

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

#### REVIEW

**Reviewer:** Assoc. Prof. Krasimira Borisova Slaveva, PhD, "D. A. Tsenov Academy of Economics" - Svishtov, Department of Statistics and Applied Mathematics, Scientific area "Statistics and Demography".

Author of the dissertation: Anna Dimitrova Petkova, PhD student, training funded by the state, in the field of higher education: 3. Social, economic and legal sciences, professional direction: 3.8. Economy, doctoral program: Finance, money circulation, credit and insurance (Finance).

**Theme of the dissertation work:** "Foreign Direct Investment: Economic Growth and Convergence within the European Union"

Scientific adviser: Assoc. Prof. Anelia Radulova, PhD

Reason for submitting the review: participation in the scientific jury for defence of the dissertation paper acc. to Order №1126/22.11.2023 by the Rector of "D. A. Tsenov Academy of Economics" – Svishtov.

This review has been prepared in accordance with the requirements of the existing Law on the Development of the Academic Staff, the Rules for its Application and the Rules for the Development of the "D. A. Tsenov Academy of Economics" - Svishtov.

# I. General presentation of the dissertation work:

The dissertation on the topic "Foreign Direct Investment: Economic Growth and Convergence within the European Union" authored by Anna Dimitrova Petkova is 163 pages long. In terms of structure, there are an introduction, an exposition in three chapters, a conclusion and a list of references. The bibliography contains 118 sources, the majority of which are in Latin. 24 tables and 17 figures are placed within the main text. Two studies have been published on the subject of the dissertation. A declaration of authenticity and authenticity is attached.

The topic of the dissertation is extremely relevant and significant, because foreign direct investments play an important role in the development of national economies, the structure and dynamics of FDI in Bulgaria and the impact of FDI on convergence in the EU and, in particular, on the CEE member states, were studied. The study enriches the theoretical and empirical studies on the role and importance of FDI for the state and development of national economies, to increase their competitiveness and to accelerate the process of

economic and social convergence between countries within the EU. The title of the dissertation is well formulated and clearly directs the reader to the issues that will be discussed in the development - the impact of foreign direct investment on economic growth, characteristics of the investment environment and policies for attracting foreign investment in Bulgaria, analysis of the dynamics and structure of FDI in Bulgaria, FDI and convergence in the EU and specifically the impact of FDI on the real convergence of Central and Eastern Europe member states.

#### II. Assessment of the form and content of the dissertation.

The dissertation follows the established as a standard structure, including an introduction, three chapters, a conclusion, a list of cited and used literature. The dissertation is characterized by the depth of the research, the connection between the individual chapters, following the logical sequence of the scientific research - first, the specifics and forms of manifestation of foreign direct investment, the mechanisms for the manifestation of the impact of FDI on economic growth and the determinants of the attractiveness of investments are clarified, then proceed to a comparative analysis of the inflow of FDI in Bulgaria for the period 2010-2021 and finally analyze foreign direct investments and convergence within the EU. In the dissertation, the author gives a reasoned answer to the questions of what are the main determinants of the research, what are the appropriate methods for modeling and analysis, what are the expected effects, etc.

In the introduction, the basic formal requirements regarding mandatory attributes are fulfilled and the object, the subject, the research thesis are correctly defined. the purpose and tasks of the study.

The author points out that **the object** of the research is the FDI flows in Bulgaria and the EU member states from Central and Eastern Europe, and **the subject** is the assessment of the intensity of foreign direct investments in Bulgaria and their influence on the degree and speed of convergence within the European Union .

Doctoral student Anna Dimitrova Petkova states that the **main goal** of the research is to establish the direction of impact of FDI intensity on economic growth and the degree of convergence of Bulgaria and the member states of Central and Eastern Europe within the European Union.

The aim of the dissertation is to establish the direction of impact of FDI intensity on economic growth and the degree of convergence of Bulgaria and the member states of Central and Eastern Europe within the European Union.

To achieve the main goal of the research the following tasks are set:

- 1. Clarifying the specificity, form of manifestation and types of foreign direct investment.
- 2. Revealing the degree and direction of impact of FDI on the economic growth of the recipient country. On the basis of studied theoretical propositions and empirical studies to summarize the effects of foreign investment flows on the socio-economic development of the host country.
- 3. Identification of the economic and non-economic determinants of attractiveness of foreign direct investments.
- 4. Analysis of the intensity of net foreign investments, the absolute size and structure of the main components of FDI and structural transformations of investment flows in Bulgaria.
- 5. On the basis of a comparative analysis, to analyse the existing dependencies between economic growth (measured by basic macroeconomic indicators) and the inflow of foreign capital in Bulgaria and in the CEE countries.
- 6. To construct an econometric model for assessing the degree of convergence in terms of income and FDI flows in the CEE member countries.
- 7. To assess the degree of impact of FDI flows on the real convergence of CEE member countries on the basis of macroeconomic indicators significant for economic growth.

The presented tasks provide a clear orientation for the content of the dissertation work and correspond to the set research objective.

The information base of the study is indicated in the introduction, including legislative and regulatory legal acts, theoretical and analytical studies, reference statistical data and analytical materials of the Ministry of Finance (MoF), the Bulgarian National Bank (BNB), the National Statistical Institute (NSI), the International monetary fund (IMF), the World Bank (WB), the Statistical Office of the European Union (Eurostat), the Organization for Economic Cooperation and Development (OECD) and other international organizations.

The methodology of the research is based on the specialized literature on the topic of the dissertation, the methods of analysis and synthesis, the principles of the system approach, logical, comparative and statistical analysis and econometric modeling are applied. Microsoft Excel and the statistical package IBM SPSS Statistics were used in the processing of the empirical data.

The first chapter of the dissertation is devoted to clarifying the impact of foreign direct investment on economic growth, on the one hand, an in-depth review of the concepts of their specificity, forms of manifestation, classifications, etc., and on the other hand, the mechanisms of manifestation of the impact of FDI on economic growth. An in-depth review of the scientific literature was carried out and on this basis various theoretical statements, definitions, specifics of FDI, economic growth and the dependence between them were presented. As a result of the study of the various theoretical concepts and the results of empirical analyzes of the impact of FDI on economic growth, the doctoral student identified the following four groups: conditionally positive, inconclusive positive, neutral and negative impact of FDI on economic growth. The various mechanisms by which foreign direct investment affects the economic growth of the host country are presented.

The second chapter characterizes the investment environment and the policies for attracting foreign investments in Bulgaria. An in-depth empirical analysis of trends in changes in FDI flows in Bulgaria for the period 2010-2021 was carried out, tracking the dynamics of the following indicators: "net foreign investments in Bulgaria"; "relative share of FDI in GDP"; "direct investment positions of foreign capital in the EU (EU-28) and Bulgaria"; "main components of FDI" "size of foreign and national investments in fixed assets in Bulgaria". The sectoral structure of FDI and domestic investments in fixed assets for the period 2010-2021 was characterized, and an assessment of the intensity of structural changes was carried out using statistical methods for the analysis of structures - coefficients of absolute structural changes and integral coefficients of structural changes and differences.

In the third chapter, an answer is given to the question whether and to what extent FDI flows influence the ongoing processes of socio-economic convergence of the CEE member states and, in particular, Bulgaria. The models for economic convergence are characterized and the prerequisites for real convergence of the member states within the European Union are clarified, and the author believes that they can be considered as the main goal for less developed countries to join the regional economic integration scheme. As an example confirming this view, the countries of Central and Eastern Europe, which were accepted into the European Union after 2004, are pointed out. Based on a comparative analysis, an assessment of the degree of economic growth of the countries of Central and Eastern Europe and the trends in the change was made of FDI flows based on official statistical information on the size of real GDP estimated at market prices from 2020, of GDP per capita based on purchasing power parity (PPP) and of FDI flows for the period 2010-2021 By applying the methods of regression and correlation analysis, the form and strength of dependence/influence of FDI flows on the real convergence of four of the CEE member countries (Bulgaria, Romania, Latvia and Lithuania) was determined, and for this purpose an assessment of the impact of FDI flows on three macroeconomic indicators: GDP per capita (PPP), GDP per employed person (constant PPP \$ for 2017) and labor productivity per employed (Index, 2015=100).

In the conclusion, in a synthesized form, the main conclusions of the conducted research are presented, they correspond to the set goal and tasks and show their implementation and categorically reflect what was done by the author.

A total of 118 literary sources are included in the bibliographic reference, of which those in a foreign language predominate. Definitions, opinions, methods, etc. used. are used correctly and are reflected by citation on the relevant page and in the list of references

In general, the dissertation work is characterized by a serious depth of the scope of the research, both of a theoretical and a practical-applied and methodological nature. The doctoral student made significant efforts to research the specialized literature on the researched issues, revealed the peculiarities and specific features of the research object, analyzed the views of the authors and successfully distinguished and systematized them into four main groups. The selected research approaches, and the formulated conclusions are correct and well-founded.

The presented dissertation has a logical presentation and follows the set goal and research tasks, and the conclusions and conclusions of the author are well argued. The dissertation work has a good scientific style, the terms are used correctly in the exposition, and this clearly shows the high degree of knowledge of their essence and content. The methodology of the research is adequate to the set goals and tasks, there is a thorough knowledge of the investigated issues. The doctoral student has fulfilled the set goal and demonstrated skills in handling scientific concepts, an aspiration for critical analysis and a scientific presentation style. Author's achievements and contribution points are present in the dissertation work. The technical and visual design of the dissertation work is at a high level - for the visualization of important aspects of the research, appropriate forms of presentation are used - diagrams, tables, graphic images. In the dissertation, an in-depth empirical study was carried out, appropriate statistical methods were applied for the analysis of dynamics, structural changes, for the study of dependencies, etc. The obtained results of the statistical analysis are correctly interpreted, the formulated conclusions and conclusions correspond to the obtained results of the empirical analysis

The author's abstract is developed in a volume of 44 pages and is well structured, contains the necessary elements and information that correspond to the content of the dissertation, reflect the results achieved by the author and the main points of contribution.

Attached to the dissertation work are **two studies** in the Doctoral Research Annual Almanac. The presented publications include important parts of the dissertation work and contain significant results of the conducted scientific research, which gives reasons to consider that the dissertation has been approved and popularized to a high degree.

## III. Scientific and scientific-applied contributions to the dissertation work

The dissertation contains scientific and scientific-applied contributions that build on theoretical and empirical research in the field of finance, and specifically with regard to the study of the impact of FDI on economic growth and the degree of convergence of host countries. The following stand out as the author's achievements and the basis for deriving contributions:

- 1. The specificity, the form of manifestation and the types of foreign direct investments are clarified and the determining economic and non-economic determinants of the attractiveness of foreign direct investments are identified.
- The extent and direction of the impact of FDI on the economic growth of the recipient country is revealed, and on the basis of studied theoretical statements and empirical studies, the effects of foreign investment flows on the socio-economic development of the host country are summarized.

- 3. The intensity of net foreign investments, the absolute size and structure of the main components of FDI and the structural transformations of investment flows in Bulgaria were analysed.
- 4. On the basis of a comparative analysis, the existing dependencies between economic growth (measured by means of basic macroeconomic indicators) and the inflow of foreign capital in Bulgaria and in the CEE countries have been analysed.
- 5. An econometric model was constructed to assess the degree of convergence in terms of income and FDI flows in CEE member countries.
- 6. On the basis of macroeconomic indicators significant for economic growth, the degree of impact of FDI flows on the real convergence of CEE member states was "measured".

I believe that the contributions formulated by the author are actually achieved, show the main merits of the dissertation work and are related to the enrichment of existing knowledge and its application in practice.

### IV. Criticisms, recommendations and questions

Being well acquainted with the dissertation gives me reason to conclude that there are no significant omissions, inaccuracies or contradictions. I believe that the dissertation work enriches the available knowledge, contains significant ideas and real results have been achieved.

The question I ask is related to directions for future research work on the topic: Based on the research carried out, what other macroeconomic indicators can be included in the models as factors affecting FDI and the degree of convergence of Bulgaria within the European Union?

### V. Summary conclusion and opinion

The reviewed dissertation on the topic "Foreign Direct Investment: Economic Growth and Convergence within the European Union" represents a complete independent scientific study of a theoretical-applied nature on a topical and significant issue. Doctoral student Anna Dimitrova Petkova demonstrates solid theoretical knowledge and skills for conducting in-depth scientific research. I believe that the dissertation contains significant scientific and scientific-applied contributions and fully meets the requirements and criteria for obtaining the educational and scientific degree "doctor" from the Law on the Development of the Academic Staff in Bulgaria and the Regulations for its application and the regulations for educational activities at "D. A. Tsenov Academy of Economics" - Svishtov. All this gives me reason to give a categorically positive opinion on the open procedure and to propose to the members of the honorable Scientific jury to award the educational and scientific degree "Doctor" in the doctoral program "Finance, money circulation, credit and insurance (Finance)" to Anna Dimitrova Petkova.

Date: 20.12.2023	
Svishtov	Reviewer:
	(Assoc. Prof. Krasimira Slaveva, PhD)