



**REVIEW**

Вх. № PA20-754/29.05.2024г.

by a member of scientific jury for obtaining the educational and scientific degree "PhD"  
within a procedure of the University of Economics - Varna

1. General information

- author of the review: Assoc. Prof., PhD, Georgi MARINOV Georgiev, UE-Varna;
- basis for writing the review: participation in the composition of the Scientific Jury for the defence of the dissertation according to the Order Nr. ПД-06-61/29.04.2024 of the Rector of the UE-Varna and the decision of the first meeting of the Scientific Jury held on May 09, 2024, regarding which members of the jury will write a review;
- author of the PhD thesis: Ralina Dobrinova Mircheva;
- topic of the PhD thesis: SPECIFICITY OF THE INTERNATIONAL ACTIVITY OF THE PHARMACEUTICAL COMPANIES IN BULGARIA;

2. PhD student data: Ralina Dobrinova Mircheva was enrolled in the full-time PhD study in the PhD programme "World Economy and International Economic Relations", managed by the department of International Economic Relations of UE-Varna. The PhD student Mircheva has fulfilled the minimum requirements of her individual studies plan within the programme and has published the required number of scientific publications. She has been exmatriculated with the right of a defence of a thesis within 5 years, starting from 01.02.2022. I have known Mrs. Mircheva personally, starting from her student time, as a bachelor student in International Economic Relations major at UE-Varna. She has been among the most prominent students of her cohort, later she has demonstrated very good teaching skills, as a lecturer who is able to attract the attention of the students and to evoke interest in the studied material. Mrs. Mircheva has covered all the required activities in her individual plan within the deadlines, incl. the PhD exams and publication of scientific papers and participation in scientific events. She has a successful career in the field of data analysis, a fact which additionally contributes to the quality of her scientific publications.

3. The presented dissertation thesis is organised in a standard structure consisting of introduction, three chapters, where the empirical study is contained in the last chapters, a conclusion, list of bibliography, and appendices. The volume of the thesis is 222 pages, of which 200 are the core text with 47 figures and 24 tables and 22 pages contain the list of bibliography and the appendices. Cited are 139 literature sources in Bulgarian and English language. The first chapters, after a general representation of the importance of globalisation for the sector, presents the supranational regulations of the pharmaceutical industry - incl. at international organisations level and as common policies of the EU. Special attention is given to the mergers and acquisitions in the sector, as potentially limiting the competition, and to the influence of crises on the supply chains, especially during the pandemic period. The second chapter of the thesis depicts the situation in Bulgaria, based on statistical data and in-depth interviews, starting from the legal framework and presenting the market structure, as volumes



and participants, and emphasising the specifics of the parallel import of medical drugs as a phenomenon of great importance. The third chapter contains the main empirical research in the thesis. Analysed are the main commercial partners of the country in the import of medical products. It follows analysis of the import of antibiotics and vaccines, for a period of the last 20 years. Next, studied is the most recent 5-year period, with research in two directions - the activity of the international pharmaceutical companies for the respective time period, and the parallel import and the import of generic medical drugs for the same period. The abstract of the thesis contains 44 pages, there are also a declaration of originality, as well as other documents, required by the procedure. The minimal national requirements for a "PhD" are covered.

4. Assessment of the structure and the contents of the PhD thesis - the structure and the contents of the presented PhD thesis comply with the current requirements (Art. 34 (2) and (3) of the Order about the development of academic staff in the University of Economics - Varna). As a main goal, the author takes the challenge in researching and emphasising the trends, to outline some directions for the explanation and forecasting of the development of the sector, even amidst economic and social crises. This is an important task, since the Covid-19 pandemics has set hardships for many of the EU countries, and the effects of the crisis in the pharmaceutical industry can be observed years thereafter. It is of a great importance for the organisations working in this sector to be free to take informed decisions and to elaborate efficient strategies and practices for an equitable and sustainable market supply with medical drugs, whereby good practices and measures have to be emphasised, as well as the reasons for the shortages of some medicines. As this activity is done under conditions of the current national and supranational policies, the idea is they also to be studied. The author uses a very interesting application of the clustering approach, as well as in-depth interviews. The thesis stands very well as lexical and stylistic usage. The abstract fully and precisely reflects the achievements of the paper.

5. Identification and assessment of scientific and scientific-applicable contributions in the PhD thesis - the author explored and proofed mainly the hypothesis that parallel import and the import of generics can assure the non-interruption of the supply of medicines, to ensure the patients in Bulgaria to have access to medical drugs, and to me, this is an extremely important result. Despite the existence of limitations to the scope of the study, the time periods chosen are well selected, since they include the period of the Covid-19 pandemics, 2020-2021, which was also the biggest challenge up to date for the trade in medical drugs, and for the international trade in general, both as size and as space distribution, generating many questions about the mere nature of globalisation, and of the structure of the economy. Methodologically - I consider the research methods used being well chosen and correctly applied. A special contribution of the thesis is the application of a specific clustering approach with consecutive comparative study of the structures emerged, since it allows to point out plausible conclusions on data for not very long periods, where the traditional econometric approaches do not work. The revealed statistically significant change in the market structure



before, during, and after the Covid-19 pandemics is a strongly valuable scientific result, possessing in the same time also significant practical dimensions, and this ranges the thesis among the most well done both as a result and as importance in the contemporary Bulgarian economic science about the international markets.

6. Publications and participation in scientific events: the presented related to the PhD thesis publications and participations in scientific events comply with the minimum national requirements for the granting of the educational and scientific degree "PhD", according to Art. 26, (2) and (3) of the Law about the development of the academic staff in the Republic of Bulgaria and with the Art. 35, p. 1-4 of the Order about the development of the academic staff in UE-Varna. Related to the PhD thesis, Mrs. Mircheva has published 4 scientific papers (resulting in 35 points in the group of indicators "G", min. 30 points), of which 3 scientific reports and 1 scientific journal paper. The scientific reports are presented in various scientific events in Bulgaria, incl. at the UNWE and Tsenov Academy-Svishtov, a circumstance which significantly widens the visibility of the results obtained.

7. Detected or not detected plagiarism in the PhD thesis and in the abstract - I do not find any traces of plagiarism in both the thesis and the abstract, as well as in the collateral scientific publications. In addition, the author demonstrates a high level of originality of expression and of the ideas presented.

8. Critical remarks and recommendations - as far as the research is elaborated on the base of data for Bulgaria, and in the same time the results obtained demonstrate a significant importance, incl. in the social dimension, I consider an extension of the study to include other groups of similar countries - i.e. the neighbour (or the Balkan) countries, EU and non-EU. An additional check of the results on more detailed data would also be a plus. However, reflecting the existing reality, both as the volume of PhD theses, and more importantly the scope of available data, this comment has to be regarded rather as an advice for future research.

9. Questions to the author - does the author have any additional concerns about the plausibility of the statements (the answers) in the in-depth interviews; how big seems to be the utility of in-depth interviews with participants on lower levels in the pharmaceutical sector (mid-managers, trade representatives) for the goals of the PhD thesis? What are the current prospects under a possible future pandemics the reaction of the EU-countries against possible drug shortages to be more adequate?

10. In conclusion - the PhD thesis of Ralina Mircheva is a comprehensive scientific study on a relevant economic issue. The study comprises both theoretical and empirical components and has been elaborated at the level of contemporary science. The research adheres to the highest standards for similar works. The thesis contains both scientific and practical contributions, offering originality in the field. The thesis is entirely an achievement of its author, who demonstrates in-depth knowledge about the problem studied, as well as ability for independent thinking. Taking all of the above into account, I strongly support the awarding of the academic title "PhD" to Ralina Dobrinova Mircheva and I encourage the scientific jury to also vote positively.



**ИКОНОМИЧЕСКИ УНИВЕРСИТЕТ – ВАРНА**  
СЕРТИФИЦИРАНА СИСТЕМА ЗА УПРАВЛЕНИЕ НА КАЧЕСТВОТО ISO 9001:2015

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

Reviewer:  
(Assoc. Prof. Georgi MARINOV, PhD)

29.05.2024.



## REVIEW

Вх. № PA20-766/31.05.2024г.

written by a member of a scientific jury,  
for the acquisition of an educational and scientific degree "doctor" according to the  
announced procedure from the University of Economics - Varna

### 1. General information

**Reviewer:** Prof. Dr. Galina Zaharieva

professor, doctor in the field of higher education: 3. Social, economic and legal sciences, professional field 3.8 "Economics", scientific specialty: "World Economy and International Economic Relations", department "International Economic Relations", D. A Tsenov Academy of Economics, Svishtov

**Reason for writing the review:** Participation in the composition of the Scientific Jury for the defense of the dissertation according to Order No. RD-06-61/29.04.2024 and the decisions of the first meeting of the Scientific Jury held on 05.09.2024.

**Author of the dissertation:** Ralina Dobrinova Mircheva - PhD student at the Department of "International Economic Relations" at the University of Economics - Varna with supervisors: Prof. Dr. Veselina Vasileva Dimitrova and Head Assistant Professor Petyo Todorov Boshnakov, Ph.D

**Topic of the dissertation:** Specificity of the international activity of companies from the pharmaceutical industry in Bulgaria

### 2. Data about the PhD student

Ralina Dobrinova Mircheva obtained a bachelor's degree in "International Economic Relations" at the University of Economics - Varna in 2015, and in 2016 - a master's degree in Management. Since 2019, she has been enrolled as a full-time doctoral student at the Department of "International Economic Relations" at the University of Economics - Varna. During the training period, she has passed the required exams and successfully completed all the activities set out in the individual plan, as a result of which she is written-off with the right to defense. Her professional biography includes the positions of consultant and quality specialist. She is fluent in English and French.

### 3. General presentation of the dissertation work

#### 3.1. Volume and structure

The dissertation "Specifics of the international activity of the companies from the pharmaceutical industry in Bulgaria" has a volume of 222 pages. It consists of an introduction (5 pages), three chapters (185 pages), a conclusion (5 pages), references (13 pages) and appendices (10 pages). The illustrative material offered in the exhibition covers 47 figures and 24 tables.

The dissertation 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.

#### 3.2. Relevance of the topic



The dissertation addresses a relevant problem that is complex and systemic in nature. On the one hand, we have human health, which is of particular importance for economic well-being, on the other, the enterprises of the pharmaceutical industry that ensure the production and supply of medicines essential for maintaining human health, on the third, the operation of regulations at different levels and nature that affect the trade in medicinal products nationally and internationally. Nowadays, despite the growth of international trade in medicinal products, we are witnessing problems related to the provision of medicines, the predictability and regularity of supplies, especially in crisis conditions. This is precisely what makes the issue of trade and supply in the drug markets extremely important, as well as the issue of using the potential of international trade to eliminate emerging deficits by improving regulatory mechanisms and improving the activities of pharmaceutical companies and involved institutions in the context of ongoing integration processes.

### **3.3. Object, subject, goals, tasks, thesis, toolkit and literature**

The object and subject of the dissertation work are correctly defined and in accordance with the topic chosen by the dissertation student. The object of research in the dissertation is the pharmaceutical companies that operate on the domestic market. The subject of the study is commercial activity in the pharmaceutical sector and the changes that occur with significant changes in the external environment. The main goal of the dissertation is to discover the specifics and trends of the Bulgarian market in the import, production and trade of medicines, and to achieve it the following research tasks are set:

- In theoretical and methodological terms: to systematize and analyze the scientific literature on international trade, individual approaches and specifics in the activity.
- To study the organization of the pharmaceutical business and drug trade in Bulgaria.
- To highlight both good and controversial practices in international drug trade.
- To conduct a study on the trends in the import of medicines in Bulgaria.
- Based on the conducted theoretical-methodological research and empirical research, to make generalizations, conclusions and assumptions about the development of the sector.

The dissertation argues that parallel and generic imports can ensure continuity of drug supply to ensure access to drugs by patients in the country. The following research hypotheses are formulated:

Hypothesis 1: The import of medicinal products in Bulgaria has seen a significant growth after Bulgaria's entry into the EU.

Hypothesis 2: The Covid-19 pandemic has an impact on the realization of drug supplies in the country.

Hypothesis 3: Parallel trade facilitates the import of medicines that are missing from the market.

Hypothesis 4: The import of generic drugs in Bulgaria shows a significant growth for the studied period 2018-2022.

In general, the aim and tasks of the dissertation research have been achieved, the stated thesis has been proven and the formulated hypotheses have been confirmed.

In view of the specificity of the topic and the limitations related to the acquisition of data, the doctoral student has chosen and applied adequate research approaches and methods. In the course of the research, various methods were applied such as: comparative method, analogy, synthesis, deduction and induction, in-depth interview, cluster analysis. Particularly valuable are the results obtained with the help of in-depth interviews and cluster analysis with the R programming language.



The bibliographic reference indicates that to achieve the goal and tasks of the dissertation, the doctoral student used 139 sources in Bulgarian and English, which include 29 monographs and studies, 51 articles and 59 electronic sources.

#### **4. Assessment of the structure and content of the dissertation**

The dissertation is structured in three chapters that follow their logic. In the first chapter of the dissertation, the foundations of an in-depth theoretical and practical study are laid. The chapter examines the importance of globalization, regional integration and economic prosperity, and how these affect the international trade in medicines. The international organizations, regulatory bodies and unions that regulate the drug trade are also presented in hierarchical order. Pharmaceutical MNCs are considered as a major part of new trends in international business and global competitiveness in international markets. The chapter concludes with an analysis of the impact of Covid-19 on supply systems in the pharmaceutical industry.

Chapter two presents the organization of the pharmaceutical business and drug trade in Bulgaria. The legislative framework in Bulgaria for the wholesale trade of medicines has been examined, the main practices related to the medicine policy and the basic terminology have been indicated. It illustrates how supply chains are constructed and function in drug wholesale trade and the importance and scope of parallel drug trade is presented. The chapter highlights the controversial practices of the Bulgarian market, as well as some of the possible reasons for the shortage of certain medicines in our country.

Chapter three presents the empirical study. The scope, tasks and information sources of the empirical study are presented. A thorough and comprehensive analysis of the data on the import of pharmaceutical products, parallel imports and the activities of international companies was made. Recommendations of an applied nature are derived.

In the conclusion of the dissertation, the main thesis and hypotheses are confirmed.

The presented Abstract of the dissertation has a volume of 44 pages and reflects the content and structure of the work in a synthesized form. The language of the presentation meets the academic requirements.

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

The dissertation work is an original, multi-component and multi-aspect study in the field of the international activity of companies from the pharmaceutical industry in Bulgaria. Based on what is presented in it, I accept the scientific and scientific-applied contributions stated by the doctoral student. They can be identified in the following aspects:

1. Enrichment of theoretical knowledge related to the influence of a number of factors of the global environment on the development of the pharmaceutical business and its adaptation to the international political, economic and social environment.

2. In a theoretical-applied aspect, the key role of the pharmaceutical industry and the dynamics of its development for the well-being of nations has been researched and proven. Confirmed, through applied methods for quantitative and qualitative research, statements and conclusions are also essential for proving the author's thesis and hypotheses.

3. The dissertation work contributes to expanding the field of application of familiar tools of scientific research in a poorly studied area of international business, such as the pharmaceutical industry.

4. Based on the conducted studies and analysis, a package of proposals was formulated at the company and institutional level, which could be used in the decision-making process



regarding the supply of the markets with medical products and drugs, especially in a period of crises and unpredictability.

#### **6. Publications and participation in scientific forums**

The author's ideas have been presented publicly through 4 publications - one independent article in an "open access" scientific journal that is referenced/indexed in ERIH PLUS and CEEOL, two independent papers and one co-authored paper presented in respected forums. The provided materials confirm that there is compliance with the quantitative requirements under Art. 35, para. 1, items 1-4 of the Regulations for the development of the academic staff at the University of Economics - Varna and minimum national requirements for awarding the educational and scientific degree "Doctor" in the field of higher education 3. "Social, economic and legal sciences", according to Art. 2b, paragraphs 2 and 3 of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

#### **7. Confirmed or unconfirmed plagiarism in the dissertation and the abstract**

I do not find any plagiarism in the dissertation and abstract submitted by the doctoral student.

#### **8. Critical notes and recommendations**

In general, I have no significant notes for the author. I can recommend that she continues her work in the field of researching the problems of the pharmaceutical industry in a national and international aspect.

#### **9. Questions for the dissertation student**

In the first chapter, much attention is paid to the processes of globalization, regionalization and integration. Can we single out one of them as a leader in the state and development of the trade in pharmaceutical products on the Bulgarian market?

Are there any problems similar to those outlined by the author in relation to the Bulgarian drug market and the markets in other countries, i.e. to what extent can they be defined as national or pan-European?

#### **10. Conclusion**

The presented dissertation work on the topic "Specificity of the international activity of the companies from the pharmaceutical industry in Bulgaria" with author Ralina Dobrinova Mircheva meets the requirements for awarding the educational and scientific degree "doctor" according to LDASRB, RILDASRB, as well as the specific requirements of the University of Economics - Varna. It contains scientific and scientific-applied results, which represent an original contribution to science and demonstrate in a categorical manner the qualities and skills of the dissertation candidate for independent conduct of scientific research.

In view of everything stated, I give my positive assessment of the conducted research, presented by the above-reviewed dissertation work, abstract, achieved results and contributions and I propose to the respected members of the scientific jury to vote for awarding the scientific degree "doctor" to Ralina Dobrinova Mircheva in Higher Education field 3. Social, economic and legal sciences; Professional field 3.8. Economics, Scientific specialty "World economy and international economic relations"

30.05.2024

Reviewer:  
/Prof. D

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