EXPERT OPINION

in connection with the defence of a PhD thesis
for the acquisition of the educational and scientific degree "PhD"
in the field of higher education: 3. Social, economic and legal sciences
Professional field: 3.8. Economics (Financial markets)
PhD program: "Finance, Insurance and Assurance"

<u>Topic of the PhD thesis:</u> "THE IMPACT OF ELECTRONIC BANKING ON CUSTOMER SERVICES AND BANKING OPERATIONS IN BANKS OF THE REPUBLIC OF NORTH MACEDONIA AND THE REPUBLIC OF BULGARIA"

Author of the PhD work: Semra Bujari

Academic supervisors: Prof. Stanislav Dimitrov, PhD

<u>Author of the opinion:</u> Prof. Tsvetan Iliev, PhD

1. General presentation of the received materials

This opinion has been prepared on the basis of Order № 256/21.07.2025 of the rector of University of Insurance and Finance (UIF) – prof. Boris Velchev, DSc, in accordance with art, 4(2) of the Law on the Development of Academic Staff in the Republic of Bulgaria and art 30(2) of the Regulations for the implementation of this Act, as well as in accordance with art47(7) of the Rules for admission and training of PhD students in UIF.

The documentation provided to me under the completion includes: dissertation, abstract, list of scientific publications, abstracts of publications for participation in the procedure, reference for compliance with scientific requirements, CV, declaration of authorship and conscientious development of the dissertation. In compliance with the requirements of art. 6(1) and (2) of the LDASRB there is evidence of possession of a Master's Degree and a dissertation on "THE IMPACT OF ELECTRONIC BANKING ON CUSTOMER SERVICES AND BANKING OPERATIONS IN BANKS OF THE REPUBLIC OF NORTH MACEDONIA AND THE REPUBLIC OF BULGARIA".

The presented gives me grounds to point out that the normative requirements for admission to participation in a dissertation procedure for adjudication of educational and scientific degree "PhD" have been complied with.

2. Brief biographical data about the PhD student

Doctoral student Semra Bujari was born on 03.03.1989 in the Republic of North Macedonia. In the period 2007 – 2010 she completed her higher education in the "Bachelor" degree in "Business Administration" at Fon University Struga. In 2016 she obtained the "Master" degree in "Economic Sciences" at the same university.

To date, PhD student Bujari has focused her development in academic circles, holding the position of "Director of the Center for Postgraduate Qualification at the International University - Struga. At the same time, she also performs the function of Erasmus coordinator at the same university. She is fluent in written and spoken Albanian, English and Turkish.

3. Topicality of the topic and appropriateness of the set goals and objectives

I can define the research area chosen by doctoral student Bujari as topical. In recent years, the banking sector worldwide has been in the process of profound transformation. It is driven by the rapid development of technologies and the growing demand for more efficient, accessible and customer-oriented services in the context of comprehensive digitalization. In this regard, one of the most significant axes of development is electronic banking, t encompasses a wide range of digital services and tools, including online banking, mobile banking, automated teller machines (ATMs) and other electronic channels. They allow customers to conduct financial transactions and manage their accounts without the need for physical interaction with a bank branch. This shift to digital banking puts the functioning of banking institutions on a completely different footing. Moreover, it creates a new reality for the customer experience when consuming financial services.

For banking institutions in countries such as the Republic of Macedonia and the Republic of Bulgaria, the implementation of e-banking technologies presents unique opportunities, but at the same time it also faces a number of challenges. As these countries continue to integrate into the European financial ecosystem, the role of e-banking is becoming increasingly important in shaping the future of their banking sectors. The impact of electronic banking on customer service and banking operations is a topic of increasing interest among researchers in these two countries. It is related to the need to clarify issues such as efficiency, customer satisfaction, financial integrity, and competitive dynamics in the banking sector.

In view of the relevance of the research problem thus emphasized by doctoral student Bujari, I accept as realistically defined and within achievable dimensions the goal of the dissertation work – to research and analyze the impact of e-banking on customer service and banking operations in banks in North Macedonia and Bulgaria. More specifically, the dissertation focused on two areas. First, to clarify the mechanism by which the implementation of e-banking technologies has affected the ability of banks in both countries to serve their customers. Second, to study the internal processes that govern banking operations.

In view of the set goal, the doctoral student has not defined the research object precisely and specifically in his dissertation. However, it could be defined as: the electronic banking service in the context of the digitalization of processes, operations and customer service in banking institutions. The subject of the doctoral dissertation is also not clearly stat-

ed, but it could also be traced: the possibilities of electronic banking for increasing the quality of the provided banking services and the competitiveness of banking institutions in the Republic of Macedonia and the Republic of Bulgaria. To prove his thesis, the dissertation candidate tests two main hypotheses.

4. Knowledge of the problem

It is a good impression that the doctoral student is familiar with the research developments on her problem by a number of foreign authors. Semra Bujari aptly emphasizes that despite the huge volume of research, new aspects always arise, especially with the digitalization of socio-economic relations today. From what is presented in the dissertation presentation, I can conclude that the doctoral candidate is familiar with the various aspects of a problem and this gives her the opportunity to delve into it in depth.

5. Methodology of the study

To achieve the goal defined in the thesis, doctoral student Semra Bujari uses adequate research methods: induction and deduction, comparative analysis, description of phenomena and processes, and logical modeling. To a significant extent, they enable the achievement of the research tasks

6. Characterization and evaluation of the dissertation

The dissertation has a total volume of 188 pages. Structurally, it consists of: an introduction, an exposition in five chapters, a conclusion, and a bibliography, including 70 sources in English and 21 Internet resources.

I define the first chapter of the dissertation as a part of the presentation with a completely theoretical character. In it, doctoral student Buyari clarifies the role and importance of electronic banking. The author's attempt to shed light on the transition from electronic commerce to electronic banking makes a good impression. Applying a deductive approach, Bujari analogizes the two processes, focusing on digitalization. For this purpose, a set of studies by various authors on the problem was used.

At the end of the chapter, some more important conclusions are drawn about the possibilities of electronic banking for achieving competitiveness in the banking market and for improving the quality of services provided to customers.

Chapter two of the dissertation is dedicated to the management of electronic banking in banking institutions. I can also say that this part of the work is theoretical in nature. The issues of e-banking management are clarified by tracing the main steps in planning and developing strategies. The approach chosen by doctoral student Bujari to link e-banking with e-marketing deserves particular attention. In addition, an assessment of the management of electronic banking from the perspective of the consumer of banking services is made. Conclusions are also drawn at the end of this chapter.

In the third chapter, the doctoral student focuses on the technologies that banks use to develop and offer their products through electronic banking systems. To this end, a wide

range of practically applicable technological solutions is reviewed, which, according to Buyari, have proven their effectiveness. Special attention is paid here to the risks for both banking institutions and consumers of electronic banking products. The possibilities for ensuring the security of transactions, which are used in world practice, are presented. On this basis, a number of challenges are outlined that are faced by the deepening digitalization of processes and operations, and especially the application of artificial intelligence in banking practice.

The fourth chapter of the dissertation is of a practical and applied nature. In it, the doctoral student presented the development of electronic banking systems in the two studied countries in the period 2017 – 2023. For the most part, the chapter's presentation introduces us to information about banking practices in the Republic of Macedonia and to a significantly lesser extent in Bulgaria. At the end of the chapter, no conclusions are drawn about the practices of electronic banking in the two countries and there is no comparative analysis, which was stated in the aim of the dissertation.

The fifth chapter of the dissertation can be defined as the practical part of the development. It uses the method of a survey conducted among 100 respondents, clients of different banks in the two countries under consideration. The information collected has served doctoral student Bujari to reach some more important conclusions and formulate recommendations for the development of electronic banking in the banking sectors of both countries.

The conclusion of the dissertation contains more important conclusions than what is presented in the five chapters. This gives me reason to define doctoral student Bujari as an author with a critical research perspective on the problems of electronic banking.

7. Contributions and importance of development for science and practice

I assume that the doctoral student's scientific contributions indicated in the reference correspond to what is shown in the dissertation.

8. Evaluation of publications on the dissertation

The scientific publications on the topic of the dissertation, in which the author's ideas are popularized - one article and five reports – also speak of a well-formed research view. The author's stated research work corresponds to the requirements of the procedure for acquiring the ESD "doctor".

9. Personal participation of the PhD student

I accept the dissertation, abstract and publications of doctoral student Semra Bujari presented to the attention of the scientific jury as a personal achievement of the author. The literary and information sources indicated in the bibliography have been used correctly. I have not identified any practices of plagiarism.

10. Abstract

The abstract is developed according to the requirements and has all the necessary requisites for such a work. It fully reflects the structure and content presented in the dissertation and is 30 pages long.

11. Critical notes and recommendations

Like any similar work, the dissertation presented by doctoral student Semra Bujari also has some shortcomings:

- 1. The definitions of the object and subject of research are not clearly defined in the introduction to the dissertation.
- 2. The research tasks, based on which the possibility of achieving the stated scientific goal must be demonstrated, are also not well defined. They can be determined from the content of the dissertation.
- 3. The comparative analysis of electronic banking practices in North Macedonia and Bulgaria is not effective enough because the Bulgarian practice is examined much more superficially.
- 4. The bibliography does not include works by North Macedonian and Bulgarian authors on this issue. There are certainly many of them.
 - 5. In places in the exhibition, the descriptive and journalistic style prevails.

Questions that doctoral student Buyari should address during the defense:

- 1. What challenges do banking institutions in Bulgaria and North Macedonia face when implementing electronic banking systems, in relation to cybersecurity?
- 2. In what directions will artificial intelligence influence electronic banking systems?

12. Personal impressions

I do not know the doctoral candidate and have no personal impressions of her. In preparing my opinion, I have been guided solely by what was presented in the dissertation and her publications.

13. Recommendations for future use of dissertation contributions and results

The main recommendation I make to doctoral student Bujari is to expand the information base of his research and publish it as a monograph.

CONCLUSION

In conclusion, I believe that doctoral student Semra Bujari meets the scientific and legal requirements for awarding educational and scientific degree "PhD" in the field of Higher education 3. Social, economic and legal sciences; Professional field 3.8. Economics (Financial markets) and has the necessary professional and personal qualities. Therefore, I confi-

dently give my positive assessment of the conducted research, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and I propose to the honourable jury to award the educational and scientific degree "PhD" to Semra Bujari.

01.09.2025 Signature: /Prof. Tsvetan Iliev, PhD/