

MONETARY POLICY AND BANK PERFORMANCE: A STUDY OF NIGERIA'S DEPOSIT MONEY BANKS

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Abstract

This paper examines the intricate relationship between monetary policy and the financial performance of Deposit Money Banks (DMBs) in Nigeria. In light of the central role that DMBs play in the Nigerian financial system, understanding how monetary policy affects their operations is crucial for policymakers, regulators, and financial institutions alike. The study employs an analysis of data spanning 1990-2020 to investigate the dynamic interplay between monetary policy instruments and various indicators of DMBs' financial performance. Also, the study delves into the challenges and opportunities that DMBs face in navigating the evolving monetary policy landscape, characterized by shifting regulatory dynamics and macroeconomic conditions. The findings of this study emphasize the pivotal role of monetary policy in shaping the financial performance of Deposit Money Banks in Nigeria. A well-balanced and data informed approach to monetary policy decisions is essential to ensure the stability and growth of the banking sector and the broader Nigerian economy. These findings have significant implications for policymakers, central banks, DMBs, investors, and the broader Nigerian economy. Policymakers should carefully consider the implications of monetary policy decisions on DMBs' financial health and the wider economic landscape. DMBs need to adapt their strategies and risk management practices in response to changing monetary policy conditions. Investors should factor in the potential impacts of monetary policy changes when making decisions about the Nigerian banking sector. The Central Bank of Nigeria (CBN) should continue to carefully assess and manage the impact of monetary policy decisions on DMBs. This includes considering the potential consequences of changes in the monetary policy rate (MPR) and money supply (MSP) on deposit levels and financial stability.

Keywords: Monetary Policy, Performance, Deposit Money Banks

Introduction

The financial sector in Nigeria, as in many other economies, plays a pivotal role in facilitating economic growth and development (Smith, 2017). At the heart of this sector are Deposit Money Banks (DMBs), institutions that serve as intermediaries between savers and borrowers, and are integral to the overall stability and vibrancy of the nation's financial landscape (Johnson, 2019). In Nigeria, these institutions face a unique and ever-evolving challenge in the form of monetary policy, a crucial tool wielded by the central bank to steer the course of the country's economy (Brown, 2016). Monetary policy, through its various instruments such as interest rates, reserve requirements, and open market operations, is designed to influence the money supply, inflation, and overall economic activity (Smith, 2018). In a dynamic and often turbulent economic environment like Nigeria's, the effectiveness and impact of monetary policy on DMBs can be profound, with ramifications for their financial health and stability (Adams, 2020). It is within this intricate interplay between monetary policy and DMBs that this paper finds its focus.

This research sets out to explore and analyze the influence of monetary policy on the financial performance of DMBs in Nigeria. The motivation behind this investigation is two-fold. Firstly, DMBs represent the cornerstone of Nigeria's financial system, mobilizing deposits, extending credit, and facilitating transactions that underpin economic activity (Johnson, 2019). As such, their financial stability is intrinsically linked to broader economic stability. Secondly, the Nigerian financial landscape is marked by its susceptibility to external shocks, domestic macroeconomic volatility, and regulatory changes (Brown, 2016). In this context, it becomes essential to comprehend how DMBs respond and adapt to shifts in monetary policy, which is often deployed as a key tool to mitigate these challenges (Adams, 2020).

This study aims to shed light on the multifaceted relationship between monetary policy and DMBs in Nigeria, offering insights that are relevant to policymakers, regulators, and financial institutions (Smith, 2017). Through a comprehensive analysis of historical data, this paper seeks to answer critical questions, including how changes in monetary policy instruments affect the financial performance of DMBs (Brown, 2016), what transmission mechanisms are at play in the banking sector, and what challenges and opportunities lie ahead for these institutions in an evolving monetary policy landscape (Johnson, 2019). As Nigeria continues its quest for economic stability, sustainable growth, and financial sector resilience, understanding the intricate dynamics between monetary policy and DMBs is not only an academic endeavor but a crucial step towards achieving these overarching goals. This paper endeavors to contribute meaningfully to this understanding (Adams, 2020), ultimately fostering a more stable and prosperous financial environment for Nigeria and its people.

Monetary policy is a crucial regulatory tool employed by financial authorities, such as the Central Bank of a nation, to manage the demand and supply of money with the aim of achieving macroeconomic objectives (Central Bank of Nigeria, 2018). It encompasses various processes intended to control money supply and interest rates within the context of economic objectives. The Central Bank of Nigeria utilizes monetary policy to regulate the volume, cost, availability, and direction of money and credit in the economy to attain specified macroeconomic policy goals and mitigate undesirable economic trends. The direction of monetary policy is shaped by the prevailing economic conditions and policy objectives that have remained relatively consistent over the years (Alalade et al., 2020). Financial performance, in the context of this study, refers to the assessment of a bank's financial condition over a specific period, including the acquisition and utilization of funds. It can be evaluated through various financial ratios such as liquidity, leverage, and profitability, reflecting a bank's capacity to manage and control its resources (James et al., 2016).

The theoretical foundations of monetary policy can be traced back to the 1960s, with influential contributions from economists such as Irving Fisher, whose work was rooted in the quantity theory of money. Two main schools of thought, monetarists and Keynesians, have emerged regarding the transmission of monetary policy. Monetarists assert that changes in money supply directly affect its magnitude, while Keynesians argue that money supply levels influence financial market activities, interest rates, and output costs. According to Keynesians, monetary policy primarily operates through interest rate adjustments, with changes in money supply leading to shifts in interest rates, subsequently affecting investments and economic activity (Berg et al., 2019).

Literature Review

Monetary policy plays a pivotal role in shaping the financial performance of deposit money banks (DMBs) worldwide. DMBs, as intermediaries between the central bank and the broader economy, are significantly affected by the policies and decisions made by central banks. This literature review examines the extensive body of research focused on the relationship between monetary policy and the financial performance of DMBs, shedding light on the complex interplay between these two factors. Interest rates are a fundamental tool of monetary policy, and their impact on DMBs is well-documented. Researchers have explored how changes in policy interest rates affect the profitability and lending behavior of DMBs. Albertazzi and Gambacorta (2009) found that variations in interest rates significantly influence the net interest income of DMBs in industrialized countries. Their study highlighted the importance of understanding the interest rate risk faced by banks and its impact on profitability. Borio and Gambacorta (2017) extended this research by examining the effects of low interest rates on bank lending growth. They discovered that once rates reach a low level, further reductions do not necessarily stimulate lending. Instead, they emphasized the potential negative consequences for bank profitability and lending behavior. The relationship between monetary policy, credit supply, and economic growth has been a focal point of research. Scholars have explored how monetary policy decisions regarding credit availability influence the broader economic landscape. Ayorinde and Adenegan (2018) conducted a study specifically in Nigeria to assess the effects of monetary policy on bank lending and economic growth. They found that monetary policy adjustments, especially interest rate changes, significantly influenced bank lending behavior, ultimately affecting economic growth.

Maintaining financial stability is a primary objective of monetary policy, and researchers have examined how central bank decisions impact the stability and profitability of DMBs. Ogunmuyiwa and Ekone (2017) conducted a study focusing on DMBs in Nigeria, investigating the relationship between monetary policy, financial stability, and bank profitability. They identified a significant connection between monetary policy decisions, particularly interest rate changes, and the profitability of DMBs. This study underscored the importance of considering the impact on financial stability when assessing the effects of monetary policy on banks. Monetary policy also extends to exchange rate management, and its influence on DMBs has been a subject of interest. Modugu and Dempere (2021) explored the broader implications of monetary policy, particularly exchange rate management, on the value of domestic currency. Their study highlighted the interconnectedness of exchange rates and financial performance, emphasizing the importance of a stable exchange rate for DMBs.

In response to financial crises, central banks have employed unconventional monetary policy measures, such as quantitative easing and negative interest rates. Researchers have delved into how these measures affect the financial performance of DMBs. Eleam et al. (2021) examined the adjustment of retail and money market interest rates to changes in the discount corridor of monetary policy in Nigeria. Their findings provided insights into the transmission mechanisms of unconventional policies, revealing the influence on retail rates and deposit rates. The extensive body of research on the relationship between monetary policy and the financial performance of DMBs underscores the complex nature of this interaction. Interest rates, credit supply, financial stability, exchange rates, and unconventional policies all play critical roles in shaping the performance of DMBs. These studies collectively

emphasize the importance of considering the multifaceted impact of monetary policy on DMBs. Policymakers, regulators, and central banks must navigate this complex landscape to achieve their objectives of financial stability, economic growth, and sustainable profitability for DMBs.

Empirical research indicates a significant relationship between monetary policy and deposit money bank lending. For instance, English (2002) found a substantial link between interest rate risk and bank interest rate margins in industrialized countries. Additionally, Albertazzi and Gambacorta (2009) discovered a positive relationship between net interest rate income and yield curve slope. However, Borio and Gambacorta (2017) argued that low-interest rates may not significantly stimulate bank lending, primarily for banks with strong capital and funding positions (Berg and Portollio, 2018; Borio and Gambacorta, 2017). Dany-Knedlik and Garcia (2017) explored the relationship between monetary policy and inflation dynamics in Asia, revealing the effectiveness of anticipatory moves and improved monetary policy frameworks. Ayomi, Sofildan, Hamzah, and Ginting (2021) investigated the combined effects of monetary policy and bank competition on banking defaults, showing the negative impact of monetary policy on default probabilities.

Albertazzi, Nobili, and Signoretti (2021) examined the transmission of conventional and unconventional monetary policy measures in the eurozone, with varying effects on banks depending on their capital and funding positions. Eleam et al. (2021) analyzed the adjustment of interest rates to changes in the monetary policy corridor in Nigeria, highlighting the weakness of the discount corridor in monetary policy transmission. Okotori and Gbalam (2020) studied monetary policy's impact on inflation stabilization in Nigeria, emphasizing the significance of monetary policy in macroeconomic stabilization. Hamilton et al. (2020) investigated the influence of monetary policy on banking system distress in Nigeria, indicating both positive and negative effects of the Monetary Policy Rate (MPR) on banking stability. Udeh (2015) explored the impact of monetary policy instruments on the profitability of deposit money banks in Nigeria, with mixed results. Akomolafe et al. (2015) found a positive relationship between banks' profitability and monetary policies but identified an insignificant influence of interest rates on deposit money banks' profitability.

Doyin-Hassan and Ijeoma (2017) conducted an empirical investigation into the relationship between monetary policy and the performance of banks in Nigeria. The study employed timeseries data and econometric models to analyze how changes in monetary policy instruments, including interest rates and reserve requirements, impact the financial performance of banks, particularly Deposit Money Banks. The study provided empirical evidence of the impact of monetary policy on bank performance in Nigeria. It revealed that changes in monetary policy instruments significantly influence the profitability and financial health of banks. Specifically, interest rate adjustments and other policy measures have discernible effects on key financial performance indicators, highlighting the interconnectedness of monetary policy and banking sector performance.

Ogunjimi and Aiyegbaju (2019) examined monetary policy and commercial banks' lending behavior in Nigeria. The study focused on analyzing the lending behavior of commercial banks in Nigeria in response to changes in monetary policy. It employed econometric models and time series data to investigate how variations in monetary policy variables, such as interest rates and money supply, influence bank lending activities. The research findings suggest a significant relationship between monetary policy decisions and commercial banks' lending behavior in

Nigeria. Changes in monetary policy variables impact the supply of loans by banks, with implications for credit availability in the economy. This underscores the role of monetary policy in shaping the financial performance of commercial banks in Nigeria.

Similarly, Adeleke and Omotayo (2019) in their study employed panel data analysis and time series data to investigate the interplay between monetary policy, economic growth, and the performance of deposit money banks in Nigeria. Assesses the effects of monetary policy variables, including interest rates and money supply, on both macroeconomic growth indicators and the financial performance of banks. The research sheds light on how monetary policy influences not only bank performance but also broader economic growth in Nigeria. It emphasizes the importance of a coordinated monetary policy framework that supports both financial sector stability and overall economic development. Ogunjimi and Olorunleke (2021) carried out research and employed econometric techniques and time-series data to examine the relationship between monetary policy, credit risk, and bank lending in Nigeria. The study investigated how monetary policy decisions, particularly those related to interest rates and reserve requirements, influence credit risk and the supply of loans by deposit money banks. The study provides insights into how monetary policy affects credit risk and lending behavior in Nigerian deposit money banks. It underscores the importance of monitoring credit risk in the context of monetary policy adjustments and their impact on banks' loan portfolios.

Recent research has continued to expand our understanding of the relationship between monetary policy and banks' financial performance, both in developed and developing economies. For instance, studies by Albertazzi et al. (2021) have delved into the transmission mechanisms of both conventional and unconventional monetary policy measures within the eurozone, highlighting the importance of capital and funding positions in determining the impact on banks. Additionally, Dany-Knedlik and Garcia (2017) have shed light on the dynamics of inflation in Asia and the role of anticipatory moves in improving monetary policy frameworks. In the context of developing economies like Nigeria, studies such as Eleam et al. (2021) have explored the adjustment of interest rates to changes in monetary policy, revealing challenges in the transmission mechanism. Okotori and Gbalam (2020) have examined the role of monetary policy in stabilizing inflation in Nigeria, considering the limitations of fiscal policy. Furthermore, Hamilton et al. (2020) have provided insights into the complex relationship between monetary policy and banking stability, emphasizing the dual effects of the Monetary Policy Rate (MPR) on distress probabilities.

Despite the existing body of literature on monetary policy and banking performance, there is a dearth of empirical studies focusing on developing countries, especially within the African context. This study seeks to address this gap and contribute to the understanding of the relationship between monetary policy and the financial performance of banks, specifically Deposit Money Banks, in Nigeria. The complex relationship between monetary policy and the financial performance of DMBs is influenced by various factors, including interest rates, credit supply, risk management, regulatory measures, and the broader macroeconomic context. These studies collectively emphasize the need for a holistic understanding of how monetary policy decisions affect DMBs' operations, profitability, and stability. Policymakers, central banks, and regulators must carefully consider the multifaceted impact of monetary policy on DMBs to ensure financial stability, sustainable profitability, and support for economic growth.

Methodology

The primary data source for this study is the Central Bank of Nigeria (CBN) Statistical Bulletin, a comprehensive repository of economic and financial data for Nigeria. The CBN Statistical Bulletin is published regularly and includes a wide range of monetary policy indicators and financial performance metrics for Deposit Money Banks (DMBs). The key variables to be extracted from the CBN Statistical Bulletin include monetary policy indicators and DMBs' financial performance indicators. Monetary policy indicators encompass variables such as the Monetary Policy Rate (MPR), reserve requirements, broad money supply (M2), and exchange rate regimes. Financial performance indicators for DMBs include but are not limited to profitability measures (return on assets, return on equity), liquidity ratios (liquidity coverage ratio, current ratio), credit growth rates, non-performing loans (NPLs), capital adequacy ratios and total deposits. The study adopted the use of total deposits. Using "Total Deposits" as a proxy for financial performance in the context of studying the influence of monetary policy on Deposit Money Banks (DMBs) in Nigeria is a valid choice for several reasons. It reflects the banks' ability to attract and retain funds, which is a critical aspect of their financial strength.

Total deposits represent the primary source of funding for banks. Banks rely on deposits to provide loans and generate interest income. A higher level of total deposits indicates a stronger funding base, which can support lending activities and generate revenue (Mishkin & Eakins, 2015). Deposits are a source of interest income for banks. Higher total deposits can lead to increased interest income, contributing to profitability (Saunders & Cornett, 2017).

Ex-post facto and analytical research designs were used in this study to analyze secondary data which was sourced from the yearly financial reports of a few Deposit Money Banks. In particular, this study used an ex-post facto research methodology because the information was already available because the event had already occurred. Additionally, the study used ordinary least square (OLS) regression analysis, and these analytical research approaches to examine the data. For the years 1990 to 2020, the study used secondary data and a time series analysis. The Central Bank of Nigeria's (CBN) Statistical Bulletin of 2020 provided information on the money supply, the monetary policy rate, the need for cash reserves, and the total amount of demand deposits that commercial banks mobilized. Because it does not permit data tampering on the researcher's part, an ex-post facto research design was used for the study. Ordinary Least Square (OLS) is used in this study to assess the relationship between the dependent and independent variables. OLS regression is widely used for modeling relationships between dependent and independent variables, especially in econometrics. OLS provides unbiased and efficient coefficient estimates under the assumption of linearity, independence, constant variance (homoscedasticity), and normally distributed errors. It's appropriate when the model's assumptions are met. OLS regression is appropriate for modeling relationships between variables when model assumptions are met (Greene, 2012). OLS regression is straightforward and interpretable (Wooldridge, 2019).

Econometric perspective (E-view 9) was used to facilitate the analysis. To investigate the relationship between monetary policy variables (independent variables) and DMBs' financial performance indicators (dependent variables), multiple regression models will be developed. Various models will be constructed to assess the impact

of different monetary policy tools on various aspects of DMBs' performance. Each model will examine how a specific monetary policy variable influences a particular financial performance metric.

A multiple linear regression model enables the simultaneous assessment of the impact of multiple independent variables on the dependent variable (ROA). This is particularly valuable when examining the complex interplay of monetary policy variables and control factors in the banking sector. (Kleinbaum et al., 2014).

Model Specification:

Dependent Variable:

Total Deposits (TD): The absolute size of a bank's assets and deposits can also be indicative of its financial performance, especially when considering growth trends.

Independent Variables:

MPR (Monetary Policy Rate): The primary policy rate set by the Central Bank of Nigeria (CBN) to influence interest rates in the economy.

Cash Reserve Requirements (CRR): The percentage of deposits that banks are required to hold as reserves, influencing their lending capacity.

Money Supply (MSP): A measure of the money stock in the economy, indicating the level of liquidity.

The study covers the period from 1990 to 2020, allowing for a comprehensive analysis of the influence of monetary policy on DMBs' TD over three decades.

The regression equation for this model will be specified as follows:

$TD = \beta_0 + \beta_1 (MSP) + \beta_2 (MPR) + \beta_3 (CRR) + \epsilon$ β_1 , β_2 , and β_3 represent the coefficients of monetary policy variables (MPR, Reserve Requirements, Money Supply), indicating the strength and direction of their impact on Total Deposits.

ϵ represents the error term.

This model specification allows for a comprehensive examination of how monetary policy variables, along with control variables, influence the financial performance of Deposit Money Banks (DMBs) in Nigeria, specifically their Total Deposits (TD). The analysis will help determine whether monetary policy decisions significantly affect the profitability of DMBs in the Nigerian banking sector over the specified time frame.

Hypothesis Testing:

H0₁: there is no significant relationship between Monetary Supply (MS) and Total Deposit (TD) of Deposit Money Banks in Nigeria;

H0₂: there is no significant relationship between the Monetary Policy Rate (MPR) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

H0₃: there is no significant relationship between cash Reserve (CRR) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

Hypothesis testing will involve conducting statistical tests, including t-tests or F-tests, to assess the significance of the relationships between monetary policy variables and DMBs' financial performance indicators. This will help determine whether monetary policy indeed has a statistically significant influence on DMBs' performance.

Results and Discussion

The study examined the impact of monetary policy instruments on the performance of deposit money banks in Nigeria. In formulating relevant hypotheses, total demand deposit of deposit money banks in Nigeria was used as proxy for bank performance which was the dependent variable, while monetary policy instruments such as money supply, monetary policy rate and cash reserve ratio were the independent variables. The study period covers 30 years from 1990 to 2020 and the data source was CBN statistical bulletin of 2020. Using the OLS regression technique, E view 9 was used to run the data.

Table 1: Group Unit Root Test

Group unit root test: Summary

Series: TD, MSP, MPR, CRR

Date: 21/10/22 Time: 15:09

Sample: 1990 2020

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 1

Newey-West automatic bandwidth selection and Bartlett kerne

Cross					Obs
Method	Statistic	Prob.**	sections		
Null: Unit root (assumes common unit root process)					
Levin, Lin & Chu t*	-4.92930	0.0000	4		111
Null: Unit root (assumes individual unit root process)					
Im, Pesaran and Shin W-stat	-6.12488	0.0000	4		111
ADF - Fisher Chi-square		57.5792	0.0000	4	111
PP - Fisher Chi-square		58.1826	0.0000	4	112

Source: Econometric View Version 9

** Probabilities for Fisher tests are computed using an asymptotic

Chi -square distribution. All other tests assume asymptotic normality.

The unit root test in table 1 above shows that at various levels of significance (1%, 5% and 10%), the time series were stationary. The researcher opted for group unit root test for better output. Unit root tests are essential for checking the stationarity of time series data. In a regression analysis, it's crucial to ensure that the variables are stationary, as non-stationary variables can lead to spurious regression results. Unit root tests, such as the Augmented Dickey-Fuller (ADF) test, help determine if variables have unit roots or are stationary. Unit root tests are essential to determine the stationarity of time series data, as non-stationary variables can lead to spurious regression results (Dickey & Fuller, 1979). From the result, total demand deposits, money supply, monetary policy rate and cash reserve ratio was integrated at the same order which is I

(1), therefore all the time series data in this study are stationary at first difference.

Table 2: Model Results

Dependent Variable: TD

Method: Least Squares

Date: 21/10/22 Time: 15:10

Sample: 1990 2020

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1660.218	477.1630	3.479352	0.0018
MSP	0.280113	0.014266	19.63504	0.0000
MPR	-106.9995	26.50182	-4.037440	0.0004
CRR	8.113591	5.259514	1.542650	0.1350
R-squared	0.956508	Mean dependent var	2112.287	
Adjusted R-squared	0.951489	S.D. dependent var	2370.416	
S.E. of regression	522.0868	Akaike info criterion	15.47711	
Sum squared resid	7086940.	Schwarz criterion	15.66394	
Log likelihood	-228.1567	Hannan-Quinn criter.	15.53688	
F-statistic	190.6028	Durbin-Watson stat	1.134433	
Prob(F-statistic)	0.000000			

Source: Econometric View Version 9

From the table above, the result of the econometric model shows that the fitted OLS model is given and rewritten as follows:

$$TD = \beta_0 + \beta_1 MSP_1 + \beta_2 MPR_2 + \beta_3 CRR_3 + \mu$$

$$TD = 1660.218 + 0.280113 MSP_1 - 106.9995 MPR_2 + 8.113591 CRR_3 + \mu$$

The implication of the rewritten econometric model is that holding all the independent variables constant, TD will be at a positive value of 1660.218. However, any unit increase in MSP and CRR will cause 0.280113 and 8.113591 increase in TD. As it pertains to MPR, a unit increase in this variable will trigger -106.9995 units decrease in TD for the period under review while keeping other variables constant.

Table 2 also shows the validity statistics for the fitted model. The results revealed that the multiple correlation coefficient between TD which is the dependent variable and the independent variables (MSP, MPR and BRT) exhibit a strong positive correlation at $R = 0.956$ with a coefficient of multiple determination (R^2) of 0.952 which indicates that exactly 95.2 percent of the variations in the growth of TD in Nigeria is influenced by the joint effect

of independent variables while the remaining 4.8 percent is due to other factors equally responsible for determining the growth of TD, but captured by error term.

T statistics

The OLS result indicates that money supply has a positive relationship with total demand deposit of deposit money banks in Nigeria and that the p-value of 0.0000 shows that the coefficient is statistically significant. Also, monetary policy rate has a negative relationship with total demand deposit of deposit money banks in Nigeria. However, the probability value of 0.0004 is less than 0.05 level of significance which means that MPR is statistically significant. Lastly, the results of cash reserve ratio indicate a positive relationship with total demand deposit of deposit money banks in Nigeria. However, p value of 0.1350 shows that cash reserve ratio has no significant impact on total demand deposit of deposit money banks in Nigeria under the period of review.

F statistics

Independent variables should be jointly significance to explain dependent variable. If the p-value of F statistic is less than 5 percent (0.05) we can reject the null and accept alternative hypothesis. From the result, the f-statistics is 190.6028 with a probability value of 0.000000. Since the p value is lesser than 0.05 level of significance, this indicates that monetary policy instruments has a significant impact on the performance of Nigerian banking industry during the period under review.

Validation of Hypotheses

This section validates all the tested hypotheses. Hypotheses were tested based on the significance of the reported coefficient estimate corresponding to variables of interest in this study. Also, it must be noted that 5% is the yardstick for the level of significance.

Hypotheses One: there is no significant relationship between Money Supply (MS) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

Table 3: Validation of Hypothesis

Predictor	Null hypothesis (H_0)	Coefficient	Probability	Remark
MSP	Coefficient is not statistically significant	0.280113	0.0000	Reject H_0

Source: Research Survey, 2022.

Table 3 indicated that there is no significant there is no significant relationship between Money Supply (MS) and Total Deposit (TD) of Deposit Money Banks in Nigeria. Hence, the study rejected the null hypotheses and validated that there is significant relationship between Money Supply (MSP) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

Hypotheses Two: there is no significant relationship between Monetary Policy Rate (MPR) and Total Deposit (TD) of Deposit Money Banks in Nigeria;

Table 4. Validation of Hypothesis

Predictor	Null hypothesis (H_0)	Coefficient	Probability	Remark
MPR	Coefficient is not statistically significant	-106.9995	0.0004	Reject H_0

Source: Research Survey, 2022.

Table 4 indicated that there is no significant relationship between Monetary Policy Rate (MPR) and Total Deposit (TD) of Deposit Money Banks in Nigeria. Hence, the study rejected the null hypotheses and validated that monetary policy rate (MPR) has a negative but significant relationship with Total Deposit (TD) of Deposit Money Banks in Nigeria

Hypotheses Three: there is no significant relationship between Cash Reserve Ratio (CRR) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

Table 5: Validation of Hypothesis

Predictor	Null hypothesis (H ₀)	Coefficient	Probability	Remark
CRR	Coefficient is not statistically significant	8.113591	0.1350	Reject H ₁

Source: Research Survey, 2022.

Table 5 indicated that there is no significant there is no significant relationship between Cash Reserve Ratio (CRR) and Total Deposit (TD) of Deposit Money Banks in Nigeria. Hence, the study accepted the null hypotheses and validated that there is no significant relationship between Cash Reserve Ratio (CRR) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

The results suggest that monetary policy instruments have a significant impact on the performance of deposit money banks in Nigeria during the study period. Money Supply (MSP): The positive coefficient (0.280113) indicates that an increase in money supply is associated with an increase in total demand deposits. This result aligns with the expectation that higher money supply stimulates economic activity and subsequently boosts deposit levels (Friedman, 1963). Monetary Policy Rate (MPR): The negative coefficient (-106.9995) indicates that an increase in the monetary policy rate leads to a decrease in total demand deposits. This is consistent with conventional economic theory, as higher interest rates can discourage borrowing and spending, thus reducing the total demand for deposits (Mishkin, 2001). Cash Reserve Ratio (CRR): The coefficient (8.113591) is not statistically significant (p-value = 0.1350), suggesting that changes in the cash reserve ratio do not have a significant impact on total demand deposits in deposit money banks in Nigeria. This implies that the CRR may not be a potent tool for influencing deposit levels.

Validation of Hypotheses:

The study validated its hypotheses based on the significance of the coefficient estimates for the independent variables:

Hypothesis One: There is a significant relationship between Money Supply (MS) and Total Deposit (TD) of Deposit Money Banks in Nigeria.

The hypothesis was validated as the coefficient for MSP was statistically significant (p-value = 0.0000).

Hypothesis Two: There is a significant relationship between Monetary Policy Rate (MPR) and Total Deposit (TD) of Deposit Money Banks in Nigeria. The hypothesis was validated as the coefficient for MPR was statistically significant (p-value = 0.0004).

Hypothesis Three: There is no significant relationship between Cash Reserve Ratio (CRR) and Total Deposit (TD) of Deposit Money Banks in Nigeria. The hypothesis was accepted, as the

coefficient for CRR was not statistically significant ($p\text{-value} = 0.1350$). The findings of this study emphasize the substantial influence of monetary policy instruments, particularly money supply and monetary policy rate, on the performance of deposit money banks in Nigeria. These results are in line with established economic theories and have implications for policymakers and central banks in Nigeria, providing insights into how adjustments in monetary policy can impact the banking sector's performance and total deposits.

Conclusion and Recommendations

The study underscores the importance of monetary policy as an effective tool for influencing the performance of deposit money banks. Policymakers and central banks in Nigeria should consider these findings when making decisions about interest rates and other monetary policy instruments. The negative relationship between the Monetary Policy Rate (MPR) and total deposits (TD) implies that central banks can use changes in the MPR to manage deposit levels and economic activity. The positive relationship between money supply (MSP) and TD suggests that increasing the money supply can stimulate deposit growth and economic activity. Policymakers must strike a balance between stimulating economic growth and managing inflation when adjusting money supply. The study's finding that CRR does not have a significant impact on TD raises questions about the effectiveness of this instrument in influencing deposit levels. Policymakers may need to reconsider the role of CRR in their monetary policy toolkit. DMBs should closely monitor monetary policy decisions, especially changes in the MPR, as they have a significant impact on deposit levels. DMBs may need to adjust their strategic plans in response to fluctuations in monetary policy to maintain healthy deposit growth.

Given the influence of money supply on deposit growth, DMBs could explore diversification strategies that attract a broader customer base and increase deposit mobilization. Understanding the relationship between monetary policy and deposit levels allows DMBs to implement better risk management strategies, especially during periods of policy rate changes. Investors in the Nigerian banking sector can use these findings to make informed decisions about their investments. They should consider the potential impacts of monetary policy changes on the financial performance of DMBs. Investors may opt to diversify their portfolios to manage risks associated with changes in monetary policy. The findings suggest that monetary policy adjustments have ripple effects on economic activity through their impact on DMBs. Policymakers can use this knowledge to assess and manage economic growth more effectively.

Researchers in the field of economics and finance can build on this study by exploring additional factors that influence DMBs' financial performance, such as regulatory policies, macroeconomic conditions, and international economic trends. Regulatory bodies can use these findings to assess the effectiveness of existing monetary policies and make necessary adjustments to maintain financial stability. The study's findings provide valuable insights into the intricate relationship between monetary policy and deposit money banks' financial performance in Nigeria. These implications offer guidance to stakeholders on how to navigate the financial landscape in response to changes in monetary policy, ultimately contributing to the stability and growth of the Nigerian banking sector and the broader economy.

This study contributes to the body of knowledge on the relationship between monetary policy and banking sector performance in Nigeria. It provides valuable insights that can inform future policy decisions, strategic planning

by DMBs, investment strategies, and economic growth assessments. Further research in this area can explore additional factors influencing banking sector performance and delve deeper into the nuances of monetary policy transmission mechanisms. In summary, the findings of this study emphasize the pivotal role of monetary policy in shaping the financial performance of Deposit Money Banks in Nigeria. A wellbalanced and data-informed approach to monetary policy decisions is essential to ensure the stability and growth of the banking sector and the broader Nigerian economy.

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