

# **REVIEW**

by Stanislav Dimitrov Petkov, Associate Professor at the Higher School of Insurance and Finance -  
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of dissertation for awarding the educational and scientific degree "**Doctor**"  
in the field of higher education 3. Social, economic and legal sciences, Professional field 3.8.  
Economics, doctoral program "Finance, Insurance and Social Security" at the Higher School of  
Insurance and Finance (VUZF) – Sofia

**Author:** Nikolay Lazarov Lazarov

**Topic:** Innovations in Retail Banking and Their Applications in Bulgaria

**Scientific supervisor:** Prof. Dr. Daniela Bobeva

## **1. General description of the presented materials**

I have been appointed a member of the scientific jury under the procedure for defense of the dissertation of doctoral student Nikolay Lazarov Lazarov for obtaining the educational and scientific degree "Doctor" in the field of higher education 3. Social, economic and legal sciences, Professional field 3.8. Economics, doctoral program "Finance, Insurance and Social Security" at the Higher School of Insurance and Finance - Sofia (VUZF) by order of the Rector of VUZF Prof. Dr. of legal sciences Boris Velchev № 89/05.04.2022

The topic of the dissertation is "Innovations in retail banking and their application in Bulgaria". The scientific supervisor of the doctoral student is Prof. Dr. Daniela Bobeva. The dissertation is in Bulgarian.

The doctoral student has presented the following materials in connection with the procedure:

- dissertation work;
- abstract of dissertation - in Bulgarian and in English;
- reference for fulfillment of the minimum national requirements for obtaining the educational and scientific degree "Doctor" in professional field 3. 8. Economics;
- list of publications on the topic of the dissertation;
- publications on the topic of the dissertation;
- CV;
- Order of the Rector of VUZF to determine the scientific jury for the defense procedure.

The materials are characterized by completeness.

## **2. Brief biographical data about the doctoral student**

The doctoral student Nikolay Lazarov Lazarov holds a master's degree in International Management from the University "Assoc. Zlatarov", Burgas. He subsequently acquired an EMBA from Cotrugli Business School in 2010.

Nikolay Lazarov has gained significant experience of over 17 years in banking, working in Raiffeisenbank Bulgaria for more than 10 years and more than 7 years in Postbank. He holds various positions and since 2019 he has been the Director of the Sales Department.

## **3. Relevance of the topic and appropriateness of the set goals and objectives**

The topic chosen by the author is extremely relevant - innovations, their role in the activities of financial institutions, new technologies and trends in banking. The author has correctly justified the relevance and significance of the topic.

In his research work Nikolay Lazarov clearly formulates a thesis, hypotheses, goals, objectives, object and subject of research. The main research thesis that is defended is that innovation and technological development are becoming a crucial factor in a significant change in conventional commercial banking. In connection with the main thesis of the study, two hypotheses have been formulated and tested. The first hypothesis is: innovations in banking and new technological solutions significantly change the business model in traditional retail banking. The second hypothesis is: technological innovations significantly affect the profitability and efficiency of banks. In addition, the author tests the hypothesis whether the need for significant investments in the implementation of digital transformation of banks results in a change in the strategies of banks in retail banking.

I believe that the doctoral student has correctly formulated the thesis and hypotheses. There is a correspondence of topic, thesis, hypotheses, structure, exposition and conclusions in the research. In addition, the applied methodology, the period covered by the study and the analyzed data are correctly described. The author could formulate a restrictive framework and describe the sources of information used.

#### **4. Knowledge of the problem**

The doctoral student Nikolay Lazarov demonstrated in-depth knowledge and significant practical experience in relation to the issues he studied. He has his own opinion on the researched issues, formulates the problems in the field, performs analysis, draws conclusions and offers guidelines for solutions. He is also theoretically acquainted with the issues he is considering. The author has applied correlation analysis and empirical research.

#### **5. Research methodology**

The research methodology is presented on pages 13-14 in the paper. I agree with the methodology described by the author, applied in conducting the study. The author has applied traditional scientific methods. Positive for the study is the application of two specially developed econometric models. The doctoral student has studied scientific sources on the topic, regulations and statistical information. A content analysis and comparative analysis of the business strategies of the

banks was performed and general criteria for systematization and classification of empirical indicators were derived. The PhD student applies correlation econometric analyzes of the impact of innovation on administrative costs, salary costs and revenues from fees and commissions of banks. Their influence is assessed by purposeful selection of variables expressing the applied innovative solutions and by means of a correlation model. Such a methodology is used to study and evaluate the factors influencing the granting of consumer and housing loans.

## **6. Characteristics and evaluation of the dissertation**

The dissertation has a volume of 245 pages. The main study is 212 pages long, 15 pages indicate the sources used and 18 pages describe two appendices. The work is structured in Introduction, Three Chapters, Conclusions and Conclusions, References and Applications. The applications are two in number, in a volume of 18 pages. At the beginning of the work the included figures, tables, as well as the abbreviations used are described. The number of illustrations included is a total of 71, including 62 figures and 9 tables.

It is difficult to estimate the number of used literature sources, as they are not numbered, not arranged in different groups and some of them are repeated. Nevertheless, it can be concluded that the author used a significant number of sources of information. The citations of the sources used are inside the text, not below the line. However, it can be concluded that the doctoral student correctly cited the sources used and a significant number of citations and references were made.

The technical requirements for the preparation of a dissertation are largely met by the doctoral student.

The introduction briefly presents the author's idea and is a very good introduction to the issue. The introduction defines the object, subject, thesis, hypotheses, purpose and objectives of the study, as well as the applied methodology.

Chapter One is entitled "Creating, Defining and Managing Innovation". Chapter One examines the theory of innovation. The volume of the First Chapter is 92 pages. This part of the study is structured in four points. There is a certain imbalance between the individual points - their volume varies from 13 pages to 45 pages. It is noteworthy that no conclusions and summaries are drawn at the end of the chapter. There is a difference between the points mentioned in the content and in the

actual research of the dissertation, such as point 2. In this chapter the doctoral student examines the essence of innovation, management of non-innovation activity and innovation in retail banking. The author systematizes and classifies the types of banking innovations. The various financial technologies and their application in retail banking are described.

Chapter Two is entitled "Innovation and development of the Bulgarian market in retail lending, consumer and housing loans." Chapter Two examines the banking models of distribution and innovation in household lending. The volume of Chapter Two is 52 pages. This part of the study is structured in two points. Again, there is no balance between the different parts of the chapter - the first point is 35 pages and the second point is 17 pages. Chapter Two analyzes the dynamics of housing and consumer lending in Bulgaria. According to the author, for the first time in the literature an analysis of the approaches to the formation of interest rates on housing loans through its own reference interest rate. The connections between the granting of housing and consumer loans and GDP are analyzed. The analysis was conducted not only for Bulgaria, but also for each euro area country. The author applies correlation analysis to study the relationship between variables. The analyzed period is relatively long - the period 2004 - 2020.

Chapter Three is entitled "Assessment of the factors and effectiveness of innovation and digitalization of banks in Bulgaria." Chapter Three examines the factors that influence innovation and its effectiveness, as well as the role of digitalization in the development of innovation in banking theory in the field of innovation. The volume of Chapter Three is 47 pages. This part of the study is structured in three points. In this chapter, a critical analysis of existing models by other authors is performed. The PhD student develops his own model for measuring the effectiveness of innovation by using statistical tools and key indicators for the performance of banks. The role of digitalization for the development of innovations in retail banking in Bulgaria is analyzed. The author also offers his own model for assessing the factors that affect housing and consumer loans. The trade strategies of certain banks in offering products in housing and consumer lending are presented.

The end of the study is entitled "Conclusions". The volume is 7 pages. The conclusion corresponds to the analysis in the main text of the paper.

The presented dissertation is a significant development of the chosen topic. The research is extremely thorough and comprehensive. The analysis is characterized both by its theoretical aspects and by its practical and applied dimensions.

In general, the qualities of the dissertation are indisputable. The topic is current. There is a clear authorial presence. Based on the analysis, conclusions are drawn. There is a logical connection between the individual chapters. Up-to-date data have been studied.

### **7. Contributions and significance of the study for science and practice**

An abstract is attached to the dissertation. The contributions of the dissertation are formulated on page 39 of the abstract. Seven scientific contributions are listed. I accept most of the contributions formulated by the author. The doctoral student formulates five practical contributions. I fully accept these five practical contributions.

### **8. Evaluation of the publications on the dissertation**

For the purposes of this procedure, the doctoral student has presented a total of three independent publications on the topic of the dissertation. The three publications are in Bulgarian. The total volume of the publications is 52 pages.

The first publication is on "Housing lending in Bulgaria - prospects and trends." The work was published in the Proceedings presented at the National Student and Doctoral Conference on "Economic Challenges for Bulgaria (2021-2023) - Sustainability and Risks", 23.04.2021, ISBN 978-619-7622-05-8, pp. 328-338. The study has a volume of 11 pages.

The second publication is entitled "Assessment of the factors influencing housing and consumer lending in Bulgaria." The study is 15 pages long. The work is to be published in the journal Economic Thought at the Institute for Economic Research at the Bulgarian Academy of Sciences. An official note from the editors of the magazine was presented, certifying that the article had been accepted for publication.

The third publication is on "Assessment of the factors and effectiveness of innovation and digitalization of banks in Bulgaria." The work is 26 pages long. The article was published in the

magazine "Money and Culture", published by VUZF. It would be good for the doctoral student to present evidence for the publication of the article.

I accept that the presented publications are on the topic of the dissertation. With the presented publications the doctoral student fulfills the national minimum requirements for acquiring the ONS "Doctor".

### **9. Assessment of compliance with the minimum national requirements**

PhD student Nikolay Lazarov meets the national minimum requirements for acquiring ONS "Doctor" set in the Regulations for the implementation of the Law on the Development of Academic Staff of the Republic of Bulgaria - he is awarded 50 points for his dissertation and a total of 30 points for his scientific publications. The total points collected by the doctoral student are 80 points.

### **10. Personal participation of the doctoral student**

The author's attitude to the researched issues is evident from the dissertation work. The position of the doctoral student on the problems studied by him and his active opinion on them is evident. This is due to the good knowledge of the topic, the object of the dissertation, as well as the special interest of the author to it.

### **11. Abstract of dissertation**

The dissertation is accompanied by an abstract - in Bulgarian and English. The abstract is 41 pages long. The abstract contains a description of the main characteristics of the dissertation, structure and content of the work, summary of the dissertation, research contributions, publications on the topic of the dissertation and a declaration of authorship and lack of plagiarism.

The abstract contains some differences with the presented dissertation. For example, a slightly different title "Innovations in retail banking and their application in Bulgaria - perspectives and trends", while the topic in the dissertation is "Innovation in retail banking and their application in Bulgaria". I accept the difference as a technical error.

The abstract of the dissertation is prepared in accordance with the requirements adopted for such research. It illustrates well enough the main points in the dissertation.

## **12. Critical remarks and recommendations**

Along with the merits of the work, I would like to formulate some notes and suggestions to the author. Performance would be improved by comparing with innovation practices and trends in retail banking in other EU countries. It would be worthwhile to analyze good practices and unsuccessful practices and examples of innovations in retail banking. It is good for this kind of research to be better designed, to avoid technical mistakes. In addition, it is positive that the dissertation has a relative balance between the different parts of the study. Next, the conclusions should follow each chapter, not the end of the study. It would be positive for the author to take a clearer personal position, to have a more critical analysis.

## **13. Personal impressions**

I have no personal impressions of the doctoral student, except for those acquired during the present procedure.

## **14. Recommendations for future use of dissertation contributions and results**

I recommend the doctoral student to continue a more in-depth and critical study of his chosen topic, as it is relevant and will continue to be in the focus of public interest in the coming years.

## **CONCLUSION**

In conclusion of the above, I give my **positive assessment** of the dissertation, abstract, results and contributions, as well as the scientific publications of PhD student Nikolay Lazarov and **I suggest the esteemed scientific jury to award him the educational and scientific degree "Doctor"** in the field of the higher education 3. Social, economic and legal sciences; Professional field 3. 8.



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14.05.2022

Reviewer:

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