, of which 50 are in Bulgarian, 263 are foreign language sources. The results are also illustrated in 8 tables, 11 figures and 2 appendices.

The dissertation unfolds in a fairly detailed structure in three chapters, each of which is composed of between 4 and 6 separate structural elements, between which there is a clear logical connection. The volume of work is balanced almost equally between the three chapters. The conclusions at the end of each chapter summarize the scientific results and make a bridge to the following parts, thereby strengthening the logical connection of the constituent parts of the dissertation work.

In the **first chapter**, the author demonstrates an excellent knowledge of classical economics in all its varieties and historical development and enrichment. The entire history of economic theories is in this chapter in a concise and focused presentation of the theoretical discussions that lead to important conclusions.

In the **second chapter** is the essence of behavioral economics and the role of Thaler's theory is outlined. In this part, two of the formulated hypotheses are tested. The homo economicus change is confirmed to overcome the deficits in the theory explained in chapter one. According to the doctoral student, there is a new built model of the agent in behavioral economics, which includes: limited computational capacity, hesitancy, influence of context, influence of social environment and norms, reciprocity, fairness norm, volitional problems, myopia, loss aversion, influence of physical and emotional states, errors due to use of short-cuts for response, yielding to momentum, yielding to prodding. In this theoretical context, homo economicus is presented as quite vulnerable and more amenable to external influences such as 'nudging'.

It is this identified weakness that enables Chapter Three to develop the concept of the "nudge". Here, the author, analyzing Thaler's theory, also reaches his own scientific conclusions regarding the essence and forms of manifestation of nudging, as well as predicting the potential effects of its application. The categorization of the forms of nudging is the author's own contribution, as is the framework of the election architecture. In the third chapter, the doctoral student demonstrates an interest in the latest processes of greening the economy and tries to apply Thaler's theory to this new economic phenomenon, which also represents a serious scientific contribution given the topicality of the problem.

The dissertation and publications are written in a high scientific style with a clear definition of the main concepts and categories that the author handles with ease.

## **7. Contributions and importance of dissertation for the science and practice**

The dissertation develops economic theory in one of the least researched in Bulgarian economic literature, the homo economicus problem in the context of Thaler's theory, which is not an end in itself, but serves to define policies to overcome important social problems. The work and publications related to it contain both contributions to the development of science and its application.

The doctoral student's four-year work has led to a complete and in-depth knowledge not only of classical economics, but also of criticisms of it and sympathies for richer explanations of people's behavior in the economy.

The presented contribution points of the dissertation work are well argued in the academic work. Three scientific contributions and two scientific-applied ones are substantiated. I totally agree with the defined contributions. Evolution in economic theory builds a new homo economicus in economic theory, which the author presents as an evolutionary tree of the development of the homo

economicus category, which represents a kind of scientific novelty with great potential for use in scientific research based on a review of the development of the theoretical views of various authors.

An important contribution is also the identification of synergistic effects on theory from experiments, mathematical psychology and other modern scientific currents and their tools. A significant contribution of the author is the definition of the contributions of the various authors in the theory of homo economicus. The definition of the applied aspects of the concept of nudge in a rather broad context of socio-economic policies is also new. I appreciate the defined proposals for applying the theory as possible policies with a high potential for solving social problems.

Besides the scientific and practical-applied significance of the research, I would like to emphasize that this dissertation is important for the education of students, because with the strongly expressed theoretical character and giving way to modern theories, including psychological-economic currents in the modern economic science, students' interest in the theory increases.

#### **8. Evaluation of publications related to the dissertation**

The presented publications are 1 (one) scientific article and 5 (five) reports from scientific conferences, all in Bulgarian. The reports have been presented at various university conferences, also at a conference of the Institute for Economic Research of the BAS. Of these publications, 3 (three) are independent and 3 (three) are co-authored, of which 2 (two) are with the scientific supervisor Prof. Dr. Plamen Chipev.

All publications are related to separate parts of the dissertation, further developing some of the theses in it. The emphasis in the articles is on the practical applications of Thaler's theory in motivating a more active "nudge" policy in relation to solving important social problems such as poverty, social and economic inequality, migration and others. The articles demonstrate the doctoral student's ability to formulate policies based on thorough scientific research.

#### **9. Personal participation of the doctoral student**

Acquaintance with the dissertation and the publications gives me reason to confirm that the research was conducted entirely by the dissertation student, and the formulated contributions and obtained results are her personal credit.

#### **10. Resume**

The abstract is a volume of 32 pages, prepared in Bulgarian and English. It meets the requirements by including a brief description of the goals, tasks, scientific methodology of the work, as well as the main scientific results and contributions. The abstract correctly reflects the characteristics of the dissertation and contains the necessary information for a comprehensive presentation of

the dissertation, with which the doctoral student demonstrates the ability to summarize her analyses, which speaks of scientific maturity.

## **11. Critical notes and recommendations**

The candidate presented the scientific discussion regarding Homo economicus and Homo sapiens in an objective and balanced manner, but the author's position in this discussion should be more clearly highlighted. In fact, the author states: "Methodological and philosophical criticism has been formed challenging the need to criticize rationality, a one-sided approach to psychology, delving into biases and the experimental method. R. Thaler outlines the subsequent development of behavioral economics in the inclusion of emotions'.

The theory of Mises and the Austrian school in general and libertarianism (not so-called libertarian paternalism, according to Thaler) should be more thoroughly presented.

I recommend expanding the description of the methodology applied in the dissertation.

### **Questions:**

1. In many places, the dissertation talks about "the new knowledge about man". Are the new knowledge about man new?

2. What is meant by rational and irrational behavior?

3. How will we explain macroeconomic processes and trends, how will we make predictions, if we abandon the concept of homo economicus and replace it with homo sapiens? Where is Thaler's connection to macroeconomics?

## **12. Personal opinion**

My personal impressions of the doctoral student are that she is an accomplished scientist with great scientific capacity and broad scientific interests. She has enormous work capacity and dedication to scientific and teaching activities. Demonstrates enviable teamwork skills, including in scientific activity.

## **13. Recommendations for further use of the dissertation contribution and results**

I recommend publishing the dissertation as a monograph.

## **CONCLUSION**

The dissertation contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria (ZRASRB), the Regulations for the Implementation of ZRASRB and the relevant Regulations of PU "Paisiy Hilendarski". The dissertation shows that the doctoral student Aigun Naji Ertürk-Mincheva possesses in-depth theoretical knowledge and professional skills in the scientific specialty History of Economic Studies, demonstrating qualities and skills for independently conducting scientific research at an extremely high theoretical level.

Due to the above, I confidently give my positive assessment of the conducted research, presented by the above-reviewed dissertation work, abstract, achieved results and contributions, and I propose to the honorable scientific jury to award the educational and scientific degree "doctor" to Aygun Naji Ertürk-Mincheva in the field of higher education: Social, economic and legal sciences, professional direction 3.8. Economics doctoral program "History of Economic Sciences".

4 May 2023

Reviewer : .....