

OPINION

**by Prof. Virginia Ivanova Zhelyazkova, DSc
from VUZF University - Sofia**

of dissertation for awarding the educational and scientific degree “Philosophiae
Doctor”

in the field of higher education 3. Social, economic, and legal sciences
Professional field 3.8. Economics

Author: Nikolai Lazarov

Topic: “Innovations in Banking and Their Application in Bulgaria - Perspectives
and Trends”

1. General description of the submitted materials

By order № 89 of April 5, 2022, of the Rector of VUZF University - Sofia - Prof. Boris Velchev, DSc, I have been appointed a member of the scientific jury for providing a procedure for the defense of a dissertation on “Innovations in Banking and Their Application in Bulgaria - Perspectives and Trends” for obtaining the educational and scientific degree “Philosophiae Doctor” (Ph.D.) in Higher Education 3. Social, economic and legal sciences, Professional field 3.8. Economics. The author of the dissertation is Nikolay Lazarov - Ph.D. student at the Department of Finance and Insurance.

Ph.D. student Lazarov presented the following materials on the procedure:

- dissertation for the award of Ph.D.;
- abstract of the dissertation in Bulgarian and English language;
- autobiographical reference;
- a copy of the diploma for the acquired Master's degree;
- three publications on the topic of the dissertation - two scientific articles and one report in a collection of reports from a scientific conference;

- reference for the implementation of the national minimum requirements for awarding the Ph.D., set in the Law for the Development of the Academic Staff in the Republic of Bulgaria, and the Regulations for its implementation.

The documents are in good condition and this facilitates the preparation of the opinion on the procedure.

2. Characteristics and evaluation of the dissertation

The presented dissertation is dedicated to a topical matter for the Bulgarian banking market - trends and prospects in the development of innovations in retail banking. With the advance of digitalization, this issue has become particularly important in recent years. Banks in Bulgaria lag somewhat behind those in the European Union. It is necessary to constantly look for the reasons, the problems that led to this trend, as well as the opportunities to catch up. In his dissertation, PhD student Nikolay Lazarov presents an in-depth analysis, which answers some of the most important questions, so as to assess what is the state of our banking market at the moment and what the trends are. The work is logically structured, and divided into an introduction, three chapters, and a conclusion.

The introduction correctly defines the thesis, hypotheses, purpose, and objectives of the study. The first chapter is devoted to the theory of innovation. Here the doctoral student discusses the main theoretical applications and perspectives of various researchers on the subject. He pays special attention to innovations in the financial sphere. The focus of the second chapter is the development of the Bulgarian retail banking market and the innovations that are observed in this segment. Innovations in housing and consumer lending are presented and analyzed separately. The third chapter presents the author's study of the factors that influence innovation and its effectiveness, as well as the role of digitalization in the development of innovation in banking. In this part of the paper, the doctoral student has critically considered various existing models of other authors, evaluates his research, and then, based on the conclusions reached on the applicability of the different approaches analyzed, he offers his own way of measuring the effectiveness of innovation through the use of statistical tools and key indicators for bank performance. Emphasis is placed on the role of digitalization in the development of innovations in the retail banking sector in Bulgaria.

The work is significant in volume - a total of 248 pages, of which 229 main text, the remaining pages – are appendices. It is enriched with illustrative material - 9 tables and 62 figures, which clearly and correctly elucidate the texts, and presents the author's ideas and the

data he has collected on various issues. The list of used literature contains a sufficient number of titles - there are no numbers, but it is clear that the sources are more than 100 in number, mostly in English language.

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

The dissertation work of doctoral student Lazarov has a pronounced practical orientation and this naturally explains the nature of the contributions that emerge in it. As a result of the research on the housing loan market in Bulgaria, the doctoral student, who has significant experience in banking practice in the field he studies, reaches a number of important and useful conclusions.

The very methods by which these conclusions have been reached can be considered as applied contributions, as they show the ways and steps to analyze key indicators for banks, as well as the behavior of market participants. Such are the author's models for estimating the factors influencing housing and consumer loans and the banks' income from fees and commissions, administrative costs, and staff costs. An important contribution of a practical nature is the study of the relationship between the distribution channels used by banks and their financial results. This is still a poorly studied issue, not only in the Bulgarian but also in the international scientific literature, and it is essential for the management of banks, especially in the highly dynamic environment of new and new distribution channels in both physical and in cyberspace.

Ph.D. student Lazarov contributes to the elucidation of some theoretical issues, such as what are banking innovations, what classification can be proposed for them, what are the main financial technologies and how they are used in retail banking, what are the possible approaches to interest rates levels of housing loans by applying a bank's own reference interest rate.

The overall impression of the work is that it reflects the maturity of the knowledge of the doctoral student's practice in combination with a very good knowledge of the theory of the research topic.

4. Evaluation of the publications on the dissertation

PhD student Lazarov has presented a total of three scientific publications in connection with this procedure. All three are on the topic of the dissertation, two are articles, one in the journal "Economic Thought of the Bulgarian Academy of Sciences, and one in the

journal “Money and Culture” of VUZF University, and the report was published in a collection of reports from a scientific conference of VUZF University.

With these three publications, the doctoral student fulfills the requirements regarding the number and type of scientific publications, set in the Law for the Development of the Academic Staff in the Republic of Bulgaria, and the Regulations for its implementation.

5. Assessment of compliance with the minimum national requirements

The doctoral student has presented a dissertation for the award of Ph.D., which meets the accepted academic rules for the compilation of such type of work, as well as three scientific publications in scientific journals in Bulgaria. Thus, he meets the minimum national requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria, and the Regulations for its implementation for awarding Ph.D.

6. Abstract of the dissertation

The abstract correctly reflects the main points in the dissertation in summarized form. It corresponds to the established good practice in academia for writing such works.

7. Critical remarks and recommendations

I have no significant critical remarks. I would recommend the Ph.D. student publish his work in the form of a paper and electronic book. In this way, the results of his work will reach a wider audience and he will have the opportunity to receive feedback with which to enrich both his research and his practice in the banking field.

CONCLUSION

The dissertation contains scientific, scientific-applied and applied results, which represent an original contribution to science and meet all the requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria, and the Regulations for its implementation for awarding Ph.D. The presented materials and dissertation results fully comply with the specific requirements of the Regulations for Admission and Studies of Doctoral Students at VUZF University.

The dissertation shows that the candidate Nikolay Lazarov has in-depth theoretical knowledge and professional skills in the Professional field 3. 8. Economics, demonstrating qualities and skills for independent research.

Due to the above, I confidently give my positive assessment of the research presented by the above peer-reviewed dissertation, abstract, results and contributions, and I invite the esteemed scientific jury to award the educational and scientific degree Ph.D. to Nikolai Lazarov in Higher Education field 3. Social, economic and legal sciences; Professional field 3. 8. Economics, the doctoral program at VUZF “Finance, Insurance and Social Insurance”.

May 17, 2022

Reviewer:

(s)

/ Prof. Virginia Ivanova Zhelyazkova, DSc /