

REVIEW  
OF A DISSERTATION PAPER TITLED:  
"THE GRAY ECONOMY IN BULGARIA IN A COMPARATIVE PLAN"

PhD student: Liliana Veselinova Georgieva

Research supervisor: Prof. Stefan Petranov, PhD

reviewer: Assoc. Prof. Milen Velushev, PhD

Grounds for presenting the review: Decision of the scientific jury on the defense of the dissertation work, confirmed by Order No. RD-38-282/03.06.2024 of the Rector of SU.

This review is in accordance with the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Rules for its Implementation and the Rules for the Terms and Conditions for Acquiring Scientific Degrees and Holding Academic Positions at SU "St. Clement Ohridski".

### **1. Applicant data**

Doctoral student Liliana Veselinova Georgieva graduated with full honors with a bachelor's degree in "Economics" in 2017 and obtained a master's degree in "Accounting and Auditing" in 2019. She has undergone additional training on exchanges in Germany, China, Russia and France.

Since July 2020, she is a doctoral student in the "Economics and Economic Policy" program at the "Economics" department of the Faculty of Economics. Her professional experience outside the University is mainly in the field of accounting and finance. Since 2022, she has been working at the Bulgarian Development Bank, where he deals with the preparation of macroeconomic analysis, an overview of various state and European policies and strategic development. She has experience in participating in scientific projects as a participant in KOTRA and FNI projects.

Since 2019, she has conducted seminars at the Faculty of Economics, initially as a part-time assistant at the "Finance and Accounting" department, and then continuing to give seminars at the "Economics" department in the disciplines "International Economy", "Microeconomics I", "General Economic Theory ", "Macroeconomics I" and "New Economic Phenomena". In 2022, she won third place in the "Student of the Year" competition of the SU in the "Doctoral students" category, having first places from previous years in the "Economic Sciences" category as a student in the bachelor's program (2016) and then as a student in the master's program (2018) ).

Her participation in numerous conferences and scientific forums in the country and abroad, as well as in various initiatives of the department during her doctoral studies, are impressive. Her

work also includes a number of activities of public benefit, as in the period 2021-2023 she is the chairman of the Association of Graduates of FEBA at SU "St. Kliment Ohridski", and is a representative in the Student Council and in the Faculty Council of FEBA from the quota of doctoral students.

## **2. General characteristics of the dissertation work**

The dissertation submitted for public defense has a volume of 174 pages (without the information sources and without the appendices). It is structured as Introduction (pp. 7-13); 4 chapters (Chapter I - pp. 14-59; Chapter II - pp. 60-89; Chapter III - pp. 90-132; Chapter IV - pp. 133-169 and Conclusion (pp. 170-174). Additionally, scientific contributions of the thesis (pp. 175-178) are presented, followed by appendixes containing information related to the presentation (pp. 178-276). The bibliography includes 268 sources, of which 243 are in English. Finally, the participations in conferences and scientific publications on the topic of the dissertation are listed, serving as proof that the thesis has been tested in scientific forums and has been used in eight scientific publications.

In the Introduction, the thesis, the object, the subject, the goals, the tasks are clarified, after which the research methodology is described. The research thesis is that despite the higher relative share of the gray economy in Bulgaria, its characteristics and structure are similar to those of the gray economy in other EU member states. And if this is true, then the measures and policies to minimize the gray economy, successfully applied in these countries, can be applied in Bulgaria as well. To test her thesis, PhD student Georgieva aims to clarify the characteristics of the shadow economy in five individual member states: Greece, Romania, Slovakia, Croatia and the Czech Republic, and in two aggregates: the European Union and the Eurozone, made up of those that adopted the euro as main means of payment member countries. To achieve this goal, it has formulated appropriate research tasks and a review of specialized literature analyzing the phenomenon of the shadow economy to help clarify the key characteristics of the shadow economy, so as to collect and process statistical data allowing comparability between shadow economies to different countries. One of the planned key contribution moments of the dissertation is the intention to use the collected data to compile a composite indicator that would give an assessment of tax morale as a key characteristic of the gray economy and with the help of this assessment to compare the selected research objects. The adopted methodology corresponds to the tasks set, it is a combination of quantitative and qualitative analysis, which is suitable for the application of the empirical approach to reach valid conclusions based on the scientific method. Thus, the given request for the scale and depth of research suggest that it is systematic and complex, and the conclusions reached on its basis are significant and valid. The introduction also summarizes the content of the thesis to give an idea of the logic of the research.

The first chapter, eloquently titled "The shadow economy according to the scientific literature", presents the main scientific achievements in the study of the shadow economy of different countries, and at the end of it an emphasis is placed on the studies of the shadow economy in Bulgaria. The chapter begins with a presentation of the basic concepts in their complexity and

multidimensionality, because of which the scientific community cannot unite around a single term to describe the part of the economy, where there are no formal rules, the organization is spontaneous, and the definition and control of compliance with informal rules is difficult. Therefore, the approach, adopted by the doctoral student Georgieva, to present various existing definitions and to select the one that functionally best serves the subsequent presentation is correct. The chosen definition links the shadow economy with the failure to pay taxes and, more precisely, defines it as that part of the economy in which the volume of production and sale of legal goods is purposefully hidden from the state authorities in order to avoid payment of due taxes and insurances. After the definition of the studied economic phenomenon, it becomes possible to discuss the methods for estimating the size of the gray economy, considering the advantages and disadvantages of a number of estimation approaches. The presence of a gray economy in a country logically raises the question of the genesis of this phenomenon and its scale. So, PhD student Georgieva has made an overview of the theories, focusing on the relationship between the size of the gray economy, the size of the GDP and the rate of economic growth. After this exposition, the focus of the first chapter shifts to Bulgaria, where the results of transitional research on the gray economy in the country are discussed.

The second chapter, entitled "Comparative analysis of key manifestations of the gray economy in Bulgaria" contains a presentation of the data on the key characteristics of the gray economy in several countries selected according to appropriate criteria, the choice of the methodology for the analysis of these data is discussed, after which an assessment is made of the achieved results in a comparative plan. The chapter begins with a presentation of a Eurobarometer survey conducted in 2019, which forms the basis of the empirical analysis carried out in the dissertation. Since the intention of doctoral student Georgieva is to demonstrate the peculiarities in size and structure of the gray economy in Bulgaria, a thorough review of economies with a similar stage of economic development and similar institutional indicators has been made. The doctoral student has identified the following countries as suitable for comparative analysis: Greece and Romania, Slovakia, Croatia and the Czech Republic. In addition, for the purposes of the comparative analysis, data on the gray economy in two supranational formations to which Bulgaria belongs or is about to join, namely the European Union and the Eurozone was used. Their inclusion in the analysis gives it a normative element, since the economic development of Bulgaria is closely related to its ability to fully integrate within the framework of these two supranational structures. The exposition continues with the processing of the data for the selected countries and establishes which of the theoretical considerations presented in the first chapter are confirmed by empirical evidence. On this basis, numerous recurring manifestations and key characteristics of the shadow economy have been identified in the countries selected for analysis.

The third chapter entitled "Tax Behavior and Tax Morale" presents the arguments for focusing the analysis on tax behavior as a reflection of the size and manifestation of the gray economy phenomenon and establishes the main variables that influence it. The chapter begins by defining tax morale as a set of motives that determine tax behavior. Various studies of tax morale are described, in which the mechanisms for its manipulation in the public interest are also discussed.

After that, an already described in the scientific literature indicator of tax morale was searched for and the data from the Eurobarometer survey used in the dissertation was reviewed for variables that are related to establishing the level of tax morale in a given country. The rest of the chapter is devoted to discussing and testing different models that describe the relationship of tax morale with tax behavior as a proxy for the shadow economy, with the aim of proving that tax morale is a significant variable in determining tax behavior.

The fourth chapter is called "Differences in Tax Morale by Sociodemographic Characteristics." It examines the phenomenon of tax morale in depth in an attempt to establish the factors that determine it and thereby explain the differences in tax morale between the countries under study. An econometric analysis of the data from the Eurobarometer survey was prepared in order to establish what is due to the observed differences in the data on tax morale in the different countries whose gray economy is the subject of research. Conclusions were made that there are both similarities and differences between the tax morale in Bulgaria and in the other studied countries, as well as that the established differences are due to factors such as geographical location, historical development, lifestyle and culture. On the other hand, belonging to a common supranational structure and a similar degree of economic development determines similarities in tax morale in the countries under consideration.

The conclusion summarizes the main findings of each chapter and synthesizes the content of the chapters into neat logical chains that confirm the validity and significance of the analysis. It becomes clear that the working hypothesis that the relative size of the gray economy in Bulgaria is larger than that in the other studied countries is confirmed, as is the hypothesis that there are similarities, common characteristics in the structure of the gray economy, for example the most affected economic sectors and economic activities. It is the last conclusion that gives reason to the assumption that to reduce the size of the gray economy in Bulgaria, good practices and measures can be used in the formulation and implementation of common European guidelines and policies to combat the gray sector.

I believe that the source data has been used in the thesis is reliable and verifiable, and the processing and analysis carried out meets the accepted standards for comprehensiveness and reliability of descriptive and econometric analysis. I acknowledge as sufficient the scientific apparatus used for definition of economic phenomena, use of generally accepted economic terminology, observation of accepted algorithms of the scientific method and the empirical approach do I accept the conclusions reached as reliable and truthful.

### **3. Identification and assessment of scientific and applied contributions**

After the conclusion, PhD student Georgieva identified the following scientific and scientific-applied contributions:

1. Deducing current characteristics of the gray economy in Bulgaria, as well as in the European Union, the Eurozone, and also in countries close in economic development to Bulgaria such as Greece, Romania, Slovakia, Croatia and the Czech Republic.

2. Grouping of the established characteristics into two independent groups: of the demand side (most frequently purchased services, motivation of buyers), and of the supply side (most affected sectors, most performed undeclared activities, motivation of participants).
3. Examining and confirming a statistically significant relationship between stated tax morale and stated tax behavior using econometric models
4. Clarifying the role of tax morale as a factor in the collection of taxes owed, beyond and independent of the factors traditionally seen as motivating the behavior of the rational economic agent.
5. Highlighting similarities and differences in tax morale based on socio-demographic characteristics of the population in different countries.

I believe that the contributions so identified are significant and meet the generally accepted criteria for scientific and applied contributions. The first contribution is significant because, as can be seen from the literature review, until now no systematization and qualification of the characteristics of the gray economy has been done using at once data for Bulgaria, Greece, Romania, Slovakia, Croatia and the Czech Republic, as well as in the European Union and the Eurozone. The second contribution is significant because it systematizes the characteristics according to the forces thanks to which the efficient distribution of economic resources is carried out - demand and supply. The third contribution is significant because it establishes in an indisputable way the relationship between tax behavior and tax morale. The fourth contribution is significant because it establishes the importance of tax morale for tax collection thus improving the Standard Economic Model where morale is neglected as a factor in rational behavior. The fifth contribution is significant because it establishes specific similarities and differences in tax morale that determine similarities and differences in tax behavior and can be used in formulating policies to influence tax morale in order to reduce the size of the shadow economy.

#### **4. Evaluation of dissertation publications**

In accordance with the criteria for obtaining a scientific and educational degree, Liliana Georgieva has submitted evidence for six independent publications and two publications in co-authorship, carried out in collections of reports from international conferences or in specialized scientific journals. All publications are directly related to the topic of the dissertation. As can be seen from the content of the publications, they present results obtained from the analysis of empirical data in the dissertation. The volume and quality of the publications presented in the current procedure for acquiring a doctoral degree exceeds the minimum state requirements for awarding the educational and scientific degree "doctor" in professional field 3.8. "Economics" according to ZRASRB and the Regulations for its implementation.

#### **5. Evaluation of the author's summary**

The summary has a volume of 50 pages and presents correctly, precisely and in the necessary completeness the main moments of the dissertation work, systematically and truthfully summarizing the structure and content of the individual chapters and presenting the achieved

results. A reference to the scientific contributions of the development, as well as a list of the author's related publications, take part of the author's summary. I believe that the summary meets the criteria and fulfills its purpose, because it fully and reliably summarizes the main theses, arguments and conclusions of the dissertation.

## **6. Critical notes and recommendations**

I believe that the presented dissertation has a number of strengths, it fully corresponds to the generally accepted scientific paradigm and is a coherent, logical and systematized study that has all the necessary elements: definition, application, analysis and evaluation. In this sense, I accept as valid the adopted scientific approach: the identification of the investigated phenomena, the review of the scientific literature, the collection and processing of empirical data, and the formulated conclusions.

Along with what has already been achieved, the researched topic provides an opportunity for upgrading and further specialization. In my opinion, the already established and analyzed relationship between tax morale and tax behavior can be used in the formulation of economic policies to reduce the size of the gray economy, and the indicator of tax morale can serve as an indicator of the effectiveness of such policies. Therefore, my recommendation to the PhD student Georgieva is to direct her further efforts to verifying the possibility of using tax morale as a standard unit of measure for changes in tax performance, which will provide an opportunity to measure the effectiveness of policies in relation to tax policies.

## **7. Conclusion**

I will end this review by sharing that I have personal impressions of Liliana Georgieva's work as a member of the department, as well as her performance in the doctoral exams. Therefore, I can confidently assert that she possesses the solid theoretical knowledge and the appropriate work ethic that the award of a Ph.D. degree implies. I believe that the dissertation submitted for public defense confirms my opinion by demonstrating that the PhD student consulted an impressive volume of literature sources so as to acquire a comprehensive and structured knowledge of the underground economy, which she then used to make a comprehensive analysis of the research problem. The presentation is logical and the writing style is academic. From the documents made available to the academic jury, it is clear that the formal requirements of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for the Terms and Conditions for the Acquisition of Scientific Degrees and the Occupancy of Academic Posts at SU St. Kliment Ohridski have been met.

Based on the above, I give a positive assessment of the dissertation work, and with full confidence I propose to the members of the scientific jury to vote positively for the awarding of the educational and scientific degree "doctor" in professional direction 3.8. "Economics" to Liliana Veselinova Georgieva.

18.08.2024

Sofia

Reviewer:

Assoc. prof. M. Velushev, PhD