

REVIEW
of official reviewer for the dissertation work
of Kalizhan Sagatbekovich Kaliyev on the topic "Analysis of Bank Risk and Performance across Transition Economies", granted for the degree of
Doctor of Philosophy (PhD) in the specialty "6D050900- Finance".

№ u/p	Criteria	Compliance with the criteria (you must mark one of the answer options)	Substantiation of the position of the official reviewer
1.	The topic of the dissertation (as of the date of its approval) corresponds to the directions of development of science and / or state programs	<p>1.1 Compliance with priority areas for the development of science or government programs:</p> <p>1) The dissertation was completed within the framework of a project or target program financed from the state budget (indicate the name and number of the project or program)</p> <p>2) The dissertation was completed within the framework of another state program (indicate the name of the program)</p> <p>3) The dissertation corresponds to the priority direction of the development of science, approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan (indicate the direction)</p>	<p>The research topic corresponds to the priority direction of the development of science and has a close connection with the state programs of Kazakhstan, as well as with Development Strategy of the Republic of Kazakhstan until 2050.</p> <p>The dissertation corresponds to the priority direction of the development of science and corresponds to the concept of Development of Financial Market of Republic of Kazakhstan accepted by the Government of Republic of Kazakhstan dd. July 23/03, number 753. State Program "Digital Kazakhstan" approved. December 12, 2017 year, No. 827 as amended by the Decree of the Government of the Republic of Kazakhstan dated December 20, 2019, No. 949.</p>
2.	Importance for science	The work <u>makes</u> / does not make a significant contribution to science, and its importance is well disclosed / not disclosed	<p>The dissertation work <u>makes</u> a significant contribution to science, and its importance is well disclosed.</p> <p>Author utilizes the GMM system that is quite sophisticated tool to apply in terms of instrumental variables. It helps define the use of the variables that are already in use, and to classify the unrecognized measures that are largely omitted especially within methodologies in use of panel data and when values of the variables are dynamic in nature as in banking industry.</p>
3.	The principle of independence	<p>Self-reliance level:</p> <p>1) <u>High</u>;</p> <p>2) Medium;</p> <p>3) Low;</p> <p>4) There is no independence</p>	<p>The work was written by the author independently at a <u>high</u> level. Author's approach can be observed based on unique methodology application in study of financial intermediary in banking for the economies in transition. Moreover, author introduces a separate notion of transition banking that is categorized as a new part of the emerging markets banking modeling.</p>

4.	The principle of internal unity	4.1 Rationale for the relevance of the dissertation: 1) <u>Justified</u> ; 2) Partially justified; 3) Not substantiated.	The topic of the dissertation is <u>relevant</u> and <u>justified</u> . The interest of the study is the Transition Economies that is a new locomotive for the global development. Hence, it creates a new interest for the investors and that is why increasing the level of necessity for the scientific research of the problem. The examination of the processes of financial intermediation is important both in terms of practical and theoretical sense.
		4.2 The content of the dissertation reflects the topic of the dissertation: 1) <u>Reflects</u> ; 2) Partially reflects; 3) Does not reflect	The content of the dissertation <u>reflects</u> the topic of the dissertation. The problem of banking business modeling is the ownership, regulation and overall bank specific factors as author indicates. The problem within transition economies banking 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. Author heavily signifies this particular point in the study.
		4.3. The purpose and objectives correspond to the topic of the dissertation: 1) <u>comply</u> ; 2) partially correspond; 3) do not match	The purpose and objectives <u>correspond</u> to the topic of the dissertation. Author as well points the regulatory framework itself as a factor of significant impact on development of economies in transition. The reasoning is that the regulation before the times of crisis as author indicates possibly had been the reason for the crisis embryo itself. Moreover, transition economies typically have weak financial markets. Therefore, the objective of the study is a tradeoff faced by regulators between financial market development and macroeconomic stability. Bank takes a unique place in the financial intermediary process in markets of transition economies.
		4.4 All sections and provisions of the dissertation are logically interconnected: 1) <u>are fully interconnected</u> ; 2) the relationship is partial; 3) there is no relationship	All sections and provisions of the dissertation are logically completely <u>interconnected</u> . Author form a conceptual framework in the first place, indicating the necessity to form the financial intermediary processes in a newly emerged markets of transition economies from the aspects of ownership, regulation and bank specific factors.
		4.5 The new solutions proposed by the author (principles, methods) are argued and evaluated in comparison with the known solutions: 1) <u>there is a critical analysis</u> ; 2) partial analysis; 3) the analysis is not one's own opinions, but quotes from other authors	There is a <u>critical analysis</u> . Author shows new approach to examine banks business modeling for economies in transition utilizing the methodology of "Generalized Methods of Moments". Author indicates the next important aspects to the problem: 1. The results for the robustness of the findings are checked utilizing five different regional samples with different banking industry specifications. 2. Only transitional economies are covered in the research and most of

			<p>the previous studies are related to emerging or developing markets.</p> <p>3. 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.</p>
5.	The principle of scientific novelty	<p>5.1 Are scientific results and statements new?</p> <p>1) <u>completely new</u>;</p> <p>2) partially new (25-75% are new);</p> <p>3) not new (less than 25% are new)</p>	<p>Scientific novelty is <u>reflected</u> in the formulation, theoretical justification and practical solution of the problem implemented through the application of GMM dynamic modeling.</p> <p>5.1 Scientific results and provisions are <u>fairly new</u>;</p> <p>Scientific results and provisions are quite new – author shows that the examination of regulation, ownership and overall bank specific factors' impact requires a separate study on the transition economies. Combined examination of the overall emerging markets can be complicated in terms of biasness of the findings.</p>
		<p>5.2 Are the conclusions of the dissertation new?</p> <p>1) <u>completely new</u>;</p> <p>2) partially new (25-75% are new);</p> <p>3) not new (less than 25% are new)</p>	<p>5.2 The conclusions of the dissertation are <u>completely new</u>.</p> <p>The conclusions of the dissertation are completely new – author uses the empirical methodology of GMM that takes into account the dynamic nature of the values of the variables.</p> <p>The GMM permits to have original values of the variables in the model, what is quite important in the sense that researcher will make lesser adjustments to the data that is conceptually right thing to do. The study findings within the sample will be closer to the true values of population mode.</p>
		<p>5.3 Technical, technological, economic or management decisions are new and justified:</p> <p>1) <u>completely new</u>;</p> <p>2) partially new (25-75% are new);</p> <p>3) not new (less than 25% are new)</p>	<p>5.3 Technical, technological, economic or managerial decisions are <u>new and justified</u>:</p> <p>Technical, technological, economic or management decisions are completely new and justified - the author proposed a GMM methodology for the examination of bank industry in transition economies. The approach is <u>justified</u> as it is the best suitable model for dynamic data variables.</p>
6.	Validity of the main conclusions	<p>All key findings are <u>based/not based</u> on scientifically sound evidence, or <u>reasonably well-founded</u> (for qualitative research and arts and humanities courses)</p>	<p>Scientific results, conclusions and recommendations of the dissertation are <u>substantiated and reliable</u>. Author complies with the requirements for scientific research. Author uses the works of foreign and domestic scientists who have made a great contribution to theory and practice of the</p>

			<p>problem under consideration, publications of the main provisions. The validity and reliability of the results obtained is confirmed by:</p> <ol style="list-style-type: none"> 1. The results of robustness tests of the main findings applying GMM across five different sub-samples. 2. 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. 3. 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. <p>The research methods used confirm the scientific significance of findings.</p>
7.	Basic provisions for defense	<p>The following questions need to be answered for each position separately:</p> <p>7.1 Is the position proven?</p> <ol style="list-style-type: none"> 1) <u>proven</u>; 2) rather proven; 3) rather unproven; 4) not proven <p>7.2 Is it trivial?</p> <ol style="list-style-type: none"> 1) yes; 2) <u>no</u> <p>7.3 Is it new?</p> <ol style="list-style-type: none"> 1) <u>yes</u>; 2) no <p>7.4 Level to apply:</p> <ol style="list-style-type: none"> 1) <u>narrow</u>; 2) medium; 3) wide <p>7.5 Is it proven in the article?</p> <ol style="list-style-type: none"> 1) <u>yes</u>; 2) no 	<p>Provision 1 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.</p> <p>7.1 Is the position proven? Yes, it has been proven through GMM methodology for dynamic patterns of variables.</p> <p>7.2 Is it trivial? No, it is not trivial. The concept of "transition economies" from the point of view of financial intermediary process was developed by the author. There is a lack of confirmed studies upon the category of transition economies only that author categorizes as a separate layer of emerging markets. The difference is conceptual as was indicated in the fundamental study of Jimenez et al. (2008), who stated that in transition economies banks are playing first and crucial role in financial intermediary process that is affecting the overall macroeconomic stand of the country.</p> <p>7.3 Is it new? Yes, it is new. Separate examination of transition economies is recommended by the author. Overall examination of emerging markets can lead to biased findings.</p> <p>7.4 Level to apply: broad – banks play crucial role as financial institutions in the economies of transition.</p> <p>7.5 Is it proven in the article? Yes, proven in published scientific articles. “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</p>

(2019), 139-154.

“Bank Regulation in the Economies in Transition”. Volume: 11 issue: 4, Article first published online: November 29, 2021; Issue published: October 1, 2021, Sage Open, 2021.

Provision 2 Ownership structure of banks has a direct effect on performance of financial institutions in transitional economies. The findings within the study show that ownership structure examined separately of the factor of crisis has a significant effect on both financial stability (Z-score) and performance measures in different sample specifications. Specific qualitative factor has weaker effect when the factor of crisis is included into the model.

7.1 Is the position proven? Yes, proven. Author addresses the application of general to specific in selection of variables following the fundamental study of Klomp and De Haan (2012).

7.2 Is it trivial? No, not trivial, the application is effective. The GMM system application is useful in both conceptual and empirical aspects. The system of GMM is developed with the purpose of usage of highly dynamic values of the variables. The sophisticated tool helps solve the problem of simultaneous causality, endogenous variables, dispersion of the variables applied. But, foremost, it helps utilize the values within the coefficients that are hidden and are already in use within the model. This is a conceptual power of the GMM system that is highly valuable for a particular study.

7.3 Is it new? Yes, it is new. Banking business modeling establishment in economies in transition is the approach author addresses as the one, which is separate from overall emerging markets observation.

7.4 Level for application: narrow, for banking financial institutions.

7.5 Is it proven in the article? Yes, proven in published scientific articles.

1 “Bank Risk Evaluation through Z-score Measure and its Effect on Financial Health of the Industry of Transitional Economy of Kazakhstan”

			<p>(2020), Bulletin of Kazakhstan National University.</p> <p>2 “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.</p> <p>Provision 3 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.</p> <p>7.1 Is the position proven? Yes, it is proven. The methodology is proposed to assess the value of both performance and risk in different subsamples. More specifically, author applies seven different combinations of modeling. The specifications are: the bank specific factors only; including the factor of crisis; including the factor of local crisis (devaluation); incorporating regulatory norms and conditions; each of three notions added together and separately (Activity Restrictions, Capital Requirements and Reserve Requirements).</p> <p>7.2 Is it trivial? No, it is not trivial. The technique author applies shows the relationship between the financial results of performance and risk for banks in economies in transition.</p> <p>7.3 Is it new? Yes, it is new. Operational cost is estimated through accounting measures that permits to examine the idiosyncratic risk. In the sequence, the effect on systemic risk can be traced.</p> <p>7.4 Application level: narrow. The study examines the banks only. However, the application and the effect are wide and significant as the banks play crucial role in establishment of economic performance of the whole economy.</p> <p>7.5 Is it proven in the article? Yes, proven in published scientific articles.</p> <p>1 “Bank Regulation in the Economies in Transition”. Volume: 11 issue: 4, Article first published online: November 29, 2021; Issue published: October 1, 2021, Sage Open, 2021.</p>
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2 “Bank regulation in the economies in transition”, (2020), October, 33rd EBES Conference, Madrid, Spain.

3 “Financial Stability of Banking Industry in Kazakhstan aftermath the World financial Crisis”, (2020), April, Turan University Press.

Provision 4 The negative result of effect of concentration of both political and economic power, which slows down transmission from planned to market economy. This notion is additionally proved during the video interview discussions with the practitioners from the field (the particular video interview was conducted with Mr. Gani Uzbekov, former deputy Minister of Finance of Republic of Kazakhstan).

7.1 Is the position proven? Yes, proven. Author addresses the point that concentration of power is legitimate in the countries of transition and officially supported by the local governments by empowering only banking structures that are largely politicized.

7.2 Is it trivial? No, not trivial, the results indicate that banking, in example in Kazakhstan, the banking industry has a specific feature of powerful shareholders that were largely enrolled in political administration within the country before taking the helm of running the business of financial intermediation. This is a specific trait of markets in transition economies with old ties still in power even after almost three decades of free market economies.

7.3 Is it new? It is partially new. Banking business modeling establishment in economies in transition was examined as problematic and constrained by the power of concentration that postpones the development and introduction of truly applicable market levers that can help excel and expand the financial market.

7.4 Level for application: both narrow and wide. Specific application is for banking financial institutions. however, it is proved that idiosyncratic risk of a single financial institution affects the industry as a whole and puts certain questions in front of the regulator and economists within the macro and micro conditions of the overall economy.

7.5 Is it proven in the article? Yes, proven in published scientific articles.

1 “Bank Risk Evaluation through Z-score Measure and its Effect on Financial Health of the Industry of Transitional Economy of Kazakhstan”

			<p>(2020), Bulletin of Kazakhstan National University.</p> <p>2 "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.</p> <p>Provision 5The results of robustness tests of the main findings applying GMM across five different sub-samples. The samples are: full sample model; peer countries only; Eastern European and Central European countries; Balkan and Caucasus countries;</p> <p>7.1 Is the position proven? Yes, it is proven. The methodology application for all sample specifications with the results are given in chapter seven of the dissertation work.</p> <p>7.2 Is it trivial? No, it is not trivial. Author combines the approaches of different fundamental studies. In example, the approach to take operating efficiency combined with interactive terms of Crisis and Regulatory factors is a new approach.</p> <p>7.3 Is it new? Yes, it is new. Some studies were done on the examination of emerging markets and separately on the classification of post Soviet Union countries. However, the combination representing transition economies of different parts of the world in one study is not common.</p> <p>7.4 Application level: wide for banking systems. The role of the study is narrow in application (banks only), however, quite wide across banking industries as it covers transition economies. Author categorizes countries of emerging markets as transition economies referring to the state of economic development in both macro and micro perspectives.</p> <p>7.5 Is it proven in the article? Yes, proven in published scientific articles.</p> <p>1 "Bank Regulation in the Economies in Transition". Volume: 11 issue: 4, Article first published online: November 29, 2021; Issue published: October 1, 2021, Sage Open, 2021.</p> <p>2 "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.</p>
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8.	The principle of certainty Reliability of sources and information provided	<p>8.1 Choice of methodology - justified or methodology described in sufficient detail 1) <u>yes</u>; 2) no</p> <p>8.2 The results of the dissertation work were obtained using modern methods of scientific research and methods for processing and interpreting data using computer technologies: 1) <u>yes</u>; 2) no</p> <p>8.3 Theoretical conclusions, models, identified relationships and patterns are proven and confirmed by experimental research (for areas of training in pedagogical sciences, the results are proven on the basis of a pedagogical experiment): 1) <u>yes</u>; 2) no</p> <p>8.4 Important statements are <u>supported</u> / partially confirmed / not supported by references to relevant and reliable scientific literature</p> <p>8.5 Used literature sources are <u>sufficient</u> / not sufficient for a literature review</p>	<p>The choice of methodology is <u>justified</u>: The GMM is used as methodology to examine the problem economic stability (risk) and overall bank performance affecting the macro economy.</p> <p>The results of the dissertation work were obtained using modern methods of scientific research and methods of processing and interpreting data using computer technology: The empirical software Eviews was used to the application of GMM methodology in examination of bank business modeling in transition economies.</p> <p>Theoretical conclusions, models, identified relationships and patterns are <u>proven</u> and <u>confirmed</u> by practical work. Author uses practical experience as the one foundation to prove the findings of the study. Author conducts interviews with top management of financial institutions, practitioners from the field. This is an interesting approach to obtain new robust findings and open up new questions for further researches.</p> <p>An author has a references list that contains 249 sources. An approach the author uses can help both in theory and practice of banking business development. The statements author makes are supported in the dissertation work.</p> <p>The literature sources used are <u>sufficient</u> for a literature review. Author uses some of the fundamental works as a basement for the overall work. In example, the study of Arrelano and Bond (1991).</p>
9.	Principle of practical value	9.1 The dissertation has a theoretical value: 1) <u>yes</u> ; 2) no	The dissertation has a high theoretical value: Author cites the fundamental work of Jimenez (2008), who indicates that banks in transition economies play a crucial role in establishment of macro and micro stability. Hence, the factors as prudential norms that are practically constraining the banking business development constrain the development. Author exactly examines this particular question in part of his dissertation. Therefore, the dissertation has a significant theoretical value.

		<p>9.2 The dissertation is of practical importance and there is a high probability of applying the results obtained in practice:</p> <p>1) <u>yes</u>; 2) no</p>	<p>The dissertation is of practical importance and there is a high probability of application of the results obtained in practice: Author examines transition economies only what is helpful for quite a huge part of the world economies. The application of the findings with some adjustments to the countries can be a good approach in solution of financial intermediation problems in countries of transition. In example, the problem of liquidity, activity restrictions and capital requirements.</p>
		<p>9.3 Are the suggestions for practice new?</p> <p>1) <u>completely new</u>; 2) partially new (25-75% are new); 3) not new (less than 25% are new)</p>	<p>The practice offerings are completely <u>new</u>. This new approach to an old problem in transition economies banking can be widely used in other related studies.</p>
10.	Quality of writing and design	<p>Quality of academic writing:</p> <p>1) <u>high</u>; 2) average; 3) below average; 4) low.</p>	<p>The quality of academic writing is <u>high</u>. The author justifies his thoughts well and to the point. The dissertation contains logical reasoning and very factual. Author well addresses citations and references to the works of other scientists. Some of the fundamental studies are used for the building part of the methodology.</p>

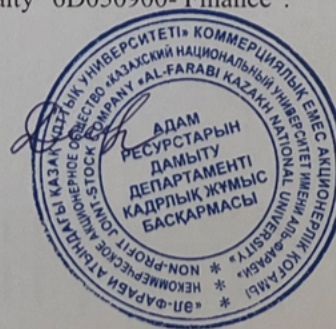
The content of the dissertation work corresponds to the goals and objectives of the study. The work was performed in accordance with the requirements and criteria for dissertations of applicants for the degree of Doctor of Philosophy (PhD) of the Ministry of Education of the Republic of Kazakhstan.

The scope of the study is extensive with complete list of relevant literature reviews. The findings can be an important addition to the existing previous studies which are scant. The author may deserve the degree of Doctor of Philosophy (PhD) in the specialty "6D050900- Finance".

Official reviewer:

PhD, Associate Professor,

Al-Farabi Kazakh National University, Almaty.



Raigul Doszhan

