

## OPINION

by Prof. Dr. Maria Petrova Vidolova, Sofia University "St. Kl. Ohridski ",

Department of „Finance and Accounting“

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, PhD program "Finance, Insurance and Insurance"

**Author: Nikolai Lazarov Lazarov**

**Topic: "Innovations in banking and their application in Bulgaria - perspectives and trends"**

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

By order № 89 / 05.04.2022 of the Rector of the Higher School of Insurance and Finance Prof. Boris Velchev I was appointed a member of the scientific jury in connection with the procedure for defense of a dissertation on "Innovations in banking and their application in Bulgaria - perspectives and tendencies" for acquiring the educational and scientific degree "Doctor" in the field of higher education 3. Social, economic and legal sciences, Professional field 3.8. Economics. The author of the dissertation is Nikolay Lazarov Lazarov - PhD student of independent preparation for the doctoral program "Finance, Insurance and Insurance" with supervisor Prof. Dr. Daniela Bobeva from Higher School of Insurance and Finance .

The presented dissertation meets the conditions in the Law for the development of the academic staff in the Republic of Bulgaria and the Regulations for its application. The required documents are attached to the materials of the competition. An autobiography, a dissertation, an abstract and three publications on the topic of the dissertation are presented. No violations were found during the implementation of the procedure. A reference for the implementation of the minimum national requirements under Art. 2b of the Law for the development of the academic staff.

### **2. Brief biographical data about the candidate**

The doctoral student has a master's degree in business administration and management. His professional experience contributes to N. Lazarov's specialized theoretical and applied knowledge in the field of dissertation work. His professional career is entirely in the banking sector - he has held

and holds managerial positions in Postbank and Raiffeisen Bank, respectively Head of Sales Division, Retail Sales Department, Supervisor /Retail Banking Division, Sales Manager Agent Network Department and others.

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

The topic of the dissertation is particularly relevant and the need for scientific systematization and coverage. The presented dissertation work is dedicated to the undoubtedly significant by point of view the state and trends in the financial sector and in particular the banking sector in Bulgaria a problem related to the large-scale penetration of digital and digital technologies and the automation of a number of processes in the context of economic and monetary union reforms to improve the profitability of banking intermediation. The issue is relatively poorly studied and especially for Bulgaria becomes a priority in connection with the expected significant changes in the business model of traditional retail banking, building a new architecture of the process resulting from the permanent introduction of innovations in the sector and accompanying changes in character. the goals and participants in the various processes and ultimately influencing the profitability and efficiency of banks.

The dissertation has a total volume of 216 pages, structured in an introduction, three chapters and a conclusion, as well as appendices containing 62 figures and tables, a large volume of unnumbered literature. The dissertation research is logically sound, the research thesis is correctly formulated, the purpose and tasks, the object and the subject of the research are correctly outlined. To achieve the set goals and objectives N. Lazarov thoroughly studies the theory in the field of innovation, reviewing the main theoretical positions regarding the nature of the phenomenon of innovation, the great variability in the interpretation of different authors, types of banking innovations and in particular banking innovations. retail. The author shares the concept that innovation is related to the creation, absorption and dissemination of innovations as a result of a set of scientific, technical, organizational, financial and marketing activities carried out by interconnected participants in the innovation process. Something more, the emergence, implementation and effective management of innovation is one of the most challenging and complex processes in organizations, including and in commercial banks. The PhD student successfully systematizes the banking models of distribution and innovations in household lending. For this purpose, the dynamics in the segment of housing and consumer lending in Bulgaria /period 2004 - 2020/, the approaches to the formation of interest rates on housing loans were monitored. With the help of correlation analysis, the connections between the granting of housing and consumer loans and GDP were analyzed, and the analysis was expanded to include the euro area countries. Of particular interest to the professional audience is the study of

the impact of factors on innovation and its effectiveness, as well as the role of digitalization in the development of innovation in banking. For this purpose, various current models are considered and our own way of measuring the effectiveness of innovation is offered by using statistical tools and key indicators for the performance of banks. The author also offers his own model for assessing the factors influencing housing and consumer loans.

### **3. Contributions and significance of the development for science and practice**

The doctoral student knows thoroughly the state of the problem and creatively evaluates the literary material. The presented material testifies to the breadth of the candidate's scientific interests and his abilities to perform acceptable quantitative and qualitative research. The dissertation presents the doctoral student as an erudite, intelligent, hardworking and conscientious researcher. There is a scientific product with very good information, in-depth and critical view of trends in the field. The dissertation is the result of conscientious research activity of a doctoral student with theoretical and specialized knowledge in this field, acquired as a result of extensive practical experience and scientific self-training. A wide range of research methods was also used.

The scientific contributions of the doctoral student can be found in all three main areas required in the evaluation of the dissertation: novelty in science, enrichment of existing knowledge, application of scientific achievements in practice. I fully agree with the main scientific contributions formulated by the doctoral student.

- In theoretical aspect the analysis of the theoretical and methodological bases and the practical-applied aspects of the entry and management of innovations in the banking sector is carried out, the types of banking innovations are systematized and classified, the specifics of these processes are highlighted and the main driving factors in Bulgaria, influencing the innovation and digital decisions in the trade strategies of the banks in Bulgaria. As the comprehensive research on the distribution channels in retail banking and their relationship with the results of banks is still scarce in the specialized literature on the problem, the dissertation is of some interest to the professional audience. The logical structure of the research, as well as the realization of the set research goals, tasks and assumptions also contribute to the clarification of the problem.
- It can definitely be said that N. Lazarov has established himself as a professional in the field of banking management and retail banking, through various distribution channels, the introduction of innovative products and segments in banking. The review of innovations, trade strategies and sales channels used by banks in Bulgaria in the distribution of consumer loans can be used in connection with improving innovation management in the financial

sector in order to increase its efficiency and influence on investor behavior. The latter definitely brings to the fore the professional expertise of the dissertation.

- Of particular interest is the research conducted by the dissertation and correlation analysis of the relationship between consumer and housing loans to GDP of the euro area and Bulgaria for the period 2004 - 2020, which proves that the correlation in consumer loans is significant and at the same time higher than the correlation for housing loans. The values for Bulgaria are close to the average for the Euro area and again show a significant correlation in the relationship between consumer credit and GDP. Valuable by point of view the item of practice is the analysis of the approaches to the formation of interest rates on housing loans through its own reference interest rate.
- The developed own model for assessment of the factors and efficiency of the innovation activity and digitalization of the banks in Bulgaria can definitely be considered as a contributing moment, and on this basis the effect of the innovations in the banks is assessed. Of professional interest is also the developed model for estimating the factors influencing the banks income from fees and commissions, administrative costs and staff costs.
- The research proves the researcher's thesis and hypotheses of dissertation work that innovation and technological development are becoming a significant factor in a significant change in conventional retail banking, which will help banks assess the existing distribution mix of service channels and sales and plan future changes in the strategy based on the specifics and benefits of the various service and sales channels presented in the study.

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

The publications attached by the author reflect the results of the dissertation. The results are important from a scientific and applied aspect for the practice in the conditions of turbulent environment and restructuring of the financial and banking sector both in the world and in Bulgaria.

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

The candidate has met the minimum national requirements for obtaining the educational and scientific degree "Doctor" in the professional field 3.8. "Economics".

#### **6. Abstract**

The abstract reliably and fully reflects the results of the theoretical and applied research and is prepared according to the requirements.

#### **7. Critical remarks and recommendations**

With regard to the dissertation, some critical remarks can be made, which do not detract from its content and quality. It is necessary that before the presentation for evaluation by the jury the content of the dissertation is numbered, as well as the text is cleared of many technical errors. I believe that certain disparities in composition can be overcome, such as the weight of individual chapters and paragraphs. The last, of course, is the author's view. With the presented dissertation, the doctoral student demonstrates qualities and skills for independent research. I recommend the author to deepen his research in this extremely relevant field, thus there will be even greater opportunities for future use of scientific and scientific-applied contributions, as well as for making competent management decisions.

## **CONCLUSION**

The dissertation presented for defense has the character of a completed scientific research. The obtained scientific results are of a contributing nature, which gives me reason to believe that the work meets the requirements of the Law on the Development of Academic Staff and the Regulations for its implementation. The presented materials and dissertation results fully comply with the specific requirements of the Regulations for admission and training of doctoral students at the Higher School of Insurance and Finance.

The analysis of the proposed dissertation gives me a good reason to support the research, which characterizes the author as a built and creative, competent and in-depth researcher. In view of the above, I give full conviction to the dissertation of Nikolay Lazarov and propose to the highly respected scientific jury to decide to award him the degree of "Doctor of Economics" field in higher education "Social, Economic and Legal Sciences ", Professional field" Economics ".

4.05.2022 г.

Prof. Dr. Maria Vidolova

