

*To the Specialized Academic Council DF 58.082.058\_ID 6305  
at the West Ukrainian National University  
of the Ministry of Education and Science of Ukraine*

## **REVIEW**

of the opponent **Natalia Ihorivna Horbal**,  
Candidate of Economic Sciences, Associate Professor,  
Associate Professor of the Department of Foreign Trade and Customs  
of the Lviv Polytechnic National University,  
on the qualification work of **Igor Rivilis**  
on the topic: «Global Waste Management and Corporate Social Responsibility»,  
submitted for the degree of Doctor of Philosophy in the speciality  
073 «Management»

**Relevance of the topic of the qualification thesis.** The issue of global waste management in the context of corporate social responsibility is extremely relevant, as societal values are transforming, leading to the formation of responsible businesses that are oriented towards sustainable development of society. Through corporate social responsibility, businesses contribute to achieving sustainable development goals, which involves balancing the economic, environmental, and social goals of society and their mutually beneficial integration, ensuring the formation of an effective approach to managing international companies.

Given this, Igor Rivilis's qualification thesis, which aims to scientifically substantiate the theoretical concepts of waste management and the formation of social corporate responsibility in the context of the development of the applied model for the implementation the environmental strategic priorities of business, is relevant and timely.

The dissertation submitted for defence is part of the scientific research of the West Ukrainian National University, in particular: fundamental state budget funded researches "National concept of eco-security of society and inclusion of the circular economy in the conditions of the pandemic" (state registration number 0121U109485); "Concept of recovery and green reconstruction of Ukraine" (state registration number 0124U000003); implementation of the international project (Erasmus+ Module Jean Monnet) "European inclusive circular economy: post-war and post-pandemic module for Ukraine (EICEPPMU)" 2022-2024, registration number 101085640); business funded research on the topic "Transformation of business in conditions of sustainable development of the global economy" (Contract No. MEV-33-2023 dated 05/10/2023); business funded

research on the topic “Scientific and professional consulting of the enterprise on issues of social responsibility and organization of recycling” (Contract No. MEV-81-2021 dated 01/10/2021); business funded research on the topic “Formation of the company’s ecological brand in foreign markets” (Contract No. MEV-37-2024 dated 25/04/2024).

**The degree of justification of scientific provisions, conclusions, and recommendations formulated in the dissertation.** The dissertation has a logically structured layout, with clearly defined goals and objectives and methodologically justified approaches to their implementation. Moreover, the qualification thesis contains proposals for improving global waste management based on the development of corporate social responsibility.

The dissertation employs various general scientific and special research methods, including the method of theoretical generalization, the method of dialectical cognition, methods of analogy and comparative analysis, methods of induction and deduction, methods of analysis, synthesis, and data processing, the monitoring method, and the method of data visualization, as well as the main provisions and results of the research. These methods enabled the achievement of the research objectives.

All conclusions of the dissertation are logically justified and supported by the analysis of corporate social responsibility and global waste management in the context of contemporary challenges of international business.

The main theoretical and applied provisions of Igor Rivilis’s dissertation have been successfully tested at national and international conferences and published in domestic and international journals.

The above allows for a positive conclusion regarding the scientific level, reliability of the presented material, theoretical justifications and arguments, the practical significance of the conclusions and recommendations arising from Igor Rivilis’s dissertation.

**Structure and volume of the qualification thesis.** The qualification thesis is written in professional English, contains annotations in Ukrainian and English, an introduction, three chapters, conclusions, a list of references, and annexes.

In the first chapter, “Theoretical and methodological basis of the research waste management and corporate social responsibility”, the applicant examines the genesis of theoretical approaches to research of waste management concept, substantiates the theoretical identification of the corporate social responsibility theories, and the concept of environmental management in the system of waste management. Carroll’s pyramid of

corporate social responsibility is adapted to the modern infrastructural conditions of the company's social responsibility in its global interaction. The main features and characteristics of CSR theories are described, indicating that a firm has a moral obligation to achieve social and environmental goals in addition to financial benefits. It is investigated that the creation of a comprehensive environmental safety management system allows enterprises to utilize the synergistic advantages of all its components, thereby optimizing the use of vital materials and organizational resources.

In the second chapter, "Research of global waste management and corporate social responsibility", the applicant analyzes waste management in the system of circular transformation, evaluates the features of corporate social responsibility under instability, and analyzes the level of emissions under global transnationalization. Levels of circularity are outlined, options for cooperation between municipalities in the field of waste collection are developed, and the concept of transitioning from linear waste management to the concept of circular resource management is proposed. It is substantiated that the implementation of corporate responsibility in the field of waste management is often hindered by regulatory barriers and the lack of standardized waste management methods. It is proven that consumers are increasingly aware of the environmental consequences of their purchasing decisions and actively seek companies that prioritize environmentally responsible waste disposal methods.

In the third chapter, "Prospects of development the waste management system and improvement of the corporate social responsibility", the applicant outlines the key areas of waste management system improvement, identifies ways of implementation of corporate social responsibility management strategy, and develops the model of waste management in the system of corporate social responsibility. It is established that in the modern business landscape, a reliable waste management system is becoming increasingly important as the world's population grows and the demand for products and services increases, leading businesses to generate more hazardous and non-hazardous waste. It is substantiated that the implementation of corporate social responsibility strategies in an organization's activities can be more effective with the use of artificial intelligence. It is argued that the successful implementation of environmentally responsible practices by transnational companies leads to increased business sustainability by improving relationships with stakeholders, reducing environmental risks, and enhancing the competitiveness of products.

The structural construction of Igor Rivilis's qualification thesis meets the qualification requirements, and the style of presentation and the delivery of research material are logical, consistent, and unified in their target orientation. The qualification thesis contains a sufficient number of tables, diagrams, figures, and charts, which are presented directly in the main part of the dissertation and included in the annexes. The language of the qualification thesis is concise, correct, and clear. In terms of structure and formatting, the work complies with the current requirements for design of dissertation, approved by the Ministry of Education and Science of Ukraine's Order dated January 12, 2017, No. 40 "On approval of Requirements to design of dissertation".

The set of scientific provisions, conclusions, and recommendations presented in the qualification work, and their practical significance, allow for the conclusion about the completeness, integrity, and structured nature of Igor Rivilis's dissertation.

**Assessment of the scientific novelty of the provisions and results obtained in the qualification thesis.** The results substantiated in the dissertation have both theoretical and practical significance, and determine the scientific novelty of the dissertation. The main results include:

- a waste management model within the corporate social responsibility system has been developed, based on methods of implementing environmental management and corporate social responsibility directions. This model includes tools for improving the waste management system and considers approaches to the development of CSR as a management strategy, allowing for the identification of the components of the corporate social responsibility implementation strategy and the directions of CSR under crisis (p. 134).

- the concept of environmental management in the system of waste management has been improved through the analysis of the environmental management system, justification of the advantages of implementing environmental management, and the development of environmental management tools (pp. 42-48).

- terminology has been improved, specifically detailing the essential characteristics of waste management and justifying the concept of waste. The term "waste hierarchy" has been proposed, with justification of the options ranked in order of preference for waste minimization (pp. 19-23).

- the evaluation of the features of corporate social responsibility under instability has been improved by highlighting the stages and approaches of business social

responsibility, outlining the problems and threats to corporate social responsibility (pp. 36-37).

— the main properties and characteristics of CSR theories have been further developed, influenced by key components such as the strength of the theory, the advantages of applying the theory, the challenges in applying the theory, and the characteristics of types of corporate social responsibility by distinguishing between the external and internal focus of CSR; theoretical identification of corporate social responsibility theories by classifying the evolution of CSR theories into three main stages (pp. 37-39).

— the analysis of waste management in the system of circular transformation and the analysis of the level of emissions under global transnationalization have been further developed, allowing for the outlining the levels of circularity, development of cooperation options for municipalities in the field of waste collection, and the concept of transitioning from linear waste management to the concept of circular resource management (pp. 61-66).

**Significance of the research results for science and practice.** The theoretical significance of the thesis lies in solving a scientific problem and developing proposals for improving waste management based on corporate social responsibility.

The practical significance of the results obtained in Igor Rivilis's qualification thesis is that the main theoretical provisions of the study on key directions for improving the waste management system and ways to implement a corporate social responsibility management strategy can be used in the practical activities of economic entities and in further scientific developments.

The presented research results, developed into practical findings and recommendations, are confirmed by the certificate of implementation and participation in scientific research work of West Ukrainian National University (certificate No. 21/69.2024 dated June 28, 2024).

**Completeness of the presentation of scientific provisions, conclusions, and recommendations formulated in the dissertation in published papers relevant to the dissertation topic.** The main provisions of the qualification thesis, which have scientific novelty, are fully and convincingly disclosed in the published papers. According to the main results of the dissertation, 11 scientific works have been published, including 3 articles in international scientometric databases Scopus, 3 articles in scientific professional editions of Ukraine, and 1 article in a foreign periodical edition. In addition,

4 articles have been published in other approbation publications. The published scientific papers by Ihor Rivilis, which are credited to the dissertation topic, meet the requirements of the current procedure for awarding the Doctor of Philosophy degree. The number and volume of printed papers entitle the author to publicly defend the dissertation.

**Absence (presence) of violations of academic integrity.** The scientific results of the dissertation were obtained by the author personally. From the scientific papers published in co-authorship, only those ideas and provisions that were personally obtained by the author were used in the dissertation. No violations of academic integrity have been identified in Igor Rivilis's qualification work. The dissertation contains references to relevant sources of information, provides accurate information about the methods used and the results of the research, and complies with the laws on copyright and related rights. All of this allows for the conclusion that the author has adhered to the requirements and rules of academic integrity in the dissertation research.

**Discussion points and remarks on the dissertation.**

1. The author analyzed the level of emissions under global transnationalization, focusing the object of his research on EU countries. However, this analysis would have been more informative if the study had paid more attention to the emission problems in Ukraine, particularly during the wartime period.

2. The thesis researched that the informal sector plays a crucial role in community waste management; however, it would have been beneficial to specify potential directions for government support of this sector.

3. The author noted that difficulties for companies seeking to maintain responsibility and consistency in their activities create regional differences in rules and standards. It would have been valuable to more thoroughly characterize these regional differences.

4. The study mentioned that enterprises could integrate various waste management strategies to create the most effective waste management system. The essence of such an effective waste management system should be detailed further.

5. The dissertation noted that developing a waste management model within the corporate social responsibility system helps companies effectively and responsibly achieve their goals. A more detailed focus on characterizing these goals in the chapter describing the theoretical and methodological basis of the corporate social responsibility study would have been beneficial.

The presented comments and discussion points indicate some controversial aspects of the research. However, overall, they confirm the relevance, complexity, and

multifaceted nature of the chosen topic, its practical significance, and do not significantly affect the qualitative characteristics of the dissertation work.

### **General conclusion and evaluation of the qualification thesis**

Igor Rivilis's dissertation on the topic "Global waste management and corporate social responsibility" is a completed scientific study, the result of which is a scientific justification of the theoretical foundations of waste management and the formation of social corporate responsibility in the context of development of the applied model for implementation of environmental strategic priorities of business.

In terms of content and professional orientation, the qualification thesis corresponds to the specialty 073 "Management" in the field of knowledge 07 "Management and administration," and in terms of quality and level of theoretical and practical developments, it meets the requirements for a PhD thesis. It presents a unique authorial approach to solving the scientific problem.

In general, the qualification thesis "Global waste management and corporate social responsibility" meets the requirements of the Resolution of the Cabinet of Ministers of Ukraine dated January 12, 2022, No. 44 "On the Approval of the Procedure for Awarding the Degree of Doctor of Philosophy and the Cancellation of the Decision of a One-time Specialized Academic Council of a Higher Education Institution, Research Institution on Awarding the Degree of Doctor of Philosophy" in terms of content, substantiation of scientific provisions and recommendations, and level of scientific novelty. The author, Igor Rivilis, deserves to be awarded the degree of Doctor of Philosophy in the specialty 073 "Management".

### **Official Opponent:**

Candidate of Economic Sciences, Associate Professor, Associate Professor of the Department of Foreign Trade and Customs of the Lviv Polytechnic National University

Natalia HORBAL

I certify the signature of Assoc. Proff. Natalia Horbal

Scientific secretary of the National University "Lviv Polytechnic"



Roman BRYLINSKY