EXAMINING THE RELATIONSHIP BETWEEN COMMERCIAL BANKING PRACTICES AND FINANCIAL STABILITY

Murad Ahmed[1*], Muhammad Farhan Aslam[2], Maira Khalid[3], Dr Hamid Khan[4], Taimur Ashiq[5]

[1*]International Islamic University Islamabad, Faculty of Management Sciences
[2&3]Mphil in Economics, National College Business Administration & Economics sub-campus Multan
[4]Assistant professor, Institute of Business Administration, Gomal University Dera Ismail Khan
[5]Mphil in Economics, School of Economics, Henan University China

[1*]muradmomand260@gmail.com, [2]farhan_aslam38@yahoo.com, [3]mairakhalid57@gmail.com
[4]hamid.nido@gmail.com, [5]taimurashiq@gmail.com

Corresponding Author: *

ABSTRACT

Background: Examining the relationship between commercial banking practices and financial stability involves analyzing how various banking activities, risk management strategies, and regulatory compliance measures impact the overall health and resilience of the financial system.

Objective: This study aims to identify key practices that contribute to or undermine financial stability, providing insights for policymakers and industry stakeholders to enhance economic robustness.

Methods: The study's respondents were chosen at random from among commercial bank senior management. Two senior managers from each bank received questionnaires, for a total sample size of 82 responses. The questionnaires were distributed using a drop-and-pick technique by the researcher. The features of the variables under research were captured and quantitative data was analyzed using descriptive statistics, such as means and frequencies. In addition, the link between the independent and dependent variables was ascertained by the application of inferential statistics like regression and correlation.

Results: Financial stability was shown to be impacted by the operational costs of commercial banks, bank size, board size, capital size, prudent interest rate policy, and productive staff. According to the model summary, internal variables together were responsible for 26.3% of the variation in financial stability. Furthermore, external determinants influencing financial stability were found to include interest rates, inflation rates, interest rate spreads, currency rates, and GDP growth, which accounted for 29.1% of the variation. The findings also demonstrated how commercial banks improved their financial stability through the application of financial innovations, bank policy, income diversification, financial reconciliation, and supervision.

Conclusion: In conclusion, both internal and external factors significantly influence commercial bank financial stability, with banks enhancing stability through financial innovations, policy measures, income diversification, financial reconciliation, and supervision.

Keywords: Financial Stability, Banking Practices, Risk Management, Regulatory Compliance

INTRODUCTION

In today's financial environment, the economy's general health is greatly influenced by the stability of commercial banks. In addition to being the backbone of financial intermediation, the commercial banking industry is also essential to preserving systemic stability. It is imperative that politicians, regulators, and financial institutions comprehend the complex interplay between commercial banking practices and financial stability[1]. This link takes into account a number of factors, including as capital sufficiency,

regulatory compliance, and risk management techniques, all of which have an impact on how resilient financial institutions are as well as the overall state of the economy.

The methods of commercial banking have seen considerable changes due to regulatory reforms, technological improvements, and shifting market dynamics. In the past, banks have modified their procedures to control the risks connected to lending, investing, and day-to-day operations. Nevertheless, there is a chance that these actions might have both beneficial and detrimental effects on financial stability. For example, aggressive lending or insufficient capital buffers may increase vulnerability to economic shocks, even as good risk management can improve stability[2]. By analyzing the intricate interactions between these activities and their effects on financial stability, this research seeks to provide insight on the ways in which various banking practices and legal frameworks either enhance or diminish systemic resilience.

It is critical to take into account both recent advancements and historical antecedents while analyzing this connection. The global financial crisis of 2008 brought to light the consequences of careless banking operations and insufficient regulatory supervision, highlighting the need for a more thorough comprehension of the ways in which commercial banking activities affect the stability of financial markets. By examining this relationship, the research hopes to provide light on efficient banking procedures and legislative measures that support financial stability and guarantee a strong and resilient banking industry that can endure upcoming economic difficulties[2][3].

3. Literature review:

Researchers, analysts, business leaders, and academics have all paid close notice to the sudden and massive increase in investment within financial institutions in recent years. This increased attention is a result of its vital role in supporting international sustainable economic growth.

Cultivating a strong, resilient, and stable financial system has become more important, especially after the global financial crisis of 2007/2008 that resulted in the failure of several large commercial banks. This is now a key strategic objective that directs monetary and financial policies meant to support all-encompassing economic growth.

The examination of the connection between commercial banking operations and financial stability has become a more prominent topic of recent study. Numerous empirical studies have examined the ways in which factors such as rivalry among banks impact financial stability, yielding a variety of conclusions. The contradicting findings from this corpus of literature underscore the intricacy of the relationship between banking practices and stability in the contemporary financial environment. Financial stability and the degree of competition in the banking industry are strongly correlated, according to recent empirical research by Kasman & Kasman (2015), Schaeck & Cihák (2014), Noman et al. (2018), Ahi & Laidroo (2019), Antony et al. (2021), and Mamadou Asngar et al. (2022). The "competition-stability" hypothesis, which postulates that greater financial stability is a result of heightened competition in the banking sector, is supported by these findings[13][6].

Ozili (2024) used a sample of 48 African nations to look at the factors that influence banking stability between 1996 and 2023. The study used the Z-Score index to evaluate bank stability and the cost-to-net-income ratio as a stand-in for banking efficiency. The results demonstrate the continued importance of efficiency in preserving stability within the region's financial sector by showing that banking efficiency is still a significant factor in determining financial stability in African banks[20].

Phan et al. (2023) looked at the relationships between random countries. They examined cost efficiency using both Data Envelopment Analysis (DEA) and Stochastic Frontier Analysis (SFA), and they utilized the Z-score index to gauge financial stability. The competition-fragility theory was supported by their study, which implies that heightened rivalry among banks might have a beneficial effect on their stability. Furthermore, the DEA results showed a favorable correlation between stability and cost effectiveness. On the other hand, bank efficiency had a detrimental, though not statistically significant, effect on financial stability according to SFA data.

Neaime and Gaysset (2024) examined the relationship between financial inclusion, banking stability, income inequality, and poverty in eight MENA region countries over the period from 2002 to 2015. Their findings indicate that financial inclusion positively contributes to reducing income inequality. However, the link between financial inclusion and poverty was not statistically or

economically significant. The study also found a significant positive correlation between financial inclusion measures and bank financial stability[17].

Alvi et al. (2024) investigated the effects of financial inclusion policies on banking stability by examining data from 88 banks in the South Asian area (Pakistan, Bangladesh, Sri Lanka, and India) from 2012 to 2018. According to their results, increasing financial inclusion has a favorable impact on South Asian banks' financial soundness[3].

Since 2011, Feghali et al. (2023) have focused on international banking systems while analyzing the effect of financial inclusion on bank stability. Their analysis, which used a sample of more than 140 nations, discovered that credit inclusion on its own can have a detrimental impact on bank soundness, underscoring the necessity of balanced financial inclusion strategies to preserve financial stability[8]. Recent research indicates that, even when utilizing a complete financial inclusion index, it is still unclear how financial inclusion policies would affect bank stability. According to a recent study, policies that emphasize payment and savings account accessibility might either have a neutral or positive effect on people's capacity to maintain their financial stability. On the other hand, it has been determined that the growth of credit may be a factor undermining stability.

From 20018 to 2023, Jungo et al. (2024) looked at the relationship between inclusion and competitiveness and bank stability in two different samples: 31 nations in Latin America and the Caribbean (LAC) and 41 countries in Sub-Saharan Africa (SSA). According to their results, banks' stability is improved by financial inclusion in both the SSA and LAC areas. except banking regulation does nothing except make Latin American nations more stable. Furthermore, banks' stability is adversely impacted by rising competition, while financial regulation in both regions lessens this negative effect[12].

From 2000 to 2015, Zeqiraj et al. (2024) looked at how banking performance affected the financial stability of commercial banks in Southeastern Europe. They evaluated financial stability using the Z-Score index and utilized return on equity (ROE) and return on assets (ROA) as performance metrics. Their results show that ROE and ROA considerably improve the financial stability of institutions. The study points out a vacuum in the literature by pointing out that financial indicators, banking efficiency, national financial inclusion, and financial development have received less attention than competition and concentration, which have received the majority of prior research attention. In order to close these gaps, this study offers fresh empirical data on the ways in which these variables affect the financial stability of banks[26]

4.Material and method:
4.1The Study Sample:
This was a descriptive study where the researchers gathered data from the published to investigate the relationship between mobile banking deepening and financial performance of commercial banks around the world.

The empirical data used in this study comes from a balanced panel dataset that includes all banks who operated between 2020 and 2024. [4]. The selection of these banks was based on their presence on the stock exchanges inside their respective nations. The study employed both quantitative methods through analysis of the financial statements using various models and ratios to provide predominantly quantitative and qualitative data to the study. The qualitative data was used to shed some light on the quantitative data to enable for a more in-depth analysis of the research problem. The study employed both quantitative methods through analysis of the financial statements using various models and ratios to provide predominantly quantitative data to the study[1][5]. Quantitative data enabled for a more in-depth analysis of the research problem.

4.2 Data Analysis:
In order to investigate the connection between commercial banking practices and financial stability, the data had to be methodically arranged, recorded, and analyzed. Based on the respondents' descriptions of the circumstances, this procedure involved finding patterns, themes, categories, and trends[6]. In order to ensure a full interpretation, a thorough cross-examination was carried out following the first study to confirm the trends and patterns across different ratios and models. Following the coding of the data, it was subjected to a thorough examination using the statistical software SPSS.

There are normally two main parts in this section as shown below.

4.3 Conceptual Model:

This can be expressed mathematically as:

$Y=f(x1)Y = f(x1)Y=f(x1)$

where Financial Performance = **f**(Mobile Banking Deepening)

In this study, the independent variable is the depth of financial development in the banking industry, measured by the ratio of total commercial bank deposits to GDP over the past five years. Financial performance is assessed using the return on assets of the banks[7].

Theoretically, financial development fosters economic growth through two main channels: supply-leading, where financial development drives growth, and demand-following, where growth creates demand for financial products. A substantial body of empirical research supports the notion that financial system development enhances economic growth. Studies consistently show a positive relationship between various measures of financial development (such as assets of financial intermediaries, liquid liabilities of financial institutions, domestic credit to the private sector, and market capitalization of stocks and bonds) and economic growth[14]. Recent endogenous growth literature, which focuses on learning-by-doing processes, also highlights the crucial role of finance[14].

Financial deepening reflects the ability of financial institutions to effectively mobilize savings for investment. It signifies the expansion of domestic savings, which forms the foundation for creating diverse financial claims. Additionally, it implies active participation of financial institutions in markets, providing quality financial instruments and services. Financial deepening is generally associated with a higher ratio of money supply to GDP.

4.4 Analytical Model:

The algebraic representation of the conceptual model is as follows:

$Y= \beta0+\beta1 \; X1+\beta2 \; X2+\beta3 \; X3+\beta4 \; X4+\beta5 \; X5+\epsilon$

Where:

- Y represents the dependent variable, financial performance (e.g., Return on Assets, ROA).
- $\beta0$ is the regression constant.
- $\beta1,\beta2,\beta3,\beta4$, and $\beta5$ are the coefficients of the independent variables.

The independent variables are defined as:

- X1 = Number of customers reached through mobile banking technology annually / Total number of customers annually.
- X2= Volume of transactions handled through mobile banking annually / Total volume of transactions annually.
- X3 = Deposits mobilized through mobile banking innovations / Total deposits mobilized annually.
- X4 = Size of the company, measured by the natural logarithm of total assets.
- X5= Liquidity, measured using the current ratio (current assets / current liabilities).

To investigate the link between these independent factors and the dependent variable, the study uses a linear regression model. With a 95% confidence level, the significance of each independent variable is evaluated using t-tests and F-tests. Financial performance is the dependent variable in this context, and total commercial bank deposits over the last five years expressed as a percentage of GDP represents financial deepening in the banking sector[15].

5.Result & conclusion:

5.1 Variables :

Based on the literature review, we identified a set of indicators projected to significantly influence the financial stability of commercial banks. These variables are summarized in Table 1, which includes details about their notation, the variables themselves, and the proxies used for measurement.

i. Dependent Variable:

The explained variable used to measure banking stability is the Z-Score. The Z-Score index, derived from the return on average assets (ROAA), serves as a gauge of the fiscal stability of commercial banks. This indicator has been employed in numerous studies within the banking industry literature [10][15]. A higher Z-Score value indicates greater banking stability, or conversely, a lower risk of insolvency. The following formula is used to calculate the Z-Score index:

Where:
EA= Equity capital \ total assets
= the standard deviation of ROAA

ii. Explanatory Variables:

This current study uses measures of banking competition, banking efficiency, and national financial inclusion as explanatory variables.

5.3 Banking Competition:

Banking competition is measured by the Herfindahl-Hirschman Index (HHI), which is the most widely used index of market concentration in empirical literature. The HHI is calculated based on the squares of market shares of deposits, assets, or loans for each bank in the system. As a static measure, the HHI reflects market concentration at a specific point in time[11].

i (MSi)

Where:

MSn =The share of nth bank

In this study, the competition index is calculated using market share, derived from the gross loans market of commercial banks, utilizing the Herfindahl-Hirschman Index (HHI). It is anticipated that banking competition, as measured by the HHI, will positively impact banks' financial stability.

Table N° 1: Variables Definition

Notation	Variable	Measure

Dependent Variable

Banking Stability: Z-Score index	ROAA+(EQUITY \ TOTAL ASSETS) --------------------------------------

Independent variable

HHI	Banking Competition	The total squared value of the gross loans market share
BCC	Banking Efficiency	Variable Returns to Scale (VRS)
NB	National Financial Inclusion	Number of Branches / 100,000 adults
SMC	Financial Development	The percentage of listed shares' value to GDP

Control Variable

Capital Adequacy	The proportion of shareholders' equity to bank's total assets
Assets Quality	The proportion of impaired loans to bank's gross loans
Management Efficiency	The percentage of operating expense to net revenues
Earning Capacity	The ratio of net income after tax to average shareholders' equity
Liquidity Management	The percentage of liquid assets to bank assets
Sensitivity To Market Risk	The percentage of total securities to bank's total assets

Banking Efficiency:

The data envelopment analysis (DEA) method, a non-parametric technique, is utilized to measure banking efficiency, providing reliable assessments of banks' performance. This study employs the intermediation approach to define inputs and outputs, considering commercial banks as financial intermediaries that take customer deposits and create assets by lending to borrowers. The relative and technical efficiency of a group of homogeneous components, known as Decision-Making Units (DMUs), is evaluated. Efficiency is measured as the maximum proportion of weighted outputs to weighted inputs, using three inputs (total customer deposits, total fixed assets, and staff expenses) and three outputs (total loans, earning assets, and net fee and commission income), [16].

The purely technical comparative efficiency (BCC) of the banks under examination Efficiency scores were calculated with a model that accommodates variable standard returns, known as the "Variable Returns to Scale" (VRS) model. This model assumes that increasing a certain percentage of inputs results in a variable rate of increase or decrease in output. Consequently, we expect a significant link between

the efficiency of commercial banks and their financial stability.

National Financial Inclusion:
The ratio of commercial bank branches per 100,000 individuals is utilized in this empirical study as a proxy for national financial inclusion. This percentage illustrates the ability of banks to offer official access to basic financial services, especially in underprivileged regions. It draws attention to how many banking services are provided to underprivileged groups that don't usually have access to financial services. As of right now, there are no established beliefs on how the national financial inclusion index affects the stability of banks[8].

Financial Development:
The ratio of listed shares to GDP is used to calculate the stock market's capitalization and growth. This indicator makes it easier for businesses to get external financing while also highlighting their reliance on it. Bank earnings suffer when businesses use shares as a form of financing. The growth of financial markets reduces the need for bank funding, resulting in a relationship of competition between the two[14]. However, because of their complementary roles in promoting economic development, the banking industry and stock markets also have a positive relationship. Banks can improve their customers' financial circumstances in less developed stock markets by expanding the availability of credit. On the other hand, established stock exchanges compete with banks to offer loans and other financial support to borrowers and investors. Consequently, banks might broaden their offerings to encompass advisory, fiscal, and business services, increasing their non-interest revenue. Bank performance and profitability may suffer if a larger proportion of stock market capitalization indicators is used, as this will

decrease the amount of credit extended to borrowers and the interest earned from that loan. Consequently, it is anticipated that there would be a negative correlation between the degree of financial market development and the financial performance of commercial banks. Thus, there is a negative correlation between declining stability in commercial banks and an increase in the stock market capitalization indicator[15][17].

Control Variables:
This study uses the CAMELS framework indicators as a stand-in for the performance of commercial banks, a control variable that has an effect on the stability of the banking system. Principal component analysis, or PCA, is a statistical method used to measure the performance of commercial banks. The index incorporates the six primary elements of the CAMELS framework, which are: earnings, liquidity management, capital adequacy, asset quality, managerial efficiency, and sensitivity to market risk. Through PCA, all of the CAMELS variables are distilled into a single factor that represents the performance of commercial banks. We believe that there is a strong correlation between the financial stability and the success of commercial banks[15].

Descriptive Statistics:
Table 2 presents condensed descriptive statistics for both the dependent and explanatory variables. The panel dataset includes banks operating in the region from 2013 to 2024, comprising 1,320 observations. Key elements include the mean, maximum, minimum, and standard deviation values. The maximum and minimum values indicate non-normality and the presence of outliers in the variables under study. Additionally, the maximum SMC suggests outliers and increased dispersion, indicating heterogeneity among the banks studied[16].

Table N° 1: The summary of the descriptive statistics

Var.	Obser.	Mean	Std.Dev.	Min.	Max.
Z-Score	1320	3.53 .	979 -.	353	5.892
HHI	1320	7.718	.484	7.058	9.208
BCCI	1320	.91	.107	.311	1
NB	1320	2.407	.602	1.073	3.475
SMC	1320	45.33	28.62	.079	114.53
CAMELS	1320	.011	1.005	-7.558	15.752

Correlation Analysis:

The summary of the correlation analysis for the study variables using pairwise correlation is presented in the following Table 3.

Table N° 2: The correlation analysis matrix

Variables	Z-Score	HHI	BCCI	NB	SMC	CAMELS
Z-Score	1.000					
HHI	0.046	1.000				
BCCI	0.262	0.141	1.000			
NB	-0.077	0.437	0.028	1.000		
SMC	0.228	0.017	0.124	0.282	1.000	
CAMELS	0.350	-0.135	0.115	-0.193	-0.017	1.000

In general, the correlation between study variables suggests that the variables have small coefficients, soall the relationships between the explanatory variables are lower than (0.80), indicating that the explanatory variables in our estimation model have no problem with multicollinearity

Analysis and Interpretation of Empirical Results:

The findings of the panel regression analysis are shown in Table 3, where the Z-score is used as a stand-in for the financial stability of commercial banks and the factors that influence it, such as control variables, national financial inclusion, banking competitiveness, and banking efficiency. The findings validate the dynamic character of the model specification by showing that the lagged dependent variable, which assesses the persistence of the financial stability ratio (Z-score), is significant and positive at the 1% level.

The Wald test indicates that our model fits data well, while the Sargan test yields no indication of over-identifying limitations. Furthermore, a negative first-order serial autocorrelation is indicated by AR (1), but it is subsequently rejected by AR (22).

Banking competition has a significant and positive impact on banks' financial stability, according to the estimated results and statistical significance of the explanatory variables' influence on the explained variable (financial stability), with statistical significance at a 1% confidence level. This implies that commercial banks are more stable when there is greater competition. More specifically, ceteris paribus, a 1% increase in competition improves financial stability by about 90%. [17][23].

Technical efficiency rates, which have statistical significance at a 99% confidence level, also contribute favorably to the financial stability of commercial banks. Ceteris paribus, an increase of one percentage point in banking efficiency results in a 44% rise in financial stability.

This empirical result supports previous research by indicating that banks with greater efficiency rates are probably more stable financially.

At a 99% confidence level, the national financial inclusion ratio has a positive and statistically significant impact on commercial banks' financial soundness. Ceteris paribus, the stability of commercial banks increases by 28% for every 1% rise in the number of branches per 100,000 adults. This finding is consistent with other empirical research showing improved bank stability is a function of increased financial inclusion[20].

Table N° 3: Regression results for the Z-Score index

Z-Score index	Coefficient	S td. Err.	t-value	p-value
Z-Score (Lag t= −1)	0.4735693***	0.0207357	22.840	0.0000
HHI	0.9010591***	0.1145345	7.870	0.0000
BCCI	0.4438002***	0.1495686	2.970	0.0030
NB	0.2804528***	0.0579900	4.840	0.0000
SMC	-.0013044***	0005020	-2.60	0.0090
CAMELS	0.1852754***	0.0126453	14.650	0.0000
Constant	-5.512272***	0.9637062	-5.72	0.0000

Wald-test	2 (6) = 1320.39
P-value	0.000
Sargan test	0.1536
AR (1)	0.0000
AR (2)	0.3692
N. instruments	42
N. groups	127
Observations	1,016

The 10%*, 5%, and 1% *** levels each have statistical significance.**

On the other hand, at a 99% confidence level, stock market capitalization (SMC) has a statistically significant negative effect on bank stability. Ceteris paribus, a 1% rise in SMC causes a 0.13% decrease in bank stability. This implies that bank instability may result from larger stock market capitalization levels. The inverse relationship between bank stability and stock market growth suggests that businesses could favor share financing. Developed markets have the potential to rival the banking industry in offering investors and borrowers financial resources, which might have a detrimental effect on traditional lending operations and lower bank revenues. [25].

Lastly, there is evidence that the performance of commercial banks, as proxied by the CAMELS composite rating, significantly improves financial stability, as shown by the Z-score, when it comes to the estimated outcomes of the control variable. More specifically, ceteris paribus, there is a 20% gain in financial stability for every 1% rise in internal performance. This implies that better performance at commercial banks contributes to the stability of their finances. This result supports other studies in the field and is consistent with our expectations[26].

Conclusion:

Finding the variables affecting commercial banks' financial stability is the aim of this study. We examined 132 commercial banks between 2012 and 2024 using a balanced panel data collection from several nations. For this investigation, linear multiple regression models using the Generalized Method of Moments (GMM) estimator were used. These banks' fiscal soundness was assessed using the Z-score. The findings show that the fiscal stability of commercial banks is favorably and significantly impacted by banking competition, efficiency, and financial inclusion. Fiscal stability is adversely impacted by financial development, as shown by stock market capitalization. On financial stability, the CAMELS framework control variable also showed a strong favorable impact. Based on these conclusions, the report suggests strengthening financial regulations, allowing the entry of new banks, liberalizing banking services, and promoting mergers in order to increase competition and fortify the banking industry.

REFERENCES:

Ahi, K., & Laidroo, L. (2024). Banking Market Competition In Europe Financial Stability Or Fragility Enhancing. Quantitative Finance And Economics, 3(2), 257-285.

Alhassan, A. L., Tetteh, M. L., & Brobbey, F. O. (2024). Market Power, Efficiency And Bank Profitability: Evidence From Ghana.Economic Change And Restructuring, 49(1), 71-93. Doi: 10.1007/S10644-015-917 4alvi, M. A.

Rafique, A., & Shehzad, K. (2020). Financial Inclusion And Bank Stability Controversy: Evidence From South Asia Region. International Journal Of Financial Engineering, 7(04), 2050038.

Antony, A., Peter, M., & Odhiambo, S. (2021). The Role Of Banking Concentration On Stability. International Journal Of Economics And Finance, 13(6), 103.

Banker, R. D., Charnes, A., & Cooper, W. W. (2023). Some Models For Estimating Technical And Scale Inefficiencies In Data Envelope Analysis. Management Science, 30(9), 1078-1092

De-Ramon, S. J., Francis, W. B., & Straughan, M. (2021). Bank Competition And Stability In The United Kingdom: Evidence From Quantile Regression. Bank Of England Staff Working Paper, 748

Ebenezer, O. O., Omar, W. A. W. B., & Kamil, S. (2022). Bank Specific And Macroeconomic Determinants Of Commercial Bank Profitability: Empirical Evidence From Nigeria. International Journal Of Finance & Banking Studies, 6(1), 25.

Feghali, K., Mora, N., & Nassif, P. (2021). Financial Inclusion, Bank Market Structure, And Financial Stability: International Evidence. The Quarterly Review Of Economics And Finance, 80, 236-257.

Ghenimi, A., Chaibi, H., & Omri, M. A. B. (2020). The Effects Of Liquidity Risk And Credit Risk On Bank Stability: Evidence From The Mena Region. Borsa Istanbul Review, 17(4), 238-248.

González, L. O., Razia, A., Búa, M. V., & Sestayo, R. L. (2019). Market Structure, Performance, And Efficiency: Evidence From Themena Banking Sector. International Review Of Economics & Finance, 64, 84-101.

Gul, S., Irshad, F., & Zaman, K. (2024). Factors Affecting Bank Profitability In Pakistan. Romanian Economic Journal, 14(39).

Jungo, J., Madaleno, M., & Botelho, A. (2023). The Effect Of Financial Inclusion And Competitiveness On Financial Stability: Why Financial Regulation Matters In Developing Countries? Journal Of Risk And Financial Management, 15(3), 122.

Kasman, S., & Kasman, A. (2023). Bank Competition, Concentration And Financial Stability In The Turkish Banking Industry.Economic Systems, 39(3), 502-517. Doi: J.Ecosys.2014.12.003.

Kiemo, S. M., Olweny, T. O., Muturi, W. M., & Mwangi, L. W. (2019). Bank-Specific Determinants Of Commercial Banks Financial Stability In Journal Of Applied Finance And Banking, 9(1), 119-145.

Koskei, L. (2020). Non-Performing Loans And Banks' Financial Stability In Kenya; Evidence From Commercial Banks. Asian Journal Of Economics, Business And Accounting, 15(3), 44-52. Doi: 10.9734/Ajeba/2020/V15i330234.

Mamadou Asngar, T., Ongo Nkoa, B. E., & Wirajing, M. A. K. (2022). The Effect Of Banking Competition On Financial Stability In Central African Economic And Monetary Community Zone. Financial Studies, 26(1).

Neaime, S., & Gaysset, I. (2018). Financial Inclusion And Stability In Mena: Evidence From Poverty And Inequality. Finance Research Letters, 24, 230-237.

Noman, A. H. M., Gee, C. S., & Isa, C. R. (2024). Does Bank Regulation Matter On The Relationship Between Competition And Financial Stability? Evidence From Southeast Asian Countries. Pacific-Basin Finance Journal, 48, 144-161.

Nyangu, M., Marwa, N., Fanta, A., & Minja, E. J. (2023). Bank Concentration, Competition And Financial Stability Nexus In TheEast African Community: Is There A Trade-Off? Cogent Economics & Finance, 10(1), 2082026.

Ozili, P. K. (2018). Banking Stability Determinants In Africa. International Journal Of Managerial Finance, 14(4), 462-483. Doi:10.1108/Ijmf-01-2018-0007.

Pan, Q., & Pan, M. (2014). The Impact Of Macro Factors On The Profitability Of China's Commercial Banks In The Decade Afterwto Accession. Open Journal Of Social Sciences, 2(9), 64-69.

Phan, H. T., Anwar, S., Alexander, W. R. J., & Phan, H. T. M. (2019). Competition, Efficiency And Stability: An Empirical Study Ofeast Asian

Commercial Banks. The North American Journal Of Economics And Finance, 50, 100990.

Schaeck, K., & Cihák, M. (2024). Competition, Efficiency, And Stability In Banking. Financial Management, 43(1), 215-241.

Topak, M. S., & Talu, N. H. (2023). Bank Specific And Macroeconomic Determinants Of Bank Profitability: Evidence Fromturkey. International Journal Of Economics And Financial Issues, 7(2), 574-584.

Windmeijer, F. (2024). A Finite Sample Correction For The Variance Of Linear Efficient Two-Step Gmm Estimators. Journal Of Econometrics, 126(1), 25-51.

Zeqiraj, V., Mrasori, F., Iskenderoglu, O., & Sohag, K. (2024). Dynamic Impact Of Banking Performance On Financial Stabilityfresh Evidence From Southeastern Europe. Journal Of Central Banking Theory And Practice, 10(1), 165-181.