JEL Classification: E52, E58, G15

Cep Jandi Anwar*,
University of Sultan Ageng Tirtayasa, Indonesia
https://orcid.org/0000-0002-2806-401X
cepjandianwar@untirta.ac.id

Asep Ridwan,
University of Sultan Ageng Tirtayasa, Indonesia
https://orcid.org/0000-0003-4105-3187
asep.ridwan@untirta.ac.id

Djuraidj Rumiki,
Finance and Banking Study Program, AKP GMIST Tahuna, Indonesia
https://orcid.org/0009-0009-3846-7953
juraij_nu@yahoo.co.id
**Corresponding author*

BANK COMPETITION AND DEPOSITS IN INDONESIA BANKING INDUSTRY: THE ROLE OF CENTRAL BANK POLICIES

Received 21 February 2025; accepted 04 March 2025; published 07 May 2025

Abstract. *The main goal of this research is to investigate the factors influencing bank deposits in Indonesia between 2010 and 2023 by analysing data from 92 banks using the Panel Generalized Method of Moments (GMM). The study examines how bank competition levels, central bank policies, and other factors such as macroprudential policies and bank size impact deposit accumulation trends. The findings suggest that increased competition among banks is impacting deposits, which highlights a potential tension between competition and the stability of deposits in the banking sector. Alternatively, maintaining policies and appropriate regulations is crucial for instilling confidence in depositors, as macroprudential policies, bank size, credit, and capital all have a positive impact. We also expect the bank's determined interest rates and reserve requirements to have an effect. This underlines the responsiveness of deposit accumulation to shifts in policy. These findings can provide insights for policymakers and bank executives in Indonesia to enhance stability and optimize deposit-taking procedures within the banking industry.*

Keywords: *bank deposits, bank competition, macro-prudential policy, bank size, panel GMM estimation.*

Citation: Anwar, C.J.; Ridwan, A.; Rumiki, D. (2025). BANK COMPETITION AND DEPOSITS IN INDONESIA BANKING INDUSTRY: THE ROLE OF CENTRAL BANK POLICIES. Economics and Finance, Volume 13, Issue 2, 106. http://doi.org/10.51586/2754-6209.2025.13.2(106)

Introduction

The banking industry plays a role in providing services that facilitate the movement of money from those who save to those who borrow (Anwar et al., 2024). Examining the competition among banks and its effects on deposit levels is a topic of interest in research as well as policy discussions (Carlson et al., 2022). Bank deposits represent a source of funding for banks; they are essential for maintaining stability and driving economic growth (Banke & Yitayaw, 2022). The competition, among banks has an impact on how depositors behave and on the amount of deposits in the industry sector in Indonesia — recognized as having a large and fast growing banking industry in Southeast Asia — making it an important area to study this connection closely.

The banking sector in Indonesia has experienced transformations over the years, including mergers and acquisitions, regulatory modifications, and technological advancements, which have

altered its competitive landscape (Abdurrahman et al., 2024). Competition can drive efficiency. Encourage creativity in the development of products and services. However, it also carries the risk of increased daring or decreased profitability, making banks less attractive to depositors (Tran & Nguyen, 2024; Anwar et al., 2023a; Dwivedi et al., 2021). The central bank is responsible for implementing these measures. The central bank may adjust interest rates and reserve requirements, among other measures. Have an impact on how banks deal with deposits (Anwar et al., 2023b). These policies shape the landscape that affects both the costs for banks to secure funding and the returns for depositors. The study was conducted by Emmanuel et al. (2022) delves into how competition among banks influences their deposit activities while considering the influence of bank policies as a moderating factor (Osakwe et al., 2022). This research examines data from banks operating within Indonesia over the past ten years. Employ robust statistical techniques to investigate the impact of competition and monetary policies on deposit mobilization trends. The findings of this study are expected to contribute to the advancement of knowledge within the fields of banking and monetary economics, offering insights that could be valuable for policymakers and financial institutions.

This research offers insights in ways, firstly by filling the void in current literature through a practical evaluation of how bank competition and deposit mobilization interact within the Indonesian banking sector — a swiftly evolving economy characterized by distinct financial patterns. Second, it looks at the moderating role of central bank policies, and thereby gain insights into the way that monetary and macroprudential tools can affect behaviour of depositors and competition. Third, the study uses robust econometric techniques such as panel data analysis and dynamic Generalized Method of Moments (GMM) estimators to guarantee the accuracy of the findings. Fourth, the results are important from the practical point of view and the recommendations made can be easily implemented by the policymakers in their effort to develop a balanced regulatory framework that promotes competition and at the same time ensures financial stability. Thus, focusing on these critical dimensions, this study seeks to add to the rapidly expanding literature on banking and monetary economics, as well as to provide policy relevant insights for enhancing the resilience and efficiency of Indonesia’s banking sector.

Literature Review

Research in the field of bank deposits delves into the factors that influence how people deposit money into banks; studies indicate that both broader economic trends and specific characteristics of banks are key players in this area of study. Findings suggest that interest rates, inflation, and aggregate economic conditions are factors that affect customers’ behaviour in respect of making deposits into banks, higher interest rates attracting more funds into the banks. The rate of growth of deposits over time is different for each bank and is determined by its profitability and competitive position as well as its liquidity status. Generally, banks with good liquidity position are in a better place to manage amounts of deposited funds. The work of Demirgüç-Kunt and Detragiache (1998), and Berger et al. (2009) shows that stability and trust are important factors for the attraction of deposits. It also looks at the relationship between banks.

A number of studies have found that competition may have a negative effect on banks’ deposit taking capacities due to the tendency of increasing deposit interest rates. However, competitive conditions may also have the ability to enhance the quality of the deposits offered to the market, which in turn will be beneficial for the depositors. Bourke (1989), Molyneux and Thornton (1992) have pointed out that the effects of competition on banks’ deposit bases are ambiguous because it can enhance and impair them simultaneously as they innovate and enhance profitability. Moreover, Demiralp et al. (2021) analysis of interest rates has shown that banks struggle with keeping deposits as interest rates and general financial stability change. In addition, other factors like the economic status of a country, the size of its market and the distance between countries (as postulated by the gravity model) affect deposit flows. In a recent study by Li and Strahan (2023), the authors argue that advancement in connectivity has enabled the flow of deposits across borders, thereby erasing national barriers and increasing competition in the deposit markets globally.

In their paper, Li et al. (2023) aims to understand how the power present in the deposit market affects the strength of bank funding and availability of longer term credit products. They suggested that participating in the deposit market may enhance the funding stability but at the same time may pose a threat of competitive interest rates increase. Haddaweea and Flayyihs (2020) investigates the impact of bank deposits on profitability by explaining the relationship between deposits and profitability. Ünvan and Yakubu (2020) aimed at identifying factors that determine the amounts of money that people deposit in banks in Ghana. The study showed that larger banks with profits and cash flows typically attract deposits that enhance depositor confidence and enhance the stability of the banks. In the same vein, Demiralp et al. (2021) aimed at understanding the impact of interest rates and sufficient liquid assets on retail bank deposits in the Euro area. It shows the impact of banking strategies in addition to profitability, cash management, and communicating monetary policy in a period of restricted financial resources.

Methods

Data

The research is based on a collection of information gathered from 92 banks spanning the period from 2010, to 2023.The dataset includes details like bank deposits and competition levels as central bank interest rates, reserve requirements, macroprudential policies, bank size credit details and capital statistics. The main sources for this dataset are statements and official reports from the Financial Services Authority of Indonesia along with reports, from the banks. Macroeconomic indicators were obtained directly from Bank Indonesia. Data, on signals and reserve needs as the banks set interest rates were gathered from official announcements and policy documents issued by Bank Indonesia. Details concerning the level of competition among banks were obtained from reports within the industry. We collected the data using databases calculated and the Herfindahl-Hirschman Index (HH).

Table 1. Descriptive Statistic

Variable	Mean	Std Dev.	Min.	Max.
Deposits	16.5672	2.6276	12.4344	31.4197
BC	0.1386	0.3118	-7.2254	0.7148
CB Rate	5.6964	1.3035	3.5000	7.7500
RR	7.0000	1.6803	3.5000	9.0000
MAPP	0.2804	0.1025	0.0836	0.4134
Size	17.0226	2.5761	11.7968	31.7237
Credit	16.4686	2.6007	12.3469	31.7237
CAR	29.7988	3.6575	13.3293	31.7957

Econometrics Methodology

This research utilizes the technique of the Method of Moments (GMM), focusing on the Panel GMM method to examine the factors influencing bank deposits in Indonesia between 2010 and 2023. Using GMM is ideal for this study, as it helps tackle issues related to endogeneity and unobserved differences while also addressing biases introduced by including lagged variables in the analysis. Comparing models helps us grasp the factors influencing bank competition and deposit gathering in relation to monetary policy and regulatory conditions more effectively. Model 1 primarily examines the effects of policy on the central bank rate and the size of the bank without considering interbank interactions. This model emphasizes how interest rates and specific bank characteristics impact deposit growth across the banking industry. This particular model doesn't take reserve requirements into account as a factor in its simplicity. Instead, it concentrates on the connection between interest rates and bank deposits. In this model, we consider reserve requirements a factor influencing market competition and the deposit base of banks. The model emphasizes the influences that affect liquidity and financial stability. Model 3 is the most complete of the four models shown here because it includes both reserve requirements and aggregate policy proxies (MAPP) credit expansion. The intention behind creating this model is to explore how monetary policy interacts with credit and finance and the effects of banks' actions on the banking

industry dynamics. This model outlines how central bank policies influence the banking sector by leveraging monetary policy mechanisms. The fourth model integrates reserve mandates with a stand-in for policy to present an overview of macroeconomic and regulatory elements (Equation 1-4).

$$BD_{it} = \alpha_0 + \alpha_1 BD_{it-1} + \alpha_2 BC_{it} + \alpha_3 CBrate_{it} + \alpha_4 \text{Size} + \alpha_5 Credit_{it} + \alpha_6 CAR_{it} + \varepsilon_{it} \quad (1)$$

$$BD_{it} = \alpha_0 + \alpha_1 BD_{it-1} + \alpha_2 BC_{it} + \alpha_3 RR_{it} + \alpha_4 \text{Size} + \alpha_5 Credit_{it} + \alpha_6 CAR_{it} + \varepsilon_{it} \quad (2)$$

$$BD_{it} = \alpha_0 + \alpha_1 BD_{it-1} + \alpha_2 BC_{it} + \alpha_3 MAPP_{it} + \alpha_4 \text{Size} + \alpha_5 Credit_{it} + \alpha_6 CAR_{it} + \varepsilon_{it} \quad (3)$$

$$BD_{it} = \alpha_0 + \alpha_1 BD_{it-1} + \alpha_2 BC_{it} + \alpha_3 CBrate_{it} + \alpha_4 RR_{it} + \alpha_5 MAPP_{it} + \alpha_6 \text{Size} + \alpha_7 Credit_{it} + \alpha_8 CAR_{it} + \varepsilon_{it} \quad (4)$$

where *BD* is bank deposits, *BC* is bank competition. *CB* rate is the central bank policy rate as a proxy of monetary policy, *RR* is bank reserve requirement, *MAPP* is macroprudential policy index. *Size* is bank size, *Credit* is bank credit, and *CAR* is capital adequacy ratio. *i* is bank cross section, *t* is period.

Dynamic panel GMM incorporates lagged values of the dependent variable (bank deposits) to capture dynamic adjustments and persistence in deposit behaviour over time. Arellano & Bond (1991) estimator is applied to transform the model into a system of equations using first differences and instrumental variables. This transformation removes fixed effects and mitigates endogeneity by using lagged levels of explanatory variables as instruments. The panel GMM method was selected due to its ability to handle changing relationships and biases in samples effectively which makes it well suited for examining connections, within the banking industry sector in Indonesia. This method allows the research to offer coherent evaluations of the elements affecting bank deposits in Indonesia.

Results

Panel GMM Estimation

Table 2. Panel system GMM Estimator

Dependent Variable: Deposits				
Variable	**Model 1**	**Model 2**	**Model 3**	**Model 4**
Deposits (-1)	0.0284***	0.0331***	0.0092***	0.0121***
	(0.0012)	(0.0014)	(0.0012)	(0.0009)
BC	-0.1176***	-0.1356***	-0.0857***	-0.0991***
	(0.0175)	(0.0196)	(0.0170)	(0.0169)
CB Rate	-0.0286***			-0.0249***
	(0.0175)			(0.0018)
RR		-0.0091***		-0.0105***
		(0.0012)		(0.0017)
MAPP			0.7109***	0.5066***
			(0.0676)	(0.0630)
Size	0.0081**	0.012***	0.0283***	0.0290***
	(0.0034)	(0.0036)	(0.0041)	(0.0029)
Credit	0.9763***	0.9814***	0.9437***	0.9401***
	(0.0035)	(0.0040)	(0.0032)	(0.0029)
CAR	0.0006***	0.0011***	0.0005***	0.0007***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
AR (1) (p-value)	0.0049	0.0041	0.0071	0.0063
AR (2) (p-value)	0.1609	0.1175	0.1480	0.1160
Sargan Test (p-value)	0.2380	0.2320	0.2670	0.2014
No. of Cross-section	92	92	92	92
No. of Observation	1,012	1,012	1,012	1,012

*Note: Symbols * is Prob. < 10%, ** is Prob. < 5%, and *** is Prob. < 1%.*

Table 2 displays that the coefficient, for deposits varies between 0.0092 and 0.0331 and is consistently positive and significant across all models. This indicates a trend of deposit persistence where past deposit amounts play a role in determining current deposits. The coefficients are slightly

elevated in Models 1 and 2 compared to Models 3 and 4 of a pronounced impact of prior deposits in these scenarios. This enduring pattern underscores the importance of customer loyalty and retention, in attracting deposits. The coefficients of *BC* are all negative and highly significant in all models, ranging between -0.0857 and -0.1356, which shows that increased competition in the banking sector decreases deposit levels. This may be due to customers dividing their deposits across different banks or going for other financial products. Model 2 (-0.1356) exhibits the strongest effect, indicating that the inclusion of reserve requirements (*RR*) as a variable enhances the strength of this relationship. In highly competitive markets, banks may have to differentiate themselves by providing better services, higher interest rates, or new products to keep and attract deposits.

The *CB* rate in Models 1 and 4 has a negative and significant effect on deposits (0.0286 and 0.0249, respectively). This means that the higher interest rates set by the central bank probably increase the borrowing costs and decrease the liquidity in the banking system, which in turn reduces deposit growth. This result shows that banks' deposits are sensitive to the monetary tightening policies. The *RR* variable in Models 2 and 4 has a negative and significant impact on deposits (- 0.0091 and - 0.0105). This means that the more reserves that banks are required to hold, the more they are likely to have reduced ability to lend out funds, which in turn leads to lower deposit growth. This captures the conflict between regulatory measures to enhance financial stability and the possible negative impact on deposit collection. Models 3 and 4 include the monetary policy proxy, which has a positive and highly significant effect on deposits (0.7109 and 0.5066). This result indicates that policy measures that support market liquidity and lower interest rates tend to expand the deposit base by enhancing financial health and economic production. The larger coefficient in Model 3 indicates that monetary policies are important in determining deposit levels, especially when *RR* is not separately considered.

All models show a positive and significant relationship between bank size and deposits, with coefficients ranging from 0.0081 to 0.0290. This is because large banks have more market share, name recognition, and trust that allows them to pull in more deposits. The effect is strongest in Models 3 and 4. This is likely because of the way that monetary policy variables make the effect of large banks on deposit take-up bigger. All of the models show that credit has a positive and very significant effect on deposits, with coefficients ranging from 0.9401 to 0.9814. This means that loans create deposits. It further emphasizes the importance of prudent credit management for sustainable deposit growth. Capital adequacy ratio (*CAR*) has a positive and significant effect on deposits in all models with coefficients of 0.0005 to 0.0011. Therefore, a higher *CAR* means that a bank is safer and sounder, and this in turn increases the confidence of the depositors who bring in more funds. Model 2 exhibits the greatest effect, suggesting that higher regulatory minimums could potentially strengthen the relationship between *CAR* and deposits. The autoregressive 1 ($AR(1)$) and autoregressive 2 ($AR(2)$) tests, on the other hand, show that the residuals are not serially correlated because all of the $AR(2)$ p-values are greater than 0.1. Furthermore, the Sargan test statistics are also not significant, which means that the instruments are valid. This ensures the accuracy of the GMM estimates and, in turn, the validity of the conclusions drawn from the study.

Discussion

The strong relationship between competition among banks and bank deposits stems from the reduction of market power and profitability, which in turn leads to an increase in deposit rates and funding costs. This may also destabilize banks by shrinking their profit margins, which in turn may discourage customers from depositing their money. Previous studies have confirmed this result, claiming that competition erodes banks' ability to generate income and affects deposit expansion. In competitive markets, small and inefficient banks cannot easily collect deposits. This negative impact can also be attributed to the behavioural aspects of customers as well as the operational features of the banks; for instance, customers may decide to diversify their deposits across different banks to reduce risk. Intense competition, of course, compels banks to cut down on the interest rates on deposits that the customers get in return for keeping their money in the bank. Customers'

perception of risk may well aggravate the situation, and if customers consider banks in competitive markets to be riskier than other institutions, they may prefer to invest in other financial products.

The study shows a negative correlation between interest rates set by central banks and bank deposits. Keynesian monetary theory predicts that variations in interest rates alter the behaviour of economic subjects with regard to savings and lending. Higher rates increase the cost of borrowing and thus slow down economic growth, which negatively affects the willingness of households and firms to save and deposit money. We can attribute the decline in bank deposits to this substitution effect. The higher interest rates also make the banks' competitive position with regard to deposit attraction worse, i.e., other investment vehicles become more attractive. This relationship also captures broader macroeconomic conditions; for instance, consumers are likely to be leery and tight-fisted when interest rates are high. Policymakers and banks require other means to address liquidity problems without threatening the ability to gather deposits. The study stresses the importance of moderate monetary policies to control inflation and enhance financial stability.

The study establishes that there is a negative correlation between the central banks' reserve requirements and bank deposits. Such reserve requirements are a constraint on the ability of banks to supply funds for investment, which reduces their profitability and makes them contend for deposits. This is in line with McKinnon's Theory of Financial Repression that posits that higher reserve requirements amount to a tax on financial intermediaries. This may lead to banks' holding more liquidity, most of which earns little or no interest, which reduces the return on deposits and, in turn, induces them to cut deposit rates or offer worse deposit products. This is particularly the case in environments of high banking competition or easily accessible other saving options. The study also reveals that central banks should use caution when altering reserve requirements to achieve monetary policy goals, as a miss may hamper deposit expansion. The study finds that there is a positive relationship between macroprudential policy and bank deposits. Macroprudential policies, which are policies that aim at reducing system risks and enhancing financial stability, can enhance the confidence of the depositors and the amounts of funds that they keep in the bank.

The Financial Stability Theory states that these measures decrease the frequency of financial crises by preventing the accumulation of systemic risks. This is supported by empirical studies that claim that macroprudential policies not only enhance financial stability but also financial inclusion by promoting the use of safe banks. The Liquidity Preference Theory suggests that, when regulations tighten up markets, depositors are more likely to prefer to keep their money in banks than to risk it in other investments. Macroeconomic policies also affect how much banks operate and depend on their funding sources, including deposits. These measures can improve the situation for the depositor. Lead to an increase in the sources of funding available to banks. There is a relationship between the size of a bank and its deposit collection efficiency, and it can be seen that larger banks have a competitive edge over smaller banks in the competition for deposits. They also offer cost savings and competitive prices, as well as better services and many products to choose from. Moreover, they have a network of branches and modern digital banking systems that can cover a customer base.

The theory of banks being too big to fail means that customers consider them less risky and less likely to fail during downturns, thus increasing their trust in them. This connection between efficiency and favourable outcomes such as cost effectiveness and increased customer satisfaction has been supported by empirical research. In addition, strong marketing initiatives and well-recognized brand names help to boost the growth of deposits. There is a direct link between bank loans and bank savings. The relationship between bank loans and bank savings is contingent upon how banks manage their lending and deposit activities. According to the Deposit Creation Theory, when banks issue loans, they also generate deposits, resulting in an increase in deposits. On the one hand, the Loanable Funds Model suggests that banks draw in deposits to offer more loans, leading to a cycle of increasing credit and deposit growth.

Empirical studies also support these findings, demonstrating that credit expansion positively impacts economic growth and savings. Moreover, a healthy credit system is good for deposit growth because banks are financial intermediaries that provide the necessary link between the

savers and the investors. The relationship between bank capital and deposits is positive and significant, which suggests that a bank's capital base is an important determinant of depositor confidence and, hence, deposit mobilization. Higher bank capital buffers are indicative of the excellent health and stability of the bank and induce the depositors to park their funds in such banks. The theoretical findings are, however, consistent with empirical evidence that shows that more capital leads to more deposits and the ability to meet withdrawal demands. Also, fulfilling the conditions of the Basel III Accord enhances the relationship between bank capital and deposits. Higher capital further enables the banks to increase their loan assets, which is an indirect way of contributing to deposit growth. This creates a virtuous cycle, where strong capital positions support both lending and deposit mobilization.

Conclusion

The research seeks to explore how bank deposits are linked to factors for banks, like competition among banks and policies set by central banks, along with macroprudential regulations. According to our results, a strong capital base positively influences deposits significantly because it boosts the trust of depositors and encourages people to make contributions. These findings align with theories like the signalling theory and the buffer theory. These findings align with studies that have demonstrated the crucial role of strong capital adequacy in ensuring financial stability. The outcomes indicate that robust bank policies play a role in fostering trust and encouraging growth in deposit mobilization. It is evident from the results that policymakers and regulators need to prioritise enhancing capital adequacy standards for banks to bolster the stability of the system. The adoption of guidelines, like the Basel III rules, could boost depositors' confidence. Encourage deposits in the banking sector as well as support financial stability and deposit growth through well-thought-out interest rate strategies and reserve mandates by central banks.

For banks, it is crucial to preserve a sound capital base, both in the sense of legal admissibility and as a means of attracting deposits. Banks should pay more attention to risk management and avoid opaque financial reporting in order to reassure depositors. Policymakers should offer banks some recommendations on how to navigate the trade-off between compliance and efficiency. More so if the initiatives are geared towards the public education of depositors on the advantages of having banked with well-capitalised banks, they can only be of immense benefit in enhancing the public confidence in the banking sector. In the future, more research may look at how bank capital affects other macroeconomic factors, such as inflation and economic growth, in both new and advanced economies. This could include looking at the data over time. Furthermore, it is worthwhile to examine the role of digital banking and financial technology in shaping the relationship between bank-specific factors and deposits. Looking into whether these effects happen for different types of banks, like commercial banks and microfinance institutions, will also help with making specific policy suggestions. The study of these relationships during the global financial crises can help to enhance the understanding of how to enhance the robustness of banking systems.

This research has several limitations chiefly because of data availability and quality. It is confined to Indonesian banks from 2010 to 2023, but the accuracy and comprehensiveness of data are likely to vary and therefore influence the robustness of the results. Because the study is country-specific, the results may not be generalizable to other developing nations with different institutional and economic environments. Moreover, global factors such as international market trends were not fully integrated, which could have had some indirect effects on deposit behaviour. In the future, further research could include a comparison of different emerging markets or other ASEAN countries to see how institutional factors and banking systems affect deposit behaviour in other settings. Extending the focus to include socio-economic factors, financial literacy, and the long-term impacts of monetary policy would be useful. Finally, an analysis of the impact of the COVID-19 pandemic on deposit patterns and banking competition would provide a relevant picture of changes in the banking sector.

Funding: This research received no external funding.
Conflicts of Interest: The authors declare that no potential conflicts of interest in publishing this work.

References

Abdurrahman, A.; Gustomo, A.; Prasetio, E.A. (2024). Enhancing banking performance through dynamic digital transformation capabilities and governance, risk management, and compliance: Insights from the Indonesian context. The Electronic Journal of Information Systems in Developing Countries, 90(2), e12299. https://doi.org/10.1002/isd2.12299

Anwar, C. J.; Okot, N.; Suhendra, I.; Indriyani, D.; Jie, F. (2024). Monetary policy, macroprudential policy, and bank risk-taking behaviour in the Indonesian banking industry. Journal of Applied Economics, 27(1), 2295732. https://doi.org/10.1080/15140326.2023.2295732

Anwar, C.J.; Suhendra, I.; Didu, S.; Sayektiyani, A.; Kholishoh, L.N. (2023a). The impact of monetary policy and credit risk on bank credit behavior: An analysis of banks listed on the Indonesian stock exchange. Cogent Economics & Finance, 11(1), 2220250. https://doi.org/10.1080/23322039.2023.2220250%0A

Anwar, C.J.; Suhendra, I.; Purwanda, E.; Salim, A.; Rakhmawati, N. A.; Jie, F. (2023b). Investigating the relationship between monetary policy, macro-prudential policy and credit risk in Indonesia banking industry. Heliyon, 9(7). https://doi.org/10.1016/j.heliyon.2023.e18229

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. The review of economic studies, 58(2), 277-297. https://doi.org/10.1016/j.heliyon.2023.e18229

Banke, N.K.; Yitayaw, M.K. (2022). Deposit mobilization and its determinants: evidence from commercial banks in Ethiopia. Future Business Journal, 8(1), 32. https://doi.org/10.1186/s43093-022-00144-6

Bourke, P. (1989). Concentration and other determinants of bank profitability in Europe, North America and Australia. Journal of banking & Finance, 13(1), 65-79. https://doi.org/10.1016/0378-4266(89)90020-4

Carlson, M.; Correia, S.; Luck, S. (2022). The effects of banking competition on growth and financial stability: Evidence from the national banking era. Journal of Political Economy, 130(2), 462-520. https://doi.org/10.1086/717453

Demiralp, S.; Eisenschmidt, J.; Vlassopoulos, T. (2021). Negative interest rates, excess liquidity and retail deposits: Banks' reaction to unconventional monetary policy in the euro area. European Economic Review, 136, 103745. https://doi.org/10.1016/j.euroecorev.2021.103745

Demirgüç-Kunt, A.; Detragiache, E. (1998). The determinants of banking crises in developing and developed countries. Staff Papers, 45(1), 81-109. https://www.imf.org/external/pubs/ft/staffp/1998/03-98/pdf/demirguc.pdf

Dwivedi, P.; Alabdooli, J. I.; Dwivedi, R. (2021). Role of FinTech adoption for competitiveness and performance of the bank: a study of banking industry in UAE. International Journal of Global Business and Competitiveness, 16(2), 130-138. https://doi.org/10.1007/s42943-021-00033-9

Emmanuel, B.; Musa, B.B.; Udi Polycarp, S. (2022). Central Bank of Nigeria prudential guideline and the financial performance of deposit money banks in Nigeria. Accounting and taxation review, 6(2), 47-71. https://www.atreview.org/admin/12389900798187/ATR%206(2)%2047-71%20new.pdf

Haddaweea, A.H.; Flayyihb, H.H. (2020). The relationship between bank deposits and profitability for commercial banks. International Journal of Innovation, Creativity and Change, 13(7), 226-234. https://ww.ijicc.net/images/vol_13/Iss_7/13737_Haddawee_2020_E_R.pdf

Li, L.; Loutskina, E.; Strahan, P.E. (2023). Deposit market power, funding stability and long-term credit. Journal of Monetary Economics, 138, 14-30. https://doi.org/10.1016/j.jmoneco.2023.04.004

Molyneux, P.; Thornton, J. (1992). Determinants of European bank profitability: A note. Journal of banking & Finance, 16(6), 1173-1178. https://doi.org/10.1016/0378-4266(92)90065-8

Osakwe, C.I.; Udoye, O.N.; Akuna, R.C. (2022). The Effect of Central Bank of Nigeria Regulation on the Performance of Deposit Money Banks. International Journal of Multidisciplinary and Current Educational Research, 4(1), 92-103. https://www.ijmcer.com/wp-content/uploads/2023/07/IJMCER_K0410920103.pdf

Tran, V. T.; Nguyen, H. (2024). Competition, liquidity creation and bank stability. Accounting & Finance, 64(2), 2111-2146. https://doi.org/10.1111/acfi.13212

Ünvan, Y.A.; Yakubu, I.N. (2020). Do bank-specific factors drive bank deposits in Ghana? Journal of Computational and Applied Mathematics, 376, 112827. https://doi.org/10.1016/j.cam.2020.112827