

OPINION

on

DISSERTATION

for the award of the ESD "Doctor" (in Economics) in the doctoral program
"Finance, Money Circulation, Credit and Insurance (Finance)"

on the topic:

**„Trade flows and transport services in the balance of payments of the
Republic of Bulgaria: trends and evidence of economic recovery“**

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Scientific supervisor: Prof. Dr. Andrey Zahariev

Reviewer: Prof. Dr. Stefan Simeonov

appointed as a member of the scientific jury by order of the rector of the
Academy of Economics Assoc. prof. Dr. M. Marinov №1250 from 27.11.2024

1. Fulfillment of the formal requirements for a dissertation

The presented dissertation is 215 pages long.

The content and format of the work fully comply with the national requirements for dissertations and the established standards in the Department of Finance and Credit.

The introduction contains a correct justification of the problem area of research, as follows: relevance, object, subject, thesis, goal, tasks and methodology. The conclusion objectively presents the main results of the dissertation work. Key generalizations are drawn and guidelines for future research on the topic are formulated.

The review of the used citations, the main content and the bibliographic reference show compliance with the requirements for bibliographic citation. Data from the similarity checking system indicate a very high level of originality with correct reference to the literary sources.

2. Structure of the dissertation

The dissertation submitted for review is developed in a classic structure of three chapters, which are balanced and contribute to the realization of the set goals:

Chapter One. The trade account of the balance of payments – methodology, principles, reporting and trends for Bulgaria and the European Union.

Chapter Two. Transport Services in the Balance of Payments in Bulgaria and the European Union – Reporting and Empirical Evidence for Economic Recovery;

Chapter Three. Seasonal Modeling and Analysis of Export Operations in the Trade Account and Transport Services in the Balance of Payments against Bulgaria's GDP (2020-2023).

26 tables and 29 figures are included to illustrate the text.

3. Scientific and substantive evaluation of the development

The research is on a topic of undeniable relevance, scientific and applied focus. Its problem-oriented nature and rich data base provide a broad field for analysis.

3.1. Object and subject of the study

The object of the study is the balance of payments of the Republic of Bulgaria. The perception of the balance of payments not only as a static tool for measuring and assessing flows of goods, services and capital is an important condition for developing the problem-oriented nature of the dissertation work. The subject of the dissertation is the establishment of trends measured through the balance of payments and evidence of economic recovery based on trade flows and transport services between Bulgaria and the rest of the world. The selection of these balance of payments components is determined by several objective circumstances: the strategic nature of the country's geographical location between Europe and Asia; expectations for economic recovery and growth after the pandemic; the subsequent electricity price crises; and the ongoing war in Ukraine.

3.2. Research thesis and working hypotheses

The thesis of the dissertation is based on the understanding that: by studying the seasonality and dynamics of exports of goods and transport services in the balance of payments, trends and evidence of economic recovery of Bulgaria as an EU member state can be established. Economic

recovery itself in the context of a series of crises requires support through targeted interventions by the executive branch in support of the economy, including through mechanisms at the EU level, such as the Recovery and Resilience Plan.

In addition to the stated object, subject, and main research thesis, the focus of the development is also directed at testing three ***working hypotheses***:

Hypothesis one. Regardless of the pandemic in 2020, Bulgaria's economy retains its open nature and continues to add value to GDP with objective adjustments in the value indicators of imports and exports for the leading commodity groups.

Hypothesis two. In the conditions of the fundamental principles of the “acquis communautaire”, with guaranteed free movement of people, goods and capital, indicators and instruments measuring the transport services sector (through the balance of payments) are of essential importance for determining trends in the economic development of Bulgaria and the EU.

Hypothesis three. By seasonally projecting selected items from the balance of payments of Bulgaria, the degree of correlation between the flows of goods and transport services and the GDP of Bulgaria as a country with an open economy can be established.

The first of the working hypotheses thus defined has a practical focus, while the second and third have a methodologically analytical nature.

3.3. Purpose and objectives of the dissertation

The aim of the dissertation is to conduct a theoretical and practical analysis of the dynamics and trends in export trade flows and transport services in the balance of payments of the Republic of Bulgaria by establishing the degree of their correlation and seasonality with GDP. They are considered as indicators of economic recovery during and after a period of multiple crises.

Six research tasks are formulated as follows:

- First. To review the existing literature on trade flows and transport services in the context of the balance of payments.
- Second. To develop and substantiate a framework for analyzing trade flows and transport services in Bulgaria's balance of payments, including quantitative and qualitative methods for assessing trends and evidence of economic recovery.

- Third. To identify and assess structural changes in Bulgaria's trade flows, including changes in the geographical and product structure of trade, as well as in the competitiveness of key export sectors.
- Fourth. To conduct a detailed analysis of the transport services sector in Bulgaria, including its contribution to the balance of payments, main subsectors (sea, air, land transport) and factors influencing its development.
- Fifth. To analyze the dynamics of exports of goods and transport services of Bulgaria for a selected period 2020-2023, with particular emphasis on the changes that occurred after the start of the COVID-19 pandemic based on quarterly data.
- Sixth. To assess the evidence of Bulgaria's economic recovery by analyzing the interrelationships between export trade flows, transport services and GDP, in order to identify trends and prospects for sustainable economic growth.

3.4. Research methodology

In methodological terms, the study is based on the use and application of comparative analysis, deduction and induction methods, seasonal projection, graphical method, statistical analysis methods, descriptive statistics, regression and correlation analysis, etc.

4. Content of the dissertation

In accordance with the formulated object, subject, thesis, goal and tasks, the work is structured in the following separate parts:

Chapter one examines the current account of the balance of payments in the part of trade in goods - methodology, principles, reporting and trends for Bulgaria and the European Union - in a theoretical, discussion and applied aspect.

In Chapter two is conducted an in-depth critical analysis of the role and place of transport services in the balance of payments of Bulgaria and the EU.

Chapter three is entirely devoted to econometric modeling through correlation analysis, descriptive statistics and seasonal projection of the relationship between export trade flows and transport services with the dynamics of Bulgaria's GDP. The object of modeling is both export flows by commodity groups and transport services in view of their positive impact on the output variable - the GDP of the Republic of Bulgaria.

The author has formulated recommendations for a practical solution to some of the key problems, as well as directions for future research, which shows his professional commitment to the transport sector.

5. Correctness of the literature used

The list of used literature includes 106 titles, over 2/3 of which are in foreign languages. The requirement for using the ARA citation standard has been met. The originality check (in Strike Plagiarism) reports very low rates of coincidence, which indicates a high level of correctness.

Knowledge of scientific research by the departmental staff is also evident, which is a prerequisite for a comprehensive theoretical analysis.

6. Achieved results

The study reveals several significant trends in Bulgaria's trade flows and transport services:

- 1) Gradual recovery of trade volumes after the decline caused by the COVID-19 pandemic, with growth rates exceeding the EU average in some sectors.
- 2) Increasing the share of high-tech products in the export structure, which indicates a gradual restructuring of the economy.
- 3) Growing importance of transport services in the balance of payments, especially in the field of logistics and courier services, stimulated by the boom in e-commerce.
- 4) Improving the trade balance in the services sector, partially compensating for the deficit in trade in goods.
- 5) Strengthening trade integration with the EU, as well as regionally within South-Eastern Europe.

In the dissertation, the author identifies **four problem areas** facing the recovery of the Bulgarian economy through the prism of the trade account and transport services, expressed in the balance of payments:

First. Sustainability of the recovery - The question remains open as to how sustainable the observed recovery is in the context of global economic uncertainty and geopolitical tensions.

Second. Structural imbalances: Despite improvements, the Bulgarian economy continues to show dependence on imports of energy resources and some high-tech components, which creates vulnerability to external shocks.

Third. Competitiveness: Growing competition from countries with lower production costs questions the long-term competitiveness of some traditional export sectors.

Fourth. Digital transformation: Despite progress, the pace of digitalization in some sectors of the economy lags behind the EU average, which may negatively affect future competitiveness.

7. Contributions

The author has formulated four contributions, the nature of which is defined as: theoretical-methodological; empirical-diagnostic contribution; prognostic-analytical and practical-applied. We can confirm that they are an objective consequence of the results actually achieved in the dissertation.

8. Publications related to the dissertation

Three independent articles by the author are indicated, which present key results of the dissertation research to the professional community.

The indicated publications provide 30 points in accordance with the national requirements under the Regulations for the Implementation of the Act on the Development of the Academic Staff in the Republic of Bulgaria.

9. Abstract

The abstract objectively reflects the main points of the content, analyses and results of the dissertation.

10. Strengths and weaknesses

There are no significant weaknesses.

As a strong point with an important place for the value of the dissertation, I consider the basis of the study to be the regulations of the European Union on balance of payments statistics, which is a serious basis for the correctness of subsequent analyses and dependencies of trade flows and transport services.

Among the merits of the study is the applied seasonal projection methodology.

11. Questions to the defense

I propose the following question to the attention of doctoral student A. Velkovski:

Based on the comprehensive analysis of trade flows in the Bulgarian economy, can you identify the sector (one or two) with the greatest potential to support overall economic growth and the most significant contribution to the positive balance of payments?

12. Conclusion

The presented dissertation for the Educational and Scientific Degree "Doctor" meets the quantitative and qualitative characteristics required by the Regulations in the "D. A. Tsenov" Academy of Economics. The dissertation reaches original scientifically sound results, the main ones of which lead to contributions of a scientific and applied nature.

All this gives me grounds for a categorically positive assessment for awarding the ESD "Doctor" in Economics, in the scientific direction 3.8. Economics, specialty "Finance, Money Circulation, Credit and Insurance" (Finance) to Anatoly Velkovski.

25.02.2025 г.

Author of the opinion:

(Prof. Dr. Stefan Simeonov)