

SCIENTIFIC STANDPOINT

From: Prof. Dr. Kristiyan Stoyanov Hadzhiev, New Bulgarian University, Department of Administration and Management, Professional Area 3.7 "Administration and Management," Scientific Specialty "Social Management"

Subject: Dissertation submitted for the award of the Educational and Scientific degree "Doctor" in the scientific field of "World Economy and International Economic Relations," professional area 3.8 Economics

Author of the dissertation: Mina Lyubomirova Karpuzova – Full-time doctoral candidate with a scholarship in the doctoral program "World economy. International economic relations" at New Bulgarian University

Title of the dissertation: "Alternative business models in the Circular economy within the European Union"

Academic advisor: Assoc. Prof. Dr. Eduard Vasilev Marinov, D.Sc.

Grounds for the Submission of the Opinion: Member of the Academic Jury, as per Order No. Z-RK 56/31.10.2024 issued by the Rector of New Bulgarian University, Prof. Plamen Doinov, D.Sc.

The opinion has been prepared in accordance with the Academic Staff Development Act of the Republic of Bulgaria, the Regulations for its implementation, and the Ordinance on the development of the academic staff at New Bulgarian University.

1. General description of the submitted dissertation

The reviewed dissertation consists of 215 standard pages, including an introduction, three chapters, a conclusion, a bibliographic reference list, and five appendices. The main text spans 184 pages and contains 30 figures and 4 tables. To support the discussion, the dissertation includes 149 literary sources, 87 of which are in Cyrillic and 62 in Latin script.

The dissertation is dedicated to a highly relevant topic, focusing on the in-depth exploration of the concept of the circular economy and alternative business models within this field. This topic provides an appropriate response to the growing need for sustainable, timely, and lasting solutions to the issues we face today. The significance of the subject in contemporary economic science calls for a reevaluation of the conceptual framework and the creation of a regulatory framework aimed at a smooth transition from a linear to a circular economy (CE). Despite its importance and relevance, the subject of the circular economy, and specifically the implementation of alternative business models, has been insufficiently explored in Bulgaria. In this context, the propositions, ideas, and suggestions presented in the dissertation have both theoretical and practical applications.

The dissertation is well-balanced, with the issues addressed presented in their logical sequence and interconnectedness. The writing style is academic, and the technical formatting is excellent. The aim and objectives are coherent and consistent with the dissertation's topic. The primary scientific problem is clearly formulated, with its boundaries precisely defined. The

research tasks, subject, object, and main thesis of the study are clearly and specifically outlined. A methodology has been developed, which is fully sufficient for achieving the research goals. The concepts and terms used in the dissertation are clearly defined.

The literature used is closely related to the topic of the dissertation and provides a comprehensive overview of the state of the researched problem. The literary sources are organized and numbered in accordance with the adopted standards. The doctoral candidate has analyzed and systematized a significant volume of literary sources on the topic, which are correctly cited in the text. A critical interpretation of the ideas presented in these sources has been made.

The text is successfully illustrated with tables, figures, and diagrams, which significantly contribute to its understanding. The results of the scientific research are presented clearly, logically, and understandably.

From the above, I conclude that the clarity demonstrated by the doctoral candidate on the issues addressed is one of the key factors contributing to the high quality of the entire dissertation.

2. Evaluation of the achieved scientific and applied research results

In accordance with the formulated goal and the detailed research tasks, the structure of the dissertation has been developed.

The introduction of the dissertation contains all the necessary "requirements": a convincing justification of the problem and its significance; clear and precise formulations of the goal and research tasks; the object and subject of the research; and the rationale for the selection of research approaches and methods. The conditions under which the research was conducted have been identified.

In the first chapter, the doctoral candidate clarifies the terminological apparatus, fundamental theoretical concepts, and relations related to the specifics of the evolutionary development of the concepts of sustainable development and the circular economy (CE), based on research in the scientific literature on the issue. The focus is placed on the objective assessment of the green transformation through the lens of a critical analysis of the circular economy model. The main issues related to the heterogeneity and complexity of the circular economy are identified, which necessitate the development of various strategies. However, these strategies generate uncertainties, and the lack of standardization makes it difficult to accurately measure the immediate effects and utility. Key prerequisites, patterns, and processes related to the complexity of the green transformation are explored, as well as the need to define universally applicable indicators and foster cooperation between stakeholders and legislative bodies. The conclusion drawn is that the linear economic model is not sufficiently effective and sustainable, as it fails to account for the consequences of economic activities on the environment and society. Despite the challenges it faces in practice, the application of the circular economy model offers prospects in the context of numerous environmental and economic benefits, making it the logical choice for the transition to sustainable development.

The first chapter clearly demonstrates the degree of development of the research problem and establishes the theoretical foundation on which the doctoral candidate formulates the main research thesis. The conclusions reached by the doctoral candidate are reasonable and supported by solid arguments. The research in the first chapter is very thorough and provides the necessary foundation for the development of the methodology for the empirical research.

In the second chapter, the doctoral candidate analyzes the main European legislative acts, policies, and principles related to the circular economy and sustainable development in the EU, and respectively in Bulgaria. The regulatory framework and the incentives or sanctions provided influence the course of the transformation and have a direct impact on how the transition is carried out. The influence of legislation on alternative business models is examined

in detail. The conclusion drawn is that the successful implementation of the circular model in the European economy requires close interaction between the state, the public, and businesses. In this context, a modern and adequately developed regulatory framework provides an excellent foundation for the actual implementation and acceleration of the economic transformation process. The study retrospectively traces the most significant events that led to the current changes in contemporary policy and the adoption of the new legislative framework in all areas related to sustainability. The focus is placed on the role of the EU in combating adverse climate phenomena from the perspective of the changes introduced in the legislative framework in the context of sustainable development and their application in Bulgaria. Policies in the areas of competitiveness, innovation, and transport are examined as key to economic transformation.

In the third chapter, the empirical research conducted on specific organizations operating according to the circular economy model in Bulgaria is presented. The main goal is to analyze the results of its application in the EU (with a focus on Bulgaria) through the lens of the economic effectiveness of the model. Based on the analysis of the collected economic data, the key challenges and development prospects for businesses in this direction are identified. The research forms the *strategic framework for planning* in the process of transformation and adaptation of organizations to the new trends and conditions related to the implementation of alternative circular business models in Bulgaria.

The study's **methodology** and research tools are **excellently justified**. It includes the interpretation of empirical data and represents a combination of qualitative (structured in-depth interviews) and quantitative (online survey) research methods. Three research methods, divided into two main approaches, are appropriately utilized.

The first approach is related to the study of the selected alternative models and includes a set of microeconomic data for each of the companies. **The second approach**, which expands the scope of the study and answers the question of the economic effectiveness of the model, is related to the examination of consumer attitudes towards alternative business models in our country.

The conclusion that arises is that the methodology used demonstrates a consistent approach to data collection, analysis, and interpretation. This ensures flexibility and allows for the objective identification and tracking of dynamic trends, which is essential for accounting for changes in the research. At the same time, it guarantees that the study is supported by fundamental empirical data, confirming its reliability and quality.

Based on the analysis presented in Chapter Three, three specific conclusions and six recommendations have been formulated for organizations regarding the implementation of alternative business models in the field of circular economy in Bulgaria.

The study conclusively proves **the main dissertation thesis** that the implementation of alternative circular models has a positive impact on companies in the Bulgarian market, leading to improved market positions. As a result, companies can expect higher turnover and an increase in their market share.

In summary, in all three substantive chapters, the doctoral candidate demonstrates skills in clearly highlighting and providing well-argued scientific defense of their views on alternative business models in the field of the circular economy.

In the conclusion part of the dissertation, the doctoral candidate systematically summarizes and consolidates the main results and conclusions, which characterize the theoretical and practical significance of the comprehensive study conducted in terms of its theoretical, methodological, and applied aspects. **The result of the dissertation research: confirmation of the formulated main research thesis.**

3. Description of scientific and practical contributions

The dissertation represents a *substantial scientific study* of a relevant and significant issue. The main contributory aspects can be examined and evaluated in two groups – scientific

contributions and practical-applied contributions, within the context of the analysis and synthesis of existing scientific knowledge in the field, regarding the criterion of **enriching existing scientific knowledge**. I fully accept the contributions formulated by the doctoral candidate. The list of contributions is correctly compiled and objectively reflects the scientific results achieved by the candidate. The contributory aspects of the dissertation demonstrate that the doctoral candidate possesses in-depth knowledge in the researched scientific field and is capable of conducting independent scientific research and logically interpreting its results.

4. Dissertation impact on the external environment

Three publications have been made on the topic of the dissertation in specialized Bulgarian scientific journals, which demonstrates that several of the ideas and conclusions formulated in the research are accessible to a professional audience. All of them reflect specific aspects of the doctoral candidate's research work and ensure the necessary visibility. The publications fully meet the national minimum requirements.

5. Evaluation of the doctoral thesis summary

The presented dissertation summary accurately reflects the content of the dissertation. It synthesizes the main points of the dissertation: general characteristics, structure and content of the work, scientific contributions, and publications related to the dissertation topic.

The deposited dissertation summary is 35 pages long. It has been prepared in accordance with the requirements, providing a synthesized overview of the content of the three chapters of the dissertation, the thesis, the subject and methodology of the scientific research, as well as the achieved theoretical-methodological and empirical results.

6. Critical comments, recommendations, and questions

I have no critical comments, recommendations, or questions regarding the presentation of the ideas and propositions in the dissertation.

I have the following recommendation for the doctoral candidate: to publish their research as a monograph so that it becomes accessible to a wider audience.

7. Conclusion

The presented dissertation shows that the author possesses in-depth knowledge of the subject matter under study. The topic of the dissertation is relevant and significant both in scientific and practical-applied terms. The dissertation is a fully completed scientific and practical-applied study that meets the requirements of the Academic Staff Development Act, its implementing regulations, as well as the internal regulatory framework of NBU for awarding the educational and scientific degree of "Doctor." In the course of the research, the doctoral candidate demonstrates the ability to conduct *independent scientific research and achieve specific scientific and practical-applied results and contributions*.

All of the above provides me grounds to give a **positive evaluation** of the dissertation and to propose to the esteemed members of the scientific jury to make a decision *to award the educational and scientific degree of "Doctor" to Mina Karpuzova in the scientific specialty "World Economy and International Economic Relations,"* professional field 3.8 Economics.

Sofia,

November 22, 2024

Signature:

/Prof. Dr. Kristiyan Hadjiev/