

REVIEW

by Prof. Virginia Ivanova Zhelyazkova, DSc, Ph.D.

from the Economic Research Institute at the Bulgarian Academy of Sciences/ VUZF – Sofia

of a dissertation for the award of the educational and scientific degree "Philosophiae Doctor"

in the Field of Higher Education 3. Social, Economic and Legal Sciences

Professional field 3.8. Economics

Author: Mina Lyubomirova Karpuzova

Topic:

"ALTERNATIVE BUSINESS MODELS IN THE FIELD OF THE CIRCULAR ECONOMY IN THE EUROPEAN UNION"

1. General description of the procedure and the submitted materials

By order Z-RK-56/31.10.2024 of the Rector of the New Bulgarian University (NBU) I have been appointed as a member of the scientific jury to ensure a procedure for the defense of a dissertation on the topic "ALTERNATIVE BUSINESS MODELS IN THE FIELD OF THE CIRCULAR ECONOMY IN THE EUROPEAN UNION" for the acquisition of the educational and scientific degree "Philosophiae Doctor" (Ph.D.) in the Field of Higher Education 3. Social, Economic and Legal Sciences, Professional Field 3.8. Economics. The author of the dissertation is Mina Lyubomirova Karpuzova, a full-time doctoral student at NBU in the doctoral program "Economics". The materials submitted by doctoral student Karpuzova include the following documents:

1. Dissertation;
2. Abstract of the dissertation;
3. Autobiography;
4. Certificate of fulfillment of the national minimum requirements for awarding Ph.D.;
5. Information about the candidate's scientific publications.

2. Information about the candidate

The candidate Mina Karpuzova holds two bachelor's degrees - in "Business Management in Tourism" from the Business and Hotel Management School in Lucerne, Switzerland (2010-2014) and in "Marketing" (2016-2019) from the University of National and World Economy, Sofia. She obtained a master's degree in "Environmental Expertise and Control" at NBU (2019-2021). Immediately after completing the "Master" degree, doctoral student Karpuzova continued her development at NBU in the doctoral program "Economics" as a full-time doctoral student, and since 2024 she has been an assistant at the same university. She has experience in the hotel industry from the Hilton Hotel in Bulgaria and in Switzerland, as well as from working as a participant, coordinator and project manager at the university and in the Air for Health association in Sofia. The professional experience of doctoral student Karpuzova supports her scientific research, as it gives her the opportunity to both working in a team of scientists and in the real business environment and thus meet the challenges that accompany these.

3. Characteristics and evaluation of the dissertation work

The dissertation work presented for consideration has a total volume of 215 pages, of which 200 pages are the main text (including a list of referenced literature), the rest are appendices. For the purposes of illustrating the analysis, numerous visual materials - tables and figures - have been appropriately placed in the text, which illustrate the ideas and conclusions reached by the doctoral student. The literature used includes a significant number - a total of 149 - sources, of which 87 are in Bulgarian, the rest - in foreign languages.

The dissertation is logically structured within an introduction, three chapters and a conclusion. The introduction clearly presents the research thesis, goals and objectives of the work, and correctly defines the object and subject of the study.

The first chapter is dedicated to the transition from a linear to a circular economy. In this part of the dissertation, the doctoral student correctly examines some basic conceptual and theoretical frameworks in the field of circular economy in the context of the global pursuit for sustainable development. Some tools for measuring the transition to a circular economy with micro-level application are examined. The presentation of some critical views on the implementation of the circular economy in the context of sustainable development is valuable.

The subject of the second chapter is the legislation, strategies and policies in the field of circular economy in the European Union (EU). It is positive that the doctoral student presents these regional policies in their global context, which allows for their broader understanding and analysis of their future direction in view of global trends. Policies in the field of circular economy are aptly analyzed in their relationship with those aimed at competitiveness and innovation. The author pays special attention to the role of transport in these processes. Special focus is placed on the state of the policy towards circular economy in Bulgaria, analyzing some basic facts and trends in this area.

The focus of the third and final chapter is on the results of the research conducted by Ph.D. student Karpuzova on the implementation of circular business models in the practice of companies operating on the Bulgarian market. I consider the chosen approach of combining a survey with an

analysis of public data on the selected companies and in-depth interviews with their representatives to be appropriate given the objectives of the research. Given the relative novelty of the topic and practice in the field of circular economy for most business organizations in our country (although the topic of resource efficiency has a decades-long tradition in a number of industries, despite the fact that the term “circular economy” was not used in the past), I congratulate Ph.D. student Karpuzova on her desire to collect and analyze information on the state of the problem. The application of three different methods of collecting information allows for better clarification of the results of the analysis and, therefore, greater accuracy of the conclusions that the Ph.D. student offers within the framework of her work.

The clear wording in the dissertation, the consistency of the presentation and the author's commitment to the research topic make a very good impression. This speaks of the author's very awareness of the research topic.

4. Contributions and significance of the work for science and practice

The contributions of the dissertation are mainly practical and applied and are found in the synthesis of basic principles - theory, as well as policies - from the field of the complex issues of the circular economy and the analysis of their applicability to the Bulgarian corporate context. The presented study of circular business models in theoretical terms and of circular business practices in companies operating in our country provides valuable information about what the attitudes and real actions in this direction are and the chosen approach could be applied to a wider sample, so that the conclusions reached are representative.

5. Assessment of publications on the dissertation work

Doctoral student Karpuzova has submitted a total of 3 articles and reports published in non-refereed journals with scientific review/in edited collective volumes. They are dedicated to the topic of the dissertation work, demonstrate her research activity and her undeniable potential for scientific development.

6. Assessment of fulfillment of minimum national requirements

The publications submitted in connection with the procedure are sufficient in type and number to fulfill the national minimum requirements set out in the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for its implementation. At the moment, there is no reason to doubt the authenticity of the candidate's works.

7. Abstract

The abstract briefly presents the dissertation and its contributions and is prepared in accordance with good academic practices for such types of works; it would only be easier for the reader to number its pages.

8. Critical remarks and recommendations

Like any work, the dissertation submitted for review is subject to improvement. The circular economy is distinguished from the classical linear economy by its exceptional complexity, diversity, pronounced interdisciplinarity and the resulting complexity of understanding, research and analysis. Therefore, the need for some clarifications and improvements in the dissertation is completely understandable and explainable. In this vein are my notes and recommendations, which are intended to contribute to improving the text upon its subsequent publication in a book or in another form (studies, articles, etc.), and in no way belittle what doctoral student Karpuzova has achieved:

- Rethink the title. The use of the adjective “Alternative” implies a distinction to something, but what is it? It becomes clear that circular models are an alternative to linear ones, but the very inclusion of “circular” in the title makes “alternative” meaningless, since circular models themselves are such. The models examined (actually practices, but I elaborate on that further below) are from Bulgaria, so I recommend that this country be indicated in the title, instead of the EU;
- In the scientific literature, the models that the doctoral student designates as “alternative” in the dissertation (p. 30) are known as “sustainable” (see Lathi et al 2018, etc.). This is a long-established term that is also used in the field of investments (“sustainable investments”, “sustainable and responsible investments”, etc.), and should be used in the dissertation as well;
- The understanding, and hence the definition of circular economy, which the doctoral student presents as the author's (p. 41), is widely known. With minor differences in the wording, it is embedded both in a number of scientific works and in the political documents of various countries, including those of the EU;
- Among the tools for measuring the circular transition, several are presented that provide opportunities for analysis at the micro level (pp. 41-47). It would be good for the doctoral student to also incorporate and analyze the EU Monitoring Framework. It is a basic tool for assessing progress in this area at the macro level and tracks various indicators in five categories for the EU countries. Statistics are available for individual countries in the union (although with different frequencies and length of time series) and this allows for various studies to be carried out;
- The criticism of the circular economy is very well conceived as part of the dissertation. However, in the text, the doctoral student confuses the criticism of sustainable development, as well as the ecologization of the economy, with that aimed at the circular economy (pp. 47-55). These three concepts, despite their interconnectedness, describe different phenomena and it would be good to clearly distinguish them in order to maintain the focus on the circular economy itself in the otherwise very well-presented scientific discussion. This will help clarify its essence;
- The doctoral student appropriately discusses the problem of the role of standardization in realizing the transition to a circular economy, and points out that there is none, specifically giving the example of the lack of an ISO standard aimed at the circular economy (p. 59). At present, however, there is an entire family of ISO standards - 59000, dedicated to the circular economy. Separately, there are six more standards that are directly related to it,

although not all of them contain the word "circular" in their names. Reflecting this circumstance will make the text factually correct. The existence of ISO standards, of course, does not mean that the problem with standardization has been overcome, on the contrary, but it should be commented on in its specifics;

- The examples of activities of 11 companies in the field of circular economy examined in the third chapter are rather circular practices than business models. Therefore, I recommend using "practices" instead of "models" in the paper. For example, Unicredit and Yettel, as well as Dundee Precious, have conventional business models. They do indeed apply some circular practices, but their profit is far from being formed by them. We can qualify a business model as "circular" if the entire activity of the company is formed by circular practices and its profit comes from their application, and not if they develop separate such activities, including for PR purposes. The specifics of the sector must also be taken into account here. For banks, for example, we can say that they support the circular economy primarily if a significant share of the loans they grant are directed towards the implementation of circular business projects, i.e. circularity for them is sought in their indirect environmental impacts, those related to their customers. This is not the case, however, for manufacturing companies, such as Dundee Precious, for whom it is essential that their core business, in terms of their direct environmental impacts, be circular. Here again, a distinction must be made between circular projects and environmental, social and governance (ESG) ones (pp. 132-133), because the latter is a broader concept than circular economy, encompassing the vast and complex social and governance issues;
- The Bulgarian literature on the circular economy, using this very term to refer to resource efficiency in practice, dates back earlier than indicated in the dissertation (p. 8). The first monograph was published in 2017. (Zhelyazkova, V., Circular Economy. Financial Aspects. VUZF) and it analyzes both the theory and the main problems facing the implementation of circular business models with a focus on the problems facing their financing, a little later - in 2018 follows research by a team from the Varna University of Economics (Gallucci, Dimitrova et al. "Innovative models for a circular economy". Univ. ed. Science and Economics) and the first textbook for students on this topic (Zhelyazkova, V. Introduction to Circular Economy. VUZF). Therefore the pioneering that the doctoral student claims (p. 8) has actually been there for a long time in the ideas of today's dynamic world. However, the research in the dissertation has its undeniable value and its contribution is towards shedding light on the complex issues related to the circular economy;
- Given what has been said so far, my recommendation is that the contributions be reconsidered so that they more accurately and objectively reflect what has been achieved within the dissertation, and it is not small.

CONCLUSION

The dissertation contains scientific results that represent an independent original contribution to science and meet the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Regulations for its Implementation.

The dissertation shows that the doctoral candidate Mina Karpuzova possesses in-depth theoretical knowledge and professional skills in Professional Field 3. 8. Economics, by demonstrating qualities and skills for independent conduct of scientific research.

Due to the above, I confidently give my positive assessment of the conducted research, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and I propose to the esteemed scientific jury to award the Ph.D. degree to Mina Karpuzova in the Field of Higher Education 3. Social, Economic and Legal Sciences; Professional Field 3. 8. Economics.

12.12.2024

Reviewer:

(Prof. Virginia Zhelyazkova, DSc, Ph.D.)