

# Impact of Monetary Policy on Deposit Money Bank Lending in Nigeria

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## Abstract

## Review Article

This study investigated the impact of monetary policy on deposit money bank lending in Nigeria over the period 2005-2022. Data for the study were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin, 2023. The study employed an ex post facto research design, and data analysis was conducted using Error Correction Model with the Ordinary Least Squares (OLS) technique. The key findings of the study show that the monetary policy rate, cash reserve ratio, and liquidity ratio all have an inverse and insignificant relationship with commercial bank lending in Nigeria. However, Open Market Operations (OMO) was found to have a positive and significant relationship with commercial bank lending. The study concluded that traditional monetary policy tools may not have been effective in influencing lending behavior in Nigeria during the study period. It recommends that the central bank should consider providing short-term funding options or facilitating interbank lending to help banks manage liquidity better while continuing to support lending activities.

**Keywords:** Cash Reserve Ratio, Liquidity Ratio, Monetary Policy Rate, Open Market Operations.

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## 1. INTRODUCTION

Monetary policy is a vital tool used by central banks worldwide to regulate economic activity and maintain macroeconomic stability (Meier & Reinelt, 2024). In Nigeria, the Central Bank of Nigeria (CBN) utilizes a variety of monetary policy tools to influence key economic indicators such as inflation, interest rates, and overall growth (Oyadeyi, 2024). Commercial banks play an essential role in transmitting these policies by providing credit to individuals and businesses (Iwedi & James, 2023). As such, understanding the impact of monetary policy on commercial bank lending is crucial for assessing the effectiveness of policy measures aimed at stimulating economic growth.

Key instruments of monetary policy, including the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), Liquidity Ratio (LR), and Open Market Operations (OMO), are significant in shaping the lending behavior of commercial banks (Bernanke, 2020). Each of these tools affects the availability of credit in the economy, influencing interest rates, liquidity levels, and banks' willingness to extend loans.

In Nigeria, where access to credit is often limited, the ability of monetary policy to affect commercial bank lending is vital for economic progress. The availability of credit is especially important for sectors such as agriculture, manufacturing, and small and medium-sized enterprises (SMEs), all of which are crucial for Nigeria's economic development (Udoh, Dauda, Ajayi, & Ikpechukwu, 2021).

Over the years, Nigeria's monetary policy has evolved, shaped by the country's economic context, which includes a heavy reliance on oil revenue, recurrent economic shocks, inflationary pressures, and fluctuating exchange rates (Pillah, 2023). The CBN is responsible for implementing monetary policy to control inflation, stabilize the financial system, and foster economic growth. The transmission of this policy largely occurs through the financial sector, particularly through commercial banks (Nwanyanwu, Tordee, Alobari, & Emah, 2024).

Deposit money banks serve as intermediaries in the financial system, facilitating the movement of funds between savers and borrowers. Their lending behavior is influenced by various factors, including the CBN's

monetary policy stance. For example, when the CBN changes the MPR, it sends signals to deposit money banks the likely direction of interest rates. A higher MPR typically increases borrowing costs, discouraging lending, while a lower MPR tends to promote lending by reducing borrowing costs. Similarly, changes in the CRR and LR directly influence the amount of funds banks have available to lend. OMO, involving the buying and selling

of government securities, also impacts liquidity in the banking system, which in turn affects lending activities (Onigah, 2024).

Over the past decade, there has been a clear historical relationship between monetary policy instruments and deposit money bank lending in Nigeria. This relationship is visually represented in Figure 1 below, followed by a brief discussion of the data.

**Table 1: Selected Monetary Policy Instruments and Deposit Money Bank Lending**

Year	Monetary Policy Rate (%)	Cash Reserve Ratio (%)	Liquidity Ratio (%)	Open Market Operations (₦'Billion)	Deposit Money Bank Lending (₦'Billion)
2012	12.00000	12.00000	49.72000	6247.890	7723.720
2013	12.00000	12.00000	46.23000	6853.880	9488.320
2014	13.00000	20.00000	38.27000	7677.340	12143.25
2015	11.00000	20.00000	42.35000	8691.420	12148.36
2016	14.00000	22.50000	45.95000	10870.51	14872.31
2017	14.00000	22.50000	54.79000	12382.05	14662.14
2018	14.00000	22.50000	65.04000	12152.44	13965.28
2019	13.50000	22.50000	104.2000	13245.86	15995.85
2020	11.50000	27.50000	67.60000	14663.34	18448.66
2021	11.50000	27.50000	61.20000	17866.50	22115.59
2022	16.50000	27.50000	54.93000	20898.15	26643.23

**Source:** Central Bank of Nigeria (CBN) Statistical Bulletin, 2022.

The dataset in Table 1 presents an overview of key monetary policy variables and deposit money bank lending activities in Nigeria from 2012 to 2022. Over this period, the Monetary Policy Rate (MPR) varied, reaching a low of 11% in 2015 and 2020, and peaking at 16.5% in 2022. The Cash Reserve Ratio (CRR) also experienced significant changes, notably rising from 12% in 2012 to 27.5% by 2020 and remaining elevated thereafter. The Liquidity Ratio (LR) fluctuated, with a notable low of 38.27% in 2014 and a high of 104.2% in 2019. It then slightly decreased from 67.6% in 2020 to 54.93% in 2022, possibly indicating a relaxation of liquidity restrictions as economic conditions began to stabilize. Open Market Operations (OMO) volumes consistently increased, growing from ₦6,247.89 billion in 2012 to ₦20,898.15 billion in 2022. The significant rise in OMO volumes, particularly in 2022, suggests more aggressive monetary interventions in response to economic challenges and inflationary pressures. Deposit money bank lending saw a substantial increase, rising from ₦7,723.72 billion in 2012 to ₦26,643.23 billion in 2022. Lending continued to grow, particularly in 2021 and 2022, despite higher MPR and CRR rates. This growth may reflect a strong demand for credit and effective support for lending through monetary policy. This study thus investigates the impact of monetary policy tools on commercial bank lending in Nigeria from 2005 to 2022.

## 2. REVIEW OF RELATED LITERATURE

Obafemi et al. (2019) conducted an empirical

study to examine the impact of the Monetary Policy Rate (MPR) on commercial bank lending in Nigeria. Using quarterly data from 2000 to 2017 and a Vector Error Correction Model (VECM), the study analyzed both the long-run and short-run dynamics of the relationship. The results revealed a significant inverse relationship between the MPR and commercial bank lending. Specifically, a one percentage point increase in the MPR led to a reduction of about 0.42% in lending. This finding indicated that monetary tightening by the Central Bank of Nigeria (CBN) effectively reduced the supply of credit, highlighting the sensitivity of Nigerian banks to changes in interest rates.

Mensah and Kwakye (2020) examined the relationship between the Cash Reserve Ratio (CRR) and bank lending in Sub-Saharan Africa, focusing on data from 2010 to 2019. Through panel data analysis, the study found that higher CRR levels generally resulted in reduced commercial bank lending across the region. While the CRR was effective in controlling inflation and ensuring financial stability, it also constrained credit availability. The study concluded that while higher reserve requirements could stabilize the banking sector, they also limited the amount of credit accessible to businesses and consumers, potentially hindering economic growth.

Reddy and Gupta (2020) studied the effect of liquidity ratios on commercial bank lending in emerging markets, including India and Brazil, using panel data analysis from 2010 to 2019. The study found that higher liquidity ratios led to a reduction in commercial bank lending. The authors attributed this to banks prioritizing liquidity

management over loan issuance, resulting in a more conservative lending approach. The study highlighted the challenge for emerging markets to balance liquidity requirements with the need to promote economic growth through increased credit availability. Garcia and Martinez (2024) investigated the relationship between Open Market Operations (OMOs), commercial bank lending, and financial stability in the Eurozone. Using data from 2020 to 2024 and applying the Generalized Method of Moments (GMM) approach, the study found that expansionary OMOs successfully boosted lending and supported economic recovery. However, they also raised concerns about financial stability due to the potential for excessive risk-taking by banks. The authors recommended a balanced approach to OMOs to ensure both credit expansion and financial stability are effectively managed.

### 3.METHODOLOGY

#### Research Design

This study adopted an Ex Post Facto research design, as it relies on secondary data. The research employs econometric techniques to examine the impact of monetary policy on commercial bank lending in Nigeria. For studies involving time series and secondary data, the most suitable methodology is linear regression, specifically using the Ordinary Least Squares (OLS) technique.

#### Nature and Sources of Data

The study utilizes time series secondary data on key monetary policy variables, including the monetary policy rate, cash reserve ratio, liquidity ratio, open market operations, and commercial bank lending, spanning the period from 2005 to 2022. Data for the analysis were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin (2022).

#### Unit-Root Test Result

Table 1:Unit Root Test Result

VARIABLE	ADF STAT.	CRITICAL VAL.	ORDER
CBL	-4.921189	-1.964418	I(1)
MPR	-3.416454	-3.081002	I(1)
CRR	-3.416454	-3.081002	I(1)
LIQR	-5.316100	-3.065585	I(1)
OMO	-8.838892	-3.828975	I(1)

Source:Author’s Computation Using E-views.

Table 1 clearly shows that all the variables are stationary at first difference (I(1). This means that the variables have unit-root until differenced in the first order. When all variables in a time series model are stationary at their first

### Model Specification

The model used in this study is based on the one applied by Nwankwo and Olufemi (2023) in their research on the relationship between monetary policy and lending rates in Nigeria from 1985 to 2022. Their study employed Ordinary Least Squares (OLS) to estimate the specified variables. The model from their study has been adapted to address hypotheses 1-4 in this research.

Implicitly:

$$CBL_t = f(MPR_t, CRR_t, LIQR_t, OMO_t) \tag{3.1}$$

The explicit econometric model is specified thus:

$$CBL_t = \beta_0 + \beta_1MPR_t + \beta_2CRR_t + \beta_3LIQR_t + \beta_4OMO_t + \mu_t \tag{3.2}$$

Where:

CBL = Deposit Money Bank Lending

MPR = Monetary Policy Rate

CRR = Cash Reserve Ratio

LIQR = Liquidity Ratio

OMO = Open Market Operations

t = Time Period

$\beta$ ’s = structural Parameters to be estimated

$\mu$  = Stochastic Error Term

The a priori expectations are given as:  $\beta_1 < 0$ ,  $\beta_2 < 0$ ,  $\beta_3 < 0$ ,  $\beta_4 > 0$

### 4. RESULTS AND DISCUSSION

#### Empirical Results

Time series data are typically assumed to be non-stationary, so it is essential to conduct a unit root test to confirm that the data are stationary. This step is necessary to avoid issues with spurious regression. To assess the stationarity of the data, the Augmented Dickey-Fuller (ADF) unit root test was applied. The decision rule for the ADF test is that the test statistic must exceed the Mackinnon Critical Value at the 5% significance level, in absolute terms. The results of the unit root test are presented in Table 4.1 below.

difference, it typically means that they are integrated of order 1, or I(1). This implies that each variable is non-stationary in its levels but becomes stationary after differencing once.

## Cointegration Analysis (Johansen Methodology)

**Table 2:** Cointegration Test Result  
**Cointegration Result**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.999526	198.6673	69.81889	0.0000
At most 1 *	0.879759	76.19384	47.85613	0.0000
At most 2 *	0.774935	42.30177	29.79707	0.0011
At most 3 *	0.634864	18.43993	15.49471	0.0175
At most 4	0.134987	2.320170	3.841466	0.1277

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

The Johansen method of cointegration was used for the study because all the variables are stationary at first difference. The Johansen cointegration result in table 2 clearly shows that the trace statistics indicates 4

cointegration equations at 5% level of significance. This entails that a long-run relationship exists between deposit money bank loans, monetary policy rate, cash reserve ratio, liquidity ratio, and open market operations.

## Regression Results (ECM Inclusive)

**Table 3:** ECM Result

Dependent Variable: D(CBL)

Method: Least Squares

Date: 11/02/24 Time: 09:36

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-61.71873	585.6099	-0.105392	0.9180
D(MPR)	-215.3840	170.2386	-1.265189	0.2319
D(CRR)	-124.0386	101.7516	-1.219034	0.2483
D(LIQR)	-35.30757	18.23713	-1.936026	0.0790
D(OMO)	1.577199	0.434343	3.631230	0.0039
ECM(-1)	-0.881431	0.396307	-2.224109	0.0480
R-squared	0.676570	Mean dependent var		1615.833
Adjusted R-squared	0.529556	S.D. dependent var		1788.832
S.E. of regression	1226.940	Akaike info criterion		17.33300
Sum squared resid	16559210	Schwarz criterion		17.62707
Log likelihood	-141.3305	Hannan-Quinn criter.		17.36223
F-statistic	4.602086	Durbin-Watson stat		1.890470
Prob(F-statistic)	0.016429			

**Source:** Researcher's Computation Using E-views

The regression results presented in Table 3 indicate that the Monetary Policy Rate (MPR) has a negative coefficient of -215.3840. This implies that a 1% increase in the MPR leads to a 215.3840% decrease in commercial bank lending. This result aligns with economic theory, which predicts an inverse relationship between the MPR and deposit money bank lending.

Similarly, the Cash Reserve Ratio (CRR) has a negative coefficient of -124.0386, indicating a negative relationship with deposit money bank lending. When the

CRR increases, the lending capacity of banks decreases because higher reserve requirements mean banks must hold more funds with the central bank, reducing the amount available for loans. Conversely, a lower CRR would increase liquidity, enabling banks to extend more loans. This relationship is consistent with monetary policy theory, where a higher CRR is used to control inflation and limit lending, while a lower CRR can stimulate lending and economic activity.

The Liquidity Ratio (LR) shows a negative coefficient of

-35.30757, suggesting a negative relationship with commercial bank lending. A higher liquidity ratio requires banks to hold more liquid assets, such as cash or easily convertible securities, which restricts the funds available for lending. As the liquidity ratio increases, banks are less likely to extend loans to businesses and consumers, prioritizing liquidity management instead. A lower liquidity ratio would theoretically allow banks to increase lending, supporting economic growth by providing more credit.

Open Market Operations (OMO) is associated with a positive coefficient of 1.577199, indicating a positive relationship with commercial bank lending. This suggests that as the central bank engages in more OMO, such as purchasing government securities, the reserves of commercial banks increase, enhancing their capacity to lend. Increased liquidity from OMO purchases reduces short-term interest rates, making it easier for banks to offer credit. In contrast, selling securities reduces liquidity, which could lead to tighter lending conditions.

The Error Correction Mechanism (ECM) has a negative coefficient of -0.881431, suggesting that the model

adjusts significantly and quickly to return to equilibrium after short-term deviations. In an Error Correction Model, the ECM reflects the speed at which the variables correct themselves toward long-term equilibrium. This coefficient indicates that about 88% of any disequilibrium from the previous period is corrected in the current period, implying a rapid adjustment process.

The coefficient of determination (R-squared) is 0.676570, meaning that approximately 67.66% of the variation in the dependent variable can be explained by the independent variables in the regression model. While this indicates a reasonably good fit, there remains about 32.34% of the variance that is unexplained by the model, which could be due to other factors not included in the analysis, measurement errors, or inherent randomness.

The F-statistic is 4.602086, with a corresponding p-value of 0.016429, which is less than 0.05. This suggests that the overall model is statistically significant at the 5% level. Therefore, we can confidently reject the null hypothesis that all the regression coefficients are equal to zero, implying that the explanatory variables have a significant impact on the dependent variable.

### Serial Correlation LM Test Result

**Table 4:** Serial Correlation Test Result  
Breusch-Godfrey Serial Correlation LM Test:

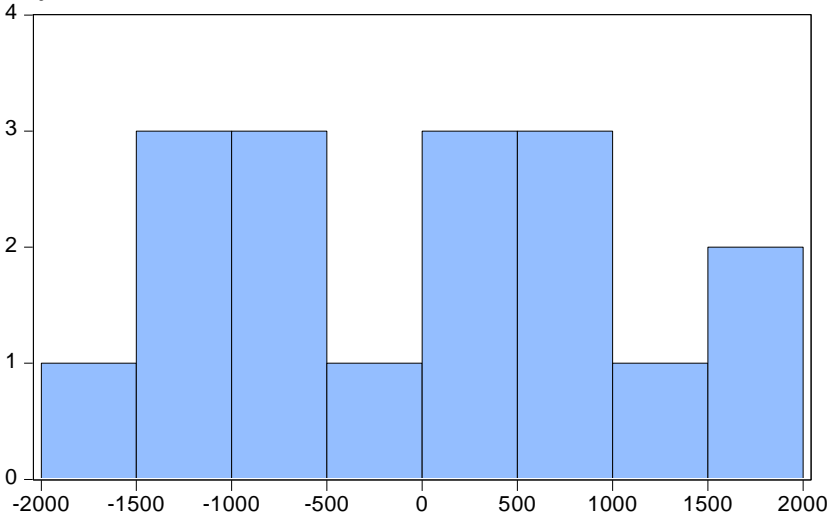
F-statistic	1.828446	Prob. F(2,9)	0.2156
Obs*R-squared	4.911725	Prob. Chi-Square(2)	0.0858

**Source:** Researcher’s Computation Using E-views.

The Breusch-Godfrey Serial Correlation LM Test was used to carry out the test of autocorrelation. It is clearly seen that the Obs\*R-squared which follows the computed Binomial distribution yielded 4.911725 and it is clearly

less than the Chi-Square probability which yielded 0.0858. This compels us to accept the null hypothesis that there is no serial correlation of any order. Hence; there is no presence of autocorrelation problem in the model.

### Normality Test



**Source:** Researcher’s Computation Using E-views.

Series: Residuals	
Sample 2006 2022	
Observations 17	
Mean	1.27e-13
Median	80.04192
Maximum	1701.522
Minimum	-1588.753
Std. Dev.	1017.325
Skewness	0.098509
Kurtosis	1.802792
Jarque-Bera	1.042753
Probability	0.593703

The normality test results show that the Jarque-Bera statistic is 1.042753, with a corresponding p-value of 0.593703. This p-value indicates that the residuals of the regression model are likely normally distributed. In a normality test, the null hypothesis assumes the data follows a normal distribution. Since the p-value is significantly higher than the typical 5% significance level

(0.05), we fail to reject the null hypothesis, suggesting there is no significant departure from normality. This is a positive result in regression analysis, as normally distributed residuals indicate that the model's assumptions are likely satisfied, which can lead to more reliable inferences and interpretations of the findings.

Test of Hypothesis  
Hypothesis One

H01: Monetary Policy Rate has no significant impact on deposit money bank lending in Nigeria.

Variable	Probability Value
MPR	0.2319

Decision

Since the p-value of the explanatory variable (MPR) is greater than 0.05, we therefore accept the H0

and conclude that Monetary Policy Rate has no significant impact on deposit money bank lending in Nigeria.

Hypothesis Two

H02: Cash Reserve Ratio has no significant impact on deposit money bank lending in Nigeria.

Variable	Probability Value
CRR	0.2483

Decision

Since the p-value of the explanatory variable (CRR) is greater than 0.05, we therefore accept the

H02and conclude that Cash Reserve Ratio has no significant impact on deposit money bank lending in Nigeria

Hypothesis Three

H03: Liquidity Ratio has no significant impact on deposit money bank lending in Nigeria.

Variable	Probability Value
LIQR	0.0790

Decision

Since the p-value of the explanatory variable (LIQR) is greater than 0.05, we therefore accept the

H03and conclude that Liquidity Ratio has no significant impact on deposit money bank lending in Nigeria.

Hypothesis Four

H04: Open Market Operations has no significant impact on deposit money l bank lending in Nigeria.

Variable	Probability Value
OMO	0.0039



## Decision

Since the p-value of the explanatory variable (OMO) is less than 0.05, we therefore reject the  $H_{04}$  and conclude that Open Market Operations has significant impact on deposit money bank lending in Nigeria.

## DISCUSSION OF RESULTS

The regression results indicate that the Monetary Policy Rate (MPR) does not have a significant impact on deposit money bank lending in Nigeria. This suggests that changes in the MPR do not significantly affect the lending behavior of deposit money banks during the period analyzed. It could imply that, despite the Central Bank of Nigeria's adjustments to the MPR, deposit money banks may not significantly alter their lending rates or volumes in response. This result contrasts with the findings of Obafemi et al. (2019), who found that the MPR significantly influenced deposit money bank lending in Nigeria. It is also partially in agreement with Tshibaka et al. (2021), who analyzed the relationship between MPR and bank lending in Kenya, finding that the impact of MPR varied across banks, depending on their financial health. Additionally, this result does not align with Adegbeye and Suleiman's (2024) findings, which highlighted the significant effect of MPR on lending in Sub-Saharan Africa, including Nigeria.

Regarding the second objective and hypothesis, the study found that the Cash Reserve Ratio (CRR) has an inverse but insignificant effect on deposit money bank lending in Nigeria. This suggests that changes in the CRR do not significantly influence lending activities within the period analyzed. This result may imply that while the CRR is an important monetary policy tool, it does not effectively regulate lending behavior in Nigeria. The finding aligns with the work of Abubakar et al. (2019), who used data from 2005 to 2017 and found a significant inverse relationship between CRR and bank lending. Similarly, Bello and Nwankwo (2021) found that higher CRR levels significantly reduced lending in Nigeria and India. This study's results also coincide with those of Osei and Tetteh (2023), who concluded that higher CRR levels improved financial stability but also curtailed lending volumes in West Africa.

The third hypothesis, regarding the impact of the Liquidity Ratio (LR), found a negative but insignificant effect on deposit money bank lending in Nigeria. While there is a negative relationship, it is not strong enough to be statistically significant, meaning changes in the liquidity ratio do not substantially affect lending behavior. This aligns with Chukwuma and Eke (2019), who concluded that while maintaining higher liquidity ratios is crucial for managing short-term obligations and ensuring financial stability, it often limits the capacity of banks to lend. Reddy and Gupta (2020) also found that higher liquidity ratios led to a reduction in commercial bank lending in emerging markets, including India and Brazil. Furthermore, Martin and Scholz (2022) found similar results in the Eurozone, where higher liquidity ratios were linked to financial stability but had a negative

impact on lending volumes.

The study also found that Open Market Operations (OMO) have a positive and significant impact on deposit money bank lending in Nigeria. This suggests that when the central bank conducts OMOs, it effectively influences the lending behavior of deposit money banks by improving liquidity in the banking system. This finding is consistent with the results of Adamu and Ahmed (2019), who found that OMOs effectively influenced bank lending behavior in Nigeria, highlighting the liquidity channel of monetary policy. Similarly, Chen and Lee (2020) reported that OMOs positively impacted deposit money bank lending in emerging markets such as China and Brazil. The findings also align with Johnson and Matthews (2023), who examined the impact of OMOs during the COVID-19 pandemic and found that expansionary OMOs helped boost deposit money bank lending as central banks sought to mitigate the economic effects of the pandemic.

## 5. CONCLUSION AND RECOMMENDATION

### Summary of Findings

This study examined the impact of monetary policy on deposit money bank lending in Nigeria covering the period 2005-2022. Data for the study were extracted from the Central Bank of Nigeria (CBN) Statistical bulletin, 2022. The major findings of the study are:

- i. Monetary policy rate has an inverse and insignificant relationship with deposit money bank lending in Nigeria from 2005 – 2022.
- ii. Cash reserve ratio has an inverse and insignificant relationship with deposit money bank lending in Nigeria from 2005 – 2022.
- iii. Liquidity ratio has an inverse and insignificant relationship with deposit money bank lending in Nigeria from 2005 – 2022.
- iv. Open Market Operation (OMO) has a positive and significant relationship with deposit money bank lending in Nigeria from 2005 – 2022.

### Conclusion

Based on the findings from the study on the impact of monetary policy on deposit money bank lending in Nigeria from 2005 to 2022, several important conclusions can be drawn. The results reveal that the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), and Liquidity Ratio each exhibit an inverse but insignificant relationship with deposit money bank lending. This suggests that these traditional monetary policy tools have limited effectiveness in influencing lending behavior in Nigeria during the study period. Specifically, the decisions made by banks regarding lending may be influenced by factors other than these

policy rates, reducing the impact of these tools in either stimulating or restraining credit supply. The identified inverse relationships imply that increases in the MPR, CRR, and Liquidity Ratio do not significantly correlate with a reduction in lending activity. This may point to a more complex environment within the banking sector, where banks may have access to excess liquidity or alternative sources of funding, which lessens the impact of these regulatory measures on their lending behavior.

In contrast, the significant positive relationship between Open Market Operations (OMO) and deposit money bank lending highlights the effectiveness of OMO as a monetary policy tool in Nigeria. The ability of OMOs to inject liquidity into the banking system is crucial for fostering lending, suggesting that this mechanism is a more effective instrument for the central bank to promote economic activity and support growth. These findings suggest that the Central Bank of Nigeria may need to reconsider its reliance on the MPR, CRR, and Liquidity Ratio as primary tools for managing deposit money bank lending. Instead, greater emphasis on OMOs could enhance the effectiveness of monetary policy in shaping credit conditions. Policymakers might also explore how these tools interact and how they can be integrated for a more powerful effect on lending behavior.

The lack of significant relationships for the MPR, CRR, and Liquidity Ratio indicates that external factors such as economic conditions, regulatory environments, and credit market dynamics may have a considerable influence on lending practices. A more comprehensive approach, which takes these external variables into account alongside traditional monetary policy measures, may be required to create a more conducive lending environment.

## RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

- i. Since the Monetary Policy Rate (MPR) does not appear to significantly influence lending behavior, policymakers should consider revisiting its role within the broader monetary policy framework. This could involve exploring other monetary policy tools that might have a more direct and tangible impact on deposit money bank lending and credit supply.
- ii. The Central Bank of Nigeria (CBN) should consider reassessing the current Cash Reserve Ratio framework. Given its limited effect on deposit money bank lending, the CBN might explore alternative reserve requirements or more flexible CRR structures that better align with the liquidity needs of banks. This could help foster a more conducive environment for credit expansion.
- iii. Since the Liquidity Ratio has a limited impact on lending, it is important to promote alternative liquidity management strategies for banks. Encouraging banks to strengthen their risk management frameworks to balance liquidity needs with lending objectives would be beneficial. Additionally, the central bank could facilitate access to short-term funding mechanisms or enhance

interbank lending, enabling banks to manage liquidity more effectively while still maintaining the capacity to extend loans.

- iv. The Central Bank of Nigeria should continue to prioritize and strengthen its use of Open Market Operations (OMO) to effectively manage liquidity in the banking system. By conducting regular and well-communicated OMO activities, the central bank can provide the necessary liquidity to banks, which would, in turn, support and expand their lending capacities. This could be a more effective tool in influencing the overall credit conditions in the economy.

## REFERENCES

- Abubakar, I., Umar, A., & Saidu, R. (2019). The effect of cash reserve ratio on commercial bank lending in Nigeria. *African Journal of Economic Review*, 7(1), 60-75.
- Adamu, P., & Ahmed, T. (2019). Open market operations and commercial bank lending in Nigeria: A VAR approach. *African Journal of Economics and Finance*, 11(1), 44-62.
- Albertus, R. H., & Lestari, E. D. (2022). The Influence of Liquidity Ratio, Profitability Ratio, And Solvency Ratio on Company Value In The Property And Real Sector Companies Estate In Indonesia Stock Exchange 2016-2017 Period. *Strategic Management Business Journal*, 2(02), 92-98.
- Alhassan, A., & Akinmoladun, J. (2023). The impact of open market operations on lending to small and medium enterprises in Nigeria. *Journal of Small Business Management*, 61(1), 152-169.
- Aliyu, A., & Yusuf, A. (2021). Monetary policy and bank lending to small and medium enterprises in Nigeria. *Journal of Small Business and Enterprise Development*, 28(1), 91-105.
- Alika, S., Ojije, G., Lukat, Z., & Oduniyi, E. (2024). Open market operations and inflation in Nigeria: Some stylized facts. Available at SSRN 4864983.
- Angadi, M. (2020). Statutory Liquidity Ratio and Cash Reserve Ratio—An overview. *IJRAR-International Journal of Research and Analytical Reviews (IJRAR)*, 7(3), 472-481.
- Arnone, M., Bandiera, L., & Tisi, C. (2022). Monetary Policy and Bank Lending: Evidence from the Euro Area. *Journal of Financial Stability*, 55, 100-115.
- Baglioni, A. (2024). The Operational Framework of Monetary Policy: A Simple Model. In *Monetary Policy Implementation: Exploring the 'New Normal' in Central Banking* (pp. 35-91). Cham: Springer Nature Switzerland.



- Bello, M., & Nwankwo, E. (2021). Cash reserve ratio and commercial bank lending: Comparative evidence from Nigeria and India. *Emerging Markets Review*, 24(1), 112-129.
- Bernanke, B. S. (2020). The new tools of monetary policy. *American Economic Review*, 110(4), 943-983.
- Carli, F., & Gomis-Porqueras, P. (2021). Real consequences of open market operations: the role of limited commitment. *European Economic Review*, 132, 103639.
- Chen, Z., & Lee, J. (2020). The effect of open market operations on commercial bank lending in emerging markets: Evidence from China and Brazil. *Journal of International Money and Finance*, 103, 102086.
- Cheng, H., & Wang, L. (2022). The Impact of Monetary Policy on Bank Profitability and Risk-Taking. *Financial Markets and Portfolio Management*, 36(3), 423-448.
- Chukwuma, I., & Eke, O. (2019). Liquidity ratio and commercial bank lending in Nigeria: An empirical analysis. *African Journal of Finance and Management*, 15(2), 123-135.
- Cîrlan, O., & Ciobu, S. (2018). The liquidity of the banking sector in the Republic of Moldova: challenges and opportunities. In *Simpozion Științific Internațional al Tinerilor Cercetători* (pp. 136-138).
- Das, B. C., Hasan, F., & Sutradhar, S. R. (2024). The impact of economic policy uncertainty and inflation risk on corporate cash holdings. *Review of Quantitative Finance and Accounting*, 62(3), 865-887.
- Dua, P. (2023). Monetary policy framework in India. In *Macroeconometric Methods: Applications to the Indian Economy* (pp. 39-72). Singapore: Springer Nature Singapore.
- Duval, R., Furceri, D., Lee, R., & Tavares, M. M. (2024). Market power and monetary policy transmission. *Economica*, 91(362), 669-700.
- Eggertsson, G. B., Juelsrud, R. E., Summers, L. H., & Wold, E. G. (2024). Negative nominal interest rates and the bank lending channel. *Review of Economic Studies*, 91(4), 2201-2275.
- Eisenschmidt, J., Ma, Y., & Zhang, A. L. (2024). Monetary policy transmission in segmented markets. *Journal of Financial Economics*, 151, 103738.
- Endut, N., Morley, J., & Tien, P. L. (2018). The changing transmission mechanism of US monetary policy. *Empirical Economics*, 54, 959-987.
- Ezeibekwe, O. F. (2020). Monetary policy and domestic investment in Nigeria: The role of the inflation rate. *Economics and Business*, 34(1), 139-155.
- Heinz, F., & Marin, N. (2022). The impact of domestic and international monetary policy rates on bank lending in emerging European markets. *Emerging Markets Finance and Trade*, 58(1), 85-101.
- Hidayat, I., & Dewi, F. O. S. (2023). The effect of liquidity, leverage, and working capital turn on profitability. *APTISI Transactions on Management*, 7(1), 60-68.
- Israel, K. F., & Latsos, S. (2020). The impact of (un) conventional expansionary monetary policy on income inequality—lessons from Japan. *Applied Economics*, 52(40), 4403-4420.
- Iwedi, M., & James, E. D. (2023). Monetary Policy and Commercial Banks Profitability in Nigeria. *Journal of Business & Management*, 1(4), 296-314.
- Jeenas, P. (2023). *Firm balance sheet liquidity, monetary policy shocks, and investment dynamics*. Universitat Pompeu Fabra, Department of Economics and Business.
- Johnson, T., & Lee, K. (2023). Liquidity ratios and commercial bank lending during the COVID-19 pandemic. *Journal of Banking and Finance*, 30(2), 225-241.
- Johnson, T., & Matthews, K. (2023). Open market operations and commercial bank lending during the COVID-19 pandemic. *International Journal of Central Banking*, 19(2), 45-65.
- Kashyap, A. K., & Stein, J. C. (2023). Monetary policy when the central bank shapes financial-market sentiment. *Journal of Economic Perspectives*, 37(1), 53-75.
- Khan, M., & Ahmed, Z. (2022). The impact of cash reserve ratio on bank lending during economic shocks: Evidence from the COVID-19 pandemic. *Journal of Economic Perspectives*, 36(3), 87-104.
- Kumar, S., & Singh, A. (2022). Open market operations, commercial bank lending, and financial stability: A GMM approach. *Journal of Financial Stability*, 53, 100908.
- Lane, T. (2024). Monetary Policy and Financial Stability—Looking for the Right

- Leo, J. G., & Abubakar, S. A. (2023). The impact of Central Bank's Credits to the Federal Government on the Effectiveness of Open Market Operations in Nigeria. *Futurity Economics&Law*, 3(3), 237-261.
- Lukonga, I. (2021). Inflation Targeting and Monetary Policy Effectiveness: Evidence from Developing Economies. *Development Economics Review*, 22(1), 85-104.
- Martin, R., & Scholz, A. (2022). Liquidity ratios and commercial bank lending in the Eurozone: Regulatory impacts and implications. *European Financial Management*, 28(4), 677-693.
- Meier, M., & Reinelt, T. (2024). Monetary policy, markup dispersion, and aggregate tfp. *Review of Economics and Statistics*, 106(4), 1012-1027.
- Mensah, J., & Kwakye, I. (2020). Cash reserve ratio and commercial bank lending: Evidence from Sub-Saharan Africa. *Journal of African Finance and Economic Development*, 12(3), 150-168.
- Mendez, E., & Morales, J. (2021). Open market operations and commercial bank lending during economic downturns: Evidence from developed and developing economies. *Economics Letters*, 207, 110075.
- Miranda-Agrippino, S., & Ricco, G. (2021). The transmission of monetary policy shocks. *American Economic Journal: Macroeconomics*, 13(3), 74-107.
- Miyoba, L., & Haabazoka, L. (2024). A Study of the Effect of Changes in the Statutory Reserve Ratio Requirement on Commercial Banks Profitability in Zambia. *Social Science Journal for Advanced Research*, 4(2), 46-57.
- Nelson, B., Pinter, G., & Theodoridis, K. (2018). Do contractionary monetary policy shocks expand shadow banking?. *Journal of Applied Econometrics*, 33(2), 198-211.
- Nwanyanwu, H. D., Tordee, B., Alobari, C., & Emah, S. D. (2024). Impact of Fluctuating CBN Rate and Bank Rates in Nigeria: A Re-Echoed Corporate Crime. *International Journal of Advanced Academic Research*, 10(5), 18-35.
- Nwankwo, U., & Olufemi, J. (2023). COVID-19 and monetary policy: How Nigerian banks responded to central bank interventions. *Journal of Banking and Financial Economics*, 29(2), 112-130.
- Nwoko, N. M., Ihemeje, J. C., & Anumadu, E. (2016). The impact of monetary policy on the economic growth of Nigeria. *African Research Review*, 10(3), 192-206.
- Obafemi, F. N., Ifere, E. O., & Samuel, E. (2019). The impact of monetary policy on bank lending in Nigeria: A VECM approach. *International Journal of Economics and Financial Issues*, 9(1), 57-65.
- Oduro, R., & Boachie, E. (2020). Monetary policy rate and commercial bank lending: Evidence from Ghana. *Journal of African Business*, 21(4), 523-539.
- Ogunleye, A., & Adebayo, D. (2023). Liquidity ratios and lending to small and medium enterprises in South Africa. *African Journal of Business Management*, 17(1), 56-74.
- Okere, W., Okonkwo, J. J., Francis, K. C., & Okoye, N. J. (2023). Effect of Money Market Operations on Industrial Productivity in Nigeria. *Saudi J Econ Fin*, 7(7), 335-343.
- Onigah, P. O. (2024). The Combined Effect of Interest Rates on Commercial Banks Performance in Nigeria. *African Banking and Finance Review Journal*, 14(14), 77-92.
- Osei-Assibey, E., & Adu, G. (2021). Monetary Policy and Bank Lending in Ghana: Evidence from a Structural VAR Approach. *African Review of Economics and Finance*, 13(1), 67-84.
- Osei, K., & Tetteh, G. (2023). Cash reserve ratio, financial stability, and commercial bank lending in West Africa. *West African Journal of Banking and Finance*, 31(2), 45-63.
- Oyadeyi, O. O. (2024). The Velocity of Money and Lessons for Monetary Policy in Nigeria: An Application of the Quantile ARDL Approach. *Journal of the Knowledge Economy*, 1-37.
- Patterson, L. (2024). Fine-Tuning the Framework for the Bank's Market Operations. *Methods*.
- Pham, V. A. (2019). Impacts of the monetary policy on the exchange rate: case study of Vietnam. *Journal of Asian Business and Economic Studies*, 26(2), 220-237.
- Pillah, T. P. (2023). Currency redesign and monetary policy of Nigeria: An evaluation. *International Journal of Public Administration and Management Research*, 8(4), 46-53.
- Pizzini, M., & Sterin, M. (2023). The relation between cash reserves, governance, and donations in nonprofit organizations. *Journal of Accounting, Auditing & Finance*, 0148558X221142953.

- Rafid, M., Soukotta, A., Cakranegara, P. A., Sutiyan, O. S. J., & Nurriqli, A. (2024). Analysis Of Liquidity Ratios, Profitability Ratios, And Capital Structures On Financial Distress Conditions In Service Companies During The Covid-19 Period. *Jurnal Darma Agung*, 30(3), 614-622.
- Reddy, S., & Gupta, R. (2020). Liquidity ratios and commercial bank lending in emerging markets: Evidence from India and Brazil. *Emerging Markets Review*, 34(1), 45-60.
- Rocheteau, G., Wright, R., & Xiao, S. X. (2018). Open market operations. *Journal of Monetary Economics*, 98, 114-128.
- Rudebusch, G. (2018). A review of the fed's unconventional monetary policy. *FRBSF Economic Letter*, 27, 1-5.
- Santos, J., & Pereira, L. (2021). The impact of liquidity ratios on commercial bank lending during economic recessions. *Journal of Economic Stability*, 12(3), 101-115.
- Tosun, M., Altay, E., & Yalçın, M. (2021). Monetary Policy and Bank Lending: A Panel Data Analysis. *Journal of Banking and Finance*, 114, 106-115.
- Tshibaka, J., Kanu, A., & Masiga, M. (2021). Monetary policy rate and bank lending: The moderating role of bank-specific factors. *African Development Review*, 33(2), 223-242.
- Udoh, E. A., Dauda, M., Ajayi, K. J., & Ikpechukwu, N. C. (2021). Monetary policy transmission in Nigeria: Does the credit channel work?. *The Journal of Developing Areas*, 55(1).
- Wuave, T., Yua, H., & Yua, P. M. (2020). Effect of liquidity management on the financial performance of banks in Nigeria. *European journal of business and innovation research*, 8(4), 30-44.
- Zeaiter, A., & Mokdad, F. (2024). The Implementation of Central Bank Policy during the Economic Crisis in Lebanon. *Valley International Journal Digital Library*, 6418-6427.