

TO THE MEMBERS OF THE SCIENTIFIC JURY  
IN THE PROCEDURE FOR ACQUISITION OF THE  
EDUCATIONAL AND SCIENTIFIC DEGREE "DOCTOR"  
IN THE DOCTORAL PROGRAMME  
"FINANCE, MONETARY CIRCULATION, CREDIT AND INSURANCE (FINANCE)"

**OPINION**

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**Dissertation topic:** "FINANCIAL ASPECTS OF THE TRANSITION TO A CIRCULAR ECONOMY"

The present opinion has been prepared in accordance with the requirements of the current Law on the Development of Academic Staff, its implementing regulations, and the Regulations for the Development of Academic Staff at D. A. Tsenov Academy of Economics – Svishtov.

**I. General Presentation of the Dissertation**

The dissertation comprises 382 pages. In compositional terms it consists of an introduction, three chapters, a conclusion, a bibliography, and appendices. A balanced and logical classical structure is observed. The introduction and the conclusion have been prepared in accordance with generally accepted academic requirements. The dissertation clearly defines the object, subject, purpose and objectives of the scientific research, as well as the dissertation thesis. The selected topic is characterized by relevance, significance, and suitability for doctoral research. The relevance of the research stems from the dynamics of the contemporary economy, more specifically from the fact that the concept of the circular economy is still in a process of evolution. The topic is key for studying the possibilities for applying the principles of the circular economy as an integrated model for sustainable development of the modern Bulgarian city. The research is motivated by the increasingly deepening global and European environmental and resource challenges, including the growing pressure on natural resources, problems related to the generation and treatment of waste, and the need to increase resource efficiency under conditions of limited public budgets.

The object of the research is the circular economy models related to major municipal activities. The subject of the research focuses on the regulatory and administrative aspects that contribute to the transition towards a more efficient circular economy, as well as their financial and economic dimensions.

The main objective of the dissertation is to study the development of circular economy concepts by identifying circular economic models applicable to the national economy, as well as implementable aspects from global and European regulatory and administrative frameworks. On this basis, the foundations are laid for improving the mechanisms of the circular economy and for their effective implementation at the municipal level.

In order to achieve the main objective, the following research tasks have been formulated:

First. To conduct a critical review, in historical and theoretical terms, of the concept of the circular economy.

Second. To develop and structure the methodological foundations for analysing the necessity of transitioning from a linear to a circular economic model.

Third. To justify and test an approach for the application of circular economic mechanisms within the regulatory and administrative framework at the national level and at the level of local governance – within municipalities.

Fourth. To substantiate the benefits of well-structured and implemented circular mechanisms within regulatory and administrative frameworks in one of the strongest economies in the world – the economy of the Republic of Japan.

Fifth. To rank feasible mechanisms for the gradual implementation of the circular economy within municipal local governance, by developing operational models for the implementation of circular urban agriculture in urban agglomerations, as well as the application of a new methodology for determining the municipal waste fee based on the circular economic model.

Sixth. To examine and trace the linear economic model without the application and implementation of circular economy aspects, and to identify the problematic areas leading to the exhaustion of the linear economic model functioning according to the principle “Take – Make – Dispose.”

The main research thesis defended by the author in the dissertation is that the introduction of circular economic mechanisms aimed at achieving a balanced, resource-saving and low-carbon economy at the municipal level is not only feasible but also beneficial from an environmental and social perspective.

The author demonstrates very good knowledge of the researched field both in theoretical and in purely practical terms. A modern methodology and relevant analytical tools have been employed. Useful conclusions, recommendations and generalizations have been made.

The research methods applied in the dissertation include comparative analysis, methods of deduction and induction, cost–benefit analysis, graphical methods, statistical methods of analysis, and others.

In developing the dissertation, certain limitations regarding the scope of the research have been adopted. The dissertation has been developed within clearly defined theoretical, methodological, analytical and applied boundaries. Limiting conditions have been defined with the purpose of outlining and framing the research in order to prevent excessive and multi-aspect expansion. Thus, outside the scope of the study remain the reasons for the still relatively low popularity and interest in circular design in the member states, as well as the exploration of possibilities for creating additional incentives in this direction.

The author has complied with the rules of academic ethics, including the originality of the scientific product, correct citation and referencing, and reliability of the presented information.

A substantial body of recent Bulgarian and international specialized publications has been thoroughly examined and analyzed.

## **II. Assessment of the Form and Content of the Dissertation**

The research logic and the structure of the dissertation are well constructed. The dissertation is based on scientific studies by Bulgarian and foreign researchers in the related field.

In structuring the research, the doctoral candidate first, in Chapter One – “Theoretical Foundations, Regulatory Framework and Current State of the Circular Economy,” presents a historical and conceptual analysis of the emergence and development of the idea of the circular economy, including its connections with efficiency economics, sustainable development and the environmentalization of the economy. Problem areas hindering the sustainable development of the circular economy are identified, including: institutional and regulatory heterogeneity, deficiencies in implementation and control, limited administrative capacity, insufficient public awareness and engagement. On this basis, the necessity of permanent and multidimensional analysis of the development of the circular economy is justified, encompassing political, regulatory, economic and social dimensions, with the aim of identifying deficits and defining effective directions for development.

Chapter Two – “New Models Based on the Principles of the Circular Economy” has a pronounced analytical and research character. It presents international experience and best practices in the application of circular economy models, with particular emphasis on the Japanese model. The study shows that sustainable circular models are characterized by clearly structured institutional mechanisms, long-term policy orientation, and a combination of regulatory and economic instruments. At the same time, the analysis confirms that the mechanical transfer of practices is methodologically incorrect and practically risky, since the effectiveness of circular models is context-dependent and influenced by the institutional environment, financial capacity and social attitudes. In this sense, the dissertation highlights adaptation as a key prerequisite, whereby international experience functions as an orientation and a source of mechanisms, while implementation under Bulgarian conditions requires selective transfer and careful adaptation to local policies and regulations.

Chapter Three – “Study of the Circular Economy” is devoted to the author’s empirical research, reflecting the results of the applied testing of the developed methodology for determining the municipal waste fee and its place within the circular economy at the municipal level.

An analysis of the administrative practice and regulatory framework at the local level is presented, demonstrating that environmental management components are structured in accordance with national and European environmental policies. The role of public participation and the non-governmental sector is highlighted as a significant factor for the functioning of municipal waste management systems. Unregulated waste treatment practices at the municipal level are also examined. A cost–benefit analysis (CBA) and scenario analysis are conducted, showing that the economic justification of the proposed methodology for determining the municipal waste fee is sensitive to assumptions regarding participant behaviour and to the selected analytical parameters. The effectiveness of separate waste collection systems is substantiated as a key factor for the functioning of circular models at the local level.

The arguments formulated in the concluding sections contribute to the completeness of the study, while the summarizing conclusions presented at the end of each chapter further

emphasize its qualities. In the final conclusion, the doctoral candidate systematizes the main generalizations, conclusions and achieved results, which may be considered as contribution elements, representing the essence of research of this type. This provides grounds for confirming the research thesis formulated at the beginning of the study.

The dissertation demonstrates a high degree of scientific maturity and professional precision. The study is well grounded, consistent and successfully combines theoretical analysis with empirical research, thus providing both theoretical and practical value. The presented results and conclusions are convincing and demonstrate originality, relevance and contribution to the development of the researched topic.

The abstract has been prepared in accordance with the main elements of the dissertation and highlights the author's contributions. It reflects in a synthesized form the content, main results and conclusions achieved during the research process.

The publications presented on the dissertation topic demonstrate that key aspects of the research have been disseminated within the scientific community, including through participation in scientific forums, and that the national minimum requirements for doctoral studies have been fulfilled.

### **III. Scientific and Applied Contributions of the Dissertation**

The careful review of the dissertation makes it possible to identify the following scientific and applied contributions:

First. An original conceptual framework of the circular economy is developed as a complex socio-economic model requiring transformation in production, consumption, resource management and institutional practices.

Second. Through the author's analysis of the theoretical and regulatory foundations of the circular economy, key problem areas hindering its sustainable development have been identified and an adaptation approach suitable for the Bulgarian institutional and socio-economic context has been developed.

Third. Based on the analysis of possibilities for applying circular models at the local level, circular urban agriculture is analytically justified as an integrative model combining bio-waste management, development of green infrastructure, social inclusion and local production.

Fourth. An original methodology for determining the municipal waste fee based on the "polluter pays" principle has been developed, aimed at introducing economic incentives for reducing waste generation and improving resource efficiency.

Fifth. The developed analytical and applied models have been normatively validated through amendments to municipal regulations adopted by Troyan Municipality in key areas such as waste management, green system protection and development, and management of municipal forest territories.

### **IV. Critical Remarks, Questions and Recommendations**

I have no significant critical remarks or recommendations regarding the dissertation, including the main exposition and the author's argumentation. I also have no questions.

## **V. General Conclusion and Opinion**

The presented dissertation possesses the characteristics of a comprehensive, in-depth, and completed scientific study addressing a significant economic problem. The objectives and tasks defined in the introduction have been achieved during the research process.

The scientific and applied contributions formulated in the conclusion and the results of the practical research can be considered real achievements of the doctoral candidate.

For the purposes of the decision of the Scientific Jury regarding the award of the educational and scientific degree “Doctor” in the doctoral programme “Finance, Monetary Circulation, Credit and Insurance (Finance)”, I give a positive evaluation of the dissertation titled “Financial Aspects of the Transition to a Circular Economy” and propose that the members of the Scientific Jury award the educational and scientific degree Doctor (in Economics) to Nikolay Vasilev Todorov.

Date: 23.03.2026

Prepared by:

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