

University of Insurance and Finance (UZF University)

REVIEW

by Prof. Mariana Mateeva Petrova, PhD

of dissertation for awarding the 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 Social Security"

Author: **Semrah Bujari, MSc**

Title: **The impact of electronic banking on customer services and banking operations in banks of the Republic of North Macedonia and the Republic of Bulgaria**

1. General description of the presented materials

Following Order No. 256/21.07.2025, the Rector of the University of Insurance and Finance - Professor Boris Velchev, was appointed as a member of the scientific jury for providing a procedure for the defense of a dissertation on the topic of "The impact of electronic banking on customer services and banking operations in banks of the Republic of North Macedonia and the Republic of Bulgaria" for obtaining the educational and scientific degree "Doctor" in the field of higher education 3. Social, economic, and legal sciences, Professional field 3.8. Economics, the program "Finance, Insurance, and Social Security". The author of the dissertation is Semrah Bujari.

The materials submitted by Semrah Bujari include documents according to the presented inventory: reference for the scientific and scientific-applied contributions in the dissertation; reference for the fulfillment of the minimum national requirements for the acquisition of a degree "Doctor" in professional field 3.8. Economics; dissertation work; summary of professional accomplishments. In addition, the doctoral student submitted 6 publications (9 in documents and abstracts).

2. Relevance of the topic and expediency of the set goals and objectives

Basic (general) hypothesis:

1. How does the use of the new innovation E-banking affect consumers and banks in our country and the Republic of Bulgaria?

H1: The use of electronic banking has a positive effect.

H2: The use of electronic banking affects negatively.

3. Knowledge of the problem

The author has made an extensive, thorough, and correct analysis of the various issues addressed in the work, allowing for correct conclusions. For the preparation of this publication, the author analyzed 71 source materials (including those in foreign languages), specialized literature on the subject.

The applicant did not provide information on the availability of research profiles in the following databases: Scopus, Web of Science, ORCID, Google Scholar, Researchgate, etc. Given the lack of such profiles officially declared and confirmed by the author in the application documents for the competition, it is not possible to make any reference to the h-index for citation of the **Semrah Bujari**, respectively to summarize precise conclusions about her recognition and citation in the research space.

4. Research methodology

With a view to the stated purpose of the work and verification of the adopted research hypotheses, the following research methods were adopted: *historical; Content analysis; comparative method (comparative); statistical method; synthesis*.

The author presented the results of the research conducted and interpreted them correctly.

5. Characteristics and evaluation of the dissertation

The dissertation consists of 188 pages, of which 181 are the main text and the literature used to prepare this publication constitutes 71 source items.

The study has an introduction, five chapters, a conclusion, and a bibliography.

Purpose and scope of the study

Chapter one: **ROLE AND IMPORTANCE OF ELECTRONIC BANKING** examines that electronic banking offers significant advantages, such as convenience, accessibility and speed, allowing customers to manage their finances anytime and from anywhere. However, there are also significant disadvantages, including security concerns, the potential for cyberattacks and the risk of identity theft. In addition, not all consumers are familiar with digital platforms, which can limit access for certain demographic groups. Overall, while electronic banking offers many advantages, it is essential to address the risks associated with it to ensure a safe and inclusive banking experience.

Chapter two explores the application of e-marketing in electronic banking management plays a crucial role in enhancing customer engagement and expanding the reach of banking services. By leveraging digital marketing tools such as email campaigns, social media, and targeted online advertisements, banks can effectively promote their products and services to a broader audience. E-marketing also allows for personalized communication,

improving customer experience and satisfaction. However, it also requires careful management of privacy and data security to protect customer information. Overall, the integration of e-marketing in e-banking management can drive growth and innovation while fostering stronger relationships between banks and their customers.

Chapter three focuses on TECHNOLOGIES OF ELECTRONIC BANKING he have revolutionized the financial sector by offering greater convenience, efficiency, and accessibility to customers. Innovations such as mobile banking apps, secure online payment systems, and artificial intelligence for personalized services have transformed the way individuals and businesses interact with banks. While these technologies provide numerous benefits, such as faster transactions and reduced operational costs, they also raise concerns related to cybersecurity and data privacy. As e-banking continues to evolve, it is essential for financial institutions to balance technological advancements with robust security measures to ensure a safe and seamless banking experience for all users.

Chapter four focuses on THE ELECTRONIC BANKING SYSTEM IN MACEDONIAN AND BULGARIAN BANKS: Forecasts by numerous experts in the financial and IT sectors suggest that in the coming years, the trend of growth in e-banking will continue to rise. An increasing share of electronic and mobile banking will be occupied by fintech companies in the future, there is a trend for more and more commercial banks to establish their own fintech companies. This process will enhance the level of innovative solutions (primarily in terms of faster transfers and lower transaction costs) in the transactions between banks and their clients, as well as between fintech companies and users of fintech services

Chapter five „EMPIRICAL RESEARCH“

After thoroughly analyzing the impact of electronic banking (e-banking) on consumers and banks in the Republic of North Macedonia and the Republic of Bulgaria, the study concludes that while there are both positive and negative effects, the overall impact of e-banking has proven to be more positive than negative. The hypothesis H1, which posited that the use of electronic banking has a positive effect, is supported by the findings, whereas hypothesis H2, which suggested a negative impact, is only partially valid in certain contexts.

The research confirms that the net effect of e-banking in both North Macedonia and Bulgaria is positive. Stakeholders should continue to promote adoption, while investing in education, security, and system improvements to ensure inclusive and secure use.

6. Contributions and significance of development for science and practice

The problem posed by Semrah Bujari is interdisciplinary and entirely refers to the current achievements and needs of science and practice, which deserves to appreciate the

author's contribution. The chosen research problem is not an easy problem to study due to its interdisciplinary and multifaceted nature. ‘

In the course of scientific research, which demonstrates the potential of scientific contributions:

1. *Impact Assessment of E-Banking on Consumer Behavior and Bank Operations:* The research provides valuable insights into how e-banking has transformed consumer behavior, enhancing convenience and accessibility while improving operational efficiency for banks. It highlights how the integration of e-banking services has positively impacted customer satisfaction, financial inclusion, and cost reduction for banks, specifically in the context of North Macedonia and Bulgaria.
2. *Identification of E-Banking Challenges and Risks:* The study identifies and discusses the negative aspects of e-banking adoption, such as security concerns, digital exclusion, and the decline of physical banking services. By addressing these challenges, the research offers a comprehensive understanding of the risks involved and the need for improved cybersecurity measures and inclusive digital literacy programs.
3. *Role of E-Marketing in E-Banking Growth:* This research contributes to understanding the importance of e-marketing strategies in enhancing e-banking services. It emphasizes how the use of social networks, blogs, and digital platforms can help banks reach a larger audience, improve customer engagement, and introduce innovative financial products and services.
4. *Regulatory and Technological Implications:* The study highlights the importance of regulatory frameworks in supporting the growth of e-banking, emphasizing the need for updated laws regarding cybersecurity, privacy, and consumer protection. It also underscores the technological infrastructure challenges that banks face, especially in emerging economies, and the necessity of continuous investment in digital platforms.
5. *Strategic Management of E-Banking in a Globalized Context:* The research provides valuable strategic insights for banks aiming to expand their digital services. It outlines the critical need for well-defined planning, resource allocation, and the adoption of e-marketing strategies to ensure successful e-banking operations in a highly competitive and evolving financial environment.

7. Evaluation of dissertation publications

The results of the scientific research are reflected in 9 publications (in list is 6) . They testify to the doctoral student's long-standing and deep scientific interest in tax issues and the fact that the prepared dissertation is the author's work.

8. Assessment of compliance with the minimum national requirements

Attached is a Certificate for fulfillment by the doctoral student of the minimum national requirements for acquiring the educational and scientific degree "Doctor" in the professional field 3.8. Economics. The total number of points is many times higher than required.

9. Assessment of the applicant's personal contribution

The presented 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" is the result of scientific research confirmed by constructive results. There is no doubt about the author's contribution, in-depth scientific research, and pursuit of the set goal and research hypotheses.

The dissertation demonstrates the author's theoretical knowledge and proves his ability to conduct scientific work independently.

10. Summary of professional accomplishments

The summary of professional accomplishments consisting of 34 pages/ 33 pages long in Bulgarian (29 without the bibliography of 40 sources) and is prepared in accordance with the requirements of the Act for the Development of the Academic Staff and the Regulations for the Application of the Act for the Development of the Academic Staff.

It is not well structured and does not correctly reflect the logic and sequence of the dissertation work.

There is no presentation of the structure of the dissertation work, as well as the empirical research in chapter five.

It is not customary to include a bibliography in the abstract.

11. Critical comments and recommendations

My critical notes to the presented dissertation work of **Semrah Bujari** are the following:

The dissertation would benefit from a clearer definition of subject and object, as well as clearer argumentation of rather exposed theses and propositions.

The restrictive conditions in the developed dissertation not clearly defined.

The pages referenced in the table of contents do not match.

I can make some remarks regarding the bibliography, not all cited sources are cited in the text. In modern scientific publications, citation under a line is unacceptable.

I recommend presenting the results in specialized international publications with IF / IR, allowing higher visibility of scientific results and creating conditions for more intensive citations.

12. Personal impressions

I do not know the doctoral student personally. We do not have joint publications and developments.

My impressions come from the dissertation, the author's summary of professional accomplishments, and dissertation publications. They show a serious and erudite researcher, a bona fide scientist with an extensive theoretical background and a proven ability for independent research.

CONCLUSION

The dissertation contains scientific, scientific-applied, and applied results, representing an original contribution to science and meeting all the requirements (s) of LDASRB and RILDASRB. The presented materials and dissertation results correspond to the specific requirements of the Regulations for admission and training doctoral students at the University of Insurance and Finance.

The dissertation shows that Semrah Bujari 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 give my positive assessment of the research presented by the above-reviewed dissertation, a summary of professional accomplishments, results, and contributions, and I invite the scientific jury to award the educational and scientific degree "Doctor" to **Semrah Bujari** in the field of higher education 3. Social, economic, and legal sciences; Professional field 3. 8. Economics; Ph.D. program "Finance, Insurance and Social Security".

06.09.2025

REVIEWER:

/prof. Mariana Petrova, PhD/