REVIEW

by James Borislavov Jolovski, Associate Professor at the University of Insurance and Finance, Doctor of Economics

of a dissertation for the award of 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 provision*

Author : PhD student Semra Bujari

Topic : The impact of electronic banking on customer service and banking operations in banks in the Republic of North Macedonia and the Republic of Bulgaria

Scientific advisor : Stanislav Dimitrov, professor at the University of Insurance and Finance, Doctor of Economics

1. General description of the materials presented

By order No. 256 of 21.07.2025 of the Rector of the University of Insurance and Finance, Prof. Dr. Boris Velchev, I am appointed as a member of the scientific jury for ensuring a procedure for the defense of a dissertation on the topic The impact of electronic banking on customer service and banking operations in banks in the Republic of North Macedonia and the Republic of Bulgaria for the acquisition of the educational and scientific degree " Doctor (PhD)" in Field of higher education 3. Social, economic and legal sciences, Professional field 3.8. Economics, doctoral program Finance, insurance and provision. The author of the dissertation is Semra Bujari – a doctoral student in an independent form of study at the Department of Finance and Insurance with scientific supervisor Prof. Dr. Stanislav Dimitrov from UZF.

The submitted documents by Semra Bujari according to the presented inventory include:

- Application for admission to defense
- Dissertation work
- Abstracts in Bulgarian and English
- Autobiography
- List of publications on the topic of the dissertation
- Publications on the topic of the dissertation
- Publication summaries

- Full text of publications
- Reference for meeting minimum requirements

The doctoral student has submitted a total of six publications, three of which are directly relevant to the topic of the dissertation, one has an indirect connection, and two others are in the field of public finance.

The package of documents is comprehensive and well-organized, allowing for easy review and assessment for compliance with national requirements.

2. Brief biographical data about the doctoral student

I do not know Semra Bujari personally. The information under this point summarizes the candidate's submitted CV.

Since 2016, Semra Bujari has been a Master of Economics from the International University of Struga. She has a Bachelor's degree in Business Administration and a professional qualification in Marketing and Management. She works at the International University of Struga, and since October 2024 she has been an Assistant Professor and Director of Postgraduate Programs. Before that, she was an Erasmus Coordinator. She has professional experience in the financial sector and in financial and accounting positions.

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

The topic of the dissertation is undoubtedly relevant and significant. Electronic banking is a relatively new phenomenon, which is currently developing dynamically. It is for this reason that it has not yet been sufficiently studied not only on a national or regional, but also on a global scale. The doctoral student's argumentation regarding the relevance and significance of the research could be more strongly emphasized.

4. Knowing the problem

As can be seen from the doctoral student's autobiography, as well as from the list of literary sources (71 publications, 22 websites), through which the information provision of the work was carried out, and also to some extent from her professional experience, Semra Bujari is familiar with the issues investigated in the dissertation.

5. Research methodology

The methodology is listed on pages 12-13 of the paper and includes:

- Historical method
- Content analysis (content analysis)
- Comparative analysis
- Statistical methods
- Synthesis
- Literature review

The work itself establishes the use of the mentioned research methods. However, in the text on pp. 12-13, the doctoral student could have indicated more clearly which method was used where and for what purpose. The data sources themselves are not a research method, and they are not specifically listed. The tools used are appropriate and sufficient for the implementation of the set goals and objectives and the realization of the corresponding scientific and applied contributions.

6. Characteristics and evaluation of the dissertation work

The dissertation is written in English and consists of 191 pages. The introduction presents the methodological framework of the study. The relevance and significance of the study are argued. However, the subject and object are not defined, as they rather derive from the set goals and objectives. A hypothesis is formulated in the form not of a statement, but of the question "How does the use of innovation – electronic banking – affect consumers and banks in the Republic of North Macedonia and the Republic of Bulgaria"? Two hypotheses follow from it – it can be either positive or negative. The doctoral candidate does not indicate in advance which of the two she supports. Although this approach is not typical for research activities in our country, it is scientific in nature. However, in my opinion, the methodological framework needs significant refinement, including with regard to limitations.

The individual chapters are relatively balanced in volume. Appropriate logical connections are built between them. The text is somewhat varied with some visualizations in the form of figures, but more could be added. I would recommend that the doctoral student try to develop such ones herself, since the majority of the work presents those of other researchers.

Chapter One, “Role and Importance of Electronic Banking,” systematizes the theoretical framework of electronic banking by defining the concept, tracing its evolution, and analyzing its main forms. Particular emphasis is placed on the advantages for customers – increased accessibility, convenience, and reduced transaction costs – as well as on the benefits for banks related to the optimization of operational processes and increased competitiveness. Along with the positives, a number of challenges are identified: high initial investments, the need for constant technological updates, cyber risks, and the digital exclusion of certain social groups. The chapter concludes with an analysis of the external and internal factors that accelerate the transformation of the banking sector through electronic channels.

The second chapter, “Management of e-banking”, focuses on the managerial dimensions of e-banking. It examines strategic approaches to planning, implementing and developing digital channels, as well as the role of e-marketing and customer relationship management (CRM). It identifies challenges arising from the dynamic development of technologies, including their rapid obsolescence, as well as from institutional and organizational deficits. It also analyses specific managerial problems related to staff adaptation, the need for new training models and resistance to change in the organizational culture of banks.

Chapter three is entitled “E-banking Technologies”. It presents the technological infrastructure on which e-banking is based. Key components such as the Internet and mobile devices, back-end systems, banking applications, websites, electronic payment systems, electronic and digital money are discussed. Interbank payment mechanisms, netting systems and the role of SWIFT as a global platform for cross-border transactions are also examined. Significant attention is paid to the security of e-commerce and the challenges arising from the cyber environment. The chapter concludes with an overview of new trends such as mobile applications, artificial intelligence and the future of the multi-channel model, which are changing modern banking practice.

The fourth chapter, “The Electronic Banking System in Macedonian and Bulgarian Banks,” is of a comparative-applied nature and focuses on the regulatory and institutional framework, as well as empirical data on the development of electronic banking in both countries. The regulations introduced by the National Bank of the Republic of North Macedonia are analyzed, as well as the strategy for the development of the payment system. Statistical data on the use of bank cards, POS terminals and ATMs in the period 2017–2023 are presented and the practices of leading banks such as DSK Bank and ProCredit are examined. In the Bulgarian context, the dynamics of electronic services and the regulatory environment that regulates them are tracked. Through a comparative analysis, the similarities and differences between the two countries are outlined, emphasizing the specific challenges and prospects for further development.

Chapter Five presents an empirical study, but does not have its own title. It is larger in volume, but this is due to the many graphs. It presents the empirical component of the dissertation work, through which the main and auxiliary hypotheses are tested. The research was conducted using a combination of quantitative and qualitative methods - surveys, interviews and statistical analysis of data provided by banks and official institutions. The chapter ends with an analytical synthesis of the empirical results, which supports the theoretical part of the work and justifies the contributions made in the conclusion.

Some individual views of the author do not fully correspond to my personal understanding. However, they are sufficiently substantiated in the dissertation work. For this reason, I could not accept that this circumstance has any bearing on the merits of the proposed scientific research.

The information provision was carried out on the basis of 71 publications and 24 websites. In my opinion, it could be expanded, as the volume of the work is not small (191 pages).

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

The following contributions are formulated in the dissertation:

1. Assessing the Impact of E-Banking on Consumers and Banks – A comprehensive analysis of the impact of e-banking on customer behavior and operational processes in banks in North Macedonia and Bulgaria was conducted. It was found that it improves customer convenience, access, and satisfaction, while for banks it brings efficiency, lower costs, and broader financial inclusion.

2. Identifying challenges and risks – the key barriers to e-banking are systematically outlined: cybersecurity, loss of personal contact with customers, digital exclusion (especially in older and smaller organizations). Solutions are proposed through digital literacy programs, security protocols, and customer training.

3. The role of e-marketing in the growth of e-banking – it has been proven that the strategic use of digital marketing (social media, online platforms, blogs) helps promote new services, engage customers and build brand loyalty.

4. Regulatory and technological dimensions – the need for updated regulatory frameworks in the areas of cybersecurity, data protection and consumer rights is highlighted. The

need for continuous investment in digital platforms and ICT for stability, scalability and trust is also highlighted.

5. Strategic management in the context of globalization – a strategic framework is proposed for the long-term development of banks through electronic banking, with an emphasis on planning, innovation, CRM and organizational flexibility as competitive advantages.

I believe that the work establishes the presence of scientific and applied contributions. I could accept the fifth contribution in full, and the remaining four - partially, as I find some of the statements in them to be already proven or even generally accepted.

8. Assessment of dissertation publications

Six publications are presented. Three articles and papers correspond entirely to the topic of the dissertation. One of them is indirectly related, and the other two focus more on public finances.

9. Assessment of compliance with minimum national requirements

As can be seen from the attached certificate, the doctoral student meets the minimum national requirements. The dissertation project brings her 50 points, and the four publications – 40 points. The total points obtained are 90, with a minimum requirement of 80. Even with the most strict examination of the publications and considering only the three directly related by title to the topic of the dissertation, the minimum criteria would still be met by Semra Bujari .

10. Personal participation of the doctoral student

I have no doubt about the personal participation of the doctoral student in the development of the work. I have not established plagiarism according to the statutory procedure.

StrikePlagiarism system report, the similarity coefficient reports a 10% match, which is a completely acceptable result.

11. Autoresume

The abstract is presented in Bulgarian (34 pages) and in English (35 pages). In my opinion, its volume is not entirely sufficient. However, the main conclusions and key points of the research conducted are presented sufficiently well. I believe that it generally meets the standard requirements for a publication of this nature.

12. Critical remarks and recommendations

I have no critical remarks, beyond those mentioned above in the text. I recommend that the candidate continue to develop her research activities by publishing more internationally.

13. Personal impressions

I have no personal impressions of Semra Bujari. My impressions are based entirely on the documents submitted for participation in the dissertation defense procedure.

14. Recommendations for future use of the dissertation contributions and results

The doctoral student could continue her research work by conducting additional analysis of the extent to which the recommendations and priorities she outlined are being adopted. I recommend co-authoring publications and participating in international conferences.

CONCLUSION

The dissertation work contains some scientific, scientifically-applied and applied results, which represent an original contribution to science and meet the requirements of the Act on the Development of the Academic Staff in the Republic of Bulgaria (ADSRB) and the Regulations for the Implementation of the ADSRB. The presented materials and dissertation results comply with the specific requirements of the Regulations for the Admission and Training of Doctoral Students at the University of Insurance and Finance.

The dissertation shows that the doctoral student Semra Bujari possesses theoretical knowledge and professional skills in Professional Field 3.8. Economics, demonstrating qualities and skills for independent research.

Due to the above, I give my positive assessment of the conducted research, presented by the above-reviewed dissertation, abstract, achieved results and contributions, and I propose to the esteemed scientific jury to award the educational and scientific degree 'doctor (PhD)' to Semra Bujari in the Field of Higher Education 3. Social, Economic and Legal Sciences; Professional Field 3. 8. Economics; Doctoral Program "Finance, Insurance and Assurance"

09/18/2025 Reviewer:

Assoc. Prof. Dr. James Jolovski