STATEMENT

On a dissertation for obtaining an educational and scientific degree of "doctor"

Author of the dissertation: Elena Mitova Kamenova

Topic of the dissertation: Influence of the demographic situation on the development of

human capital and the silver economy of the Republic of Bulgaria after 1990

Scientific field: 3.7. Administration and management

Doctoral program: Regional development

Scientific supervisor: Prof. Dr. Kliment Minev Naidenov

Scientific unit: Regional Development Department, Faculty of Geology and Geography, Sofia

University "St. Kliment Ohridski"

Member of the scientific jury, who prepared the statement: Assoc. Prof. Dr. Elena Simeonova Petkova, Sofia University "St. Kliment Ohridski", Faculty of Geology and Geography, Geography of Tourism Department

Reasons for preparing the statement: Order of the Rector of Sofia University "St. Kliment Ohridski" №RD 20-119 / 22.02.2022

The statement has been prepared in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria (LDASRB), the Regulations for Implementation of the Law on the Development of Academic Staff in the Republic of Bulgaria (RILDASRB) and the Regulations on the terms and conditions for obtaining scientific degrees and occupying academic positions at Sofia University "St. Kliment Ohridski".

Data about the author:

Elena Kamenova holds a Bachelor's degree in Political Science from Sofia University "St. Kliment Ohridski". Subsequently, she also received a Master's degree in International Relations from the same university - Sofia University "St. Kliment Ohridski".

Elena Kamenova was an intern in the National Assembly of the Republic of Bulgaria. There she began and developed her career, working for a long time as a State Expert in the Communications Directorate. She has gained extensive experience in educational policy as well as institutional public communication, and has participated as a correspondent of the National Assembly with the European Center for Parliamentary Research and Documentation. For a long time, Elena Kamenova has also worked as a freelance teacher of English and Bulgarian for foreigners. Her long professional experience has given her the opportunity to acquire appropriate competencies so that she can focus on developing scientific research on the topic of this dissertation, which topic is in the field of administration and management.

Details of the procedure:

Elena Kamenova is enrolled in a full-time doctoral program in professional field 3.7. Administration and management in the doctoral program "Regional Development" at the Department of "Regional Development", as of February 1, 2019 to February 1, 2022 by Order of the Rector of Sofia University "St. Kliment Ohridski" №RD 20-145 / January 18, 2019.

Due to the expiration of the term by Order of the Rector of Sofia University №RD-20-450 / 17.02.2022, Elena Kamenova was expelled with the right to defense, as of 1.02.2022.

General characteristics of the dissertation:

The dissertation addresses the topic of the influence of the dynamics of the demographic situation in Bulgaria on the development of human capital and the silver economy. The dissertation focuses on the theoretical review of the formulations for the concept of "human capital" and the model of the silver economy, as well as the analysis of demographic trends in Bulgaria with emphasis on the last thirty years, as well as the measurement of human capital potential in the country. An overview of the models of the silver economy of Germany and Japan was also made. Prospects for the development of the silver economy in Bulgaria in the context of demographic trends were outlined based on an analysis of the National Concept for Promoting Active Life of the Elderly People in the country, as well as a comparative review of the approaches to the development of the silver economy in Japan and South Korea.

Relevance and significance of the problem developed in the dissertation:

The importance of the topic is determined by the fact that the world is going through unprecedented demographic changes, leading to changes in the age structure of the population. In the context of the dynamics of demographic processes and the persistent trend of population aging worldwide, limiting the negative effects of population aging is a key challenge. In order to meet the challenges posed by an aging population, the development of the silver economy is crucial. That is why we can agree with the author that the problem related to the impact of demographic processes on the development of human capital and the silver economy is relevant.

The relevance of the topic is determined by the deteriorating demographic situation in Bulgaria over the past thirty years, which affects all aspects of socio-political life of the country, determining the social, economic and political development of the country. Demographic factors create complex challenges and opportunities, including in terms of economic growth. As a result of the dynamics in the demographic processes in the country, new problems arise, which require measures different from the previous ones. The two national strategies, on demographic development and active aging, respectively, outline the main objectives of demographic development, but the measures envisaged to meet these objectives need to be updated to take into account the new opportunities offered by digital technologies. In this regard, it is important to study the impact of the demographic situation in the country on the development of human capital and the silver economy. The choice of the author to study the development of human capital in the last thirty years in a deteriorating demographic situation in Bulgaria is dictated by the fact that in contemporary theories of economic growth human capital is considered as one of the key factors for economic development because it contributes to economic growth not only by increasing labor productivity but also by creating conditions for innovation. Research and measurement in the field of human capital are of key importance in view of the need for innovative development of the economy of Bulgaria.

Evaluation of the structure of the dissertation:

The dissertation is 266 pages long. In addition, 6 applications with a total of 47 pages are presented, which include 153 data tables. The dissertation contains 115 figures and 55 tables. Structurally, the dissertation includes a title page, content, introduction, three chapters, conclusion, biography and appendices. The list of the used literature includes 206 literature and information sources, of which 53 are Internet sources, 2 strategic documents and 141 books, monographs, articles, reports and statistical reference books, of which 22 are in Cyrillic and 129 in Latin. The sources used are related to the developed topic and are cited in the appropriate places in the text. The structure of the dissertation is well balanced and each of the three chapters is important for the overall research. The included components (parts) are arranged in a logical sequence, which helps to achieve the set goals. The main components are few in number - 3 chapters - and are related to the general theme of the study, which creates the impression of a unified and comprehensive research, subordinated to a common theme and goal. This impression is confirmed by the content itself, as well as by the exposition of the dissertation.

Review of the content of the dissertation:

The content of the dissertation paper is subordinated to the general topic and the set goal of the dissertation, as there are no deviations from the topic in the exposition of the text.

The introduction reveals the relevance of the topic. The set goal is precisely and clearly formulated and it is stated as follows: "to outline the main parameters of the demographic situation in Bulgaria in the period 1990 - 2019, by researching and analyzing the factors and causes that shape demographic processes and how they affect the development of human capital and the silver economy at the country, and to justify the two-way process of influence."

The tasks that the author had to perform in the process of her work on the dissertation paper in order to achieve the set goal are structured in terms of meaning and significance. In this introductory part also the object and the subject of the research are indicated, its significance is substantiated, the motives for the choice of the specific topic, as well as the reasons for conducting the research and the methods, which are used are revealed.

The next <u>first chapter</u> is of a theoretical nature. It provides a literary overview of the statements about the nature and features of the concept of "human capital". The historical development of the concept of "human capital" is traced. The issues of its formation and development are considered. The approaches, methods and indicators for measuring human capital are indicated. The importance of human capital for achieving economic growth is revealed. This section also presents the trends and challenges of population aging, as well as aspects and models of the silver economy. Attention is paid to the issue of the impact of the age structure of the population on economic development. The general analysis is supported by specific studies of the models of the silver economy of Germany and of Japan.

The second chapter is devoted to the demographic situation in Bulgaria. An in-depth analysis of the demographic trends in the country is presented, with an emphasis on the period of the last thirty years. Statistical data were used. The data were processed and skillfully interpreted by the author of the dissertation. Where appropriate, country values were compared with data for the other EU Member States. As a result of the analyzes the following demographic aspects for Bulgaria were assessed: number and age structure of the population, internal and external migration, birth rate and fertility, induced abortions, marriage, cohabitation and divorce, mortality and aging of the population in the country.

The third chapter presents an analysis of how the demographic situation in Bulgaria (revealed in the second part of the dissertation) affects the development of human capital (a concept presented in the first chapter). The analysis is preceded by measuring the potential of human capital in Bulgaria for a twenty-year period - 2000-2019. Based on a review of existing approaches and methods for measuring human capital, appropriate indicators have been selected to assess its potential. The selected indicators are used to assess the following components of human capital: educational potential, health potential, labor potential, sociocultural potential and intellectual potential. The author has well justified the choice of the indicators used and has performed an in-depth analysis of the individual components. On this basis, a general assessment of the potential of human capital in the country has been prepared. The analyzes were performed by planning regions, which made it possible to outline the regional disparities in the country. At the end of this chapter, based on the analysis of human capital, as well as a review of key strategic and conceptual documents and a comparison of the approaches of Japan and South Korea, perspectives are outlined and measures for the development of the silver economy in Bulgaria in the context of modern demographic trends in the country are offered. The conclusion presents the main summaries and conclusions that correspond to the overall theme of the research presented in the study in the dissertation.

Degree of knowledge of the state of the problem and creative interpretation of the literary material:

The author has selected, interpreted and analyzed appropriate literary and information sources relevant to the topic of the dissertation. The presented research clearly shows the

knowledge and competencies of the author on the studied problems of demographic trends in Bulgaria and their impact on the development of human capital and the silver economy.

Correspondence of the chosen research methodology and the set goal and tasks of the dissertation with the achieved results and contributions:

The author has fulfilled the goal and tasks set in the dissertation. Based on a study of the demographic development of Bulgaria, she has revealed the current demographic situation in the country. She has analyzed the impact of demographic processes on the development of human capital and the silver economy in Bulgaria. She has presented a study of the potential of human capital in Bulgaria by planning regions. She has traced the dynamics of the factors leading to demographic aging of the population in Bulgaria and the demographic indicators related to aging in the context of the dynamic demographic situation in the European Union. She has made an analysis of the development of the silver economy in Bulgaria, as well as a review of measures to promote active life of the elderly. She has conducted a comparative review of the development of the silver economy in Germany and Japan. She has researched the challenges posed by an aging population. She has outlined ideas for overcoming certain demographic problems, as well as recommendations for improving the potential of human capital and for the development of the silver economy in Bulgaria. The set goal and tasks correspond to the achieved results and scientific contributions presented in the dissertation. The research methods used in the dissertation to achieve the goal, tasks and relevant results are the methods of analysis and synthesis, induction and deduction, the historical method and the method of hypotheses. In addition, demographic methods, mathematical-statistical methods and graphoanalytical methods were used. Works of Bulgarian and foreign authors, data from the National Statistical Institute, Eurostat, the World Health Organization, the World Bank and others are analyzed. I think that these methods are suitable for achieving the results of the dissertation. The issues of the concept of human capital and the silver economy are considered in the works that have been studied and analyzed. The statistical data have allowed for an indepth analysis and accurate assessment of the demographic situation in Bulgaria to be made.

Evaluation of the scientific and / or scientifically applied contributions of the dissertation:

Elena Kamenova has identified and formulated four specific scientific or scientificapplied contributions to her dissertation as follows: "(1) A theoretical overview of the development of the concept of human capital, its formation and methods for its measuring has been performed. Scientific theories and research on the relationship between human capital and economic growth are considered in detail, which were used as a basis for studying the potential of human capital in Bulgaria, and in the course of development its key role in economic development is proven. (2) A generalized understanding and theoretical overview of the basic concepts and classifications related to the development of the silver economy in the context of population aging is proposed. Theories of population aging and its impact on economic growth and productivity are discussed. Two successful models of the silver economy are presented - in Germany and Japan. Specific recommendations for the development of the silver economy in the country have been formulated. (3) An assessment and analysis of the demographic situation in Bulgaria has been made, considering the main factors and indicators that determine the demographic development of the country. (4) The potential of human capital and its components in Bulgaria by planning regions in the period 2000 - 2019 has been studied. For the purposes of the research, the educational, health, labor, socio-cultural and intellectual potential at the regional level were measured separately by selecting indicators and applying a statistical method. Based on the results of the study, a detailed analysis of the state of human capital in Bulgaria, as well as the impact of the demographic situation on its development have been performed. Conclusions and concrete recommendations and ideas for increasing the efficiency of human capital in the country have been formulated." In her dissertation Elena

Kamenova has made a literary review of the concepts and ideas for the development of the concept of human capital and the silver economy. She has analyzed and assessed the demographic situation in Bulgaria. She has studied the potential of human capital in the country, as well as the impact of the demographic situation on its development. On this basis, she has formulated recommendations for increasing the efficiency of human capital in Bulgaria.

I agree with the contributions, which are formulated in this way and I think that they have a theoretical and practical application. They would be useful for further research in the fields of economics, administration, governance and management at national and regional level. The achieved results and contributions presented in the dissertation paper are of significance for the practice with regards to the development of human capital and the silver economy, taking into account the development of demographic trends in the country and its regions.

Data for the abstract/ summary book:

The abstract/ summary book accurately and in a synthesized way, and in a generalized form presents the structure and content of the dissertation paper. The most important moments and achieved results of the overall research presented in the dissertation are indicated.

Evaluation of the publications related to the dissertation:

Elena Kamenova has presented four publications on the topic of the dissertation, three of which are independent and one is co-authored. They have been published in scientific peer-reviewed issues: Proceedings of the Scientific Conferences "Geography and Regional Development" and Conference Proceedings "Societal Transformations and Sustainable Development with Respect to the Environment in the Post-Covid-19 Digital Era".

Opinions, recommendations and remarks:

I have no critical remarks about the dissertation. However, I recommend that the Internet sources presented in the biography be arranged in alphabetical order. This minor editorial remark does not diminish the value of the proposed work. The dissertation is a complete study of the research topic. As a recommendation to the author in view of her knowledge and abilities, I would suggest that she continue to conduct research and studies at regional level that would be useful for achieving effective governance and economic development at the regions.

My overall impression and opinion about the dissertation are that it is a research paper on a very current and important topic, both for the scientific community and for the practice of management at national and regional level in Bulgaria in order economic growth in the country to be achieved. Through her work, the author demonstrates in-depth knowledge in the field of the subject. The paper is presented in clear scientific language and style. The author shows excellent abilities to perform in-depth research and analysis. She skillfully interprets and analyzes the complex issues related to demographic trends, human capital and the silver economy. In her dissertation, the author has appropriately used a scientific approach and tools to conduct a comprehensive and complete, independent research. The individual parts of the structure are arranged in a logical sequence. The content of the dissertation reflects the range of questions on the subject. All considered issues are subordinated to the general topic, and no deviations from the topic have been found. The considered issues complement and expand the knowledge in the field of the influence of the demographic situation on the development of the human capital and the silver economy in Bulgaria. The author has successfully fulfilled the goal and tasks of the dissertation, thus achieving significant results and scientific contributions.

Conclusion:

In conclusion, the author Elena Kamenova meets the requirements of LDASRB, RILDASRB and the Regulations on the terms and conditions for obtaining scientific degrees and occupying academic positions at Sofia University "St. Kliment Ohridski" for obtaining the educational and scientific degree of "Doctor" in the Scientific field: "Administration and Management" for her dissertation on the topic: Influence of the demographic situation on the development of human capital and the silver economy of the Republic of Bulgaria after 1990.

She possesses a master's degree. She was expelled with the right to defense. She meets the minimum national requirements. She has the required number of publications on the topic of the dissertation. The candidate has in-depth theoretical knowledge in the relevant specialty and ability to conduct independent research. Very good knowledge of the issues concerning demographic trends, human capital and the silver economy has been demonstrated. The acquired knowledge has been used to measure the potential of human capital in Bulgaria and to upgrade the understanding of the impact of the demographic situation in the country on the development of human capital and the silver economy in the period 1992-2019. Skills for good interpretation and in-depth analysis of the problems on the researched topic has been revealed. Scientific results have been achieved, which represent an original and valuable contribution to the science of management and the field of regional development.

In view of the arguments presented in this opinion, I confidently and clearly declare my positive assessment of the presented dissertation and propose that the Scientific Jury award the educational and scientific degree of "Doctor" to Elena Kamenova.

Date: Member of the scientific jury:

April 13, 2022 /Assoc. Prof. Dr. E. Petkova/