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Monetary Policy and Deposit Money Banks Performance in Nigeria

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Abstract

The purpose of the study is to examine how Nigerian deposit money banks behave in relation to monetary policy. Evidence from the study showed that the central bank has successfully used monetary policy instruments to increase the lending portfolio of DMBs to the private sector. In particular, the cash reserve ratio has been carefully adhered to by banks in Nigeria because it improved banks' performance over the long term. Another element of monetary policy that has assisted banks in maintaining their profitability is the loan-to-deposit ratio, which guarantees the private sector's unrestricted access to bank credits. However, the rate of all rates—the monetary policy rate—has not positively impacted bank lending to the private sector. This also holds true for the liquidity ratio and the exchange rate. The study comes to the conclusion that there is substantial evidence that monetary policy has positively, if unsatisfactorily, impacted DMB's performance. In order to speed up bank credits, some rates must still be checked.

Keywords: Monetary policy, deposit money banks, Nigeria

1 Introduction

The banking sector has developed since Nigeria's independence in 1960 and has been actively engaged in the business of providing financial services to the Nigerian economy. The banking sector serves as the major conduit for the dissemination of monetary policy in the economy while also acting as an intermediary and working to increase profits for its owners. The monetary authority provides general rules for the financial sector to follow (the Central Bank of Nigeria).

Prior to the Structural Adjustment Programme (SAP) in 1986, the Central Bank of Nigeria used direct monetary measures to oversee the banking industry, including selective credit controls, managed interest and exchange rates, credit limitations, cash reserve requirements, and special deposits. The bank's desire to encourage investment and expansion was the main driver of the period of relatively low fixed interest rates (Uruakpa, 2019).In order to reduce the amount of excess reserves and credit and increase the capacity of the banks, the CBN occasionally enforced special deposits (Uchendu, 1995). According to Ajayi and Atanda (2012), the underdeveloped state of the financial sector and the intentional cap on interest rates made the adoption of market-based instruments impractical at that time (the direct monetary policy era, 1960–1985).

After the Structural Adjustment Program (SAP) was enacted in 1986, Nigeria's monetary policy underwent a variety of policy modifications (Uruakpa, 2019). Indirect monetary policy was adopted as a result of the financial system's deregulation effort, with open market operations serving as its main tool. Reserve requirements, discount window operations, foreign exchange market intervention, and the injection and withdrawal of public sector deposits into and out of DMBs were also used as supplementary tools.As a result, discount houses were founded in an effort to improve the policy, acting as a middleman between the CBN and the banks in the selling and acquisition of OMO instruments (Solomon, 2016).

The Monetary and Credit Policy Guidelines were introduced by the Central Bank of Nigeria in 1994. The guidelines set minimum cash reserve requirement ratios (cash deposits with the CBN to total demand liabilities made up of demand, savings, and time deposits) equal to 6.0 percent, a liquidity ratio of 30 percent, a range of 12.0- 15.0 percent for savings and time deposits, and a maximum lending rate of 21.0 percent, inclusive of all fees (Uchendu, 1995). In a same vein, the naira's exchange rate was set at 22.0 to the US dollar.Other monetary policy measures included percentage loan allocations to rural borrowers, small businesses, and the government's priority industries (18% for agriculture, 42% for manufacturing, and 10% for exports) (CBN, 2011). The 1995 Monetary, Credit, Foreign Trade, and Exchange Policy Guidelines maintained the majority of these guidelines while reinstating the interbank foreign exchange market, where the naira's exchange rate was

anticipated to be determined by the market in the form of an autonomous foreign exchange market (AFEM).Furthermore, the CBN would only act in the market to further its policy goals (CBN, 2013). The recommendations also called for a 7.5 percentage point difference between the loan rate and the savings rate. The overarching legislation governing the activities of the banking sector were established by the CBN Decree 24 and the Banks and Other Financial Institutions Decree (BOFID) 25, both of which were issued in 1991.

By sending a circular to all banks in 2019, the Central Bank of Nigeria (CBN) instructed the DMBs to maintain a minimum loan-to-deposit ratio of 60% by the end of the year, failing which they would be subject to an additional cash reserve requirement (CRR) of 50% of the LDR shortfall. At the time, the goal was to boost investment levels in the real sector of the economy, which would then contribute to the expansion of the Nigerian economy as a whole (CBN, 2016).However, the deposit money banks (DMBs) also make money through interest on loans and advances while also increasing the amount of money available to the economy through credits.

Ayodele (2014) found that interest rates and exchange rates had a good impact on commercial banks' lending, while Hapsari (2018) found that the loan-to-deposit ratio had a favorable impact on banks' financial performance. Ndugbu and Okere (2015) observed an inverse association between bank deposit rate and DMB performance in a different study. Odior and Ejedegba's (2018) study, as well as those by Afolabi et al., Adewole and Nnaji (2018), and others, all made use of certain relevant variables. It is evident from a quick review of the existing literature on monetary policy and bank performance that there are significant issues with variables and time constraints.For instance, the most current study by Okwudili (2021) only included the loan to deposit ratio, loan to asset ratio, and lending rate as factors, collecting data up to 2019. So far as the researcher is aware, none of these studies has offered a thorough and in-depth empirical analysis of the impact of monetary policy variables including the liquidity ratio, exchange rate, CRR, and MPR on the performance of Nigeria's commercial banks.

Therefore, the goal of this study is to close this gap by elucidating how Nigeria's commercial banks' performance and monetary policy are related. The primary objective of this study is to determine the impact of monetary policy factors on the financial

performance of listed deposit money banks (DMBs) in Nigeria from 1990 to 2021, including liquidity ratio, exchange rate, CRR, and MPR. The financial literature will benefit from this study in this area. This study's goal is to look into how Nigerian deposit money banks perform in relation to monetary policies.

Theoretically, the findings of this study will contribute to a fuller understanding of the relationship between monetary policies and bank performance in terms of the provision of credit to the private sector, which is the primary purpose of deposit money banks in Nigeria. As a result, this study will reveal the quantitative proof of how much the CBN's monetary policy ceilings have impacted banks, providing banks with an assessment tool to evaluate their performance if necessary without incurring significant costs for additional research.

According to empirical findings, the government as a whole will find this study to be extremely useful in formulating the best judgments and policies that would favorably impact deposit money banking in Nigeria. The Central Bank of Nigeria, which is the regulatory body, will learn how much of an influence its monetary policy decisions have on banks, and this information will serve to further direct the apex bank's future actions.

2. Empirical Literature Review

Odior and Ejedegba(2008) examined how Nigeria's commercial banks' profitability was impacted by the Central Bank of Nigeria's (CBN) monetary policies. The study was based on annual nation aggregate level data for the 35-year period 1980–2014. The study employed an econometric framework and a multivariate regression analysis as part of its methodology. The findings demonstrated that monetary policy rate, cash reserve ratio, and exchange rate annually increased bank profitability in the long and short terms, while Treasury bill rate and liquidity ratio annually decreased bank profitability in the long and short terms.The study also showed that the CBN's monetary policy has similar short- and long-term effects on banks' profitability. The findings had the consequence that the profitability of the banking industry was not just determined by the high loan rates that banks charged relative to the maximum rates that their circumstances permitted, but also by changes in monetary policy. The monetary authorities should adopt monetary policies that will aid Nigerian deposit money banks in increasing their profitability as well as

evaluate and reinforce bank lending rate policies through effective and efficient regulation and supervision framework, they advised.

For a period of ten (10) years, from 2008 to 2017, Adewole and Nnaji (2018) looked into the impact of monetary policy on the profitability of deposit money banks in Nigeria. The impacts of monetary policy on the profitability of deposit money banks in Nigeria were experimentally determined using a systematic collection of time series and cross-sectional data that was pooled into a panel data set. The co-integration test was based on an error correction model, and the study used Johansen's multivariate co-integration approach. The variables were put through the Augmented Dickey-Fuller (ADF) test to check for stationary or unit roots.The panel regression was used to formulate and test hypotheses. The study found that the monetary policy, as measured by the Cash Reserve Ratio (CRR) and Monetary Policy Rate (MPR), had a considerable impact on the profitability of Nigeria's deposit money institutions. It was suggested that the Central Bank of Nigeria alter the Cash Reserve Ratio and Monetary Policy Rate in a way that will allow for more liquidity, enabling deposit money institutions to properly carry out their lending and investment activities.

The effectiveness of monetary policy in enhancing the profitability, liquidity, and credit performance of Nigerian commercial banks from 1980 to 2017 was examined in a study by Bassey and Ekong (2019). The profitability of commercial banks in Nigeria was positively correlated with the monetary policy rate and Treasury Bill rates.Additionally, the monetary policy rate, money supply, and cash reserve ratio all had a significant positive impact on the Nigerian commercial banks' ability to extend credit. Additionally, changes in the money supply and the monetary policy rate had favorable effects on the liquidity performance of commercial banks to varying degrees. Therefore, the study advised using a smart combination of policy tools to increase returns on investment in the Nigerian banking system.

The effect of monetary policy on deposit money banks' performance in Nigeria was examined by Uruakpa (2019). His analysis used monetary policy tools such the monetary policy rate, cash reserve ratio, money supply, and liquidity ratio as independent variables. The study discovered that all of the monetary policy indicators (cash reserve ratio,

monetary policy rate, money supply, and liquidity ratio) jointly affected on deposit money banks' ability to lend to the private sector using regression analysis, co-integration, and granger causality tests.Credit to the private sector did, however, have a positive and strong link with the money supply and cash reserve ratio. Additionally, he discovered that the relationship between the liquidity ratio and credit to the private sector was negative and unimportant, whereas the association between the private sector's credit and the monetary policy rate was positive and insignificant. The credit to the private sector had a unidirectional causal relationship with the cash reserve ratio and the money supply, but there was no causal relationship between credit to the private sector, the liquidity ratio, or the monetary policy rate. He also discovered a strong statistically significant long run relationship between the monetary policy variables and credit to the private sector.He advised the CBN to continually utilize all of the instruments researched to regulate banking operations because the study indicated that the combination of the various instruments gave monetary policy its greatest strength.

The relationship between monetary policy and the accomplishment of a bank's profit target was explored by Omankhanlen, Isibor, and Okoye (2020). Since the rules have been found to have an impact on deposit money bank operations, they claimed that there have been several disputes on the advantages of their implementation. They conducted their research to determine how monetary policy tools including the liquidity ratio, interest rate, and money supply (M2) affected the goal of deposit money banks' profitability.Their investigation spans the years 2002 through 2019. In order to analyze the data, the Auto Regressive Distributed Lag and Error Correction model was used. The study found a positive long-term relationship between the liquidity ratio and deposit money bank profitability, as well as a negative long-term relationship between interest rates and deposit money bank profitability. Finally, a positive long-term relationship between money supply (M2) and deposit money bank profitability was found. They said that in order to help deposit money banks operations accomplish their profit goal, monetary authorities should take policies for the liquidity ratio, interest rates, and M2 implementation.

In 2020, Gimba, Vincent, and Oyedokun looked at how Nigeria's listed deposit money banks performed between 2006 and 2018. The study used an ex post facto research design

as its methodology. Based on the variables employed in the study, panel time series data were derived. The dependent variable was net profit margin (NPM), while the independent proxies for measuring monetary policy were the liquidity ratio (LQR), interest rate (INR), loan to deposit ratio (LDR), and cash reserve ratio (CRR). The results demonstrated that the performance of listed deposit money banks in Nigeria was significantly impacted by monetary policy.Based on the findings, they came to the conclusion that while interest rate and cash reserve ratio had no bearing on net profit margin, liquidity ratio and loan to deposit did. As a result, they noticed that the impact of monetary policy on the Nigerian commercial banks as a tool for containing inflation, unemployment, etc. was focused on helping the economy play a healthy and productive role. One of their recommendations was that, given the recent increase in loan to deposit ratios, the Central Bank of Nigeria should properly control the monetary policy rate.The government should take additional steps to regulate the loan to deposit ratio, and the monetary authorities should reduce the cash reserve ratio from 22.5% to 25% in order to influence how well banks perform in terms of their ability to raise large amounts of money and to keep banks from going out of business.

Twelve listed Deposit Money Banks (DMBs) in Nigeria were the subject of an investigation by Okwudili (2021) into the impact of monetary policy on financial performance over a ten-year period. Loan to Asset Ratio, Loan to Deposit Ratio, and Central Bank of Nigeria Lending Rate were used as proxy measures for monetary policy, while Return on Asset was used as a proxy measure for financial performance. The theoretical underpinnings of this inquiry were the institutional theory and the theory of financial intermediation. For data analysis, the panel regression model, Pearson correlation, and descriptive statistics were used. According to the findings, LDR significantly improves the financial performance of DMBs listed in Nigeria. This outcome was in line with the two possibilities put forth in the investigation.The outcome also showed that LAR significantly adversely affected the financial performance of DMBs listed in Nigeria. The study also showed that CBNLR has a negligible adverse impact on the financial performance of listed DMBs. The study suggested that in order to improve their banks' profitability, the management of DMBs in Nigeria should work to raise the LDR of those institutions. Additionally, DMBs should not rely on LAR and CBNLR as a method to improve financial performance because the results of the study showed that these strategies had mixed and negative consequences,

respectively. To improve the generalizability of the results, the study also suggested that future research include uncited DMBs functioning in Nigeria.

3.Methodology

The development of a model to support the relationship between the variables is required in order to assess monetary policy and the performance of Nigerian banks. The data will be analyzed using the Autoregressive Distributed Lag (ARDL) Model.The functional form of the ARDL model is given by:

$$Y = f(X) \quad (3.1)$$

Where Y is dependent and X is the independent variable. More specifically, we formulate thus:

$$\text{Bank Performance} = f(\text{Monetary Policy Variables}) \quad (3.2)$$

Where bank performance is measured using total banks' credit to the private sector. Therefore, we substitute as follows:

$$BCPS = f(\text{Monetary Policy Variables}) \quad (3.3)$$

Where: BCPS = Bank credit to the private sector

By identifying the monetary policy variables, we substitute into equation (iii) thus:

$$BCPS = f(MPR, CRR, LIQR, EXR, LDR) \quad (3.4)$$

Where:

MPR = Monetary policy rate, CRR = Cash reserve requirement, LIQR = Liquidity ratio, EXR = Exchange rate of naira to dollar, LDR = Loan to deposit ratio

Expressing this model in explicit econometric (Linear equation) form as:

$$BCPS = \alpha_0 + \alpha_1 MPR + \alpha_2 CRR + \alpha_3 LIQR + \alpha_4 EXR + \alpha_4 LDR + U_t \quad (3.5)$$

Where:

α_0 = Constant or intercept of the model

$\alpha_1, \alpha_2, \alpha_3, \alpha_4$ andα_5 = Partial Slope or coefficients of the variables MPR, CRR, LIQR, EXR and LDR respectively

U_t = error term at time t

4. Results Presentation, Analysis and Discussion of Findings

4.1 Pre-Estimation Test Results

The Table 4.1 below shows a summary of Augmented Dickey Fuller (ADF) unit tests carried out on each of the variables. The test is done at 5% critical value as follows

Unit Root Test

Table 4.1: Summary of Unit Root Test Result

		ADF Test statistics			
Variable		**At Level**	**1st Difference**	**Decision**	**Order of Integration**
BCPS		-1.0036	-5.1139	Stationary at 1st difference	I(1)
MPR		-3.1234	-8.0386	Stationary at Level	I(0)
CRR		-0.0047	-5.8858	Stationary at 1st difference	I(1)
LIQR		-4.9793	-6.8592	Stationary at Level	I(0)
EXR		1.8429	-3.7652	Stationary at 1st difference	I(1)
LDR		-4.8249	-5.0462	Stationary at Level	I(0)
Critical Values	**1%**	***-3.6702***	***-3.6793***		
	5%	***-2.9639***	***-2.9678***		
	10%	***-2.6210***	***-2.6229***		

Source: Researchers' Computation using EView 9.0

The unit root test above reveals that bank credit to private sector (BCPS), cash reserve ratio (CRR) and exchange rate (EXR) are all stationary at first difference and are said to be integrated of order one, I(1). However, monetary policy rate (MPR), liquidity ratio (LIQR) and loan-to-deposit ratio (LDR) are stationary at level meaning that they are integrated of order I(0). The implication is that we have confirmed the data to have statistical properties that do not vary over time since they have mixed order of integration. Based on this result, we test for the existence of a long-run relationship or cointegration amongst the variables using the Bounds test approach.

4.1. 2 ARDL Bounds test for Cointegration

H_0: No long run relationship exists amongst the variables (no cointegration)

H_1: There is long run relationship amongst the variables

Table 4.2: Summary of the ARD Bounds Test

Test Statistic	Value	k
F-statistic	4.6042	5

Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

Source: Researchers' Computation using EView 9.0

The Bounds test F-statistic is estimated at 4.604 and is greater than the 5% critical value at I(0) and I(1) bounds (2.62 and 3.79 respectively), therefore, we reject the null hypothesis and conclude that the variables are cointegrated or that the variables have long run relationship. The confirmation of the long run relationship between monetary policy

variables and banks' performance implies that there is a long run significant effect of monetary policy variables on the performance of banks in Nigeria.

4.1. 3 Lag Selection Criteria

The model used the Akaike information criteria to select the appropriate lag for the model. The figure below shows the process:

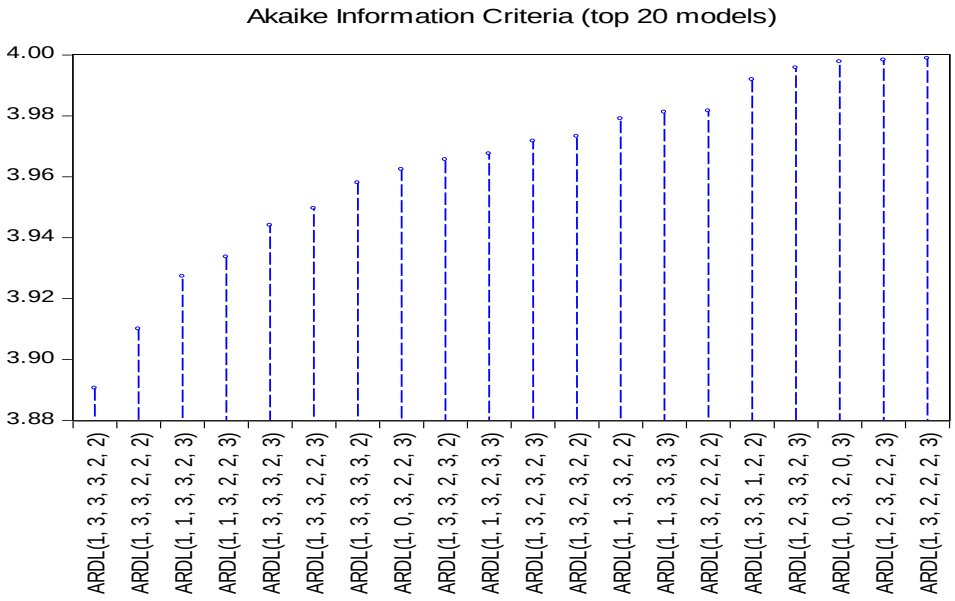

Figure 4.1: Lag Selection Order Criteria

Source: Researchers' Plot Using EView 9.0

The system selected the top 20 lag models as shown in the figure above. After careful examination, the minimum AIC value of -3.88 which has the lag order ARDL (1,3,3,3,2,2) was selected. This means that the dependent variable (BCPS) has a maximum lag period of 1, the monetary policy variables MPR, CRR and LIQR also have maximum lag periods of 3 while EXR and LDR have 2 lag periods each. The lag period tells us the maximum number of previous years that accounted for the value of the present year.

4.2 Model Estimation

4.2.1 Short Run Model Estimates

The short run estimates shows the relationship between monetary policy variables and performance of banks in Nigeria in the short run period. The estimate includes the lag periods as selected using the AIC criterion as well as the error correction coefficient which shows the speed of adjustment of the model to long run equilibrium. The result of the short run ARDL estimates is shown below:

Table 4.3: ARDL Short Run Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
BCPS(-1)	0.856040	0.223679	3.827100	0.0040
MPR	0.023567	0.154910	0.152134	0.8824
MPR(-1)	0.257714	0.170787	1.508979	0.1656
MPR(-2)	-0.141369	0.153674	-0.919931	0.3816
MPR(-3)	-0.186373	0.136714	-1.363238	0.2059
CRR	-0.178320	0.254718	-0.700069	0.5016
CRR(-1)	0.717252	0.201922	3.552115	0.0062
CRR(-2)	-0.315084	0.187501	-1.680436	0.1272
CRR(-3)	-0.151069	0.124416	-1.214224	0.2556
LIQR	-0.082083	0.038162	-2.150926	0.0599
LIQR(-1)	0.062402	0.038398	1.625170	0.1386
LIQR(-2)	0.043243	0.031701	1.364090	0.2057
LIQR(-3)	-0.046227	0.050674	-0.912253	0.3854
EXR	0.008605	0.025075	0.343186	0.7393
EXR(-1)	-0.063713	0.030856	-2.064834	0.0689
EXR(-2)	0.052546	0.022080	2.379778	0.0412
LDR	0.127723	0.048116	2.654489	0.0263
LDR(-1)	-0.106496	0.060895	-1.748834	0.1143
LDR(-2)	0.154434	0.053985	2.860694	0.0188
C	-7.359915	9.140268	-0.805219	0.4414
CointEq(-1)	-0.143960	0.023679	-6.079650	0.0359

R-squared	0.977306	Mean dependent var	13.19828
Adjusted R-squared	0.929396	S.D. dependent var	5.737628
F-statistic	20.39887	Akaike info criterion	3.890538
Prob(F-statistic)	0.000034	Durbin-Watson stat	1.789587

Source: Researchers' Computation Using EView 9.0

The estimates above show that monetary policy rate (MPR) positively affected banks' credit to private sector (BCPS) both in the previous year (first lagged period) and the current year. In the current year, MPR increased BCPS by 0.0362 units. However, the *p-value* of

0.8824 indicates an insignificant increase in BCPS occasioned by change in MPR in the current year. The previous year also increased BCPS but not significantly. The second and third lagged periods showed negative effect of MPR on BCPS.

Cash reserve ratio had negative relationship with banks' performance (BCPS) in the current year decreasing it by 0.1783 units. In the previous year, CRR had positive coefficient increasing BCPS by 0.7173 units. The *p-value* of 0.0062 in the first lag period shows that the previous year's increase in CRR was significant, but the current year changed to negative.

In the case of liquidity ratio, the coefficient in the current year was negative. This means that liquidity ratio decreased BCPS in the current year by 0.0821 unit. In the first and second period lags, liquidity ratio was positively signed meaning that it increased BCPS though not significantly since their respective *p-values* are all greater than 0.05 critical value.

Exchange rate has only 2 lag periods and it showed negative coefficient in the lag period decreasing BCPS by 0.0.0637 units. The current year value is positively signed increasing BCPS by 0.0086 which is an indication that exchange rate increased banks' performance in the current year but not significantly.

Loan-to-deposit ratio (LDR) has two lag periods as well and the coefficient in the current year was positive. In other words, loan-to-deposit ratio increased BCPS in the current year but decreased it in the first period lag. The increase in banks' performance occasioned by change in loan-to-deposit ratio in the current year was found to be significant.

The short run estimates has a speed of adjustment of 14.39% given the coefficient of the CointEq(-1) which is -0.1439. This shows that the model corrects its previous period's disequilibrium at an annual speed of 14.39%. The intercept is negative meaning that there is decrease in banks' performance indicators holding the monetary policy variables constant at zero.

4.2.2 Long Run Model Estimates

The ARDL model also estimates the long run coefficients of the model. This is summarized below:

Table 4.4: ARDL Long Run Estimates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MPR	-0.322734	1.942923	-0.166108	0.8717
CRR	0.505552	0.905427	0.558357	0.5902
LIQR	-0.157437	0.565576	-0.278366	0.7870
EXR	-0.017799	0.004073	-4.369998	0.0003
LDR	1.220211	0.106429	11.465024	0.0066
C	-51.124781	136.596769	-0.374275	0.7169

Source: Researchers' EView 9.0

The long run estimates above shows that monetary policy rate (MPR), liquidity ratio LIQR) and exchange rate (EXR) decrease banks' credit to private sector by 0.323, 0.157 and 0.018 units respectively. However, only exchange rate decreased banks' performance significantly in the long run given the *p-value* of 0.0003.

On the other hand, cash reserve ratio (CRR) and loan-to-deposit ratio (LDR) have positive and direct relationships with banks' credit to private sector increasing it by 0.506 and 1.2202 units respectively. Only the positive effect of loan-to-deposit ratio on banks' credit to private sector was significant in the long run since it has *p-value* of 0.0066.

The intercept in the long run model is estimated at -51.125 units. This indicates a negative change in banks' credit to private sector when the monetary policy variables are held constant at zero. This implies that banks' credit to private sector continues to decrease in the absence of the monetary policy variables. This underscores the pivotal role of monetary policy in the ensuring that banks' performance is enhanced.

4.3 Policy Implication

The monetary policy rate (MPR) increased bank lending to the private sector in the short run, but in the long run, it worsened banks' performance indicators. This suggests that the short-term benefit of MPR on DMB performance is not long-term maintainable. In other words, the Central Bank of Nigeria needs to create a structure that will allow MPR to affect banks in the long run. Research into...

The short-term association between the variable for cash reserve ratio and bank loans to the private sector was negative. CRR has a long-term favorable impact on DMB's performance indicator. This is supported by the fact that over the long term, deposit money institutions continue to reserve an increasing amount of cash, and the apex bank uses this ratio to evaluate the performance of banks. The reserve ratio is set such that as banks' demand deposits rise, their reserves rise along with them, maintaining the required ratio. This is advantageous for banks that have built up customer deposits over time. This confirms what has been said.

In both the short- and long-term, the liquidity ratio and exchange rate have varying impacts on the performance of banks. Exchange rate had a beneficial impact on banks' lending to the private sector (BCPS), while liquidity ratio temporarily lowered BCPS. However, over time, the liquidity ratio continued to have a detrimental impact on DMB performance, whereas the exchange rate reduced DMB performance. The findings have the consequence that the liquidity ratio set for banks in Nigeria has not been advantageous for the banks because it restricts their ability to play a role in financial intermediation in the economy.In order to preserve robust and prospering DMBs in Nigeria, the apex bank must evaluate the liquidity ratio because changes to it reduce banks' short- and long-term lending to the private sector. On the other hand, the exchange rate has declined over the long term, highlighting the crucial role played by the CBN in keeping the rate stable so that banks can increase the amount of credit they extend to the private sector.

The CBN's loan-to-deposit ratio had a favorable impact on the DMB's performance during the short- and long-term periods. The fact that DMBs have maintained a robust portfolio in accordance with CBN prescriptions means that they currently have a good loan-to-deposit ratio.Additionally, DMBS have demonstrated that banks in Nigeria have been following the apex bank's monetary policy norms by matching their deposit obligations to the loans they issue.

5. Conclusion

The findings lead to the conclusion that the central bank has effectively used monetary policy instruments to increase the lending portfolio of DMBs to the private sector. In particular, the cash reserve ratio has been carefully adhered to by banks in Nigeria because

it improved banks' performance over the long term. Additionally, the loan-to-deposit ratio is another element of monetary policy that has assisted banks in maintaining their profitability by ensuring the private sector has unrestricted access to bank credits. However, the rate of all rates, the monetary policy rate, has not positively impacted banks' lending to the private sector; this also holds true for the liquidity ratio and currency rate.There is also substantial evidence to draw the conclusion that, while favorable, monetary policy has had an unsatisfactory impact on DMB's performance. To speed up bank credits, meanwhile, some rates still need to be reviewed.

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