Volume 8, Issue 3, 2025 (pp. 66-81)



#### MONETARY POLICY AND BANK PERFORMANCE IN NIGERIA

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#### Cite this article:

Inibehe G. Alexander, Olalekan O. Akinrinola, Chimeruo V. Onyeka-Iheme (2025), Monetary Policy and Bank Performance in Nigeria. African Journal of Accounting and Financial Research 8(3), 66-81. DOI: 10.52589/AJAFR-CAUKVZ4M

#### **Manuscript History**

Received: 12 May 2025 Accepted: 15 Jun 2025 Published: 21 Jul 2025

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**ABSTRACT:** *This study examines the impact of monetary policy* on bank performance in Nigeria, using data sourced from CBN statistical bulletin which spans between 2010 and 2023, with a specific focus on the relationship between the monetary policy tools and return on assets (ROA). Using Auto Regressive Distributed Lag (ARDL) regression analysis, the study tests three hypotheses to determine whether monetary policy tools significantly influences bank performance (ROA). The results indicated an insignificant positive relationship between inflation rate, interest rate and ROA, suggesting that changes in the central bank's interest rate directly affect bank performance. Also, there is no significant relationship found between cash reserve ratio and ROA, implying that other factors, such as regulatory frameworks, operational efficiency, macroeconomic stability, and inflation rate volatility, play a more dominant role in determining bank performance. Based on these insights, the study recommends that the CBN consider the impact of monetary policy on bank performance when setting monetary policy rate, while financial institutions should enhance their interest rate management Future researchers should explore additional strategies. macroeconomic variables, such as exchange rate movements and GDP growth, to provide a more comprehensive understanding of bank performance determinants.

**KEYWORDS:** Monetary Policy, Bank Performance, Cash Reserve Ratio, Interest Rate, Inflation Rate, Return on Assets.

Volume 8, Issue 3, 2025 (pp. 66-81)



### INTRODUCTION

Monetary policy serves as a fundamental tool through which central banks influence economic stability and financial sector performance. It involves the strategic use of instruments such as money supply control, reserve requirements, and liquidity regulation to achieve macroeconomic objectives, including price stability, economic growth, and employment generation. The banking sector, as the primary conduit for monetary policy transmission, is directly affected by changes in these policy measures. Consequently, the effectiveness of monetary policy in shaping economic outcomes is a subject of significant academic and policy interest.

Banks play a crucial role in the financial system by providing essential services such as credit allocation, deposit mobilization, and payment facilitation. They act as intermediaries between savers and borrowers, ensuring liquidity flow in the economy. The performance of banks is influenced by various factors, including regulatory policies, economic conditions, and monetary policy decisions. Ajayi and Atanda (2012) argue that "the structure and efficiency of the banking system directly affect the implementation and success of monetary policy measures." Effective banking operations enhance financial stability, promote economic development, and support monetary policy goals.

In Nigeria, the Central Bank of Nigeria (CBN) employs various monetary policy tools to regulate the economy and ensure financial system stability. The Cash Reserve Ratio (CRR), Open Market Operations (OMO), and liquidity adjustment mechanisms are among the instruments used to influence the availability and cost of credit. According to Uchendu (2009), "the primary objectives of monetary policy in Nigeria include price stability, reduction of unemployment, and promotion of economic growth," all of which are closely linked to the health of the banking sector. Banks must adapt to these policies to ensure sustainable profitability and efficiency.

Zenith Bank, established in 1990, is one of Nigeria's leading commercial banks, with a significant presence both locally and internationally. The bank operates in various segments of the financial services industry, including retail banking, corporate banking, and investment banking. Zenith Bank is known for its innovative approach to banking, leveraging technology to enhance customer service and operational efficiency. Over the years, the bank has achieved several milestones, including becoming one of the largest banks in Nigeria by assets and market capitalization. Zenith Bank's commitment to excellence is reflected in its consistent performance, including strong profitability and solid capital base, which have contributed to its ability to adapt to changes in the economic environment, including shifts in monetary policy.

In recent years, Zenith Bank has continued to demonstrate resilience in the face of macroeconomic challenges, including inflationary pressures and exchange rate volatility. The bank's strong capital position and focus on risk management have enabled it to effectively navigate changes in monetary policy and external economic conditions. Zenith Bank has also earned numerous awards, including recognition for its superior customer service, sound financial management, and contribution to economic development. According to Zenith Bank's annual report (2023), the bank has achieved a significant growth in assets, profitability, and shareholder value, despite the challenges posed by the broader economic environment.

The unpredictable nature of monetary policy changes and their direct influence on bank operations has been a key issue and major problem. Banks are expected to respond to policy

Volume 8, Issue 3, 2025 (pp. 66-81)



measures such as interest rate adjustments, cash reserve requirements, and liquidity ratios, yet the extent of their compliance and the resulting financial implications remain uncertain. Ajayi and Atanda (2012) argue that "monetary policy shifts in Nigeria often create structural rigidities within the banking sector, making it difficult for banks to efficiently allocate credit and optimize performance." This inconsistency affects not only banking institutions but also the broader economy, as limited credit availability hampers business expansion and economic growth.

Additionally, external economic shocks, fiscal policy misalignments, and regulatory bottlenecks further complicate the effectiveness of monetary policy in Nigeria. According to Okonkwo (2015), "the Nigerian banking sector operates in an environment of high inflation, volatile exchange rates, and inconsistent fiscal policies, which often counteract the intended effects of monetary policy interventions." These factors create uncertainty in financial markets, affecting investor confidence and the overall stability of the banking system. This study aims to establish significant relationships between key monetary policy variables and banking performance indicators. The broad objective of this study is to examine the relationship between monetary policy variables and bank performance indicators. Specifically, the research aims to provide answers to the following research questions stated in the null hypotheses below:

- i. **H**<sub>0</sub>: There is no significant relationship between the interest rate and return on assets;
- ii. **H**<sub>0</sub>: Inflation rate has no significant effect on the return on assets of the banks;
- iii. **H**<sub>0</sub>: Cash reserve ratio has no significant impact on the return on assets.

This study investigates the relationship between monetary policy and bank performance, focusing on monetary policy tools on return on assets and the influence of monetary policy tools on the performance of deposit money banks in Nigeria. The research covers data from the period 2010 to 2023, a timeframe that allows for a comprehensive analysis of the effects of monetary policy during varying economic conditions, including periods of inflationary pressure and stability. The primary focus is on Zenith bank in Nigeria, as they are the key players in the country's financial sector, and the study aims to provide insights into how monetary policy decisions impact their financial stability and performance. However, the study being an academic work is constrained by the availability of time. Also, the challenge of obtaining accurate, timely and comprehensive data for both monetary policy and bank's performance was also a major limitation.

# THEORETICAL FRAMEWORK ON MONETARY POLICY AND BANK PERFORMANCE

Monetary policy is a fundamental tool used by central banks to regulate economic activities by influencing money supply, interest rates, and credit availability. According to Mishkin (2019), monetary policy plays a crucial role in stabilizing the economy by controlling inflation and promoting economic growth. The theoretical foundation of monetary policy is rooted in Keynesian, Monetarist, and New Classical perspectives. Keynesian theory argues that government intervention is necessary to regulate economic fluctuations through monetary and fiscal policies (Blanchard, 2020). In contrast, Monetarists, led by Friedman (1970), emphasize

Volume 8, Issue 3, 2025 (pp. 66-81)



the role of money supply in determining economic outcomes. The New Classical approach, championed by Lucas (2020), suggests that monetary policy is ineffective in the long run due to rational expectations. Recent studies by Woodford (2021) extend these theories by incorporating forward-looking monetary policy rules and their impact on financial stability. These perspectives provide a framework for understanding how monetary policy affects bank performance by influencing liquidity, profitability, and credit risk.

The transmission mechanism of monetary policy explains how changes in policy rates impact banking sector performance. Bernanke et al. (2018) argue that monetary policy affects banks through the interest rate channel, credit channel, and exchange rate channel. The interest rate channel suggests that when central banks adjust policy rates, borrowing and lending rates change, impacting banks' net interest margins (NIM). The credit channel emphasizes the role of bank lending behavior, where tighter monetary policy reduces loan availability, affecting profitability (Gambacorta et al., 2018). Additionally, the exchange rate channel influences foreign currency-denominated loans, altering banks' financial positions, especially in economies dependent on external trade. Recent studies by Carstens and Claessens (2021) highlight the global financial cycle's role in amplifying monetary policy effects, particularly in interconnected economies. Further research by Rey (2022) suggests that global financial conditions significantly influence the effectiveness of domestic monetary policies, especially in emerging markets.

Financial intermediation theory provides additional insights into the relationship between monetary policy and bank performance. According to Diamond and Rajan (2019), banks act as intermediaries by transforming short-term deposits into long-term loans. Changes in monetary policy influence the cost of funds and the ability of banks to perform this function efficiently. In a low-interest-rate environment, banks face challenges in maintaining profitability due to compressed margins, while high-interest rates may lead to reduced credit demand and higher default risks (Borio et al., 2019). Furthermore, the risk-taking channel suggests that prolonged low interest rates may encourage excessive risk-taking by banks, potentially leading to financial instability (Dell'Ariccia et al., 2020). Additional studies by Adrian et al. (2021) indicated that macroprudential policies should complement monetary policy to mitigate excessive risk-taking and enhance financial stability. A recent work by Shin (2023) suggests that central bank digital currencies (CBDCs) could play a role in improving monetary policy transmission and reducing financial sector volatility. Understanding these theoretical perspectives provides a comprehensive view of how monetary policy shapes banking sector performance across different economic environments.

# **Inflation Targeting vs. Exchange Rate Targeting**

Central banks also adopt different targeting strategies based on their macroeconomic priorities. Inflation targeting focuses on maintaining a stable inflation rate through interest rate adjustments and transparent policy communication (Svensson, 2020). Many advanced economies, including the U.S. and the Eurozone, use inflation targeting to guide monetary decisions (Bernanke et al., 2018). In contrast, exchange rate targeting aims to stabilize currency values by pegging them to a stable foreign currency, as seen in some emerging markets (Edwards et al., 2019). Research by Frankel (2021) suggested that inflation targeting tends to be more effective in economies with independent central banks and deep financial markets, while exchange rate targeting benefits trade-dependent nations.

Volume 8, Issue 3, 2025 (pp. 66-81)



Monetary policy is a dynamic tool that central banks use to achieve macroeconomic stability, and its effectiveness depends on the specific approach adopted. Expansionary and contractionary policies serve opposing but complementary roles in managing economic fluctuations. Meanwhile, discretionary and rule-based policies, as well as various targeting strategies, provide frameworks for central banks to implement effective monetary policies. Empirical studies indicate that a balanced combination of these policies enhances economic resilience and stability (Gali, 2021). As financial markets evolve, central banks must continuously adapt their monetary policy frameworks to address emerging economic challenges and opportunities (Reis, 2022).

In Nigeria, the Central Bank of Nigeria (CBN) employs a combination of monetary policy strategies to achieve economic stability. The CBN primarily utilizes an inflation-targeting approach while also managing exchange rate fluctuations to stabilize the naira (CBN, 2022). The bank frequently adjusts the Monetary Policy Rate (MPR) to control liquidity, uses Open Market Operations (OMO) to regulate money supply, and sets Cash Reserve Requirements (CRR) to influence credit availability (Adebayo et al., 2023). These measures have been instrumental in addressing inflationary pressures, fostering financial inclusion, and supporting economic growth. However, challenges such as external shocks, fiscal dominance, and economic structural weaknesses continue to impact the effectiveness of monetary policy in Nigeria. Future research should focus on evaluating how emerging financial technologies and global economic trends influence Nigeria's monetary policy landscape.

# Monetary Policy and the Banking System in Nigeria

Monetary policy plays a crucial role in shaping the banking system in Nigeria, influencing bank performance, credit allocation, and overall financial stability. The Central Bank of Nigeria (CBN) formulates and implements monetary policy tools such as the Monetary Policy Rate (MPR), Open Market Operations (OMO), and liquidity regulations to guide banking operations (CBN, 2022). Studies by Adebayo et al. (2023) indicate that monetary policy directly affects banks' profitability, lending capacity, and risk exposure. This section explores the connection between monetary policy and the banking system in Nigeria, highlighting its effects on bank performance and operations.

Monetary policy significantly impacts banks' credit allocation and lending behavior. Expansionary monetary policies, characterized by lower interest rates and increased liquidity, enhance banks' ability to offer loans to businesses and individuals (Mishkin, 2019). Conversely, contractionary policies limit credit expansion, reducing banks' loan portfolios and affecting their profitability (Bernanke et al., 2018). Studies by Onoh (2020) suggest that Nigerian banks adjust their lending strategies based on policy rate changes, impacting economic growth and investment. The liquidity management function of Nigerian banks is also influenced by monetary policy tools. Open Market Operations (OMO), which involve the buying and selling of government securities, help regulate money supply and control inflation (Krugman et al., 2020). Research by Ibeabuchi (2021) highlights that changes in OMO operations directly affect banks' liquidity ratios, influencing their ability to meet short-term obligations and maintain financial stability.

Moreover, monetary policy affects banks' risk exposure and asset quality. Stringent monetary measures, such as increased Cash Reserve Requirements (CRR), can constrain banks' ability to lend, leading to a shift towards riskier assets to maintain profitability (Gambacorta & Shin,

Volume 8, Issue 3, 2025 (pp. 66-81)



2018). Empirical studies by Eze et al. (2022) show that periods of tight monetary policy in Nigeria have been associated with increased non-performing loans (NPLs), affecting banks' financial health.

Overall, the connection between monetary policy and the banking system in Nigeria underscores the need for a balanced approach to ensure financial stability while promoting economic growth. Further research should explore the long-term impact of monetary policy shifts on Nigerian banks' resilience and performance.

# **Banking System and Bank Performance**

Empirical studies have shown mixed results on the relationship between monetary policy and bank performance. According to Ajayi et al. (2020), contractionary monetary policy leads to reduced lending, higher non-performing loans, and declining bank profitability in emerging markets. Conversely, Kutan et al. (2019) argue that expansionary monetary policy enhances bank performance by increasing credit availability and boosting economic activity. These variations suggest that the effectiveness of monetary policy depends on factors such as financial market structure, regulatory environment, and macroeconomic conditions. Moreover, recent studies highlight that banks with strong capitalization are better positioned to withstand monetary policy shocks compared to smaller, less capitalized institutions (Claessens & van Horen, 2019). Further research by Nguyen et al. (2022) confirms that monetary policy effectiveness varies significantly across developed and developing economies due to differences in financial infrastructure and institutional frameworks. A study by Beck et al. (2023) emphasizes that digital banking transformation has also altered monetary policy transmission by influencing credit distribution and bank profitability.

The banking system plays a critical role in economic growth and financial stability, serving as the intermediary for savings, investments, and credit allocation. In Nigeria, the banking sector has undergone significant transformations over the years, shaped by regulatory reforms, technological advancements, and macroeconomic conditions (CBN, 2022). The Central Bank of Nigeria (CBN) continues to implement policies aimed at enhancing banking stability and performance, with monetary policy instruments such as the Monetary Policy Rate (MPR) influencing credit availability and profitability (Emefiele, 2021). The effectiveness of these policies in driving banking performance remains a subject of ongoing analysis and debate among financial experts.

The Nigerian banking sector has experienced several regulatory changes, including the consolidation exercise of 2005, which reduced the number of banks but strengthened their capital base (Sanusi, 2020). This restructuring improved financial resilience, but challenges such as non-performing loans (NPLs) and inflationary pressures persist (Adebayo et al., 2023). In recent years, banks have leveraged digital banking services to enhance customer access to financial products, leading to increased operational efficiency and revenue growth (Olawale, 2022). However, concerns about cybersecurity risks and financial fraud have emerged as major threats to banking operations.

Bank performance is commonly measured using financial indicators such as Return on Assets (ROA), Return on Equity (ROE), and the Non-Performing Loans (NPL) ratio (Ibrahim et al., 2021). These metrics provide insights into banks' profitability, credit risk, and overall efficiency. A study by Okonkwo et al. (2023) found that the Nigerian banking industry has shown resilience despite macroeconomic challenges, with profitability largely influenced by

Volume 8, Issue 3, 2025 (pp. 66-81)



monetary policy adjustments and exchange rate fluctuations. High interest rates and inflation have been identified as key determinants affecting lending capacity and loan repayment rates. Monetary policy plays a significant role in shaping banking sector performance by influencing liquidity conditions and interest rate movements (Afolabi, 2022). The Central Bank's tightening or loosening of monetary policy affects banks' ability to grant loans, impacting both deposit mobilization and credit growth. For instance, a high Monetary Policy Rate (MPR) may reduce borrowing due to increased loan costs, thereby affecting bank revenues (Obi et al., 2023). Conversely, a lower MPR encourages borrowing but may lead to increased credit risk if not properly managed.

Inflation remains a major concern for banks, as it erodes the value of financial assets and affects loan repayment capacity (Eze et al., 2021). The impact of inflation on Non-Performing Loans (NPLs) is a widely studied phenomenon, with research indicating that high inflation leads to higher default rates, particularly among small and medium enterprises (SMEs) (Onyeka & Adeyemi, 2023). While the CBN has implemented various inflation-targeting measures, persistent inflationary pressures continue to challenge financial stability and banking sector growth. The adoption of financial technology (FinTech) has transformed banking operations in Nigeria, improving customer experience and expanding financial inclusion (Adepoju, 2022). Mobile banking, internet banking, and digital payment platforms have reduced transaction costs and enhanced accessibility to banking services. However, regulatory challenges and technological disruptions require continuous policy adjustments to maintain a stable financial ecosystem (Balogun et al., 2023).

Foreign exchange volatility is another factor impacting bank performance, especially for banks engaged in international trade financing (Nwachukwu, 2022). Exchange rate fluctuations influence capital inflows, loan repayments, and interest income. Banks with strong Forex management strategies are better positioned to navigate these challenges, maintaining profitability despite economic uncertainties (Fasanya et al., 2023). Corporate governance and risk management practices are essential in ensuring sustainable banking operations (Ogunleye, 2021). Weak governance structures can lead to financial mismanagement and increased credit risk. The CBN has introduced stringent regulatory measures to enforce transparency and accountability, but compliance remains a challenge in some financial institutions (Osakwe, 2023). Strengthening corporate governance frameworks is crucial to mitigating financial crises and fostering long-term banking stability. The Nigerian banking industry has also faced challenges due to global economic shocks, such as the COVID-19 pandemic, which disrupted financial markets and led to liquidity shortages (Ezenwa, 2022). Many banks had to restructure loans and offer moratoriums to businesses affected by the pandemic-induced economic downturn. The post-pandemic recovery phase has seen an increase in digital banking transactions and strategic diversification of revenue streams (Okorie et al., 2023).

Despite the challenges, Nigerian banks have continued to expand their presence across Africa, capitalizing on regional economic integration (Obiora et al., 2022). Pan-African banking operations have provided new revenue opportunities but also introduced cross-border regulatory risks that require effective risk mitigation strategies (Kalu et al., 2023). International collaborations and partnerships have been instrumental in navigating these regulatory landscapes. The Nigerian banking system remains a vital pillar of economic growth, adapting to changing macroeconomic conditions and regulatory reforms. While monetary policy influences bank performance, other factors such as inflation, exchange rate fluctuations, technological advancements, and corporate governance structures play crucial roles in

Volume 8, Issue 3, 2025 (pp. 66-81)



determining financial stability and profitability. Continuous policy innovation and regulatory oversight are essential in ensuring a resilient and competitive banking sector in Nigeria (Adeyemi et al., 2023).

#### RESEARCH METHODOLOGY

This section outlines the research methodology employed in the study, including the research design, sources of data, methods of data collection, model specification, and techniques of data analysis. The study investigates the relationship between monetary policy and bank performance in Nigeria from 2010 to 2023, using regression analysis as the primary analytical tool. Secondary data was obtained from credible sources such as the Central Bank of Nigeria (CBN) statistical bulletins, the National Bureau of Statistics (NBS) reports, financial statements and reports from Zenith Bank Plc in Nigeria, and relevant academic journals, books, and publications.

# **Research Design**

The study adopts an ex-post facto research design. This design is appropriate as it allows for the analysis of historical data to determine the effect of monetary policy variables on bank performance indicators. Since the data used are already existing, there is no direct manipulation of variables.

# **Data Analysis Technique**

This study employs Ordinary Least Squares (OLS) regression analysis to estimate the relationships between the variables. OLS is chosen due to its efficiency in estimating the parameters of linear models and its ability to minimize errors. The study examines the following key variables:

#### **Model Specification**

To test the hypotheses, the study employs multiple regression analysis. The models are specified as follows:

$$ROA_t = \beta_0 + \beta_1 INTR_t + \beta_2 INFR_t + \beta_3 CRR_t + \varepsilon_t$$

#### where:

- $\bullet$  ROA<sub>t</sub> = Return on Assets at time proxy as dependent variable (Bank performance indicator)
- INTR<sub>t</sub> = Interest Rate at time
- INFR $_t$  = Inflation Rate at time
- CRR<sub>t</sub> = Cash Reserve Ratio at time
- $\beta_0 = Intercept$
- $\beta_1$   $\beta_3$  = Coefficients of the independent variables



•  $\epsilon_t = \text{Error term.}$ 

# 4. Data Analysis and Presentation of Findings

The data used in this study consists of annual records of the interest rate, inflation rate, exchange rate, and return on assets of Zenith Bank of Nigeria from 2010 to 2023.

# **Descriptive Statistics**

The descriptive statistics for the key variables are presented in Table 4.2.

**Table 1: Summary of Descriptive Statistics** 

Variables	Mean	Std. Dev.	Minimum	Maximu	Coun
				m	t
ROA	2.790714	0.729736	1.020000	3.930000	14
CRR	19.85714	8.694447	1.000000	32.50000	14
INFR	14.18786	5.746258	8.000000	28.92000	14
INTR	26.80500	2.646570	22.42000	30.60000	14

The descriptive statistics show the distribution of monetary policy indicators and bank performance variables over the period under review.

**Table 2: Correlation Coefficient** 

Covariance Analysis: Ordinary Date: 04/04/25 Time: 13:13

Sample: 2010 2023 Included observations: 14

Covariance	1			
Correlation	ROA	CRR	INFR	INTR
ROA	0.494478			
	1.000000			
CRR	3.138316	70.19388		
	0.532689	1.000000		
INFR	0.739216	30.05898	30.66095	
	0.189848	0.647936	1.000000	
INTR	0.885675	17.60107	5.707475	6.504025
	0.493867	0.823756	0.404166	1.000000

Prior to conducting regression models, a pairwise correlation analysis was performed to examine the relationships between the coefficients of the loan management variables and other factors. The analysis shown in Table 2 indicates that the variables under consideration exhibit low levels of correlation.

Article DOI: 10.52589/AJAFR-CAUKVZ4M DOI URL: https://doi.org/10.52589/AJAFR-CAUKVZ4M Volume 8, Issue 3, 2025 (pp. 66-81)



# **Unit Root Test**

Augmented Dickey-Fuller (ADF) unit root test is applied to examine the stationarity of the data used in this study. The decision on whether to reject or not reject the null hypothesis that the variable has a unit root is checked at a 5% level of significance.

**Table 3: Unit Root Test** 

Variables	Augmented Dickey-Fuller (ADF)			
	5% Critical		Order of	
	values	statistics	Integration	
ROA	-3.119910	-3.964331	I(0)	
CRR	-3.144920	-4.494216	I(1)	
INFR	-3.259808	-3.275755	I(2)	
INTR	-3.144920	-5.457008	I(1)	

The stationarity of the underlying variables is presented in Table 3. ROA is stationary at level. Meanwhile, CRR and INTR are stationary at first difference, while INFR is stationary at second difference. Hence, the variables are integrated in order zero I(0), one I(1), and I(2).

# RESULTS AND IMPLICATION

Table 4: ARDL Short and Long Run Coefficients Model

Panel A:	Short-run	Dynamics	Panel A:	Long-run	Dynamics	
Coefficient			Coefficient			
Variable	Coefficient	Prob.	Variable	Coefficient	Prob.	
ROA (-1)	0.102009	0.7761	CRR	-0.032122	0.6862	
CRR	-0.028846	0.6651	INFR	0.030737	0.6832	
INFR	0.027602	0.6518	INTR	0.090852	0.5428	
INTR	0.081584	0.5553	С	0.726032	0.8247	
С	0.651970	0.8242				
Panel C: Co-integration test						
F-Bounds Test	s Test   Null Hypothesis: No levels of relationship					
Test Statistic	Value	Significa	I(0)	I(1)		
		nt				
F-statistic	2.848987	10%	2.37	3.2		
k	3	5%	2.79	3.67		

Article DOI: 10.52589/AJAFR-CAUKVZ4M DOI URL: https://doi.org/10.52589/AJAFR-CAUKVZ4M

Volume 8, Issue 3, 2025 (pp. 66-81)



#### **DISCUSSION OF FINDINGS**

The ARDL long-run result showed that all the explanatory variables except cash reserve ratio have a positive relationship with the dependent variable (return on assets). Specifically, inflation rate and interest rate are directly related to return on assets, which implies that an increase in either inflation rate or interest rate will increase the performance of banks by 0.030737 and 0.090852 units respectively. Meanwhile, cash reserve ratio is inversely related to return on assets, indicating that an increase in CRR will in turn decrease the bank's performance by 0.032122 units.

Table 4, Panel A, shows the short-run dynamic estimates of the variables used in the first model. The three variables are proxies for monetary policy, cash reserve ratio (CRR), inflation rate (INFR), and interest rate (INTR) are the control variable. The result reveals that all the explanatory variables are statistically insignificant and it reveals that CRR has a negative effect on return on assets. Meanwhile, INFR and INTR show positive relationships with return on assets (bank performance). The long-run estimates are shown in Table 5, Panel B. It is depicted from the outcome of the result that all the explanatory variables except CRR have a direct impact on bank performance at a 5 percent level of statistical significance.

Also, the ARDL cointegration bound test reveals that the computed F-statistics value of 3 is lower than the lower 2.79  $\{I(0)\}$  and the upper 3.67  $\{I(1)\}$  bound of the critical values at a 5% level of significance. Hence, it can be concluded that there is a long-run relationship among the variables used in the model.

# **Hypotheses Testing**

 $H_01$ : There is no significant relationship between the interest rate and return on assets.

 $H_02$ : Inflation rate has no significant effect on the return on assets of bank.

 $H_03$ : Cash reserve ratio has no significant impact on the return on assets of the bank.

**Decision Rule:** All the explanatory variables p-values (0.6651; 0.6518; 0.5553) are greater than 0.05. Therefore, the null hypothesis  $(H_0)$  is accepted. This indicates that there is no significant relationship between the explanatory variables (Monetary Policy tools) and the explained variable (Bank Performance).

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

The study has provided important insights into the relationship between the monetary policy and bank performance. The insignificant relationships between the monetary policy tools and bank performance indicator underscores the importance of monetary policy decisions in shaping bank profitability. An increase in either inflation rate or interest rate is associated with higher return on assets, indicating that banks benefit from adjustments in monetary policy rates. However, the lack of a significant relationship between cash reserve ratio and ROA suggests that other structural and policy-related factors, such as regulatory policies and economic stability, may play more crucial roles in influencing bank performance. Moving forward, policymakers and financial institutions should adopt strategies that enhance banking performance while ensuring economic stability. These findings align with economic theories

Volume 8, Issue 3, 2025 (pp. 66-81)



that highlight the influence of monetary policy on financial institutions' performance while also emphasizing the complexity of cash reserves beyond inflationary pressures.

Based on the study's findings, the following recommendations are proposed:

- 1. **Monetary Policy Formulation:** The Central Bank should consider the impact of MPR adjustments on bank profitability when setting interest rates. Policies that strike a balance between controlling inflation and maintaining banking sector profitability should be prioritized.
- 2. **Bank Profitability Strategies:** Financial institutions should align their lending and investment strategies with changes in the monetary policy rate to optimize returns and sustain profitability.
- 3. **Credit Risk Management:** Since inflation does not significantly impact non-performing loans, banks should focus on strengthening credit risk management frameworks, enhancing loan monitoring processes, and improving debt recovery mechanisms.
- 4. **Regulatory Policies:** Policymakers should implement regulatory measures that mitigate the risks associated with non-performing loans. This includes enforcing stricter loan approval processes and ensuring compliance with prudential lending standards.
- 5. **Further Research:** Future studies should explore other macroeconomic factors, such as exchange rates and GDP growth, in relation to bank performance to provide a more comprehensive analysis of the determinants of financial stability.

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# **Appendix**

Monetary Policy and Bank's Performance						
Years	ROA	CRR	INFR	INTR		
2010	1.02	1	11.8	22.51		
2011	1.9	8	10.3	22.42		
2012	3.93	12	12	23.79		
2013	2.9	12	8	24.69		
2014	2.7	20	8	25.74		
2015	2.63	20	9.6	26.71		
2016	2.66	22.5	18.6	27.29		
2017	3.21	22.5	15.4	30.6		
2018	3.34	22.5	11.4	28.16		
2019	3.28	22.5	11.98	30.57		
2020	2.78	27.5	15.8	28.64		
2021	2.96	27.5	15.63	28.06		
2022	2.22	27.5	21.34	28.11		
2023	3.54	32.5	28.92	27.98		

Source: CBN Statistical Bulletin (2023) and Zenith Bank Financial Reports (2023).