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The review of the doctoral dissertation prepared by Mr. Ahmed Lotfy Mahmoud Ahmed, entitled **“Performance and financial soundness of French, Spanish and Italian cooperative banks: a comparative analysis”**, written under the scientific supervision of:

- prof. dr hab. Ewa Miklaszewska, Institute of Finance, Cracow University of Economics, and
- prof. Josanco Floreani, Department of Economics and Statistics, University of Udine, Italy.

Field of Science: Social Sciences, Scientific Discipline: Economics and Finance.

1. General remarks

The formal basis for preparing the review is the resolution of the Scientific Council of the Economics and Finance discipline of the University of Economics in Krakow, appointing me as a reviewer of the doctoral dissertation of Mr. Ahmed Lotfy Mahmoud Ahmed: “Performance and financial soundness of French, Spanish and Italian cooperative banks: a comparative analysis”.

The legal basis for preparing this review is the letter no. RDC.600.57P.3.2025 of 10 June 2025, signed by Prof. Stanisław Popek, the Director of the Doctoral School of the Cracow University of Economics, with a request to evaluate the above-mentioned doctoral dissertation, based on the Law of 20 July 2018 on Higher Education and Science (Dz. U. 2024, item 1571, with later amendments). The review follows the requirements specified in the Law on Higher Education and Science of July 20, 2018 (particularly regarding Article 187).

The purpose of the review is to evaluate whether the submitted doctoral dissertation meets the requirements necessary to award the degree of doctor. The doctoral dissertation should be an original

solution to a scientific problem and demonstrate the candidate's general theoretical knowledge. Additionally, it should confirm the ability to conduct independent scientific research. In this context, I adopted the following criteria when assessing the doctoral dissertation: assessment of the research questions, objectives and hypotheses; structure and content of the dissertation; methodology, empirical analysis and results; assessment of literature review and theoretical background.

The dissertation comprises 234 pages and consists of nine chapters (Chapter 1: Introduction, Chapter 9: Conclusion). In addition, the thesis includes the bibliography, the list of abbreviations, the list of figures and the list of tables. In the reviewed dissertation, the Doctoral Candidate made use of a broad range of bibliography (394 references), including science papers and monographs. The list of bibliography is organized to the successive chapters.

2. Assessment of the research questions, objectives and hypotheses

The general objective of the doctoral dissertation is to analyze and compare the performance, efficiency, and resilience of cooperative banks in France, Spain, and Italy during the 2008 global financial crisis and the COVID-19 crisis, using panel regression analysis applied to key financial indicators. There were also formulated four following research questions:

- 1) To what extent did cooperative banks in France, Spain, and Italy demonstrate financial resilience and stability during the global financial crisis of 2008?
- 2) How did cooperative banks in these three countries perform in terms of efficiency and profitability during the 2008 crisis?
- 3) What was the performance and stability profile of cooperative banks during the COVID-19 pandemic, and how did it differ from the 2008 crisis context?
- 4) Did cooperative banks maintain operational efficiency and profitability during the COVID-19 pandemic?

Additionally, the thesis was structured around seven specific objectives:

- 1) To assess the financial resilience of cooperative banks in France, Spain, and Italy during the 2008 financial crisis: This includes examining capital adequacy ratios, liquidity levels, and lending

continuity, to determine whether cooperative banks were less affected by the systemic financial disruptions than their commercial peers.

- 2) To evaluate the financial efficiency and profitability of cooperative banks during the 2008 crisis: Metrics such as Return on Assets (ROA), Return on Equity (ROE), and cost-to-income ratios are used to determine the extent to which cooperative banks maintained their operational performance in a period of economic downturn.
- 3) To measure the resilience of cooperative banks during the COVID-19 pandemic.
- 4) To examine the financial efficiency and profitability of cooperative banks during the COVID-19 crisis: Using the same performance metrics as in the earlier crisis, this objective investigates whether the cooperative model remains effective in today's volatile and highly regulated financial environment.
- 5) To analyze the impact of macroeconomic variables and regulatory developments on cooperative bank performance.
- 6) To compare the performance of cooperative banks with that of commercial banks in the same countries and under the same macroeconomic and regulatory conditions.
- 7) To identify patterns of performance across the two crisis episodes, highlighting whether cooperative banks consistently outperformed or whether their success is context-dependent.

The hypotheses in the reviewed doctoral dissertation were formulated as follows:

- H1: The cooperative banking sector in the three countries showed resilience during the financial crisis of 2008.
- H2: The cooperative banking sectors in the three countries performed well during the financial crisis of 2008.
- H3: The cooperative banking sector in the three countries showed financial resilience during the COVID-19 crisis.
- H4: The cooperative banking sector in the three countries were well-performed during the COVID-19 crisis.

In the doctoral dissertation, the following elements were formulated:

- the general objective,
- four research questions.
- seven specific objectives,
- four research hypotheses.

The list of the specific objectives is rather long, but overall adequacy. It would be worthy to combine some questions. The main objective of the dissertation was formulated correctly, in a logical and achievable manner. The specific objectives defined by the Doctoral Candidate are of a complementary nature and further elaborate on the main objective. The research questions were formulated appropriately. The research hypotheses proposed by the Doctoral Candidate was formulated in a correct way.

3. Structure and content of the dissertation

The doctoral dissertation consists of nine chapters, including Introduction – Chapter 1, Conclusion – Chapter 9.

Chapter 1: “Introduction” contains six following parts: Background and motivation; Research problem, gap, and questions; Objectives of the study and hypotheses; Methodological overview, scope, and limitations; Theoretical contribution and significance; Thesis structure. The chapter comprises 16 pages.

Chapter 2: “Historical Development of the European Cooperative Banking” consists of four parts. The length of the chapter is 33 pages. This chapter gives a generally overview of the historical issues of the cooperative banking sector in Europe. This part of the doctoral dissertation concerns main important topics in the historical context, like e. g. the cooperative principles in a historical context, the structural and organizational characteristics of the cooperative banks, the impact of 2008 and the Covid-19 pandemic on the banking sector, including cooperative banks.

Chapter 3: “Characteristics of the Southern European Cooperative Banking Model” consists of five parts. The chapter comprises 28 pages and concerns different types of business models in the cooperative banking sector. This section presents cooperative banking models in three selected

countries: Spain, Italy and France. Additionally, the role and the significance of cooperative banks were presented in this section.

Chapter 4: “Post-2008 Crisis Reforms and the Cooperative Banking Sector “ comprises five main parts. The length of the chapter is 20 pages. The parts: 4.1 and 4.3 were divided into three subsections. In this way, the first part: “Bank capital adequacy regulations - Basel 3 agreement” consists of three following subsections: Minimum Capital Requirements, Leverage Ratio and Liquidity Requirements. The part 4.3 “Financial Stability Board and the regulation of systemically important banks” consists of three subsections: The post-crisis too-big-to-fail (TBTF) reforms, Global and domestic systemically important banks and Enhanced supervision. The Chapter 4 concerns also Banking Union Project in context of cooperative banking sector and regulatory innovation for the cooperative sector: Institutional Protection Scheme (IPS).

Chapter 5: “Post-2008 Legal and Organizational Reforms in the Southern Cooperative Sectors” consists of four parts. The chapter comprises 30 pages. This part of doctoral dissertation concerns the structural and organizational framework in the analyzed countries: France, Spain and Italy. The chapter also includes the section concerning the performance of cooperative banks in the countries mentioned above, using key financial metrics to evaluate post-crisis adaptation and competitiveness.

Chapter 6: “Measuring Bank Performance” is divided into five parts: Bank performance: efficiency and stability; Risk management; Performance and risk in cooperative banks; Measuring bank efficiency and Methods of measuring bank stability: Z-score index. The length of the chapter is 23 pages. It covers definitions: financial efficiency, operational performance, and systemic stability. It also contains various approaches to risk management and how cooperative banks integrate risk mitigation into their institutional structures. The section 6.4 “Measuring bank efficiency” was divided into three parts: Efficiency in cooperative banks; Parametric and non-parametric methods of measuring bank efficiency; Historical background of the measurement of efficiency. Finally, the last part of chapter 6 “Methods of measuring bank stability: Z-score index” consists of two parts: Altman Z-Score model; Z-score in banking.

Chapter 7: “Comparison of Cooperative Banks’ Stability in France, Spain, and Italy” consists of 3

parts and extends 6 pages. This chapter shows a comparative analysis of cooperative bank stability across the three analyzed countries. The chapter 7 contains the evaluation of capital adequacy, profitability, liquidity, and asset quality indicators in the cooperative banking sectors during the two crises: in 2008 and COVID-19.

Chapter 8: “Cooperative Bank Performance and Stability – Empirical Investigation” comprises five following sections: Underlining concepts; Descriptive statistics; Regression results; Interpretation of results from the regression models and Discussion of Hypothesis. The chapter length is 22 pages. Chapter 8 includes the main empirical results of the research thesis. Using panel regression models, the chapter tests the four central hypotheses connected with financial resilience and performance in the two crises: in 2008 and COVID-19.

Chapter 9: “Conclusions” consists of four following parts: Theoretical contributions and policy implications; Methodological reflections and study limitations; Avenues for future research; Final reflection and summary.

The choice of the topic of the reviewed doctoral dissertation deserves particular attention. Both the subjective and objective scope of the research are of significant importance. Cooperative banking plays a crucial role in development of contemporary economies of the European Union. It is also worth emphasizing the temporal horizon, concerning two crises: in 2008 and COVID-19. Theoretical and empirical parts of the dissertation are clearly indicated and isolated in the structure. The structure of the successive chapters in the doctoral dissertation is coherent and logical. In some cases, the chapter titles could be more appropriately matched to the substance of the chapters. The length of the chapters in the doctoral dissertations is generally proportionally balanced. The shortest chapter 7 (6 pages) could be included in the other parts of the thesis.

4. Methodology and empirical analyses

The doctoral dissertation evaluates the resilience, efficiency, and financial performance of cooperative banks in France, Spain, and Italy during two major crises: 2008 and Covid-19. The thesis uses a rigorous quantitative methodology grounded in panel data regression analysis. The dataset

covers a twenty-year period: 2008 – 2023. The data used in the research were compiled from official annual reports and statistical yearbooks prepared by the European Association of Cooperative Banks (EACB), covering the mentioned above period from 2008 to 2023. The dependent variables in the regression models are standard indicators of financial performance in banking sectors, efficiency, and stability: Return on Assets (ROA), Return on Equity (ROE), Total Capital Ratio (TCR) and the Tier 1 Capital Ratio (CET1). Indicators: the ratio of non-performing loans (NPLs), cost-to-income ratios, and total assets were included as explanatory or control variables to provide further granularity in assessing bank performance. The analyses were conducted in the context of the European regulations, particularly as shaped by post-crisis reforms such as Basel III, the Single Supervisory Mechanism (SSM), and the Capital Requirements Regulation (CRR).

The selection of methods and variables, in the context of the conducted research, is in my opinion adequate. The analyses are carried out on the example of the cooperative banking sectors in three selected countries: France, Spain and Italy. The research also covers a broad time horizon, encompassing two types of crises: the financial crisis (2008) and the pandemic crisis (COVID-19).

5. Assessment of literature review and theoretical background

The list of bibliography consists of 394 references. The list of references was divided in to the chapters in the following way:

- Introduction and conclusions - 7 references,
- Chapter 2 – 82 references,
- Chapter 3 – 68 references,
- Chapter 4 – 68 references,
- Chapter 5 – 76 references,
- Chapter 6 – 74 references,
- Chapter 7 – 10 references,
- Chapter 8 – 9 references.

In the reviewed dissertation, the Doctoral Candidate made use a broad range of bibliography, including science papers, monographs, one Doctoral dissertations and one master's thesis. The number of referenced sources is commendable and confirms that the Doctoral Candidate has conducted an extensive analysis of the bibliographic materials, corresponding to the scope of the research undertaken. This also demonstrates the appropriate embedding of the analyses within the international science literature. The bibliography was organized according to the subsequent chapters. The papers indicated by the Candidate are up-to-date, relevant, and well-situated within the subject under investigation. In my opinion, the selection of the literature is appropriate in terms of type, quantity, and thematic relevance.

Although the literature used has many strengths, some minor errors and weaknesses can be noted, e.g.:

- There was no identified specific law regulations concerning cooperative banking sector in the analyzed countries: Italy, Spanish and France (e.g. in Poland we have: the Act on the functioning of cooperative banks, their associations, and associating banks – Ustawa o funkcjonowaniu banków spółdzielczych, ich zrzeszaniu się i bankach zrzeszających, Dz. U. 2000 Nr 119 poz. 1252 with later amendments).
- In most cases in the list of references, DOI numbers are provided; however, some science papers appear without DOI numbers, e.g. “Wiley, B. J., & Navickas, J. (2021). Effect of financial regulation on performance of the banking sector in the United States of America. *Journal of Finance and Accounting*, 5(3), 11–21” – p. 213; “Auboin, M., & Blengini, I. (2019). The impact of Basel III on trade finance: The potential unintended consequences of the leverage ratio. *Journal of Banking Regulation*, 20, 115–123” – p. 215 and other entries.
- In the list of references, DOI numbers are sometimes underlined, while in other cases they are not. They should be formatted consistently.
- The name of the successive chapters in the list of references are sometimes underlined and in other positions they are not, like e.g. “References for chapter 2” p. 202, and “References for chapter 3” p. 209. It should be formatted in one way.
- There are positions without the name of the of journal, like e.g. “Gabriel, G. (2016). The impact of

the Basel 3 capital requirements on the performance of European banks”, p. 216.

6. The ability to conduct independent scientific research

The reviewed doctoral dissertation constitutes an in-depth analysis of the subject literature and the collected empirical material. Among the research methods employed by the Doctoral Candidate, one may identify both quantitative and qualitative (literature review) approaches. The diverse set of research methods employed by the Doctoral Candidate, together with the broad scope of analyses conducted, both in terms of subject matter and research subjects, demonstrates the maturity and well-considered design of the study. This fact confirms the Candidate’s ability to conduct independent scientific research.

Additionally, in the context of research analysis in the doctoral dissertation I formulated two questions:

- Why these three countries: Spain, France and Italy were chosen by Doctoral Candidate to his research analysis? In the text of thesis we have shortly explanation, but it will be beneficial to provide a more precise justification.
- What the specific law regulations are the base to functioning of cooperative banking sectors in the following countries: France, Spain and Italy?

7. The formal side of the dissertation

The doctoral dissertation was generally well prepared. Figures and tables are correctly titled, numbered and sourced. Although some minor editorial errors and grammatical mistakes can be noted, e.g.:

- the spaces between lines are sometimes different, e. g. p. 202,
- some figures, e.g. 4, 5 and 6 were probably not prepared himself by Doctoral Candidate.
- in the Table of contents is: “Structural and organizational framework in Spanish Banks” – it should be: “Structural and organizational framework in Spanish banks”, p. 5.
- It should be: “Discussion of hypotheses” instead of “Discussion of Hypothesis” – table of contents, p. 5.

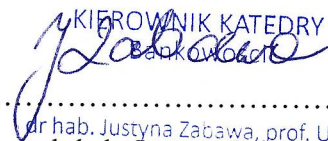
8. Conclusions

My overall assessment of the doctoral dissertation of Mr. Ahmed Lotfy Mahmoud Ahmed is positive. Given the results of the empirical analyses, the scale of the research effort, and the sound interpretation of the findings, the Candidate has shown the ability to conduct independent scientific research. In my opinion, the doctoral dissertation prepared by Mr. Ahmed Lotfy Mahmoud Ahmed is an original solution of a scientific problem and demonstrates the candidate's general theoretical knowledge.

Taking into account the above, I conclude that the doctoral dissertation prepared by Mr. Ahmed Lotfy Mahmoud Ahmed, entitled “**Performance and financial soundness of French, Spanish and Italian cooperative banks: a comparative analysis**”, written under the scientific supervision of:

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meets the requirements specified in the Law on Higher Education and Science of July 20, 2018 (Dz. U. 2024, item 1571, with later amendments,), particularly regarding Article 187 and may be submitted for public defense and further procedures related to awarding Mr. Ahmed Lotfy Mahmoud Ahmed with a doctoral degree in the scientific discipline: Economics and Finance, field of science: Social Sciences.

UKIEROWNIK KATEDRY
EKONOMICZNY


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