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IMPACT OF MONETARY POLICY ON DEPOSIT MONEY BANK LENDING IN NIGERIA (2005-2022)

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ABSTRACT: *Monetary policy is one of the most critical tools used by central banks around the world to regulate economic activity and achieve macroeconomic stability. Despite the Central Bank of Nigeria's (CBN) sustained efforts to regulate the economy through monetary policy, the impact of these policies on commercial bank lending has been inconsistent and, at times, ineffective. This study examined the impact of monetary policy on commercial bank lending in Nigeria covering the period 2005-2022. Data for the study were extracted from the Central Bank of Nigeria (CBN) Statistical Bulletin, 2023. The expo-facto research design was adopted in the study. The multiple linear regression with the application of Ordinary Least Squares (OLS) technique was adopted as the method of data analysis. The major findings of the study reveal that monetary policy rate has an inverse and insignificant relationship with commercial bank lending in Nigeria, cash reserve ratio has an inverse and insignificant relationship with commercial bank lending in Nigeria, liquidity ratio has an inverse and insignificant relationship with commercial bank lending in Nigeria, and Open Market Operation (OMO) has a positive and significant relationship with commercial bank lending in Nigeria. The study therefore concludes that traditional monetary policy tools may not effectively influence lending behavior in Nigeria during the study period. It is therefore the recommendation of the study that the central bank could also facilitate access to short-term funding mechanisms or interbank lending to improve banks' ability to manage liquidity effectively while still supporting lending activities.*

KEYWORDS: Cash reserve ratio, liquidity ratio, monetary policy rate, open market operations.

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INTRODUCTION

Monetary policy is one of the most critical tools used by central banks around the world to regulate economic activity and achieve macroeconomic stability (Meier & Reinelt, 2024). In Nigeria, the Central Bank of Nigeria (CBN) employs various monetary policy instruments to influence economic variables such as inflation, interest rates, and overall economic growth (Oyadeyi, 2024). Commercial banks play a vital role in the transmission of monetary policy by providing credit to businesses and individuals (Iwedi & James, 2023). Therefore, understanding how monetary policy impacts commercial bank lending is essential for evaluating the effectiveness of policy interventions aimed at stimulating economic activity.

Among the various instruments of monetary policy, the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), Liquidity Ratio (LR), and Open Market Operations (OMO) are crucial in shaping the behavior of commercial banks, particularly their lending activities (Bernanke, 2020). Each of these instruments directly or indirectly affects the amount of credit available in the economy, influencing interest rates, liquidity, and the willingness of banks to extend loans.

In Nigeria, where access to credit is often constrained, the effectiveness of monetary policy in influencing commercial bank lending is vital for economic development. Credit availability impacts sectors such as agriculture, manufacturing, and small- and medium-sized enterprises (SMEs), which are critical for the country's economic growth (Udoh, Dauda, Ajayi & Ikpechukwu, 2021).

Monetary policy in Nigeria has evolved significantly over the years, shaped by the country's unique economic environment, which is characterized by heavy dependence on oil revenue, periodic economic shocks, inflationary pressures, and fluctuating exchange rates (Pillah, 2023). The Central Bank of Nigeria (CBN) is responsible for implementing monetary policy, using it as a means to control inflation, stabilize the financial system, and ensure economic growth. The effectiveness of this policy is largely transmitted through the financial sector, particularly via commercial banks (Nwanyanwu, Tordee, Alobari & Emah, 2024).

Commercial banks are key intermediaries in the financial system, facilitating the flow of funds from savers to borrowers. Their lending activities are influenced by various factors, including the monetary policy stance of the CBN. For instance, when the CBN adjusts the MPR, it sends signals to commercial banks about the general direction of interest rates. A higher MPR usually leads to higher borrowing costs, which discourages lending, while a lower MPR encourages lending by reducing borrowing costs. Similarly, changes in the CRR and LR directly affect the amount of funds banks have available to lend. OMO, which involves the buying and selling of government securities, also influences liquidity in the banking system, thereby affecting lending activities (Onigah, 2024).

The last decade has demonstrated a historical relationship between monetary policy instruments and commercial bank lending in Nigeria. The historical data is graphically presented in Figure 1 below and briefly discussed afterwards.

Table 1: Selected Monetary Policy Instruments and Commercial Bank Lending

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Year	Monetary Policy Rate (%)	Cash Reserve Ratio (%)	Liquidity Ratio (%)	Open Market Operations (₦'Billion)	Commercial 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 provides a snapshot of key monetary policy variables and commercial bank lending activities in Nigeria from 2012 to 2022. The MPR fluctuates over the period, ranging from a low of 11% in 2015 and 2020 to a high of 16.5% in 2022. The CRR saw significant changes, particularly a notable increase from 12% in 2012 to 27.5% in 2020 and beyond. The liquidity ratio varied significantly, ranging from 38.27% in 2014 to 104.2% in 2019. The liquidity ratio decreased slightly from 67.6% in 2020 to 54.93% in 2022, potentially indicating a relaxation of liquidity constraints as economic conditions stabilized. OMO volumes increased consistently over the period, from ₦6,247.89 billion in 2012 to ₦20,898.15 billion in 2022. The sharp rise in OMO volumes, especially in 2022, suggests heightened monetary interventions in response to economic pressures and inflationary trends. Commercial bank lending increased substantially over the period, from ₦7,723.72 billion in 2012 to ₦26,643.23 billion in 2022. Lending continued to grow significantly, particularly in 2021 and 2022, despite higher MPR and CRR. This increase may reflect a strong demand for credit and effective monetary policy support for lending. This study therefore examines the effect of monetary policy tools on commercial bank lending in Nigeria, covering the period from 2005 to 2022.

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REVIEW OF RELATED LITERATURE

Obafemi *et al.* (2019) conducted an empirical study examining the effect of the monetary policy rate on commercial bank lending in Nigeria. The study utilized quarterly data from 2000 to 2017, employing a Vector Error Correction Model (VECM) to analyze the long-run and short-run dynamics of the relationship. Their findings revealed a significant inverse relationship between the MPR and commercial bank lending, where a one percentage point increase in the MPR reduced commercial bank lending by approximately 0.42%. The results suggest that monetary tightening by the Central Bank of Nigeria (CBN) effectively reduced the supply of credit in the economy, confirming the sensitivity of Nigerian banks to interest rate changes.

Mensah and Kwakye (2020) explored the relationship between the CRR and bank lending across sub-Saharan Africa, with a focus on data from 2010 to 2019. Using panel data analysis, the study revealed that a higher CRR generally led to a reduction in commercial bank lending across the region. The study found that while the CRR was effective in controlling inflation and ensuring financial stability, it also restricted the availability of credit. The results suggested that while higher reserve requirements can stabilize the banking sector, they can also hinder economic growth by limiting the amount of credit available to businesses and consumers.

Reddy and Gupta (2020) conducted a study analyzing the effect of liquidity ratios on commercial bank lending across several 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 the fact that banks with higher liquidity ratios prioritize liquidity management over loan disbursement, leading to a conservative lending approach. The study underscored the need for emerging markets to balance liquidity requirements with the need to foster economic growth through credit expansion.

Garcia and Martinez (2024) explored the relationship between OMOs, commercial bank lending, and financial stability in the Eurozone. Using data from 2020 to 2024, the study employed a Generalized Method of Moments (GMM) approach to analyze the effects of OMOs on bank lending and financial stability. The study found that while expansionary OMOs effectively increased lending and supported economic recovery, they also raised concerns about financial stability due to potential excessive risk-taking by banks. The authors suggested that a balanced approach to OMOs was necessary to manage both credit expansion and financial stability.

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METHODOLOGY

Research Design

The investigation employed the *Ex Post Facto* design given that the study is anchored on the utilization of secondary data. This study makes use of econometric procedure in the impact of monetary policy on commercial lending in Nigeria. In research works that involve times series and secondary data, the appropriate methodology is the linear regression with the application of ordinary least squares (OLS) technique.

Nature and Sources of Data

The data for the study is times series secondary data on monetary policy rate, cash reserve ratio, liquidity ratio, open market operations, and commercial bank lending covering the period 2005-2022. The data will be extracted from the Central Bank of Nigeria (CBN) Statistical bulletin (2022).

Model Specification

Our study adopted the model used in Nwankwo and Olufemi (2023) which studied the relationship between monetary policy and lending rate in Nigeria from 1985-2022. The study used ordinary least squares to estimate the specified variables. The above model was consequently modified to reflect Hypothesis 1-4 as follows:

Implicitly: $CBL_t = f(MPR_t, CRR_t, LIQR_t, OMO_t)$ (3.1)

The explicit econometric model is specified thus:

$$CBL_t = \beta_0 + \beta_1 MPR_t + \beta_2 CRR_t + \beta_3 LIQR_t + \beta_4 OMO_t + \mu_t \quad (3.2)$$

where:

CBL = Commercial Bank Lending

MPR = Monetary Policy Rate

CRR = Cash Reserve Ratio

LIQR = Liquidity Ratio

OMO = Open Market Operations

t = Time Period

β's = structural Parameters to be estimated

μ = Stochastic Error Term

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RESULTS AND DISCUSSION

Empirical Results

Time series data are often assumed to be non-stationary, and thus, it is necessary to perform a unit root test to ensure that the data are stationary. The test was employed to avoid the problem of spurious regression. Therefore, the Augmented Dickey-Fuller (ADF) unit root test was used to determine the stationarity of the data to complement each other. The decision rule based on the ADF test is that its statistic must be greater than Mackinnon Critical Value at 5% level of significance and in absolute terms. The results of the unit-root test are reported in Table 1 below.

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 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

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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 commercial 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

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 output in Table 3 clearly shows that the monetary policy rate (MPR) yielded a negative numerical coefficient at the magnitude of -215.3840. This entails that at a 1% increase in MPR for the years analyzed, commercial bank loans reduced by 215.3840%. This result

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conforms to economic a priori expectation because according to economic theory, an inverse relationship exists between monetary policy rate and commercial bank loans.

The regression output also shows that cash reserve ratio (CRR) yielded a negative numerical value at the value of -124.0386. This entails that there exists a negative relationship between CRR and commercial bank loans. A negative relationship between the Cash Reserve Ratio (CRR) and commercial bank loans suggests that when the CRR is increased, the lending capacity of banks decreases. This is because a higher CRR means banks are required to hold a larger portion of their deposits with the central bank, reducing the funds available for lending to businesses and individuals. Conversely, a lower CRR would mean banks have more liquidity, potentially increasing their lending capacity. This outcome aligns with monetary policy theory, where central banks may raise the CRR to curb excessive lending and control inflation or lower it to stimulate economic activity by encouraging lending.

The numerical coefficient of liquidity ratio (LR) yielded a negative value at the magnitude of -35.30757. This means that there is a negative relationship between liquidity ratio and commercial bank lending. A negative relationship between the Liquidity Ratio and commercial bank loans indicates that as the Liquidity Ratio increases, commercial banks' lending tends to decrease. The Liquidity Ratio requires banks to maintain a certain level of liquid assets relative to their total deposits, which limits the funds available for loans. A higher Liquidity Ratio means banks have to hold more liquid assets (such as cash or easily convertible securities), restricting the amount they can lend out. This relationship suggests that when the Liquidity Ratio is high, banks prioritize liquidity over lending, likely to ensure they can meet short-term obligations and avoid liquidity crises. Lowering the Liquidity Ratio would, in theory, allow banks to extend more loans, thus supporting economic activities by providing greater access to credit.

Open Market Operations (OMO) yielded a positive numerical value at the magnitude of 1.577199. A positive relationship between Open Market Operations (OMO) and commercial bank loans suggests that, as central banks engage more in OMO, the lending capacity of commercial banks increases. In most contexts, this likely means that when the central bank buys government securities (injecting money into the banking system), banks have more reserves available, which boosts their capacity to extend credit to businesses and individuals. OMO purchases increase the money supply, reduce short-term interest rates, and improve liquidity in the financial system, making it easier and more appealing for banks to lend. Conversely, if the central bank sells securities (siphoning off money from the system), it reduces liquidity, likely leading to tighter lending conditions.

The error correction term (ECT) yielded a negative numerical coefficient at the magnitude of -0.881431. A negative error correction term (ECT) value of -0.881431 in the regression output indicates a significant and relatively fast adjustment back to equilibrium in response to short-term deviations. In an Error Correction Model (ECM), the ECT captures the speed at which variables return to their long-run equilibrium after a shock or disturbance. In this case, the coefficient of -0.881431 suggests that approximately 88% of any disequilibrium from the previous period is corrected in the current period. This means that if there is a short-term deviation from the long-run relationship between the variables, the model adjusts nearly 88% of that difference each period to bring the variables back into alignment.

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The coefficient of determination (R-Squared) yielded 0.676570. This entails that approximately 67.66% of the variability in the dependent variable can be explained by the independent variables included in your regression model. This further suggests a reasonably good fit, indicating that the model explains a significant portion of the variability, but there is still about 32.34% of the variance that is not explained by the model. This unexplained variance could be due to other factors not included in the model, measurement error, or inherent randomness.

The F-statistics yielded 4.602086 with a corresponding probability value of 0.016429 with a probability of 0.016429 (< 0.05). An F-statistic of 4.602086 with a probability (p-value) less than 5% in your regression results suggests that the overall model is statistically significant at the 5% level. This means there is strong evidence to reject the null hypothesis that all the regression coefficients are equal to zero (i.e., that none of the explanatory variables have an effect on the dependent variable).

Serial Correlation LM Test Result

Table 4: Serial Correlation Test Result

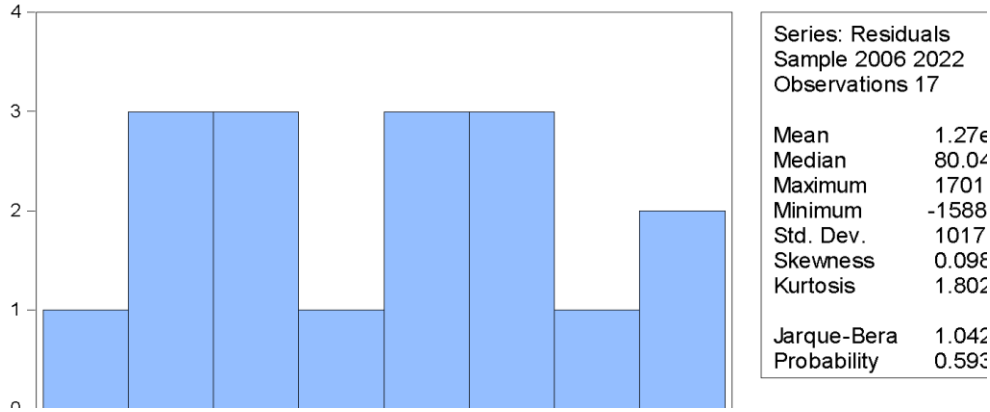
Breusch-Godfrey Serial Correlation LM Test:

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 autocorrelation problem in the model.

Normality Test



Source: Researcher's Computation Using E-views.

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The normality regression output shows the Jarque-Bera statistic yielded 1.042753 with a corresponding probability value of 0.593703. A Jarque-Bera statistic of 1.042753 with a probability (p-value) of 0.593703 indicates that the residuals of the regression model are likely normally distributed. In a normality test, the null hypothesis is that the data follows a normal distribution. Since the p-value is well above the common significance level of 5% (0.05), we fail to reject the null hypothesis, suggesting no significant deviation from normality. This is a favorable outcome in regression analysis, as normally distributed residuals imply that the model's assumptions are met, potentially leading to more reliable inference and interpretation of results.

Test of Hypothesis

Hypothesis One

Ho_1: Monetary Policy Rate has no significant impact on commercial 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 H_o and conclude that Monetary Policy Rate has no significant impact on commercial bank lending in Nigeria.

Hypothesis Two

Ho_2: Cash Reserve Ratio has no significant impact on commercial 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 Ho_2 and conclude that Cash Reserve Ratio has no significant impact on commercial bank lending in Nigeria.

Hypothesis Three

Ho_3: Liquidity Ratio has no significant impact on commercial bank lending in Nigeria.

Variable	**Probability Value**
LIQR	0.0790

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Decision

Since the p-value of the explanatory variable (LIQR) is greater than 0.05, we therefore accept the Ho_3 and conclude that Liquidity Ratio has no significant impact on commercial bank lending in Nigeria.

Hypothesis Four

Ho_4: Open Market Operations has no significant impact on commercial 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 Ho_4 and conclude that Open Market Operations has a significant impact on commercial bank lending in Nigeria.

DISCUSSION OF RESULTS

The regression results reveal that monetary policy rate has no significant impact on commercial bank lending in Nigeria. This suggests that changes in the MPR do not strongly influence the lending behavior of commercial banks in the country within the studied period. This could mean that, despite adjustments in the MPR by the central bank, commercial banks may not adjust their lending rates or volumes significantly in response. This result did not align with the findings of Obafemi *et al.* (2019) who conducted an empirical study examining the effect of the monetary policy rate on commercial bank lending in Nigeria and found that monetary policy rate significantly influences commercial bank lending for the years analyzed. The result is also partially in agreement with the findings of Tshibaka *et al.* (2021) who analyzed the relationship between monetary policy rates and bank lending in Kenya, focusing on the role of bank-specific factors such as capital adequacy, asset quality, and liquidity. The study found that the effect of MPR on lending varied significantly across banks, depending on their financial health. The study is also not supported by the findings of Adegboye and Suleiman (2024) who examined the effect of the Monetary Policy Rate on commercial bank lending in sub-Saharan Africa, focusing on data from Nigeria, Ghana and Kenya.

From the second objective and hypothesis, it was discovered that Cash Reserve Ratio has an inverse but no significant impact on commercial bank lending in Nigeria. This implies that changes in the CRR do not substantially affect the lending activities of commercial banks within the period analyzed. This outcome might suggest that the CRR, despite being a key monetary policy tool, does not effectively constrain or stimulate lending in the Nigerian banking context. This result aligns with the findings of Abubakar *et al.* (2019) who conducted a study on the effect of the CRR on commercial bank lending in Nigeria using quarterly data from 2005 to 2017. Employing a Vector Autoregression (VAR) approach, the study found that

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changes in the CRR had a significant inverse relationship with the volume of bank lending. This result is also in line with the findings of Bello and Nwankwo (2021) who investigated the impact of the CRR on commercial bank lending in emerging markets, with a particular emphasis on Nigeria and India. The findings indicated that increases in the CRR significantly curtailed lending in both countries. The findings of the present study also align with the results obtained by Osei and Tetteh (2023) who investigated the broader implications of CRR adjustments on financial stability and commercial bank lending in West Africa. The findings indicated that while higher CRR levels contributed to financial stability by reducing systemic risk, they also led to reduced lending volumes.

The finding from the third objective and hypothesis that the Liquidity Ratio has an inverse but insignificant impact on commercial bank lending in Nigeria suggests that, while there is a negative relationship, it is not strong enough to be statistically significant. In other words, changes in the Liquidity Ratio do not substantially affect the lending behavior of commercial banks. This aligns with the findings of Chukwuma and Eke (2019) who examined the relationship between liquidity ratios and commercial bank lending in Nigeria using data from 2005 to 2018. The research suggested that while maintaining higher liquidity ratios is crucial for managing short-term obligations and ensuring financial stability, it often limits the banks' capacity to extend loans. The findings of the present study are also in tandem with the results of Reddy and Gupta (2020) who conducted a study analyzing the effect of liquidity ratios on commercial bank lending across several 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 finding also tallies with the results of Martin and Scholz (2022) investigating the impact of liquidity ratios on commercial bank lending in the Eurozone, focusing on the period from 2016 to 2021. Using Fixed Effects Regression Analysis, the study found that while liquidity ratios were positively correlated with financial stability, they had a negative effect on lending volumes.

The finding that Open Market Operations (OMO) has a positive and significant impact on commercial bank lending in Nigeria suggests that when the central bank engages in OMO, it effectively influences the lending behavior of commercial banks. This outcome indicates that OMO is an important tool in the monetary policy framework, as it directly affects the liquidity in the banking system. This finding is in line with the findings of Adamu and Ahmed (2019) who analyzed the effect of OMOs on commercial bank lending in Nigeria using quarterly data from 2005 to 2018. The study highlighted that OMOs were effective in influencing bank lending behavior, providing evidence of the liquidity channel of monetary policy. The findings of the study also agree with the findings of Chen and Lee (2020) who explored the impact of OMOs on commercial bank lending in emerging markets, focusing on data from China and Brazil from 2010 to 2019. The findings of the study align with results obtained from Johnson and Matthews (2023) who explored the impact of OMOs on bank lending during the COVID-19 pandemic. Their study covered the period from 2019 to 2022, utilizing a Time-Series Analysis approach. The findings revealed that during the pandemic, expansionary OMOs were effective in boosting commercial bank lending, as central banks aimed to counteract the economic impact of the pandemic.

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CONCLUSION AND RECOMMENDATION

Summary of Findings

This study examined the impact of monetary policy on commercial 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 commercial bank lending in Nigeria between 2005-2022.

ii. Cash reserve ratio has an inverse and insignificant relationship with commercial bank lending in Nigeria between 2005-2022.

iii. Liquidity ratio has an inverse and insignificant relationship with commercial bank lending in Nigeria between 2005-2022.

iv. Open Market Operation (OMO) has a positive and significant relationship with commercial bank lending in Nigeria between 2005-2022.

Conclusion

Based on the findings from the study examining the impact of monetary policy on commercial bank lending in Nigeria from 2005 to 2022, several key conclusions can be drawn. The results indicate that the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), and Liquidity Ratio each have an inverse and insignificant relationship with commercial bank lending. This suggests that these traditional monetary policy tools may not effectively influence lending behavior in Nigeria during the study period. Specifically, the banks' lending decisions may be influenced by factors other than these policy rates, limiting the effectiveness of these tools in stimulating or restraining credit supply.

The inverse relationships identified imply that increases in the MPR, CRR, and Liquidity Ratio do not correlate with a reduction in lending activity in a statistically significant manner. This may indicate a more complex landscape within the banking sector, where banks potentially maintain excess liquidity or have access to alternative funding sources, thus diminishing the impact of these regulatory measures on their lending behavior.

The significant positive relationship between Open Market Operations (OMO) and commercial bank lending underscores the effectiveness of OMO as a monetary policy tool in the Nigerian context. The ability of OMO to inject liquidity into the banking system is crucial for encouraging lending, suggesting that this mechanism is a more potent instrument for the central bank to stimulate economic activity and support growth. The 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 commercial bank lending. Instead, a greater focus on OMO could enhance the effectiveness of monetary policy in influencing credit conditions. Policymakers might also explore the interplay of these tools and how they can be harmonized to create a more robust impact on lending behavior.

The lack of significant relationships for MPR, CRR and Liquidity Ratio indicates that external factors such as economic conditions, regulatory environments, and credit market dynamics may play a substantial role in shaping lending practices. A comprehensive approach that considers

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these external variables alongside traditional monetary policy measures may be necessary for fostering a more effective lending environment.

Recommendations

Based on the findings of the study, the following recommendations are suggested:

i. Given that the MPR does not appear to significantly influence lending behavior, policymakers should consider reevaluating the MPR's role within the broader monetary policy framework. This could involve exploring alternative monetary policy tools that may have a more direct impact on lending.

ii. The Central Bank of Nigeria (CBN) should consider reassessing the current framework and objectives of the Cash Reserve Ratio. Given its limited impact on commercial bank lending, the CBN might explore alternative reserve requirements or more flexible CRR structures that can adapt to the liquidity needs of banks.

iii. Given the limited impact of the Liquidity Ratio on lending, it is important to promote alternative liquidity management tools and strategies for banks. This could involve encouraging banks to develop robust risk management frameworks that balance liquidity needs with lending objectives. The central bank could also facilitate access to short-term funding mechanisms or interbank lending to improve banks' ability to manage liquidity effectively while still supporting lending activities.

iv. The Central Bank of Nigeria should continue to prioritize and enhance its use of Open Market Operations to manage liquidity in the banking system effectively. By conducting regular and well-communicated OMO activities, the central bank can provide banks with the necessary liquidity to expand their lending capabilities.

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