written by a member of a scientific jury

of a dissertation for the award of an educational and scientific degree "doctor" in a professional direction 3.8. - Economics, doctoral program - Political economy (General economic theory) according to a procedure announced by the University of Economics - Varna

1. General information

- **person who prepared the opinion:** Assoc. Prof. Zdravko Lyubenov, PhD, Department of International Economic Relations in D. A. Tsenov Academy of Economics – Svistov;

- **reason for writing the opinion:** order No. ПД-06-41/07.03.2024 of the Rector of University of Economics – Varna, determining the Scientific Jury for the procedure for the public defense of a dissertation and the decisions of the first meeting of the Scientific Jury held on 11.03.2024, at 10:00 a.m. in a hybrid format, which determined the Chairman of the Scientific Jury and the members who will write reviews and opinions;

- **author of the dissertation:** Slavena Stefanova Tsoncheva - PhD student at the Department of General Economic Theory at the University of Economics - Varna with supervisor: Assoc. Prof. Kaloyan Kolev, PhD;

- **topic of the dissertation:** Transnational corporations and the development and the upgrading of the human capital in Bulgaria

2. General presentation of the dissertation (according to the requirements of art. 27, para. 2 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria)

The presented dissertation is 222 pages long and includes: introduction (6 pages), main text in four chapters (186 pages), conclusion (7 pages) and bibliographic reference (23 pages). It meets the requirements laid down in Art. 27, para. 2 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

The analytical focus of the dissertation examines an essential problem of our reality - the development and upgrading of human capital under the influence of Foreign Direct Investments (FDI) made by Transnational Companies (TNCs) in the host country. The skillful argumentation of the relevance of the topic is caused by the need to understand these processes. The concentration of attention on the reasons for their occurrence, the way of their implementation and the tools used and its effects, strengthens the registered scientific value of the dissertation, but also shows the possibilities of the doctoral student to evaluate a delicate area of human knowledge.

In this context, the present dissertation can be defined as a timely study that incorporates both the theoretical foundations and the practical-applied supporting points for scientific illumination and the real display of trends in the researched field.

*The purpose* of the dissertation is appropriately formulated. It is related to a study of the impact of FDI made by TNCs on the development of human capital in Bulgaria. *The tasks of*
the dissertation work have been determined according to the set goal and have found their realization in the development. The object of research in the dissertation is the development and upgrading of human capital in the host country. The subject of research in the dissertation is the effects of the human capital development process as a result of the FDI made by TNCs.

The main research hypothesis is logical and directs the analytical focus in the exposition to adequately meet the necessary requirements of the conceptual part and the organized empirical material.

The scientific literature used is correctly cited. Serious studies of current Bulgarian and foreign specialized publications are convincingly shown.

A thorough critical analysis of the scientific literature was carried out and the author's positions with good arguments were confirmed.

A skillful handling of the tools of scientific research is observed.

3. Publications and participation in scientific forums: compliance with the quantitative requirements under Art. 35, para. 1, items 1-4 of the Regulations for the Development of the Academic Staff at Varna University of Economics (to meet the minimum national requirements for awarding the educational and scientific degree "doctor", according to Art. 2b, para. 2 and para. 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria)

From the presented documents and materials, it can be concluded that the publications and participation in scientific forums of doctoral student Slavena Tsoneva fully meet the quantitative requirements under Art. 35, para. 1, items 1-4 of the Regulations for the Development of the Academic Staff at Varna University of Economics and the minimum national requirements for awarding the educational and scientific degree "doctor", according to art. 2b, para. 2 and para. 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria:

- the doctoral student was dismissed with the right of defence;
- presented a dissertation meeting the requirements of Art. 34, para. 2 and 3 in the primary unit - Department of "General Economic Theory" at the Varna University of Economics;
- a decision was made by the primary unit, which discussed the dissertation, to open a procedure for its defence, in accordance with Art. 31, para. 1 and para. 2 of the Regulations for the Development of the Academic Staff at the Varna University of Economics;
- the main results of the research carried out on the topic of the dissertation work were published in one independent article in the refereed/indexed journal "Izvestiya" of the Varna University of Economics and in two independent reports from international conferences published in collections registered in the National Reference List of contemporary Bulgarian scientific publications with scientific peer review;
- the doctoral student has collected 30 points from the three publications in editions registered in the National Reference List of contemporary Bulgarian scientific publications with peer review.

The three publications presented show a well-argued author's position and generally reflect the achievements of the dissertation.
4. Assessment of the structure and content of the dissertation (compliance with the requirements under Art. 34, para. 2 and para. 3 of the Regulations for the Development of the Academic Staff at the University of Economics - Varna), opinion on the correctness of the dissertation abstract and the lexical and stylistic characteristics of the dissertation

The dissertation work is structured in an appropriate way. Purposefulness and logic are established. Argumentativeness of the ideas has been achieved in it.

From a content point of view, chapter one pays attention to the theoretical statements clarifying the nature of human capital and its role in TNCs.

In the second chapter, the doctoral student presents the process of knowledge transfer within the TNCs.

The third chapter examines the interrelationships between human capital, absorptive capacity and FDI realized by TNCs.

The fourth chapter of the dissertation focuses on the empirical study of the role of TNCs in the development of human capital in Bulgaria. Serious analyses and conclusions have been made.

In the conclusion, the doctoral student drew the main conclusions from the presented scientific research and made a summary about the issues under consideration.

I consider that the dissertation corresponds to the requirements under Art. 34, para. 2 and para. 3 of the Regulations for the Development of the Academic Staff at the University of Economics - Varna.

The abstract correctly and accurately recreates the structure and content of the dissertation. It meets the requirements and demonstrates the doctoral student's ability to synthesize and summarize.

5. Identification and evaluation of the scientific and scientific-applied contributions in the dissertation

I accept the scientific and scientific-applied contributions indicated by the doctoral student, which show in-depth theoretical knowledge in the investigated issues and the ability to conduct independent scientific research.

The main scientific and scientific-applied contributions in the dissertation work can be identified in the following directions:

- Theoretical knowledge has been enriched through the developed eclectic factor model determining the propensity of TNCs to develop human capital in the host country through knowledge transfer;
- The theoretical-methodological framework for research and analysis of the absorptive capacity to increase the benefits of the presence of foreign investors in the host country has been supplemented;
- A conceptual model of the interaction between the activities of the TNCs in the host country, human capital and absorptive capacity has been developed, covering all possible forms of internationalization;
- Empirical studies have been carried out using descriptive statistics and econometric methods to apply a comparative analysis of the impact of TNCs and Bulgarian companies on the development and upgrading of human capital in our country. On this basis, connections and dependencies have been revealed, and conclusions have been drawn.

I consider that the mentioned contributions of the doctoral student meet the requirements of the current regulations for obtaining the educational and scientific degree "doctor" in the Republic of Bulgaria.
6. Detected or undetected plagiarism in the dissertation and the abstract
I do not find any plagiarism in the dissertation work and it abstract.

7. Critical notes and recommendations
I don't have any critical remarks about the PhD student.
I recommend her to continue her work on the applicability of the model, methodology and toolkit she has developed.

8. Questions to the dissertation candidate
The last four years have brought many upheavals and changes at all levels – global, international, regional, state. Do you think that they influence and reflect directly or indirectly on the processes of development and upgrading of human capital in the host country Bulgaria? If the answer is yes - in what way.

9. Conclusion
The presented dissertation "Transnational corporations and the development and the upgrading of human capital in Bulgaria" authored by Slavena Stefanova Tsoneva meets the requirements for awarding the educational and scientific degree "doctor" according to the Law on the Development of the Academic Staff in the Republic of Bulgaria, the Regulations to it and the Regulations of the University of Economics - Varna.

The established convincing and clearly differentiated scientific achievements in the dissertation give me the reason to declare a categorical positive assessment and to recommend to the respected members of the Scientific Jury to support a decision "FOR" awarding the educational and scientific degree "doctor" in the doctoral program - Political Economy (General Economic Theory) of Slavena Stefanova Tsoneva.

01.04.2024
Member of a Scientific Jury:
/ Assoc. Prof. Zdravko Lyubenov, PhD /
on the dissertation for acquiring an educational and scientific degree "PhD"
in professional field 3.8 "Economics"
doctoral program "Political Economy (General Economic Theory)"
at the University of Economics – Varna

Prepared by: Assoc. Prof. Valentina Genova Makni, PhD, Department of "International Economic Relations" at the University of Economics – Varna

Basis for the preparation of the opinion: The opinion is prepared in accordance with the order of the Rector of the University of Economics – Varna RD 06-41/07.03.2024 for participation in a scientific jury and the decision of the scientific jury from 11.03.2024.

Author of the dissertation: Slavena Stefanova Tsoneva

Title of the dissertation: "Transnational Corporations and the Development and Upgrading of Human Capital in Bulgaria".

1. General presentation of the dissertation

The dissertation comprises a total of 225 pages and is structured into four chapters. The bibliography consists of 332 sources in Bulgarian and English, which have been diligently utilized and accurately cited throughout the text. Evidence of this is the report from StrikePlagiarism dated 31.03.2024, which accounts for 15.48% similarities for CS1 and 6.88% for CS2. Hence, the manuscript is an independent, original work by Slavena Tsoneva. The chosen topic is relevant for the academia and business in Bulgaria, as to date, no studies have empirically investigated the correlation between Foreign Direct Investments (FDI) and the absorptive capacity within the local economy from TNCs. The impact of TNCs on the development of human capital in the host country, particularly in Bulgaria, and its potential for assimilating transferred knowledge have been thoroughly examined. A comparison between foreign and local companies regarding their role in the formation and upgrading of human capital is also made. The PhD thesis is dissertation-worthy and fully meets the requirements of Article 27, Paragraph 2 of the Regulations for the Implementation of the Law on the Development of the Academic Staff in the Republic of Bulgaria. (The Law)
2. Assessment of the structure and content of the dissertation

The research parameters - object, subject, aim, and research tasks are precisely and clearly defined. Limitations of the research are accurately set. The four chapters in the dissertation are built in their logical sequence and are written in a scholarly language and style, where the author's positions are highlighted, including the ability to deduce own definitions of the used concepts and construct of conceptual models.

In chapter one, the significance of human capital within the operations of TNCs is argued. Chapter two undertakes a thorough analysis of one of the quintessential activities of TNCs – the cross-border knowledge transfer and their inclination towards developing human capital in the recipient economy. Chapter three demonstrates the crucial importance of absorptive capacity in mediating the FDI effects on human capital, hence the correlation between them. Chapter four provides an empirical study of the role of TNCs in the upgrading of human capital in Bulgaria.

An adequate tools has been selected for proving author's hypothesis. Descriptive statistics and econometric analysis through Welch and Mann-Whitney tests are used.

The abstract accurately reflects the content and structure of the dissertation. Parts of the manuscript have been published in specialized scientific journals as independent publications, including one article in ‘Izvestiya’ (Journal of the University of Economics – Varna) and two conference papers, presented at international and national scientific conferences.

The overall content of the dissertation corresponds to the requirements of Articles 34 and 35 of the Regulation for the Development of the Academic Staff at the University of Economics – Varna and meets the national minimum requirements for the awarding of the educational and scientific degree "Doctor" according to Article 2b, Paragraphs 2 and 3 of the Law.

3. Identification and evaluation of the scientific and scientific-applied contributions in the dissertation

I accept the contributions identified by the author, both of scientific and practical nature.

From a theoretical perspective, there are two contributions: 1) the development of an eclectic factor model within the Dunning's OLI paradigm and 2) the constructed model of interaction between the activities of TNCs, human capital, and the absorptive capacity.

From an applied perspective, there are two contributions: 1) the derived system of indicators for analyzing the absorptive capacity, which is intended to maximize the benefits from the activities of TNCs in the local economy and 2) elucidation of the disparities between
TNCs and local firms regarding their impact on the upgrading of human capital and tested correlation between inward FDIs and the level of human capital.

4. Critical remarks and recommendations

Indeed, the hypothesis in the introduction on page 8 constitutes the author's research thesis and can be extrapolated as thesis within the conceptual framework of the entire study. It states that "TNCs have a significant and comprehensive impact on the development of human capital in Bulgaria, surpassing that of local businesses. Over time, this difference gradually diminishes due to the spillover effects of TNCs on local firms and the presence of absorptive capacity, which facilitates the assimilation of this knowledge."

Paragraph iteration is observed in the Introduction and in the exposition of the manuscript. For instance, the role of Section 5 "Methodology of Theoretical Research" (pp. 45-46) in the first chapter, which overlaps with a part of the Introduction (pp. 8-9), becomes unclear. The introductory part to the fourth chapter (p. 118) also contains repeated text from part of the Introduction to the dissertation (pp. 6-7). These iterations could have been avoided.

The observations made are minor and do not detract from the scientific value of the dissertation.

5. Questions to the doctoral candidate

1) Are there successful examples from other countries that have managed to optimize the impact of TNCs through government policies particularly to strengthen the absorptive capacity of human capital?

2) What challenges and opportunities does digital transformation and Industry 4.0 pose for the absorptive capacity of human capital in Bulgaria in the context of TNCs' penetration?

6. General assessment and conclusion

The presented dissertation "Transnational Corporations and the Development and Upgrading of Human Capital in Bulgaria" meets all the requirements for awarding the educational and scientific degree "Doctor" according to the National law and the Regulations of the University of Economics – Varna. The author demonstrates significant scientific-theoretical preparation, the ability to formulate scientific and practical problems, to conduct empirical research using a specific instrumentatium.
Based on the aforementioned, I give my explicit positive evaluation and recommend to the scientific jury to award Slavena Stefanova Tsonева the educational and scientific degree "Doctor" in the doctoral program – "Political Economy (General Economic Theory)".

April 5th, 2024
City of Varna

Signature: /Assoc. Prof. Dr. Valentina Makni/
OPINION

By Assos. Prof. Elka Ignatova Atanasova, Ph.D

Department of Health Economics and Management, Faculty of Public Health, Medical University "Prof. Dr. Paraskev Stoyanov" - Varna

Member of Scientific jury in accordance with Order No. R- 06-41/07.03.2024. of the Rector of the University of Economics - Varna

Regarding: Dissertation for the acquisition of the educational and scientific degree "Doctor (PhD)" in professional direction 3.8. "Economics", Doctoral program "Political Economy (General Economic Theory)"

Author of the dissertation: Slavena Stefanova Tsoneva


Supervisor: Assoc. Prof. Kaloyan Kolev, Ph.D

Pursuant to Order No. R-06-41/07.03.2024 of the Rector of the University of Economics - Varna, I am included as an external member of the Scientific Jury, and by decision of its first meeting, held on 11.03.2024, it was decided to prepare an opinion on the procedure to obtain the educational and scientific degree "Doctor" with PhD candidate Slavena Stefanova Tsoneva - in the Doctoral program - "Politiccal Economy (General Economic Theory)" at the Department "General Economic Theory" at the Faculty of Finance and Accounting of the University of Economics - Varna.

General evaluation of the dissertation

The dissertation of Slavena Tsoneva meets in terms of volume, structure and content the requirements of Article 27, Paragraph 2 of the Rules of the Implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria. The dissertation is developed in a total volume of 201 pages, structured as follows: introduction, main text in four chapters, conclusion, and list of literature. The main text contains 38 tables, 23 figures and 9 formulas. Three hundred and two titles are cited, over ninety percent of which in English, as well as 30 specialized Internet sites. The titles included in the references show that the PhD candidate is very well acquainted with the literature in the researched area of human capital development which allows her to detect potential problems, systematize and derive solutions.

Topicality and significance of the dissertation

The relevance of the chosen topic in the dissertation is based on:

- The significant dependence of the Bulgarian economy on the import of foreign capital, makes it possible to examine the relationship "foreign direct investment-absorptive capacity", considering all possible forms of penetration of Transnational corporations (TNCs) into the local economy.
The deepening problem of the aging population and the need to transition to activities that require fewer people but higher productivity.

The search for solutions to improve the quality of human capital and the extent to which TNCs contribute to the upgrading of this capital.

The relatively small number of scientific publications on the topic in the Republic of Bulgaria mainly examine separate specific forms of TNC penetration, which becomes an incentive for the PhD candidate to carry out a more in-depth scientific analysis of all possible forms of TNC penetration in the local economy, and to derive the relationship between "foreign direct investment - absorptive capacity", thereby contributing to the expansion of knowledge in this area.

Structure and content of the study

The title: "Transnational corporations and the development and upgrading of human capital in Bulgaria" reflects the content and structure of the dissertation and synthesizes the main aspects of the research problem.

Slavena Tsoneva convincingly substantiates the relevance of the research with an appropriately selected methodological toolkit which ensures the correctness and validity of the presented results in the two parallel, relatively independent studies. The object and subject of the study are clearly presented.

The purpose of the present study is precisely defined - on the basis of the existing theory and through empirical research to determine the impact on human capital development in Bulgaria (as a recipient country of foreign direct investment (FDI)). This impact results from the activities of transnational corporations and the extent to which there exists potential (capability) for absorbing this knowledge. To achieve the goal, six research tasks have been formulated which in their sequence lead to the fulfillment of the set goal. The author defines a research hypothesis according to which TNCs have a significant and comprehensive impact on the development of human capital in Bulgaria, exceeding that of local businesses. As a result of adequately selected methods and complex analysis, the hypothesis is confirmed.

The dissertation also correctly presents the limitations: the concept of "human capital" is considered in a purely economic aspect; only the effects on human capital in the host country are analyzed; absorptive capacity is examined and evaluated solely in terms of R&D investment and available human capital. In the methodology of the conducted empirical research, the limitations are supplemented by using NSI databases; limitation of the time period; applied author's factor model to assess the absorption capacity at the micro level and assess only the effects that are directly related to TNC activities.

In Chapter 1, the concept of human capital is explored based on a historical overview of the literature. The doctoral candidate demonstrates in-depth knowledge in the chronological tracing of ideas about the emergence and development of the essence, content, and theoretical interpretations of the concept of "human capital". The extensive analysis of the relationship between TNCs and human capital in recipient countries of FDI is impressive. The potential effects of TNCs on the regional labor market have been carefully and competently considered. To be complete, theoretical
analysis is often accompanied by a systematic review of previous empirical research. The doctoral candidate quite logically reviews similar studies for countries in Central and Eastern Europe, which allows for comparability with the Bulgarian economy. In this chapter, the microeconomic approach to the study of human capital through the Theory of International Business and John Dunning’s OLI Paradigm is justified which is essential for the subsequent understanding of the researched issues.

Chapter 2 is oriented towards the study of knowledge transfer within the TNCs. The scope of the analysis includes three main questions: what competencies and skills can TNCs transfer; how to transfer this knowledge and when they are inclined to develop human capital in the host economy. A systematic interpretation of these questions begins with an extremely thorough presentation of the types of knowledge that multinational companies transfer. This knowledge inevitably helps in building a skilled workforce especially when an adequate mechanisms for transferring and implementation of knowledge is implemented. The PhD candidate demonstrates a wide-ranging knowledge of knowledge transfer mechanisms and emphasizes that by sharing knowledge and experience with local universities and research institutions, TNCs can develop innovative solutions to address local challenges. The use of numerous examples from practice contributes to the practical relevance of this part of the study.

In this chapter, Slavena Tsoneva presents an author's model of the impact of TNCs on the quality of human capital in the host country. Thus, she offers a systematic framework for developing a comprehensive understanding of the challenges related to knowledge transfer within the TNC network. The doctor candidate shows remarkable analytical skills and analyzes in an accessible language all possible forms of penetration, with a special emphasis on the development and upgrading of human capital.

Chapter 3 of the study focuses on research the theoretical construct and define the concept of "absorptive capacity". This is an essential part of the analysis, as clarifying the concept is important for further understanding the relationship between absorptive capacity and FDI. Further, the author examines the measures for assessing absorptive capacity as well as researchers' views that are divided into two main directions - indicators at both micro and macro levels. The analysis in this chapter is limited to two assessment factors: available human capital and R&D. The choice of these factors is justified by their general validity and their determining importance for the extraction of benefits from inward FDI by local labor resources.

It should be noted that the analytical skills of the candidate allow her to skillfully systematize the information and in this chapter, she proposes two author models: a factor model for assessing absorptive capacity using universal determinants at the micro and macro levels and interaction model between TNC activity, human capital, and absorptive capacity.

In chapter 4 the PhD candidate presents, discusses and compares the results of the conducted empirical research, that includes over 3,000 Bulgarian companies and about 600 TNCs, which is a good basis for drawing general findings in support or disputing the formulated hypothesis. It should be emphasized that the analyzed classified databases provided by NSI have not been made
public and have not been used in other Bulgarian studies which guarantees the originality and scientific-applied contribution of the present study.

I believe that the fourth chapter deserves a high evaluation, because, for its structuring and in-depth analysis of the importance of FDI for the development of human capital in Bulgaria and the role of the absorption capacity available to the local economy, it is based on the logic of the theoretical analysis in the second chapter and the factor model developed by the candidate in the third chapter.

To confirm the positive assessment and the merits of the dissertation work, the statistical analyzes carried out are also important, with the help of which an existing relationship between inward FDI and the level of human capital is established.

**Evaluation of the contributions**

The dissertation achieves results that give grounds for defining contributions of a theoretical and applied nature. I fully accept the contributions formulated by Slavena Tsoneva. I am convinced that they faithfully present the main achievements of the candidate as a result of the serious and thorough research work.

Theoretical contributions can refer to the systematization and enrichment of existing theoretical knowledge which contributes to the depth and logical upgrading of the research.

The significant scientific and applied contributions are related to the derivation of a system of indicators for the analysis of absorption capacity at the macro and micro level. The application of this system of indicators will allow periodic evaluations and encourage comparative studies.

The development of three models by the author is a valuable and impressive contribution that facilitates their future application and also makes these models a starting point of analysis for other researchers.

The modern econometric methods used and the statistical analyses performed definitely add practical value to the dissertation and increase the possibilities for international publications.

**Evaluation of the abstract and publications**

The abstract meets the requirements and correctly reflects in a synthesized form the structure and content of the dissertation work and the contributions of a theoretical and scientific-applied nature. A list of three independent publications related to the topic of the study, as well as a declaration of originality, are also included in the abstract. I accept that the full-text publications are representative and successfully promote the achievements of Slavena Tsoneva from her scientific research, and meet the scientometric requirements.

**Conclusion**

On the basis of all documents provided under the procedure for the defense of Slavena Tsoneva, it can be seen that the dissertation acquired this finished form after partial or substantial changes made in three of the chapters. The candidate takes into account the constructive notes made and, in a short period of time, refines and perfects the entire study. At the end of each chapter, the author
adds findings and conclusions that demonstrate in-depth economic knowledge and the ability to conduct independent scientific research.

The dissertation analysis of Slavena Tsonova characterizes her as a serious, strong and thorough researcher. She demonstrates competence in the field under study, excellent knowledge and interpretation of existing literary sources, precision, analytical skills, and excellent style and language.

The dissertation examines a real practical problem of increasing societal importance and deserves high evaluation for originality and practical applicability.

The dissertation fully meets the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria, its Rules for Implementation, and the Rules for the Development of the Academic Staff of the University of Economics - Varna. Based on this, I strongly support with a positive vote the candidacy of Slavena Stefanova Tsonova for the award of the educational and scientific degree "Doctor" in the field of higher education 3. Social, economic and legal sciences and professional field 3.8. Economy.

1 April 2024

Varna

Signature: /Assoc.Prof. Elka Atanasova, PhD/

Заличена информация съгласно ЗЗЛД и регламент (ЕС) 2016/ 679