REVIEW

of a dissertation submitted for the award of the educational and scientific degree "Doctor"
at D. A. Tsenov Academy of Economics - Svishtov

Reviewer: Prof. D.Sc. (Economics) Virginia Zhelyazkova
Author of the dissertation: Jingxin Hu
Title of the dissertation: "Economic and Trade Cooperation between China and Bulgaria within the Framework of the '16+1 Cooperation' and 'One Belt, One Road'"

I. General presentation of the dissertation

1. Subject of the dissertation

The subject of the dissertation is the analysis of economic and trade cooperation between China and Bulgaria in the context of the "16+1 Cooperation" and "One Belt, One Road" initiatives, examined through the prism of contemporary theories of international trade, regional economic integration, global value chains, and foreign direct investment. The author focuses on the dynamics, structure, and determinants of bilateral trade flows, as well as on the institutional and regulatory environment in which this cooperation develops.

2. Volume of the dissertation

The dissertation has a total volume of 221 pages, which fully corresponds to the requirements for the development of a dissertation for awarding the educational and scientific degree (PhD) "Doctor". The volume is well balanced between the theoretical part, the empirical analysis, and the formulation of challenges, perspectives, and recommendations.

3. Structure

The work is logically structured and includes an introduction, three chapters, a conclusion, and a bibliography. In the introduction, the relevance of the research, the scientific problem, the aim, the tasks, the methodology, and the thesis are clearly formulated. The first chapter performs a key conceptual function in the dissertation. The author provides a systematized and in-depth review of the historical development of Sino-Bulgarian relations, convincingly situating them in the broader context of the "One Belt, One Road" initiative and the "16+1" format. The theoretical framework is built through the precise use of the concepts of global value chains, regional economic integration, comparative advantages, and institutional economics. The analysis is not compilative but demonstrates a critical approach and a clearly articulated analytical position of the author, which creates a solid foundation for the subsequent empirical analysis.

The second chapter represents the core of the empirical analysis of the dissertation and can be

defined as one of its strongest parts. The author conducts an in-depth and multi-layered analysis of empirical data on trade and investment relations between China and Bulgaria, using a broad set of indicators (RCA, TCI, TII, IIT), gravity models, and contemporary machine-learning methods. Particularly positive is the consistent linkage of quantitative results with the specific context of bilateral relations, as well as the clear interpretation of structural characteristics and asymmetries in   trade   flows.

The third chapter performs a clearly expressed synthesizing and applied function in the dissertation. Based on the results of the preceding empirical analysis, the author consistently identifies the key structural constraints and risks to economic and trade cooperation between China and Bulgaria, including trade imbalances, logistical constraints, and increasing regulatory requirements within the EU. The analysis is constructed in close connection with the specific context of bilateral relations and takes into account both geo-economic factors and institutional constraints arising from Bulgaria's membership in the EU. On this basis, the author formulates consistent and well-argued development perspectives and proposes concrete policies and scenarios that logically derive from the empirical results and demonstrate the ability to move from quantitative analysis to practically   oriented   conclusions   and   recommendations.

The conclusion synthesizes the main results and findings of the research.

4. Literature used

The author uses a rich and up-to-date set of scientific sources - monographs, articles in reputable international journals, official EU documents, materials from international organizations, and national statistical institutions. The literature is appropriately selected and reflects the state of the scientific debate on the examined topic.

5. Appendices

The dissertation does not have separate appendices but contains a substantial volume of illustrative material within the text - tables, graphs, and diagrams, which support the analysis and visualize the obtained results.

II. Assessment of the form and content of the dissertation

1. Relevance, subject, object, thesis, aims, tasks, and methods

The researched scientific problem is undoubtedly relevant in the context of transformations in the global economy, the restructuring of value chains, and the growing importance of China as a global economic actor, as well as Bulgaria's specific position as an EU Member State and part of the "16+1" format (subsequently "17+1"). The subject and object of the research are clearly defined, the doctoral thesis is formulated in an argued and consistent manner, and the aims and tasks are logically linked to the chosen research design. The applied methodology - combining theoretical analysis, quantitative empirical research, and contemporary econometric and machine-learning methods - is fully adequate to the stated objectives and demonstrates a high degree of methodological maturity.

3. Degree of development of the problem and author's contribution

The author demonstrates an in-depth knowledge of the current state of the scientific debate on the examined topic and successfully positions his own research in relation to existing theoretical and empirical studies. The tracing of different theoretical approaches and empirical results is not an end in itself, but serves as an analytical basis for formulating a clearly articulated authorial position and for substantiating the conclusions drawn. The author shows very good awareness of existing scientific research on the topic and critically analyzes it. This gives high scientific value and relevance to both the empirical and qualitative analysis.

4. Volume

The volume of the dissertation is fully justified and proportionate to the stated aims and tasks. The balance between the theoretical justification (Chapter One), the in-depth empirical analysis (Chapter Two), and the applied conclusions and recommendations (Chapter Three) is well achieved.

3. Illustrative material

The presented tables, graphs, and figures are of high quality, informative, and well integrated into the text. They support the understanding of the analysis and demonstrate the empirical grounding of the conclusions. Particular attention should be paid to the analytical and illustrative support of Chapters Two and Three, where through a rich set of visualizations the author clearly presents the dynamics of trade indicators, model results, and structural constraints of bilateral economic cooperation.

4. Scientific, linguistic, and stylistic editing

The text is written in a clear, precise, and consistent scientific language. There is logical coherence and internal consistency between the individual parts. In Chapter One, an analytical and conceptual style dominates; in Chapter Two - a rigorous empirical and quantitative analysis; and in Chapter Three - a successful combination of analytical and applied approaches, demonstrating the author's ability to move from theory and data to policies and recommendations.

5. Statistical processing

The empirical data are processed correctly using appropriate statistical, econometric, and machine-learning methods. The calculation procedures are clearly described and justified. It should be particularly emphasized that the results of Chapter Two are consistently used as an analytical basis for the conclusions and recommendations formulated in Chapter Three, which testifies to the conceptual and methodological coherence of the research.

6. Scientific ethics

No violations of scientific ethics are identified. Citations are correct and comply with established academic standards.

7. Abstract

The abstract accurately and fully reflects the structure, content, methodology, and main scientific and applied results of the dissertation.

III. Scientific and scientific-applied contributions of the dissertation

The dissertation contains clearly identifiable scientific and scientific-applied contributions. A particularly significant contribution is the development and empirical application of an integrated analytical framework that links trade indices (RCA, TCI, TII, IIT), gravity-type econometric modeling, and contemporary machine-learning methods with interpretative tools (SHAP).

A substantial scientific-applied contribution is found precisely in Chapter Three, where, based on the obtained quantitative results, the author identifies key structural constraints and risks - trade imbalances, logistical "bottlenecks", and regulatory and geo-economic constraints arising from the EU framework. The proposed policies and scenarios are not declarative but are logically derived from the empirical analysis and aligned with the real institutional constraints of Bulgaria as an EU Member State.

The proposals for the development of logistics corridors, low-carbon industrial zones, and mechanisms for "hard" and "soft" connectivity are particularly valuable, as they have the potential for practical application in strategic planning and economic diplomacy. This gives the dissertation not only theoretical but also clearly expressed practical significance.

IV. Critical remarks and recommendations

The critical remarks on the dissertation are rather recommendatory in nature and aimed at its future enhancement. In future research, it would be useful to expand the empirical analysis through finer product disaggregation (e.g., at the 4-6-digit HS level), which is practically feasible using available international trade databases and would allow more precise identification of product niches with higher value added.

As a natural continuation of the present study, the relationship between the observed levels of intra-industry trade and specific instruments of industrial and export policy aimed at structural upgrading of bilateral trade could be further deepened.

In addition, the inclusion of trade in services related to logistics and transport would contribute to a more complete assessment of the real depth of economic relations between China and Bulgaria.

These recommendations do not diminish the scientific value of the dissertation but outline logical directions for its future development, deriving directly from the strengths of the conducted theoretical and empirical analysis.

V. General conclusion and opinion

In conclusion, it can be noted that the dissertation represents an independent, in-depth, and methodologically sound scientific study with clearly expressed scientific and applied contributions. The author demonstrates very good theoretical preparation and a high level of research skills. Jingxin Hu meets and exceeds by 10 points the national minimum requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and its Implementing Regulations with regard to scientific publications.

On this basis, I give a positive assessment of the dissertation, the abstract, and the scientific publications of the candidate and propose to the respected academic jury to award Jingxin Hu the educational and scientific degree "Doctor" in the scientific specialty "World Economy and International Economic Relations" within professional field 3.8 Economics.

Reviewer: /Prof. V. Zhelyazkova, DSc (Econ.)/

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