ABSTRACT of the dissertation work of Kaliyev Kalizhan Sagatbekovich on the topic: "Analysis of Bank Risk and Performance across Transitional Economies", submitted for the degree of Doctor of Philosophy (PhD) in the specialty 6D050900 – Finance

General characteristic of the research topic

The dissertation work examines banking industry business models of transitional economies in aspects of financial performance and risk.

Relevance of the research topic

We have tested the hypothesis on the effect of regulatory norms, ownership structure and specific determinants on the performance and risk of banks in emerging markets backed up by several fundamental works of Arellano and Bond (1991). While building the picture of banking business modeling in transition countries we refer to the next specific aspects of the problem.

We examine the performance and risk of the transitional economies in the banking industries. However, the final beneficiary is social welfare that the countries are willing to maximize. Hence, the factors of consolidation, competition and many other business structures and their combination have to be reviewed. This can help the study be sustainable and might open up new aspects to the problem. Since, we indicate banks as the main target of examination, the reasonable arrangements of financial markets and other financial institutions are important. Therefore, we consider different internal functions of banks to clarify how these functions affect the efficiency and eventually the social welfare.

There are few important reasons why we need to consider banking sector of transitional economies apart from other types of markets. In the way De Nicolo et al. (2003) stated, transitional economies have weak financial markets. Banks play crucial role in financial intermediary process. Therefore, we need to consider transitional market as a separate financial establishment.

Purpose and objectives of the research:

The following study is the examination of establishment of banking business modeling in the aspect of performance and risk in emerging markets of transition economies. The economic crisis outlined a vast number of questions for the policymakers and made them rethink, reorganize, and re-strategize the existing frameworks completely. These events bubbled up the layman's distrust towards financial and governmental norms and regulations, and appropriately raised the question of whether newly introduced policies and compliance with them would increase the financial stability and performance of these longstanding financial institutions. We view the problem from different angles.

Research objectives:

1. Examination of current state of business models in existence what helps us define the weaknesses and make recommendations to overcome further market development difficulties.

2. The unique place a bank takes in the financial intermediary process in markets of transition economies. Following Jimenez et al. (2008) we address the idea that financial markets in economies of transition tend to be weak. Therefore, banks play a core role in the financial market development with no alternative option both in regulatory aspect and in practice.

3. The interest of this study is the economies in transition. The structure and bank business models vary significantly across transition countries (Kaliyev, 2020). Moreover, many previous studies neglect the importance of post-Soviet Union countries by not including them into general observation of economies in transition (Grigorian and Manole, 2006 and Fries et al., 2005). The findings based on examination of only European transitional economies or any other regions separately will most likely produce biased findings.

4. The problem of banking business modeling is the ownership factor. It is well known that the ownership factor plays a crucial role in establishment of the business, irrespective of the type of the business. However, there is a need to mention that in transition economies, bank ownership has a special place. The problem here is that owners of the banks tend to have high affiliated relationship with the regulators and reformers of the industry. The following relationship constraints the financial market development.

5. The regulatory framework itself. The idea is that the regulation before the times of crisis possibly had been the reason for the crisis embryo itself. Transition economies typically have weak financial markets. The tradeoff faced by regulators is between financial market development and macroeconomic stability.

Research object:

We focus on the transitional countries using quarterly bank data over period of 2008-2019 years and covering one hundred transitional banks across 17 recently switched from planned to free market economies. Julian and Ofori-dankwa (2013) stated that difference in perception of performance of the institutions depends on the structure of the industry. Therefore, our study will contribute to the literature as a new vision of this relationship.

Model and methodology building

We utilize the "Generalized Methods of Moments" methodology employing panel data regressions over 17 different transitional economies during, and after the crisis period of 2008 through to 2019.

Scientific novelty of the research:

1. Seven different combinations applied for the profitability measures of Return on Assets, Net Interest Margin, and Risk score for the full sample of transition economies.
2. Separate regressions are run for the four sub-samples allocated in regions of Eastern European, Central European, Balkan and Caucasus countries applying the methodology from general to specific in the selection of variables in line with the study of Klomp and De Haan (2012).
3. The results for the robustness of the findings are checked utilizing five different regional samples with different banking industry specifications.
4. Only transitional economies are covered in the research, and most of the previous studies are related to emerging or developing markets.
5. The GMM system was applied to deal with the problems of endogenous variable, simultaneous causality, heteroscedasticity, heterogeneous variable and unrecognized features of the coefficients applied in the model.

Scientific and practical significance of the research

We contribute to the literature in few important ways:

1. We utilize model of GMM system that permits us to cover the effect of unrecognized measures that are largely omitted when other methodologies are employed in the panel data use;

2. The GMM system recognizes the use of measures that are correlated among each other and permits us to apply them while dealing with endogeneity bias. Endogeneity bias is common in use of panel data. Bank managers apply different adjustments and amendments to improve financial positions. These changes today affect values of measures in the future, leaving trace of preceding variables today. Hence, the standard errors of these variables can be highly correlated and, therefore, data adjustments are quite important. Nevertheless, adjusted data squeezes the range and creates another problem. Therefore, the GMM system use is quite reasonable.

3. We use period that covers both crisis and post crisis time. Timeframe permits us to see a complete picture of how countries in transition reflect to changes on a macroeconomic level, likewise the Global Financial crisis.

The main provisions for defense:

1. The results obtained through the application of Generalized Methods of Moments method.

2. The result of substantial liquidity portion as the only part of the business model that has significant effect on both financial stability and performance measures of banks in transition.

3. The result of whether ownership structure of banks has a direct effect on performance of financial institutions in transitional economies.

4. The negative result of effect of concentration of both political and economic power, which slows down transmission from planned to market economy.

5. The results of robustness tests of the main findings applying GMM across five different sub-samples.

6. The results of effect of regulatory norms such as Reserve Requirements, Activity Restrictions, and Capital Stringencies on the overall industry profitability and stability of the financial institutions.

7. The results utilizing the GMM methodology indicating the Reserve Requirements regulatory norms as the only significant effect factor that improves the profitability and diminishes the risk of financial instability in the banking sectors of transitional economies across a large sample of countries.

Personal contribution of the author:

The author of the work participated in the choice of the concept and object of research, determining the purpose of the work, setting research objectives, as well as in the design and running all regressions, collecting and analyzing the data obtained and writing a dissertation.

Approbation of work

The results of the research and the main provisions of the dissertation were reported and presented at international and republican scientific conferences:

- "Bank regulation in the economies in transition", (2020), October, 33 rd EBES Conference, Madrid, Spain.
- "Financial Stability of Banking Industry in Kazakhstan aftermath the World financial Crisis", (2020), April, Turan University Press.
- "Ownership as a Qualitative Factor affecting the Business Model of Banking Industry in Kazakhstan. (2020). KIMEP International Research Conference, 2020.
- "Bank Risk Evaluation through Z-score Measure and its Effect on Financial Health of the Industry of Transitional Economy of Kazakhstan"(2020), Bulletin of Kazakhstan National University.
- "Kazakhstani Banking Industry Performance Overview in the Post Financial Crisis Decade", (2020), January, Central Asian Economic Review, vol. 4(127), 40-50, ISSN - 2224-5561.
- "Bank specific, macroeconomic and industry specific determinants of bank performance and risk. The case of Kazakhstan, (2019), June, Maltepe University, Istanbul, Turkey, ICBM 2019, ISBN 978-605-2124-27-7.
- "So called "Private" Ownership Structure in Kazakhstani Banking Business Model. Industry Performance Evaluation", (2019), June, News of the National Academy of Sciences of the Republic of Kazakhstan, Series

of Social and Human Science, ISSN - 2224-5294, Volume 6, Number 328 (2019), 139-154.

- "How does risk and return affect Kazakhstani banking industry performance?", (2019), KIMEP International Research Conference, 2019.
- "BankRegulation in the Economies in Transition". Volume: 11 issue: 4, Article first published online: November 29, 2021; Issue published: October 1, 2021, Sage Open, 2021.
  Projects:

- "The Impact of Business Models on Financial Stability and Profitability of Banking Industries of Economies in Transition". In progress.

Publications

Main provisions, results, conclusions and conclusion of the dissertation presented in 10 publications, including 1 article in an international journal, which is included in the Thomson Reuters database; 4 articles in republican scientific journals recommended by the Committee for control in the field of education and science of the Ministry of Education and Science of the Republic of Kazakhstan; 4 articles and 3 theses in materials of international conferences and symposiums.

Dissertation structure

The examination of the research problem is divided into separate chapters. **The first chapter** is the introductory body to the dissertation that indicates the main subject of the problem we examine. **The second chapter** reviews the empirical literature over the tradeoff between the efficient market and the financial stability. **The third chapter** is an empirical observation of the methodology and model construction. In particular, we discuss the model, variables, and give a detailed overview of countries under examination and their respective banking industries. **In the fourth chapter**, we evaluate the effect of changes in their business models on risk and efficient operation of bank industries in the economies in transition. **The fifth chapter** covers specifics of the local Kazakhstani banking industry market with an accent on bank, industry and macroeconomic environment determinants in the first part. The second part examines the effect of ownership structure changes on bank performance. **The sixth chapter** examines significance of regulation factor for banking industries in transition economies. **In the Appendix**, we provide a summary of the interviews we have conducted with specialists from the field. The objective is to see whether the findings based on the empirical model we have built for the sample differs from the true, unbiased reality of banking in economies of transition. This work helps to fill possible missing points of the study. Hence, the gaps can be used for further research of the field. The video interviews can be provided by the author if required.

We hope this work may help shed a fresh view on necessities of political and economic reforms of banking for markets in transition.