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**Review of Muddassar Rasheed Malik's PhD thesis "*THE IMPACT OF RISK GOVERNANCE ON THE PERFORMANCE OF OECD BANKS*"**
**made under the supervision of Prof. Dr. Hab. Ewa Miklaszewska and Prof. Dr. Hab. Jacek Osiewalski**

The reviewed doctoral dissertation concerns on the impact of risk governance on bank risk, financial performance, and regulatory adjustments. Drawing on the theoretical frameworks of Knight's risk theory (1921), the upper echelon theory, and regulatory compliance theory, this study comprehensively examines the relationships between risk governance and various performance indicators in OECD banks.

In order to achieve the aim of the doctoral dissertation and verify research hypotheses, Muddassar Rasheed Malik used quantitative methods, such as regression models, based on statistical data. In the literature on the subject, the dissertation is an original attempt to deepen the knowledge of risk governance on bank risk, financial performance, and regulatory adjustments of OECD banks. This dissertation contributes significantly to the field by providing empirical evidence of risk governance's multifaceted impact on banking performance. It extends the theoretical and practical understanding of how governance mechanisms influence bank risk, financial performance, and regulatory compliance.

The results of the quantitative study in the dissertation determine its originality and positive evaluation. In addition, the careful preparation of the dissertation proves that the Author is well prepared to conduct independent scientific research.

## I. Assessment of the significance of research problems and originality of the solution presented in the dissertation

The financial crisis of 2008 highlighted the importance of risk governance in banks and the severe consequences of inadequate risk management practices. Therefore the research problem presented in the dissertation concerning the examination of risk governance and performance in OECD banks is extremely important, current and is a crucial research area. The effective risk governance practices can mitigate the likelihood of bank failure and improve overall performance. In addition, regulatory requirements for banks have become increasingly stringent in recent years, making risk governance a vital aspect for compliance. Furthermore, the complexity of financial instruments and the interconnectedness of global markets increase the need for effective risk governance frameworks to manage these risks.

Given the significance of risk governance and performance in OECD banks, a considerable body of literature has emerged in recent years.

To sum up, I consider this subject to be very valuable, for at least three reasons. First, the doctoral student points to a non-standard approach to the problem of financial risk.

Second, the Author carries out original empirical study, where it verifies hypotheses at the level of sector and individual banks in OECD countries.

Third, the PhD thesis contains extensive theoretical explanations of risk-related concepts affecting the profitability of banks in OECD countries.

The literature suggests that the composition and characteristics of top management, including their risk attitudes and experiences, can influence organizational outcomes, emphasizing the importance of selected risk governance characteristics. Furthermore, effective risk governance can have a positive impact on a range of performance measures, including profitability, efficiency, and solvency. Additionally, it is essential to investigate the relationship between risk governance and bank risk to identify and manage risks effectively. Finally, it is crucial to examine the role of risk governance in regulatory adjustments, such as stress tests, as effective risk management practices can help banks meet regulatory requirements and pass such tests.

The general structure of the work is understandable and subordinated to the set goal, which proves the scientific maturity and the ability to pose and solve a research problem by Muddassar Rasheed Malik.

## II. Formulating the objectives of the work and the originality of the research theses

The objective of this dissertation is to carry out empirical research on the impact of risk governance on bank risk, financial performance, and regulatory adjustments of OECD banks. To accomplish these goals, this study utilizes a quantitative research design, building upon existing literature. Past research has investigated the impact of risk governance on bank risk, suggesting that effective risk governance can mitigate risk and decrease the likelihood of bank failure. Other research has examined risk governance's effect on financial performance, concluding that effective risk management can enhance financial performance and profitability. Furthermore, the role of risk governance in regulatory adjustments has been highlighted in the literature, implying that efficient risk management practices can assist banks in meeting regulatory requirements and passing stress tests. Through an examination of risk governance's impact on these three objectives, this study seeks to offer valuable insights regarding risk governance implications for OECD banks.

The overarching purpose of this dissertation is to delve into the intricate dynamics of risk governance and its consequential impact on the performance and regulatory landscape of public commercial banks within the OECD.

This investigation is guided by three pivotal research questions, each aiming to uncover the nuanced relationship between risk governance and key performance indicators within the banking sector:

(1) What is the impact of risk governance on the bank risk of public commercial banks of the OECD?

(2) What is the impact of risk governance on the financial performance of public commercial banks of the OECD?

(3) What is the impact of risk governance on the bank regulatory adjustments of public commercial banks of the OECD?

Following the articulation of the research questions, this dissertation proposes three hypotheses based on the anticipated impact of risk governance on public commercial banks within the OECD.

Three hypotheses were put forward in the doctoral dissertation:

**Hypothesis 1:** There is a positive relationship between risk governance characteristics and the Tier 1 Capital ratio in public commercial banks of the OECD, implying that effective risk governance is associated with a lower level of bank risk. This hypothesis aims to investigate the extent to which risk governance can mitigate bank risk, as indicated by a critical financial stability metric, the Tier

1 Capital ratio. By analyzing the impact of risk governance characteristics, such as the roles of directors, their seniority, and the presence of risk committees, this hypothesis tests the assumption that risk governance characteristics enhance a bank's resilience to financial instability.

**Hypothesis 2:** There is a significant positive relationship between the risk governance characteristics and the financial performance as measured by the net income of public commercial banks in the OECD, indicating that risk governance leads to improved financial outcomes. This hypothesis explores the connection between the characteristics of risk governance—encompassing directorial roles, education, and committee presence—and the financial success of banks. It postulates that banks with more sophisticated and comprehensive risk governance structures are better positioned to achieve superior financial performance.

**Hypothesis 3:** Risk governance is negatively associated with regulatory adjustments in public commercial banks of the OECD, suggesting that banks with risk governance characteristics face fewer regulatory challenges.

The structure of the dissertation with its theoretical content and the empirical study carried out allow us to clearly state that the objectives were implemented correctly. To verify hypotheses, the Author skillfully uses a variety of research methods. The research methodologies across the sections of the dissertation share a foundational approach in statistical analysis, utilizing multivariate regression analysis, Principal Component Analysis (PCA), and robustness checks, including bootstrap procedures, to explore different dimensions of risk governance within OECD public commercial banks.

The methodological approach is characterized by a robust quantitative framework, deserves special mention and praise, by employing multivariate regression analysis to investigate the relationships between risk governance attributes and various banking outcomes. Principal Component Analysis (PCA) is used to create composite indices from multiple risk governance variables, offering a holistic measure of risk governance. This method allows for a detailed assessment of how combined governance characteristics impact bank risk, financial performance, and regulatory adjustments.

The doctoral dissertation was prepared carefully. The research hypotheses were correctly formulated and verified using quantitative methods. The considerations in the dissertation are based on literature studies and the quantitative own research.

### III. Structure and content of the dissertation

The doctoral dissertation covers 143 pages. The dissertation formulates the research questions, objective and research hypotheses. This doctoral dissertation is mainly empirical in nature. The whole doctoral dissertation is illustrated with diagrams and tables. It is worth emphasizing that the doctoral dissertation also consists of an extensive literature part on the characteristics of the impact of risk governance on bank risk, financial performance, and regulatory adjustments. The doctoral dissertation consists of six chapters cover: an introduction, conclusions and summary, and bibliography, and abbreviations. The conclusions consist of: Integration of Findings, Hypothesis Verification Summary and Contributions. The bibliography included in the doctoral dissertation contains 293 items, which include books, articles and reports of financial institutions.

The dissertation offers a comprehensive examination of risk governance's impact on bank risk, financial performance, and regulatory compliance within public commercial banks across OECD countries. This work delves into how risk governance mechanisms, particularly those involving board directors' characteristics and executive roles such as the Chief Risk Officer (CRO) and Chief Financial Officer (CFO), influence the management of bank risk, enhance financial outcomes, and align with regulatory standards. Drawing on the theoretical frameworks of Knight's risk theory (1921), the upper echelon theory, and regulatory compliance theory, this doctoral dissertation comprehensively examines the relationships between risk governance and various performance indicators in OECD banks. The research specifically focuses on key elements of risk governance, including the Risk Committee (RC), Chief Risk Officer (CRO), Chief Financial Officers (CFO), directors with PhD degrees (TITLE), senior directors ages between 65 to 74 (SENIOR), and independent directors (BI). By considering these factors collectively, this research addresses the research gap by providing a comprehensive analysis of risk governance's internal strength and effectiveness within banks.

In the first part, dissertation explores the relationship between risk governance and bank risk, presenting empirical evidence that highlights the quantifiability of risk through governance practices basing on Knightian Risk. The second part investigates the nexus between risk governance characteristics and financial performance, employing the Upper Echelons Theory (UET) as a theoretical lens. In the final part, the focus shifts to risk governance's role in regulatory compliance, particularly examining how governance characteristics impact regulatory adjustments. The findings suggest a negative association, indicating that effective risk governance can reduce the need for regulatory adjustments, thereby fostering a more stable and compliant banking environment.

The way of conducting considerations is clear and understandable. Due to that the doctoral dissertation is written in a synthetic way, which is correct and in line with the requirements for empirical PhD thesis, but sometimes the issues discussed in dissertation could be more clarify and explained.

**IV. Evaluation of the doctoral dissertation**

The empirical research presented in the paper is very comprehensive and original. The doctoral dissertation is prepared in very synthetic form, which is commendable and in general is written carefully. However, due to the complexity of the work, there are places where certain issues could be refined and clarified. There are some inaccuracies, both in the description of the donation problem and the description of the research method is not entirely clear.

First of all, the tested sample covers OECD member states is not homogeneous. The OECD has 38 member states. Among these states are the most developed economies in the world, including the United States, Japan, France, Germany, Italy, Canada, and the United Kingdom, all of which are also part of the Group of 7 (G7). The organization also includes smaller countries such as Denmark, Austria, Belgium, and Luxembourg. Although OECD consists mostly of countries with mature, developed economies, there are a few members that are less developed, such as Columbia, and Mexico. The above fact means that it would be good to divide the survey into such groups of countries. Then other results could also be obtained. Furthermore, the doctoral Dissertation lacks information on brief characteristics of individual economies. Each of these economies is characterized by different specificities of the financial sector. In some, such as the USA, it is a financial system based on markets, in European countries, is banking oriented. There is a chapter in the paper entitled 1.4. Motivation and the Reasons for Examining Public Commercial Banks of OECD covers pp. 34-36, but it does not contain information that OECD economies are not homogeneous or other detailed information on the OECD economies.

In my opinion, the doctoral dissertation should include more definitions regarding risk. The information on risk is too synthetic for a doctoral dissertation. However, the Author mentioned that risk is a dark concept. In the banking industry, risk management plays a crucial role in ensuring the stability and sustainability of financial institutions. It involves identifying, assessing, and managing risks to protect the bank's assets, maintain regulatory compliance, and safeguard the interests of stakeholders. An integrated risk management framework tailored for the banking industry is essential. This framework considers various types of risks faced by banks, such as credit risk, market risk, liquidity risk, operational risk, and regulatory compliance risk. It provides a holistic approach to managing these risks and ensures that they are adequately addressed (BCBS, 2017). In my opinion, the subsection on risk is too short and more detailed presentation of this concept would be valuable. It should be described in more detail e.g. section "2.2.1 Risk" covers one page. In the reviewed work, I also lack a broader discussion on the differences between "risk" and "uncertainty".

I also have comments about the description about the design of the data panel, which should be more precise. The description is not fully understandable. The data cover three research areas. In the first area, focused on bank risk, the dataset includes 14,596 bank-director years, 1125 unique bank-years, and 14,404 director-year observations. The second area, examining financial performance, utilizes 14,410 bank-director years, highlighting 1107 unique bank-years and 14,218 director-year observations, and broadens the analysis to 22 variables that encompass a wider spectrum of financial and governance-related metrics. The third area, exploring regulatory adjustments, mirrors the first in terms of observational count, using the same 14,596 bank-director years dataset, but shifts the variable focus to include regulatory adjustments. The data sources include BankFocus and BoardEx databases. However, it is unclear how it was created/merged from the two bases. The information on page 21 concerning the construction of the database is not clear. The time dimension of the panel is also not entirely clear. It's not clear whether it's one data pane or three panes. The time dimension is also not clear. The dissertation states that an extensive dataset covering bank-director years from 2001 to 2019 (pp. 19-20), but it is not clear whether all variables are available for this time range. It is also unclear whether the Author used BankScope of the earlier version of BankFocus and whether he combined data from the new version with data from the old version of the database. This information needs to be clarified.

In the dissertation p. 32, "Table 1 – Variable Definitions" describes the variables on bank level. There are no references to Table 1 in the main text of the hearing. Although there is a detailed description of the variables under Table 1, there is no description/reference to Table 1 in the main text.

Table 3 – Correlation, p.75 presents correlations for the normal distribution. It would also be good to examine Spearaman's correlation. I have not found information about data tests, data distribution, whether the data in the study are normally distributed.

The estimation method used in the work should also be better described. 1.3.2. Research Methodology, pp. 22-30 Although in the first chapter of the work there is a subchapter describing the research method, due to the complexity of the study, it is not fully described.

The Author uses a number of quantitative methods in the study: panel regression as an estimation method, but also methods using time series, such as vector autoregression (VAR) and Granger causality (Granger causality tests). The robustness of findings is confirmed through bootstrap procedures, with numerous replications to verify the stability and reliability of the regression results. The descriptions are scattered, even though there is a separate chapter. Individual models in the dissertation, of which I counted 9 basic ones and based on bootstrap procedure should be described in more detail, the results could be compiled in a collective table. There is no tabular list of individual models, which would make it easier for the reader to follow the individual parts of the reasoning.

The Author formulated three hypotheses in his work: Hypothesis 1, Hypothesis 2 Hypothesis 3, which he verifies in his work on pages: 75, 114, 115, 120. However, the numbering of hypotheses is no longer adhered to in a similar way at the end of the work. Indicating the exact numbers of the hypotheses would make it much easier for the reader to follow the logical reasoning carried out in the work. Also, there is no table/additional information concerning comparing the results of the models with the research hypotheses. I also have doubts about the way of verifying research hypotheses, which are only discussed in more detail in the summary in the subchapter: 6.2. Hypothesis Verification p. 124: "These findings collectively validate the hypotheses, confirming that risk governance plays a crucial role in managing bank risk, improving financial performance, and ensuring regulatory compliance in OECD public commercial bank". It would be worth describing and justifying this paragraph in more detail.

Editorial Notes:

1. The table list is missing in the dissertation,
2. Lack of pattern/equations numbering the dissertation,
3. There is no appendix presenting more detailed results describing the research sample.
4. The tables are generally correctly placed in the individual chapters and are described in great detail. With the exception of Table 1, page 32, which should have been earlier or in the Annex. Unfortunately, the work does not include an attachment. However, the very detailed descriptions under all the tables are very useful and deserve praise.

The findings of this study contribute to academic knowledge by shedding light on the importance of risk governance in the banking sector. Overall, I rate the quantitative research very highly and positively. I consider them comprehensive and original. An interesting approach to the issue of risk combined with empirical research contributes to the literature on the subject.

**V. Evaluation of the selection and use of literature**

The bibliography contains many literature items, that is a good proof of knowledge of the literature on the subject. The cited literature includes 243 items and includes articles and monographs as well as reports whose source is the Internet. The selection of literature is adequate to the subject of research presented in the dissertation by the Author, embedded in the international literature on the subject. The cited literature proves a good knowledge of the studied issues. The cited literature is very rich as for a doctoral dissertation, it contains a lot of the latest literature on the subject.

**VI. Conclusion**

The reviewed dissertation has been prepared carefully and, proves the PhD student's knowledge of the literature on the subject in the field of economics and finance in the social sciences. In addition, the reviewed dissertation convinces that Muddassar Rasheed Malik is well prepared to conduct scientific research, which is confirmed by the empirical research presented in this dissertation. The strength of the dissertation is a carefully conducted and well described and very detailed empirical study on the impact of risk governance on bank risk, financial performance, and regulatory adjustments and a solid literature review. Furthermore, the empirical study has significant application values, which undoubtedly proves the maturity of the analysis. This PhD dissertation fills a critical research gap by investigating the impact of risk governance on the performance of public commercial banks in the OECD. The findings contribute to academic knowledge, provide practical implications for regulators and bank managers, and inform the development of effective risk governance strategies within the banking sector. The dissertation reduces the existing cognitive gap in the literature, which is why I suggest publishing it in the form of a monograph or as a series of articles.

The evaluation carried out allows us to conclude that the doctoral dissertation of Muddassar Rasheed Malik in in the light of applicable law, meets the requirements for doctoral dissertations. I recommend that Muddassar Rasheed Malik should be admitted to the public defense of the doctoral dissertation.

Małgorzata Pawłowska

## Załącznik do recenzji rozprawy doktorskiej

Imię i nazwisko kandydata: **mgr Muddassar Rasheed Malik**

Tytuł rozprawy doktorskiej: **„THE IMPACT OF RISK GOVERNANCE ON THE PERFORMANCE OF OECD BANKS"**

Promotor: **prof. dr hab. Ewa Miklaszewska**

Promotor: **prof. dr hab. Jacek Osiewalski**

Recenzent: **prof. dr hab. Małgorzata Pawłowska**

1. Ja, niżej podpisany stwierdzam, że recenzowana rozprawa doktorska **p. mgr Muddassara Rasheeda Malika** spełnia warunki określone w ustawie Prawo o szkolnictwie wyższym i nauce z dnia 20 lipca 2018 r. (t.j. Dz. U. 2022 r., poz. 574, z późn. zm.) w związku ustawą z dnia 3 lipca 2018 r. Przepisy wprowadzające ustawę – Prawo o szkolnictwie wyższym i nauce (Dz.U. z 2018 r., poz. 1669, z późn. zm.) i wnioskuję do Rady Dyscypliny Ekonomia i Finanse Uniwersytetu Ekonomicznego w Krakowie o dopuszczenie **p. mgr Muddassara Rasheeda Malika** do dalszych etapów postępowania doktorskiego.

   TAK/~~NIE*~~

2. Ja, niżej podpisany wnioskuję o wyróżnienie rozprawy doktorskiej.

   ~~TAK~~/NIE*

3. Uzasadnienie w przypadku Recenzji z negatywną konkluzją (25-200 słów):

17.05.2024 r.
data sporządzenia recenzji

M Pawłowska
podpis recenzenta

*niepotrzebne skreślić*