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THE EFFECT OF THE COVID19 PANDEMIC ON THE FINANCIAL STABILITY OF THE BANKING INDUSTRY: THE CASE OF EURASIAN ECONOMIC UNION COUNTRIES

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ABSTRACT

The purpose of research is to identify the influence of bank-specific and macroeconomic variables on banking sector stability in the case of Eurasian Economic Union countries. For this purpose, it uses KASE and World Bank Database. The data was received from 10 commercial banks of the Eurasian Economic Union countries (Russia, Belarus, Kazakhstan, Kyrgyzstan, Azerbaijan, and Armenia) that cover the period 2016-2021.

Methodology is the panel corrected standard error model (PCSE) to observe the relation of dependent and independent variables. Altman Z-score is used as an indicator of financial stability. Return of assets (ROA) is an indicator of company profitability.

The originality / value of the research is a comparison of the factors that influence the stability and profitability of the banking industry in Eurasian Economic Union countries.

The estimation findings of the research indicate that bank-specific and macroeconomic strongly impact the financial stability in the banking sector. For example, asset quality and corruption control are significantly and negatively related with banks' stability. On the other hand, return on assets (ROA), bank size, political stability, and time dummy effect on the stability of the banking system are positive and statistically significant.

Keywords: banking industry, financial stability, EAEU countries, profitability, Z-score.

INTRODUCTION

It is important for policymakers and top managers to maintain banking stability. It is necessary for both developing and developed countries. Government officials have been working to reform the banking system to enhance banking stability in response to the global crisis caused by COVID-19. In addition, the economic activity of the country depends on the banking industry. Therefore, monitoring the profitability and stability of banks is important for supporting the country's economy.

The banking industry plays a significant role in contributing to the growth of the economy. Nowadays, it is difficult, even impossible to imagine life or any business without banks. Financial systems reduce the poverty and facilitate business. So it is important for all countries to have the healthy and stable banking system. It has motivated many scholars to study the determinants of banking stability.

The coronavirus pandemic has engulfed the entire global community and all spheres of activity. This inevitably brought about an economic crisis, especially in the vulnerable banking sector. Sharply falling incomes and credit holidays for borrowers led to a significant reduction in the revenues of the banking sector. Eurasian Economic Union countries are still struggling with the implications of the COVID-19 pandemic.

The aim of this research is identifying the effect of bank-specific and macroeconomic variables on the stability of the banking sector in Eurasian Economic Union countries.

By conducting research focused on the banking stability, policymakers, regulators, and financial institutions can identify potential risks, vulnerabilities, and emerging trends, enabling them to implement appropriate measures and safeguard the stability of the country's financial system. Research helps to assess the resilience of banks, evaluate the effectiveness of regulatory frameworks, and identify areas requiring improvement. It aids in understanding the dynamics of the banking industry, including technological advancements, evolving

customer preferences, and changing market conditions. Moreover, research facilitates the development of proactive strategies to mitigate risks, enhance risk management practices, promote financial inclusion, and foster sustainable economic growth. Ultimately, by promoting research, Kazakhstan can fortify its banking sector, foster investor confidence, and ensure the stability and resilience of its financial system in the face of domestic and global challenges.

The contribution of the empirical study is threefold. To the best of our knowledge, it is the first study that conducts a comparison of the factors that influence the stability and profitability of the banking industry in Eurasian Economic Union countries. Secondly, balanced panel data was employed to run regression analysis with the largest banks in Eurasian Economic Union countries. And finally, the impact of a pandemic period on banking stability was employed.

To observe the relation between the dependent and independent variables, a regression analysis was performed. The research employed the panel corrected standard error model (PCSE). Furthermore, the models were tested for robustness. According to the stationarity test, all variables have no unit root. The models are free of multicollinearity. Findings from the autocorrelation test suggest that autocorrelation does not occur. All variables are heteroscedasticity-free.

The results of the study's estimates suggest that bank-specific and macroeconomic variables strongly impact the financial stability in the banking industry. ROA and Z-score mutually positively influence each other, and it is statistically significant. Time dummy 2021 negatively affects profitability and positively on banking stability, and it is statistically significant, in other words the global crisis caused by COVID-19 affected the two variables differently.

Literature Review. The stability of the banking system is of benefit to financial regulatory agencies worldwide. Therefore, it is important to consider how important this issue is. Many authors have studied the stability of the banking sector from various perspectives. Mohammed Adem have focused on the influence of income diversification on the stability of banks and conducted an African cross-country analysis [1]. Pham et al. and Tram et al. have examined determinants of banking stability in Vietnam [2; 3]. The same topic was investigated by other scholars, but they analyzed banks from different countries. Although there is an extensive literature focusing on the stability of banks, only one article is relevant to the purpose of this study. Alexander Karminsky and Alexander Kostrov have compared the financial stability factors of banks in the CIS countries [4]. The above-mentioned authors expect Gamze Danişman did not test multicollinearity, autocorrelation and heteroscedasticity before running regression analysis [5]. In addition to, Ozili empirically investigated banking stability determinants in Africa, where the findings showed that banking efficiency, size and political stability significantly affected the stability of banks[19]. Diaconu and Oanea conducted empirical research on commercial and cooperative banks' stability determinants in Romania, where authors found that interbank offer rate and GDP growth influenced significantly the stability of cooperative banks only [20]. We have reviewed many other outstanding studies related to banking stability [4;5;6;7;8;10;11;12;13;15;16;17;18; and so on]. This study aims to explore the determinants of efficiency, profitability and stability in banking sector of the world for the period 2005-2012. In this study, the effectiveness measured using data shell analysis (DEA), which is subdivided into technical efficiency (TE), net technical efficiency (PTE), and efficiency of scale (SE) [7]. In addition to, Kanapiyanova et al. examined the drivers of banking stability in the case of QISMUT+3 countries (Qatar, Indonesia, Saudi Arabia, Malaysia, the United Arab Emirates, Turkey, Pakistan, Kuwait, and Bahrain), focusing on the determinants of social and government responsibility (SGR). Both main indicators of banking stability, namely profitability and non-performing loans, were considered as dependent variables. The model is studied on the entire sample and separately on commercial banks and Islamic banks [22]. Parmankulova et al. investigated the determinants of bank stability in the case of QISMUT + 3 countries (Qatar, Indonesia, Malaysia, United Arab Emirates, Turkey, Pakistan, Kuwait, and Bahrain). Both bank profitability and NPLs were treated as dependent variables. Three options are considered: the sample as a whole and divided into traditional banks (CB) and Islamic banks (IB). Data from 208 banks, both MB and CB, were used from 2011 to 2018, after the period of the global financial crisis. Generalized two-stage system methods, as well as possible least squares and panel-corrected standard errors, were used to validate the data [23]. The stability of banks depends on various factors such as bank-specific determinants and macroeconomic determinants. Bank-specific factors

contain ROA as a proxy for profitability, bank size, liquidity, asset quality, capital adequacy, management efficiency and the time. Macroeconomic determinants that can affect bank stability include GDP growth, corruption control, political stability, and inflation.

Dependent variable. The most commonly used model for identifying a company's stability is the Altman Z-score model, which has been used extensively by many researchers. The Z-score for bankruptcy prediction was provided in 1968 by Edward I. Altman.

The return on assets (ROA) is used as a dependent indicator of the second regression model. Many authors have studied the influence of factors on the return on assets in the banking industry [6; 7; 14;19;20]. ROA is a ratio of profitability that measures how a business generates profits from total assets.

Independent variables.

Bank-specific determinants

ROA: The return on assets is a measure of the company's profitability. In previous studies authors identified a significant positive relation between profitability and bank stability implying that higher earnings would provide the bank with more resources to deal with unforeseen costs [4; 8; 9].

Z-score: Z-score is a measurement of bank stability. Majed Alharthi and Mohammad Aladwan in their research identified a significant positive impact of Z-score on profitability [6; 7]. The stability of the banking sector indicates its profitability.

Bank size: The results of the studies of Karkowska et al. and Pham et al. reveal a positive and statistically significant impact between size and bank stability [2; 10]. Large banks are more financial stable because they benefit from economies of scale and scope. As a result, they have additional options for spreading out their risks. On the other hand, big banks rely on financial support from the state in the event of their failure and thus they take high credit risks. Accordingly, Tram et al. found that bank size negatively affects stability [3]. Aladwan's research shows that small banks outperform large banks [6].

Liquidity: A company's liquidity is its capacity to turn assets into cash [11]. The effect of liquidity on banking stability and profitability has been studied by a few academics. According to Mohammed Adem, there is a positive and strong correlation between liquidity and bank stability in African nations [1]. Furthermore, the same positive relation was found by Rupeika-Apoga et al. [9]. Davis et al. suggest that liquidity has a positive and significant impact on profitability [12]. This is because liquidity makes banks less vulnerable to unexpected situations.

Asset quality: Asset quality is a significant determinant of Z-score and ROA. This is proved by Rahim et al. and Davis et al. in their study [12; 13]. In addition, results show the positive relationships of bank stability and asset quality, and negative relationships between asset quality and profitability. The higher the asset quality, the lower level of bank credit risk. In an economic crisis, asset quality is a key indicator that will affect the bank stability and profitability.

Capital adequacy: Capital is a safety net for banks during a crisis, accordingly it reduces the insolvency risk. Thus, stability and capital adequacy have a positive and significant link. This confirms the findings of Gamze Danişman where capital adequacy ratio was calculated as the equity to total assets ratio [5].

Management efficiency: The cost to income ratio is used as a proxy of management efficiency. This indicator is significant and negatively affecting stability. Banks with low management efficiency are less stable and vulnerable. The result is consistent with Kasri et al., where they researched the factors that affect bank stability in Indonesia [8].

Macroeconomic determinants.

GDP growth: Based on the results, GDP growth rate is a significant factor which have a positive relation with financial stability. A expanding economy is helpful for the creation of a secure financial system. The higher GDP growth rate, the higher Z-score would be, therefore the bankruptcy risk would be lower. This result is consistent with the studies conducted by Rupeika-Apoga et al. and Tram et al. [3; 9]. According to Ghenimi et al., GDP growth negatively affects banking stability [14]. However, Karkowska et al. found not statistically significant relation between economic growth and bank stability [10].

Corruption control: The positive significant relation between control of corruption and bank stability is confirmed in previous study [12]. High corruption control can decrease bank risk-taking.

Political stability: The relationships between political stability and bank stability was examined by Dias [15]. The author observed a negative significant connection among two variables. A low level of political stability can undermine the country's economy. Consequently, the banking system will be unstable.

Inflation: The research findings indicate that Z-score and inflation rate have a significant positive relationship. This finding is in alignment with the studies of Rupeika-Apoga et al., Pham et al. and Tram et al. [9; 2; 3].

Hypotheses of the study. Based on the above studies, the following hypotheses are assumed to analyze the influence of factors on the stability in the banking system:

H1: Profitability has positive impact on bank stability.
H2: Bank size has positive influence on banking stability.
H3: Relationship of liquidity and bank stability is positive.
H4: Asset quality is positively affecting stability in the banking industry.
H5: Capital adequacy and banking stability have positive relationship.
H6: Management efficiency has negative influence on stability in banking system.
H7: The GDP growth and bank stability relation is positive.
H8: Corruption control positively affects banking stability.
H9: Political stability negatively affects bank stability.
H10: Inflation has positive impact on banking stability.
H11: Time dummy has positive influence on bank stability.

Data and Methodology

Data. The study is conducted to identify the drivers of the stability in the banking industry of Eurasian Economic Union countries. Annual data on 10 commercial banks of the Earasian Economic Union countries (Russia, Belarus, Kazakhstan, Kyrgyzstan, Azerbaijan, and Armenia) cover the period 2016-2021. The data is retrieved from the bank's financial statements during the above-mentioned period. Macroeconomic indicators are additionally gathered from the World Bank database. The panel data statistics was used in this study. The two largest banks from each country were selected without missing values, so the data is fully balanced. In order to reduce the biasedness of the results, balanced panel data is recommended [21].

Methodology. Based on the results of the multicollinearity, autocorrelation and heteroscedasticity tests, PCSE (panel corrected standard error) was utilized for regression analysis. This model is used if number of variables > time period (N>T). The research data cover 12 variables and 6 years. Z-score is a measurement of bank stability and calculated using Groeneveld and De Vries [16] presented equation (1):

$$\text{Z} - \text{score} = \frac{ROA + \frac{E}{A}}{\sigma(ROA)} \quad (1)$$

Where,
ROA (return on assets) – net income to total assets ratio;
E/A – equity to total assets ratio;
σ(ROA)– standard deviation of net income to total assets.
The dependent variable of the second regression model is the return on assets (ROA), which is calculated as:

$$\text{ROA} = \frac{Net\ income}{Total\ assets} \quad (2)$$

In order to identify the drivers of banking stability and profitability, regression models were conducted, as follows:

$$\text{Z-score} = \beta_0 + \beta(\text{ROA}) + \beta_2(\text{SIZE}) + \beta_3(\text{LTQ}) + \beta_4(\text{ASQ}) + \beta_5(\text{CAR}) + \beta_6(\text{MEFF}) + \beta_7(\text{GDP}) + \beta_8(\text{COR}) + \beta_9(\text{PS}) + \beta_{10}(\text{INF}) + \beta_{11}(\text{DUMMY}) + \varepsilon \quad (3)$$

$$ROA = \beta_0 + \beta_1(\text{Z-score}) + \beta_2(\text{SIZE}) + \beta_3(\text{LIQ}) + \beta_4(\text{ASQ}) + \beta_5(\text{CAR}) + \beta_6(\text{MEFF}) + \beta_7(\text{GDP}) + \beta_8(\text{COR}) + \beta_9(\text{PS}) + \beta_{10}(\text{INF}) + \beta_{11}(\text{DUMMY}) + \varepsilon \quad (4)$$

Where,
ROA – return on assets as a proxy of profitability;
Z-score – measurement of profitability;
SIZE – natural logarithm of total assets;
LIQ – ratio of current assets to current liabilities as a measure of liquidity;
ASQ – total loans to total assets as an indicator of asset quality;
CAR – total equity to total assets as a measure of capital adequacy;
MEFF – ratio of cost to income as a management efficiency indicator;
GDP – GDP growth rate;
COR – level of corruption control;
PS – political stability index;
INF – inflation rate;
DUMMY – 2020-2021 year.

Empirical Results. Theoretically, the research is based on a panel corrected standard error model (PCSE) because the number of variables is greater than years studied. The research data cover 12 variables and 6 years. Before running the regression analysis, the models were tested for robustness. This is necessary to select the best model. The stationarity test reveals that all variables have no unit root. The multicollinearity test results showed a value below 5 consequently the models are free from multicollinearity. Based on results of autocorrelation test, there is no autocorrelation. Heteroscedasticity is greater than 0.10, so it can be concluded that all variables do not occur heteroscedasticity.

The variables' descriptive statistics are shown in Table 1.

Table 1 – Descriptive Statistics

Variable	Obs	Mean	Min	Max	Std.Dev.
Z-score	60	1.736332	-5.685	4.353	1.404478
ROA	60	0.0195209	-0.324299	0.1843515	0.0540102
Size	60	5.509753	3.465829	7.064094	1.047702
LQR	60	0.3436461	0.0685381	0.7476411	0.1719474
ASQ	60	0.5470433	0.152144	0.8256078	0.1411546
CAR	60	0.1320762	0.05901	0.8952	0.1063333
MEFF	60	0.4583903	0.1404082	1.5613	0.2105106
GDP	60	0.0209167	-0.084	0.076	0.0333854
COR	60	-0.5671717	-1.124734	0.0721499	0.3306444
PS	60	-0.3229023	-0.9462103	0.3480572	0.3273657
INF	60	0.0645936	-0.0140361	0.1454602	0.0378077
Note – completed by the authors based on the source [17; 18].					

The research includes 10 largest commercial banks of the Eurasian Economic Union countries (Russia, Belarus, Kazakhstan, Kyrgyzstan, Azerbaijan, and Armenia) covering the period 2016-2021. The two largest banks from each country were selected without missing values, so the data is fully balanced. The main reason of selecting only 10 banks is that their financial data fully balance without missing values. The descriptive statistics results show that the highest Z-score is 4.353 for First Heartland Jusan Bank JSC in Kazakhstan (2019). Further, the minimum value of the Z-score is -5.685 for Bank RBK JSC (2017). In addition, ROA has an average value of 1.9 % with the lowest value of -32 % and the maximum value of 18 %. It shows a significant gap in bank stability and ROA. Moreover, bank's size, liquidity (LQR), asset quality (ASQ), capital adequacy (CAP), and management efficiency (MEFF) have an average value of 5.509, 0.343, 0.547, and 0.132 respectively, with a significant distinction. Macroeconomic variables have a huge rage too.

The table 2 below shows correlation test which show how closely related the dependent and independent variables are.

Table 2 – Correlation Analysis

	Z-score	ROA	Size	LQR	ASQ	CAR	MEFF	GDP	COR	PS	INF
Z-score	1.000										
ROA	0.825	1.000									
Size	0.233	0.045	1.000								
LQR	-0.054	0.046	-0.384	1.000							
ASQ	-0.242	-0.09	0.122	-0.301	1.000						
CAR	0.096	0.115	-0.056	0.102	-0.034	1.000					
MEFF	0.034	-0.058	-0.306	0.06	0.171	-0.024	1.000				
GDP	-0.005	-0.025	0.195	-0.186	0.129	-0.079	0.062	1.000			
COR	0.135	0.112	0.285	-0.382	-0.049	0.025	0.043	0.064	1.000		
PS	0.082	-0.077	0.413	-0.599	-0.039	-0.124	-0.096	0.199	0.233	1.000	
INF	0.029	-0.067	0.148	-0.255	-0.105	-0.344	-0.025	-0.141	-0.062	0.351	1.000
Note – completed by the authors based on the source [17; 18].											

As a result, a high correlation is found between Z-score and ROA, Z-score and bank size, political stability and bank size, inflation and political stability. Other variables have a modest correlation. There are also negative correlations.

According to table 3, the mean of VIF is less than 5, indicating that there is no multicollinearity in the models. The regression models show a valid correlation between the independent variables. No corrections are required to the models.

Table 3 – Variance Inflationary Factor (VIF)

Variables	Z-score	ROA
GDP	5.32	5.33
Year 2020	4.77	4.77
INF	2.66	2.67
PS	2.39	2.38
LQR	2.39	2.42
Size	1.98	2.12
Year 2021	1.85	1.86
COR	1.67	1.66
ASQ	1.51	1.66
CAR	1.43	1.43
MEFF	1.24	1.29
ROA	1.05	-
Z-score	-	1.23
Mean VIF	2.36	2.40
Note – completed by the authors based on the source [17; 18].		

The article uses the results estimated by panel corrected standard error model (PCSE). Table 4 displays the outcomes of estimating the variables in the PCSE model.

Table 4 – PCSE regression

	Z-score (model 1)	ROA (model 2)
ROA	21.460*** (21.63)	-
Z-score	-	0.035*** (13.43)
Size	0.372*** (4.33)	-0.012*** (-2.79)
Liquidity	-1.255 (-1.59)	0.052** (1.76)
Asset quality	-2.726*** (-4.16)	0.066*** (2.43)
Capital adequacy	0.318 (0.63)	-0.012 (-0.67)
Management efficiency	1.222*** (4.79)	-0.024 (-1.60)
GDP	-3.672 (-1.04)	0.095 (0.71)
Control of corruption	-0.757*** (-3.37)	0.029*** (3.00)
Political stability	0.632*** (2.25)	-0.031*** (-2.89)
Inflation	-3.484 (-1.46)	0.062 (0.67)
Year 2020	0.135 (0.45)	-0.012 (-0.99)
Year 2021	0.504*** (3.53)	-0.021*** (-3.16)
Constant	0.724 (1.20)	-0.019 (-0.74)
R-squared	0.897	0.889
Observations	60	60
Number of groups (banks)	10	10
AR1 p-value	0.53***	0.92***
Note 1 – completed by the authors based on the source [17; 18]. Note 2 – *p<0.10, **p<0.05, ***p<0.010.		

After conducting test on the robustness of the model, the panel corrected standard error model (PCSE) was chosen. Table 4 presents the results of regression in which Altman The Z-score is used as a measurement of banking stability and profitability is proxied by ROA. The results suggest that 1 % increase in constant variable will increase Z-score and decrease ROA by 0.724 % and 0.019 %, and it is not significant, that is to say there will be no change in these dependent variables. Capital adequacy, GDP and inflation have no impact on Z-score and ROA, due to its non-significance. Liquidity does not have any influence on bank stability. Further management efficiency does not affect profitability. ROA and Z-score mutually positively influence each other, and it is statistically significant. 1 % increase in return on assets that will increase bank's stability by 21.46 %. When profit increase, there is more funds for the bank to cover unforeseen expenses. This result is similar to the results in previous empirical studies [4; 8; 9]. 1 % increase in Z-score, profitability will rise by 0.035 %. A high Z-score suggests lower bankruptcy risk and greater financial stability. Accordingly, the stability of the bank indicates its profitability. Majed Alharthi found a positive influence between Z-score and profitability [7]. Size of the bank has a significant positive influence on banking stability and negative impact on profitability. 1 % increase in bank size, Z-score will go up by 0.372 %. Large banks have more options for risk diversification, so they are more stable. This result aligned with outcomes of Karkowska et al. and Pham et al. [10; 2]. However, the opposite result in Tram's et al. study showed that bank size negatively affects the stability of bank [3]. 1 % increase in bank size, ROA will decrease by 0.012 %. According to Mohammad

Aladwan's research, small banks demonstrate higher overall performance than large banks [6]. Liquidity has positive impact on profitability, and it is statistically significant. 1 % increase in liquidity, profitability will rise by 0.052 %. A high level of liquidity reflects the bank's profitability. Davis et al. assert that liquidity has a significant and positive impact on profitability [12]. Asset quality is positively affecting ROA, and it is statistically significant. Asset quality and bank stability, on the other hand, have a negative and significant link. If asset quality goes up by 1 %, profitability will go up by 0.066 %. 1 % increase in asset quality, banking stability will go down by 2.726 %. Low bank credit risk is caused by high asset quality, hence the bank will be profitable and stable. The opposite conclusion in Davis's et al. article suggests a negative relationship between asset quality and profitability [12]. The results of Rahim et al. show the positive relationships of bank stability and asset quality [13]. The management efficiency indicator shows a significant and positive influence on banking stability. 1 % increase in management efficiency, that Z-score will increase 1.222 %. Banks with high management efficiency are more stable. This finding is not consistent with Kasri et al., where they researched the drivers of banking stability in Indonesia [8]. The result showed the negative and significant relation between corruption control and the stability of the bank. If level of control of corruption will increases by 1 %, banking stability will reduce by 0.757 %. A prior study found a positive correlation between these variables [15]. A high level of corruption control can reduce a bank risk-taking. Moreover, there is a positive relation between corruption control and profitability. 1 % rise in control of corruption, profitability will increase by 0.029 %. Political stability has positive impact on bank stability and negative impact on profitability. 1 % increase in political stability, that banking stability will grow up by 0.632 % and profitability will reduce by 0.031 %. Dias observed a negative significant connection among bank stability and political stability [15]. Time dummy 2020 year does not have any impact on profitability and bank's stability, due to its non-significance. Profitability is negatively impacted by Time Dummy 2021, while banking stability is positively impacted. And it is statistically significant, in other words the financial crisis caused by COVID-19 affected the two variables differently. 1 % increase in time dummy 2021, Z-Score will boost by 0.504 % and profitability will reduce by 0.021 %.

R-squared shows how well the data fit the regression model. In model 1 (Z-score) and model 2 (ROA) 89 % of variations in dependent variable, can be explained by variations in independent variables. F test shows that the whole model is best fitted or financially validated.

CONCLUSION

In this study, the impact of macroeconomic and bank-specific factors on the stability of the banking sector in EAEU countries was investigated. For regression analysis, the panel corrected standard error model (PCSE) was employed. The World Bank database is used to retrieve the data. Moreover, the data was received from 10 commercial banks of the Earasian Economic Union countries (Russia, Belarus, Kazakhstan, Kyrgyzstan, Azerbaijan, and Armenia) between 2016 and 2021. It was discovered that ROA and Z-score mutually positively affecting each other, and it is significant. Bank size, management efficiency and political stability have significant positive relationship with banking stability. Liquidity, asset quality and control of corruption have significant positive impact on profitability. However asset quality and control of corruption have got positive impact on bank stability. Size and political stability negatively affecting profitability in banking industry of EAEU countries. Time dummy 2021 has negative impact on profitability and positive on banking stability, and it is statistically significant. The above independent variables affected the two dependent variables differently.

These findings may help policymakers and bank regulators to maintain the bank's stability. High corruption and high asset quality lead to increased credit risks, so this needs to be monitored closely. In addition, the smaller the banking assets are the higher their profitability. Finally, future research might perform a comparative analysis between EAEU countries on indicators of stability or profitability.

REFERENCES

1. Adem M. Impact of income diversification on bank stability: a cross-country analysis // Asian Journal of Accounting Research. – 2022. – (ahead-of-print). – DOI: https://doi.org/10.1108/AJAR-03-2022-0093.

2. Pham T. T., Dao L. K. O., Nguyen V. C. (2021). The determinants of bank's stability: a system GMM panel analysis // Cogent Business & Management. – 2021. – 8(1). – Article 1963390.

3. Tram T. X. H., Nguyen T. N. Factors affecting the stability of commercial banks in Vietnam // International Conference on - CIFBA 2020. – 2022. – P. 545-555.

4. Karminsky A., Kostrov A. Comparison of bank financial stability factors in CIS countries // Procedia Computer Science. – 2014. – 31. – P. 766-772.

5. Danişman G. Determinants of bank stability: A financial statement analysis of Turkish banks // Sosyoekonomi. – 2018. – 26(38). – P. 87-103.

6. Aladwan M. S. The impact of bank size on profitability "an empirical study on listed Jordanian commercial banks" // European Scientific Journal. – 2015. –11(34). – P. 217-236.

7. Alharthi M. The determinants of efficiency, profitability and stability in the banking sector: a comparative study of Islamic, conventional and socially responsible banks: PhD Thesis. – Plymouth University, 2016. – 328 p.

8. Kasri R. A., Azzahra C. Determinants of Bank Stability in Indonesia // Signifikan: Jurnal Ilmu Ekonomi. – 2020. – 9(2). – P. 153-166.

9. Rupeika-Apoga R., Zaidi S. H., Thalassinos Y. E., Thalassinos E. I. Bank stability: The case of Nordic and non-Nordic banks in Latvia // International Journal of Economics and Business Administration. – 2018. – 6(2). – P. 39-55.

10. Karkowska R., Pawłowska M. The concentration and bank stability in Central and Eastern European countries. NBP Working Paper No. 272. – Narodowy Bank Polski, Education & Publishing Department, 2017. – 28 p.

11. Beniston S. Liquidity [Electronic resource] // BDC Advisory Services [website]. – n.d. – URL: https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/templates-business-guides/glossary/liquidity# (Accessed: 22.12.2022).

12. Davis E. P., Ali Abdilahi R. Econometric Analysis of the Determinants of Bank Profitability in Three Major African Counties: Kenya, Nigeria and South Africa. NIESR Discussion Paper No. 536. – National Institute of Economic and Social Research, 2022. – 42 p.

13. Rahim S. R. M., Hassan N. M., Zakaria R. H. Islamic Vs. Conventional Bank Stability: "A Case Study Of Malaysia" // Prosiding Persidangan Kebangsaan Ekonomi Malaysia Ke VII. – 2012. – 840. – P. 839-850.

14. Ghenimi A., Chaibi H., Omri M. A. B. The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region // Borsa Istanbul Review. – 2017. – 17(4). – P. 238-248.

15. Dias R. Capital regulation and bank risk-taking–new global evidence // Accounting & Finance. – 2021. – 61(1). – P. 847-884.

16. Groeneveld J. M., de Vries B. European cooperative banks: first lessons from the subprime crisis // International Journal of Co-operative Management. – 2009. – 4. – P. 8-22.

17. World Bank. World Development Indicators 2020: From the World Bank Database. The World Bank, 2020.

18. World Bank. World Development Indicators 2021: From the World Bank Database. The World Bank, 2021.

19. Ozili P. K. Banking stability determinants in Africa // International Journal of Managerial Finance. – 2018. – 14(4). – P. 462-483.

20. Diaconu R. I., Oanea D. C. The main determinants of bank's stability. Evidence from Romanian banking sector // Procedia Economics and Finance. – 2014. – 16. – P. 329-335.

21. Baltagi B. H., Demetriades P. O., Law S. H. Financial development and openness: Evidence from panel data // Journal of development economics. – 2009. – 89(2). – P. 285-296.

22. Kanapiyanova K., Faizulayev A., Ruzanov R., Ejdys J., Kulumbetova D., Elbadri M. Does social and governmental responsibility matter for financial stability and bank profitability? Evidence from commercial and Islamic banks // Journal of Islamic Accounting and Business Research. – 2023. – 14(3). – P. 451-472.

23. Parmankulova I., Issakhova P., Zhanabayeva Z., Faizulayev A., Orazymbetova K. The drivers of financial vulnerability and profitability: evidence from conventional and Islamic banks in Islamic finance-oriented

countries // Journal of Islamic Accounting and Business Research. – 2022. – 13(6). – P. 902-919. – DOI: https://doi.org/10.1108/JIABR-06-2021-0155.

REFERENCES

1. Adem, M. (2022). Impact of income diversification on bank stability: a cross-country analysis. Asian Journal of Accounting Research, (ahead-of-print), DOI: https://doi.org/10.1108/AJAR-03-2022-0093.

2. Pham, T. T., Dao, L. K. O. and Nguyen, V. C. (2021). The determinants of bank's stability: a system GMM panel analysis. Cogent Business & Management, 8(1), 1963390.

3. Tram, T. X. H., and Nguyen, T. N. (2020). Factors affecting the stability of commercial banks in Vietnam. International Conference on - CIFBA 2020, 545-555.

4. Karminsky, A. and Kostrov, A. (2014). Comparison of bank financial stability factors in CIS countries. Procedia Computer Science, 31, 766-772.

5. Danişman, G. (2018). Determinants of bank stability: A financial statement analysis of Turkish banks. Sosyoekonomi, 26(38), 87-103.

6. Aladwan, M. S. (2015). The impact of bank size on profitability "an empirical study on listed Jordanian commercial banks". European Scientific Journal, 11(34), 217-236.

7. Alharthi, M. (2016). The determinants of efficiency, profitability and stability in the banking sector: a comparative study of Islamic, conventional and socially responsible banks: PhD Thesis. Plymouth University, 328 p.

8. Kasri, R. A. and Azzahra, C. (2020). Determinants of Bank Stability in Indonesia. Signifikan: Jurnal Ilmu Ekonomi, 9(2), 153-166.

9. Rupeika-Apoga, R., Zaidi, S. H., Thalassinos, Y. E. and Thalassinos, E. I. (2018). Bank stability: The case of Nordic and non-Nordic banks in Latvia. International Journal of Economics and Business Administration, 6(2), 39-55.

10. Karkowska, R. and Pawłowska, M. (2017). The concentration and bank stability in Central and Eastern European countries. NBP Working Paper No. 272. Narodowy Bank Polski, Education & Publishing Department, 28 p.

11. Beniston, S. (n. d.). Liquidity. BDC Advisory Services. Retrieved December 20, 2022, from https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/templates-business-guides/glossary/liquidity#.

12. Davis, E. P. and Ali Abdilahi, R. (2022). Econometric Analysis of the Determinants of Bank Profitability in Three Major African Counties: Kenya, Nigeria and South Africa. NIESR Discussion Paper No. 536. National Institute of Economic and Social Research, 42 p.

13. Rahim, S. R. M., Hassan, N. M. and Zakaria, R. H. (2012). Islamic Vs. Conventional Bank Stability: "A Case Study Of Malaysia". Prosiding Persidangan Kebangsaan Ekonomi Malaysia Ke VII, 840, 839-850.

14. Ghenimi, A., Chaibi, H. and Omri, M. A. B. (2017). The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region. Borsa Istanbul Review, 17(4), 238-248.

15. Dias, R. (2021). Capital regulation and bank risk-taking–new global evidence. Accounting & Finance, 61(1), 847-884.

16. Groeneveld, J. M. and de Vries, B. (2009). European cooperative banks: first lessons from the subprime crisis. International Journal of Co-operative Management, 4, 8-22.

17. World Bank. (2020). World Development Indicators 2020: From the World Bank Database. The World Bank.

18. World Bank. (2021). World Development Indicators 2021: From the World Bank Database. The World Bank.

19. Ozili, P. K. (2018). Banking stability determinants in Africa. International Journal of Managerial Finance, 14(4), 462-483.

20. Diaconu, R. I. and Oanea, D. C. (2014). The main determinants of bank's stability. Evidence from Romanian banking sector. Procedia Economics and Finance, 16, 329-335.

21. Baltagi, B. H., Demetriades, P. O. and Law, S. H. (2009). Financial development and openness: Evidence from panel data. Journal of development economics, 89(2), 285-296.

22. Kanapiyanova, K., Faizulayev, A., Ruzanov, R., Ejdys, J., Kulumbetova, D. and Elbadri, M. (2023). Does social and governmental responsibility matter for financial stability and bank profitability? Evidence from commercial and Islamic banks. Journal of Islamic Accounting and Business Research, 14(3), 451-472.

23. Parmankulova, I., Issakhova, P., Zhanabayeva, Z., Faizulayev, A. and Orazymbetova, K. (2022). The drivers of financial vulnerability and profitability: evidence from conventional and Islamic banks in Islamic finance-oriented countries. Journal of Islamic Accounting and Business Research, 13(6), 902-919, DOI: https://doi.org/10.1108/JIABR-06-2021-0155.

COVID-19 ПАНДЕМИЯСЫНЫҢ БАНК САЛАСЫНЫҢ ҚАРЖЫЛЫҚ ТҰРАҚТЫҒЫНА ӘСЕРІ: ЕУРАЗИЯЛЫҚ ЭКОНОМИКАЛЫҚ ОДАҚ ЕЛДЕРІНІҢ МЫСАЛЫ

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АНДАТПА

Зерттеудің мақсаты – Еуразиялық экономикалық одақ елдері мысалында банктік және макроэкономикалық айнымалылардың банк секторының тұрақтылығына әсерін анықтау. Ол үшін KASE деректер базасы мен Дүниежүзілік банк деректер базасы пайдаланылды. Еуразиялық экономикалық одақ елдерінің (Ресей, Беларусь, Қазақстан, Қырғызстан, Әзірбайжан және Армения) 10 коммерциялық банкінен 2016-2021 жылдар аралығындағы деректер алынды.

Әдістеме – тәуелді және тәуелсіз айнымалылардың қатынасын байқау үшін панельдік түзетілген стандартты қателік үлгісі (PCSE). Altman Z-балы қаржылық тұрақтылық көрсеткіші ретінде пайдаланылады. Активтердің рентабельділігі (ROA) компанияның табыстылығының көрсеткіші болып табылады.

Зерттеудің бірегейлігі / *ерекшелігі* Еуразиялық экономикалық одақ елдерінің банк саласының тұрақтылығы мен табыстылығына әсер ететін факторларды салыстыруда.

Зерттеуді бағалау нәтижелері банк секторындағы қаржылық тұрақтылыққа банктік және макроэкономикалық факторлардың күшті әсер ететінін көрсетеді. Мысалы, активтер сапасы мен сыбайлас жемқорлықпен күрес банктердің тұрақтылығына қатты және теріс байланысты. Екінші жағынан, активтердің кірістілігі (ROA), банк көлемі, саяси тұрақтылық және уақыттың банк жүйесінің тұрақтылығына жалған әсері оң және статистикалық маңызды.

Түйін сөздер: банк саласы, қаржылық тұрақтылық, ЕЭО елдері, табыстылық, Z- көрсеткіші.

ВЛИЯНИЕ ПАНДЕМИИ COVID-19 НА ФИНАНСОВУЮ СТАБИЛЬНОСТЬ БАНКОВСКОЙ ОТРАСЛИ: НА ПРИМЕРЕ СТРАН ЕВРАЗИЙСКОГО ЭКОНОМИЧЕСКОГО СОЮЗА

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АННОТАЦИЯ

Цель исследования – выявить влияние банковских и макроэкономических переменных на стабильность банковского сектора на примере стран Евразийского экономического союза. Для этого были использованы база данных KASE и база данных Всемирного банка. Данные получены от 10 коммерческих банков стран Евразийского экономического союза (России, Белоруссии, Казахстана, Киргизии, Азербайджана и Армении) за период 2016-2021 гг.

Методология представляет собой модель стандартной ошибки с панельной коррекцией (PCSE) для наблюдения за отношением зависимых и независимых переменных. Z-показатель Альтмана используется как индикатор финансовой устойчивости. Рентабельность активов (ROA) – показатель прибыльности компании.

Оригинальность исследования заключается в сравнении факторов, влияющих на устойчивость и прибыльность банковской отрасли стран Евразийского экономического союза.

Результаты оценки исследования показывают, что специфические для банка и макроэкономические факторы сильно влияют на финансовую стабильность в банковском секторе. Например, качество активов и борьба с коррупцией существенно и отрицательно связаны со стабильностью банков. С другой стороны, рентабельность активов (ROA), размер банка, политическая стабильность и фиктивное влияние времени на стабильность банковской системы являются положительными и статистически значимыми.

Ключевые слова: банковская отрасль, финансовая стабильность, страны ЕАЭС, прибыльность, Z-показатель.

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ВЛИЯНИЕ ПОТРЕБИТЕЛЬСКОГО КРЕДИТА НА СТАБИЛЬНОСТЬ БАНКОВСКОЙ СИСТЕМЫ: АНАЛИЗ ЭКОНОМИЧЕСКИХ И ПСИХОЛОГИЧЕСКИХ ФАКТОРОВ

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АННОТАЦИЯ

Цель исследования – определить влияние потребительского кредитования на банковскую устойчивость и оценить ее зависимость от экономических показателей.

Методология исследования основана на качественных и количественных подходах. В статье использовались методы регрессионного анализа, трансформация отображения аналитических данных, анализ и синтез.

Оригинальность / ценность исследования. Безусловная уникальность данной статьи заключается в том, что авторы на основе расчетов определили зависимость потребительского кредитования как от макроэкономических, так и от психологических факторов.

Результаты исследования. Авторы в результате эконометрических расчетов получили потребительскую функцию, как основного показателя совокупного спроса, которая влияет на экономический рост. Выявили низкую зависимость потребительского кредитования от: ставки процента, среднемесячного дохода населения и инфляции. Результат множественной регрессия показывал, что макроэкономические факторы только на 43,3 % объясняют рост потребительского кредитования. На ряду с этим,