

STATEMENT

by **Assoc. Prof. Dr. Gergana Ilieva Mihaylova-Borisova,**

University of National and World Economy;

Research specialty: "Finance, Money Circulation, Credit and Insurance"

dissertation for the award of the educational and scientific degree "PhD"

degree in the field of higher education 3. Social, Economic and Legal Sciences

Professional field 3.8. Economics

Author: Kiril Georgiev Anachkov

Topic: The Impact of Financial Technologies on the Credit Risk Management of Banks

Scientific supervisor: Prof. Dr. Daniela Bobeva

1. General description of the submitted materials

By Order No. 135 of 15 April 2025 of the Rector of the Higher School of Insurance and Finance Prof. Boris Velchev, Ph.D., I have been appointed as a member of the scientific jury for providing a procedure for the defense of a dissertation thesis entitled "**The Impact of Financial Technologies on the Credit Risk Management of Banks**" for the acquisition of 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 Kiril Georgiev Anachkov - PhD student in independent training at VUZF.

The PhD student Kiril Georgiev Anachkov has submitted a number of materials and documents necessary for the evaluation of the qualities of his thesis, such as: dissertation thesis, abstract, CV, list of publications, reference for the fulfillment of the minimum national requirements for obtaining the PhD in the professional field 3.8. Economics and abstracts of the publications submitted. The PhD student Kiril Anachkov has attached 4 publications, 2 of them are journal articles and 2 papers, published in conference proceedings.

2. Brief autobiographical details of the applicant

Kiril Georgiev Anachkov is PhD student in professional field 3.8 Economics, scientific specialty "Finance, Insurance and Assurance" at VUZF since 2023.

He graduated from the Bachelor's degree programme in Finance at the UNWE in the period 2016-2020, after which he obtained a Master's degree in International Banking and Financial Markets at the Department of Finance in the UNWE, graduating with an excellent grade.

The PhD student has extensive practical experience in finance. His professional career started as an intern in "APIS EUROPE" AD and "UNIQUE LIFE INSURANCE COMPANY" AD. Since October 2021 he has been a junior financial analyst for large corporate clients at Raiffeisen Bulgaria EAD, and since April 2022 he started working at Maxima Bulgaria EOOD. Initially, he held the position of Junior Business Analyst and from September 2023 he was appointed Head of Business Analytics.

3. Characteristics and evaluation of the dissertation thesis

Kiril Anachkov's dissertation is dedicated to the impact of financial technologies on credit risk management in the banking system. It is on a very topical subject, as the rapid development of technology allows for more flexible credit risk management and at the same time, makes it possible to satisfy to a greater extent the growing requirements of banks' customers. The dissertation is 213 pages long, of which the actual research is 179 pages. It contains an introduction, three chapters, a conclusion, and references used. A list of abbreviations used, a list of figures and a list of tables are presented at the beginning. The introduction of the dissertation presents its relevance, defines the subject, object, purpose, research objectives, thesis and methods of the study. The thesis that is defended is: "financial technology is becoming a significant factor for successful credit risk management in commercial banks. By integrating advanced financial technology, banks improve their processes and consequently this leads to a reduction in credit risk". To prove the thesis 3 hypotheses are tested. Appropriate research methods such as descriptive analysis, comparative analysis, historical-logical approach, statistical analysis and econometric modelling have been used in the dissertation.

The First Chapter "Conceptual Framework for Credit Risk Management and Financial Technology", clarifies the nature of credit risk and banking regulation. Dissertation elaborates on the clarification of the nature of financial technology by grouping the main technologies that find application in the banking sphere. The doctoral student's view on the implementation of financial technology in credit risk management in banking is presented.

The Second Chapter, "Application of Financial Technology in Banks' Credit Risk Management," discusses how each of the technologies - artificial intelligence, blockchain technology, cloud computing and big data - can be applied to credit risk management, highlighting the respective challenges banks may face in their application. The author's stance on the research problem and the in-depth analysis and comparison of the application of these financial technologies and traditional statistical methods is positively impressive.

In the Third Chapter "Assessing the effect of the application of financial technology in the credit risk management of banks in Bulgaria" econometric models are built to assess a number of macro and micro factors, affecting non-performing loans in Bulgaria. Econometric models are estimated for 8 banks by including information technology costs as an explanatory variable for the purpose of assessing their impact on the NPL ratio. An analysis of the relationship between financial technology adoption and ESG compliance is also presented.

The dissertation uses 149 sources of information, of which 31 are in Bulgarian and the rest in English. They are correctly used and show that the PhD student is well acquainted with the researched issues.

4. Contributions and Significance of the Development for Science and Practice

The dissertation is a complete and logically linked study, which has scientific and applied contributions. The PhD candidate provides a number of recommendations and ideas for the application of the financial technologies grouped by him in the activities of banks, especially in credit risk management. This acquires significant topicality of the work and great practical application.

A number of scientific and applied contributions can be found in the scientific work, of which the most significant are:

- enriching the existing literature on the grouping of financial technologies that can be applied to credit risk management;
- development of author's statistical models for assessing the impact of information technology costs on NPL levels in Bulgarian banks;
- investigating the relationship between Financial Technology and ESG for the purpose of meeting ESG requirements and sustainability goals;
- defining recommendations for the use of modern financial technologies in credit risk management by banks.

5. Assessment of publications on the dissertation thesis

The PhD student has submitted 4 publications, including 2 articles published in peer-reviewed journals and 2 papers published in conference proceedings held in the country. One article entitled "Impact of the COVID-19 pandemic on the economy and banking sector of Bulgaria" was published in the journal "Economic and Social Alternatives" of the UNWE, which is indexed in EBSCO and other secondary databases. The other article with the title "Bulgaria's accession to the euro area - effects on the economy and the banking sector" was published in the journal "Management in Business and the Public Sector" of the VUZF. Two papers have been published in conference proceedings that are on the Reference List of the NACID. All publications are stand-alone.

6. Assessment of compliance with minimum national requirements

In the submitted Report on the candidate's fulfilment of the minimum national requirements for the acquisition of the educational and scientific degree "PhD" in the professional field 3.8. Economics, 4 publications are reported, with which the PhD candidate fulfils the national minimum requirements under the Regulations for the Implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria.

7. Author summary

The author summary was developed according to the requirements for its preparation. Its volume is sufficient of 54 pages. The content of the dissertation is faithfully and correctly reflected. An account of the scientific and applied contributions is also provided.

8. Critical comments and recommendations

I have no critical remarks to make about the study. I believe that the PhD student has presented a qualitative, logically linked and extremely topical research, which has scientific and applied contributions. I would make a recommendation to publish the work for the purpose of greater dissemination of its results.

I would put the following question to the PhD student:

Which financial technology(s) would you recommend banks in Bulgaria to use in order to better manage credit risk?

CONCLUSION

The dissertation contains *scientific, scientific and applied results that represent an original contribution to science and meet the requirements* of the Law for the Development of Academic

Staff in the Republic of Bulgaria and the Regulations for the Implementation of the the law. The submitted materials and dissertation results comply with the specific requirements of the Regulations for Admission and Training of Doctoral Students at the Higher School of Insurance and Finance.

The dissertation work *shows* that the candidate Kiril Anachkov has in-depth theoretical knowledge and professional skills in the professional field 3.8. Economics, *demonstrating* qualities and skills for independent scientific research.

Because of the above, I confidently give my *positive assessment* of the research conducted, presented by the above reviewed dissertation, abstract, results and contributions, and *propose to the honorable scientific jury to award* the Scientific and Educational degree “Doctor” to Kiril Anachkov in the Field of Higher Education 3. Social, Economic and Legal Sciences; Professional field 3. 8. Economics, scientific specialty "Finance, Insurance and Assurance".

May 20, 2025

Reviewer:

(Assoc. Prof. Gergana Mihaylova-Borisova, PhD)