

To  
The members of the Scientific Jury  
D. A. Tsenov Academy of Economics  
Finance and Credit Department

## REVIEW

by a member of the scientific jury, determined by Order No. **1050/1.12.2022.**  
of the Rector of D. A. Tsenov Academy of Economics – Svishtov  
on dissertation for awarding educational and scientific degree "Doctor" (in Economics)

**Author of the standpoint:** Assoc. Prof. Vanya Dencheva Tsonkova, PhD, Department of Finance and Accounting, St. Cyril and St. Methodius University of Veliko Turnovo, Professional field: 3.8. Economics (Finance, Money Circulation, Credit and Insurance)

**Author of the dissertation:** Raya Biserova Dragoeva, PhD student, d010219218, doctoral programme "Finance, money circulation, credit and insurance (finance)"

**Dissertation topic:** Financial Analysis of the Commercial Banks in Bulgaria in the Conditions of Post-Crisis Recovery

**Scientific Advisor:** Assoc. prof. Lyudmil Krastev, PhD

### I. General presentation of the dissertation work

#### 1. Subject

The object of research in the dissertation is "the financial condition of the commercial banks in Bulgaria (first group), and the subject - "the key indicators for evaluating the banking activity." On this basis, the purpose is formulated – "to prove that through the tools of financial analysis and in accordance with the national and international regulatory framework, the banking sector remains stable in crisis conditions", as well as five research tasks are set.

The research is based on the argumentation of the thesis clearly formulated in the introduction – "the banking sector in Bulgaria (in particular the banks of the first group) remains stable even in the conditions of multiple crises, thanks to the formed capital buffers and adequately managed balance sheet positions in accordance with the national and European regulatory framework" (p. 6).

#### 2. Volume

The dissertation has a volume of 219 standard pages (including 22 pages of bibliography). Additionally, the required references and declarations are included.

#### 3. Structure

The dissertation consists of an introduction, an exposition in three chapters, a conclusion, a list of references. The main text includes 39 figures and 16 tables.

In the **introduction**, by emphasizing the importance and role of banks in the economy and their susceptibility to various risks, especially in the dynamic modern environment, the relevance of the research is substantiated. In this context, PhD student Raya Dragoeva formulated the object, the subject, the goal, the tasks of the research; states the thesis defended in the presentation; specify

the methodology used, limiting frameworks and the authors whose scientific works the dissertation is based on; motivates the need to develop the topic.

The **first chapter** presents the theoretical-methodological statements related to the researched issues. In it, through a thorough study of the literature, the roots of banks are sought and the evolution of banking is outlined. It is based on the understanding of the parallel emergence and development of banking institutions and money as a universal medium of exchange, and also of the influence of socio-economic relations on banking. Further, the emergence of banks in our country is clarified, as well as the modern aspects of banking in general and in Bulgaria are analyzed. Particular attention is paid to the important processes affecting banking institutions today - the introduction of modern information technologies, the consolidation of capital, the development of reliable risk management models and the influence of the concept of corporate social responsibility. In the next paragraph, an in-depth review of the changes in banking legislation in our country after the end of the 1980s was carried out, emphasizing compliance with the Basel Agreements, as well as the need for effective banking supervision. In the last paragraph, the views of the different schools and scientists regarding the nature of financial crises and banking ones in particular are traced. The author summarizes that it is "extremely important to analyze crises in the banking sector and their causes, which will lead to their timely detection and the possibility of implementing measures to reduce or completely avoid their negative consequences." (p. 60)

The **second chapter** aims to lay the methodological foundations of the practical-applied analysis in the next chapter. In it, by "reading" the definitions of our and foreign authors for financial analysis, PhD student Raya Dragoeva formulates the essence of the financial analysis of commercial banks (p. 66), as well as outlines its place in financial management. It is also pointed out that in recent years stress tests and rating systems are the most applied tools for analysis and evaluation of banking activity – an integral part of banking supervision and bank management. The main part of this chapter is devoted to clarifying the application, components and financial indicators of the CAMEL system, as well as presenting a modified author's model for evaluating commercial banks. In the last paragraph of the second chapter, the causes and effects of the financial crisis of 2007-2008 are examined and an analysis of key indicators of the Bulgarian banking system and the banks of the first group is made, in order to illustrate the impact of the crisis in our country.

In the **third chapter**, which is the core of the author's research, first of all, the essence, possibilities and challenges of consolidation are explained, as well as its specific manifestations in the Bulgarian banking market. By calculating the concentration coefficient for the period 2007-2021, it is concluded that there is a moderately concentrated banking market in our country with an upward trend. The specific sub-paragraphs successively analyze the reasons for the consolidation and present the results of pre- and post-process performance studies; the Bulgarian legislation on mergers and takeovers is examined; an in-depth comparison of key indicators before and after the process is made on the example of 5 consolidation transactions in our market, as well as a comparison with the indicators of commercial banks of the same group, which did not participate in consolidation transactions. Thus, the conclusion that mergers and acquisitions have a positive impact on the efficiency of banks is argued (p. 193). In the central paragraph of this chapter is the application of the author's rating model from the previous chapter, through which the financial condition of the commercial banks of the first group is examined and a general ranking is made. In the last paragraph of the third chapter, the author argues for guidelines for the future development of banking activity in our country, affecting emerging risks in banking institutions and, more



specifically, the risk associated with the growth of non-performing loans, digitalization and climate risks. This is how Raya Dragoeva presents the guidelines for her future research work.

In the **conclusion**, as a confirmation of the thesis stated in the introduction and the formulated goals and objectives, the author synthesizes the final results, conclusions and recommendations of the dissertation work.

#### **4. Bibliography**

The doctoral student used 268 sources in Bulgarian, Russian and English related to the theoretical and methodological foundations of the study, regulatory and normative documents, as well as statistical databases. The literature reference is impressive, with the sources cited being actually used in the text, as evidenced by their appropriate and conscientious citation.

#### **5. Appendices to the document**

The dissertation does not include separate appendices, but in the main text, especially in the third chapter, there are numerous tables and graphs of dynamic statistical series and results of the author's analyses, as well as illustrative diagrams.

### **II. Assessment of the form and content of the dissertation**

#### **1. Assessment of the relevance of the scientific problem developed in the dissertation and the formulated: subject and object, thesis, purpose, tasks and research methods; clarity and argumentation of ideas, uniqueness of novelties**

The key role of banks in national economies and the impact of multiple crises today require reliable and effective supervision of their activities in order to preserve their sustainability. That is why a toolkit is needed for a detailed assessment of financial health of the banks and the influence of various external and internal factors on it. The author Raya Dragoeva bravely accepts the challenge of the complexity of the problem and manages to construct and apply an advanced model for financial analysis of banks, with the understanding of the conditionality of its effectiveness under dynamic modern conditions. The dissertation stands out with the following characteristics: clear definition of the object, subject, purpose and tasks of the research; precise formulation of the research thesis; consistent style aimed at proving the thesis and realizing the set goals and objectives; in-depth argumentation of own ideas, obtained results and proposals.

#### **2. Analysis of the degree of elaboration of the researched issues by other scientists and to what extent the author's own attitude on the issues under consideration is reflected**

The author takes into account the existence of a number of scientific works on the financial analysis of banks during and after a crisis, on the causes of crises and their impact on the banking sector, as well as recognizes their indisputable contribution to science and practice. She admits that the dissertation is based on the achievements of our and foreign authors in the field of banking activity, analysis and regulation, but emphasizes the need for a "new reading of banking activity" in connection with the dynamic processes and digitalization that are changing the appearance of financial institutions. Indeed, in the theoretical and methodological part of the work, Raya Dragoeva conscientiously and appropriately refers to the views of individual authors. At the same time, unobtrusively but categorically in the text, as well as through summaries and conclusions at the end of individual chapters, he highlights his personal ideas and contributions related to the issue.

#### **3. Opinion on the volume of the dissertation, on the quality and number of illustrative materials. Attitude towards scientific, linguistic and stylistic redaction**



The volume of work is within the standard for a doctoral dissertation. It is optimal for presenting and defending the author's views. The author presents the tables and graphs with data and calculation results in the text, along with their interpretation. Large-scale secondary data are used, mainly from the BNB, correctly indicating their source, without burdening the scientific work with appendices.

The structure of the dissertation is distinguished by balance between the individual chapters and consistency in the presentation of the paragraphs. It is subordinated to the purpose and tasks set in the introduction, as well as the argumentation of the research thesis.

The dissertation work is supported in stylistic, terminological and technical terms. There are no elementary explanations in the text, as well as deviations from the issues.

#### **4. Assessment of the toolbox used and the correctness of the calculation procedures**

In the work, a serious statistical and econometric toolkit is applied when performing a financial analysis of commercial banks in Bulgaria. Moreover, the author reasonably presents and tests her rating system – an extended version of CAMEL, for the Bulgarian banks of the first group for the period 2010-2021, being meticulous in the calculation procedures and the interpretation of the obtained results.

#### **5. Opinion on compliance with the rules of scientific ethics**

Literary sources are cited correctly, in compliance with the rules of scientific ethics and in accordance with the standards adopted by the D. A. Tsenov Academy of Economics APA style. The author explicitly refers to his own scientific works, on which some paragraphs of the dissertation are based.

#### **6. Opinion as to how well the abstract accurately and completely reflects the work**

The author's abstract contains the mandatory accepted elements, as follows: general characteristics; main content of the dissertation (and synthesized presentation); reference to scientific and scientific-applied contributions; a list of the doctoral student's publications; a reference for the compliance with the national requirements under the Regulations for the implementation of the Law on the development of the academic staff in the Republic of Bulgaria; statement of originality and authenticity.

The abstract faithfully reflects the structure, logic and content of the dissertation work.

Directly related to the topic of the dissertation are **6 publications** in the period 2020-2022 – three articles and three reports. During the same period, the doctoral student took part in 7 scientific forums in our country. These facts testify that in a very short period of time she managed to implement her ideas and popularize the results of her research before the scientific community. It is also important to point out that Raya Dragoeva participated in scientific conferences during her studies as a bachelor and master, and was also awarded with prestigious university and national honors.

### **III. Scientific and scientific-applied contributions of the dissertation work**

In the reference to the abstract, the author formulates three contributions. I accept this presentation as correct, but too modest considering the significant work and the achieved serious results. My view of the main scientific and scientific-applied contributions of the dissertation work is as follows:

- 1) Against the background of tracing the chronology of banking development and analysis of dynamic economic processes in our days, the main risks that banks face and which will determine their future development has been presented (information technologies,



processes of M&A and the consolidation of capital, the multifaceted nature of risk and the need for reliable models for its management, the impact of the CSR concept). At the end of the scientific study, basic guidelines for improving the banks' activities have been also formulated.

- 2) Synchronization of the Bulgarian banking regulations with the requirements of the Basel standards and European regulations has been thoroughly studied, as well as their role in maintaining the stability of banking institutions during crises has been argued.
- 3) By highlighting the specifics, the place and the role of financial analysis for the financial management of commercial banks and the effectiveness of the supervisory activity, the author's extended model for evaluating banking activity based on the CAMEL system has been developed and presented.
- 4) An original analysis of the effectiveness of the consolidation processes of the Bulgarian banking market has been carried out, based on the mergers and takeovers for the period 2007-2021, and the hypothesis of greater efficiency of the Bulgarian banks after the consolidation has been confirmed.
- 5) By tracking the dynamics of significant indicators, the impact of the 2007-2008 crisis on the banking sector in our country as a whole and especially on the banks of the first group has been comprehensively studied.
- 6) The proposed model for establishing the financial status of Bulgarian banks has been precisely tested, based on large-scale data for banks from the first group for the period 2010-2021, and their stability has been proven.

I consider the mentioned contributions to be the personal work of the doctoral student. On the one hand, they enrich scientific research in the field of analysis of banking activity and banking crises, and on the other hand, they demonstrate practical guidelines for assessing the financial performance of commercial banks.

#### **IV. Critical notes and questions on dissertation work**

My overall impression of the dissertation is very positive. Even if there are minor imperfections, they are neutralized by the consistent, thorough, fascinatingly flowing thought of the researcher.

Some of the questions that arise in front of me when reading the dissertation have found a place in the last paragraph of the work and the abstract as guidelines for the future development of banking activity in Bulgaria, provoked mainly by digitalization and the connection with climate change. I recommend the doctoral student to implement them and popularize their results.

**Question for the PhD student:** In relation to the three scenarios on page 187 regarding the impact of technology and fintech companies outlined by the European Systemic Risk Board, which is the most likely scenario in your opinion for the future development of the banking sector?

#### **V. Summary evaluation of the dissertation work and conclusion**

The dissertation submitted for review meets the requirements of the national and university normative framework at the D.A. Tsenov Academy of Economics. Through the dissertation, the author demonstrates excellent theoretical training, knowledge of the possibilities of mathematical and statistical tools, skills and competences for its application and improvement in the field of finance, in particular – banking. The necessary actuality of the developed problem, real scientific significance, novelty and applicability of the proposals are present. A significant part of the ideas

and results of the research carried out have been popularized at scientific forums and published in prestigious publications.

All this gives me the reason to give a positive assessment of the dissertation work and to propose to the respected members of the Scientific Jury to vote for awarding the educational and scientific degree "Doctor" in the doctoral program "Finance, monetary circulation, credit and insurance (finance)" to PhD student Raya Biserova Dragoeva.

30.12.2022  
Veliko Tarnovo

Assoc. Prof. Vanya Tsonkova