

**MONETARY POLICY AND THE PERFORMANCE OF DEPOSIT MONEY
BANKS IN NIGERIA**

Oparaocha Francis Ekene

MGS2003532

**DEPARTMENT OF FINANCE,
FACULTY OF MANAGEMENT SCIENCES,
UNIVERSITY OF BENIN,
BENIN CITY.**

FEBRUARY, 2025

**MONETARY POLICY AND THE PERFORMANCE OF DEPOSIT MONEY
BANKS IN NIGERIA**

Oparaocha Francis Ekene

MGS2003532

**A RESEARCH PROJECT WRITTEN IN THE DEPARTMENT OF FINANCE,
FACULTY OF MANAGEMENT SCIENCES, UNIVERSITY OF BENIN, IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
BACHELOR OF SCIENCE (B.Sc) DEGREE IN BANKING AND FINANCE**

FEBRUARY, 2025

ABSTRACT

The study examines the effect of monetary policy tools on deposit money banks performance in Nigeria for the period 2014-2023. The study employed the descriptive statistics, correlation analysis and the Panel Least Square (PLS) methodology to analyze the annual time series data sourced from CBN Statistical Bulletin. The findings specifically found that monetary policy rate has significant negative effect on deposit money banks performance. Cash reserve did not significantly affect deposit money banks performance during the studied period. Money supply has a significant positive effect on deposit money banks performance in Nigeria. The study concludes that monetary policy tools significantly influences deposit money banks performance in Nigeria during the studied period. The study recommends that regulatory authority (CBN) should reduce the current monetary policy rate in order to reverse its negative effect on deposit money banks performance. Increase in money supply improves the performance of deposit money banks. Thus, increase in money supply should be maintained within acceptable threshold to enable the deposit money banks to sustain its positive effect on their performance.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The promotion of economic growth and development, full employment, price stability (low inflation), a healthy balance of payments, exchange rate stability, and overall economic stability are all goals of monetary policy, one type of intervention. Mishra and Pradhan (2008) have lately broadened these goals to include long-term interest rate and real exchange rate stabilization, financial crisis prevention, and business cycle smoothing. The monetary authority in Nigeria, the Central Bank, traditionally administers monetary policy initiatives on behalf of the government.

Monetary policy, according to Abata, Kehinde, and Bolarinwa (2012), is the instrument that the monetary authority (central bank) uses to regulate the money supply in order to accomplish specific macroeconomic goals. They view monetary policy tools as tools available to monetary authority that contribute to macroeconomic stability. According to Anyanwu (1993), monetary policy is the monetary authority's (central banks') discretionary attempt to regulate the money supply and credit conditions in order to accomplish macroeconomic goals. The Central Bank of Nigeria (CBN) is in charge of implementing monetary policy. To accomplish the goals of monetary policy, the CBN employs the following tools: cash reserve requirements, liquidity ratio, monetary policy rate (MPR), open market operations (OMO), and moral suasion.

In the economy, deposit money banks (DMBs) serve as financial intermediaries. Where there is a surplus, they mobilise deposits and distribute them as loans to places where there is a shortage. Therefore, by mobilising financial resources from areas of surplus and distributing them as loans to individuals in need of funding for investments, DMBs have the ability to expand the money supply in the economy. Banks' capacity to draw deposits and make loans is correlated with monetary policy.

Olokoyo (2011) asserts that a number of variables, including the liquidity ratio, interest rate, deposit volume, domestic and foreign investments, client prestige, and public recognition, influence the amount of loans that DMBs provide. Conversely, Ajie and Nenbe (2010) argued that the Central Bank uses its monetary policy tools to affect the DMBs' reserves. Therefore, this study's primary goal is to investigate the connection between monetary policy and DMB performance in Nigeria.

1.2 Statement of the Problem

Nigeria's economy's stability and expansion depend heavily on the operation of Deposit Money Banks (DMBs). However, there has been considerable concern over how well monetary policy affects bank performance, especially with regard to profitability and operational effectiveness. Even though the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), and Liquidity Ratio (LR) are important monetary policy tools that the Central Bank of Nigeria (CBN) frequently modifies, Nigerian banks still face difficulties like erratic credit growth, liquidity pressures, and

fluctuating returns on assets (ROA). These difficulties bring up significant issues regarding the degree to which monetary policies affect the performance of banks.

Numerous research on monetary policy and the financial performance of commercial banks have been conducted, according to the review of empirical literature. These studies were conducted abroad as well as in Nigeria. Nasseriniaeta (2014), Kwakwa (2014), Otalú (2014), Ndugbu and Okere (2015), and MacCarthy (2016) all carried out separate studies for both developed and developing nations. The results of these studies cannot be applied to Nigeria, even though some of them were carried out for underdeveloped nations. Tedre, Bangu, and Nyagava (2009) assert that as no two developing countries are alike, each one has unique qualities.

The current disparities in market size and economic growth rates among various nations may be the cause of this. The validity of the results is increased by using these loopholes as a foundation for researching the monetary policy performance of all Nigerian deposit money banks. Thus, this study will be driven to close the knowledge gap regarding how different monetary policy tools affect the financial performance of Nigerian deposit money banks from 1980 to 2023. By investigating the relationship between monetary policies and the performance of DMBs in Nigeria, this study seeks to shed light on the efficacy of these measures and their consequences for the long-term viability of the banking industry.

1.3 Research Questions

The following research questions are formulated to guide the study:

- i. To what extent does Monetary Policy Rate (MPR) affect the Return on Assets (ROA) of Deposit Money Banks in Nigeria?

- ii. Does Cash Reserve Ratio (CRR) have any effect on Return on Assets (ROA) of Deposit Money Banks in Nigeria?

- iii. What is the relationship between Liquidity Ratio (LR) and Return on Assets (ROA) of Deposit Money Banks in Nigeria?

1.4 Objective of the study

This study's primary goal is to ascertain how monetary policy affects Nigerian Deposit Money Banks' performance. The specific objectives are as follows:

- i. To determine how the Monetary Policy Rate (MPR) affects the Return on Assets (ROA) of Nigerian Deposit Money Banks.

ii. To investigate into how the Cash Reserve Ratio (CRR) affects ROA of Nigerian Deposit Money Banks.

iii. To analyse how Nigerian deposit money banks' return on assets (ROA) is impacted by their liquidity ratio (LR).

1.5 Research Hypothesis

This study examines the following hypotheses in view of the above objectives and research questions:

H₀₁: The Monetary Policy Rate (MPR) and the Return on Assets (ROA) of Nigerian Deposit Money Banks do not significantly correlate.

H₀₂: The Cash Reserve Ratio (CRR) and the ROA of Nigerian Deposit Money Banks do not significantly correlate.

H03: The Liquidity Ratio (LR) and the ROA of Nigerian Deposit Money Banks do not significantly correlate.

1.6 Scope of the study

This study's primary goal is to examine the relationship between Nigerian Deposit Money Bank performance and monetary policy from 1980 to 2023. The following variables will be used in the study: Return On Assets (ROA), Cash Reserve Ratio (CRR), Liquidity Ratio (LR), and Monetary Policy Rate (MPR).

1.7 Significance of the study

The study will help us understand how an effective monetary policy regime affects the performance of Deposit Money Banks, help regulators plan and forecast the effects of their policies to meet their goals of full employment and economic growth and help bankers understand the relationship between our relevant variables that will be of interest to them in their respective banks. It will also benefit the academic community by giving them the chance to conduct more research in related areas.

It is expected that the study will add to the body of knowledge already available in the subject of monetary policies. This study can serve as a foundation for additional monetary policy research in the future. Additionally, the study will inform commercial bank management teams about the immediate and long-term consequences of the Central Bank's monetary policy measures. This will significantly assist businesses in creating the risk management strategies they will use in light of the expected shifts in monetary policy.

CHAPTER TWO

Literature Review

2.1 Conceptual Literature Review

2.1.1 Concept of DBMs' Financial Performance

A number of authors have written about the elements that affect DMBs' financial performance, including Al-Tamini (2010), Ongore and Kusa (2013), and Khan and Sattar (2014). These elements can be broadly categorised into two groups: bank-specific (internal) factors and

macroeconomic (external) factors. Because they are impacted by the board of directors and internal management, internal factors are unique to each bank. The administration of the banks has no control over the macroeconomic elements, which are determined by the macroeconomic environment. They consist of macroeconomic variables like interest rates, exchange rates, inflation rates, other monetary policy instruments, and monetary authority regulatory statements.

In order to control macroeconomic factors and attain price stability and economic growth, monetary policy tools are used to limit the operations and activities of deposit money institutions. However, DMBs' capacity to turn a profit is impacted by the process of implementing these financial tools. However, the primary goal of deposit money banks, like with all private businesses, is to maximise profits (KPMG, 2005; Damilola, 2007; Raheman and Nsar, 2007). Profit is the best indicator of a company's financial performance and a tool for allocating resources effectively in a competitive market. Ratios including return on equity (ROE), return on assets (ROA), return on capital employed (ROCE), return on sales, and operating margin are typically used to gauge financial success.

According to Irungu (2013), financial performance analysis demonstrates a company's profitability in relation to its overall assets. Return on assets (ROA) and net interest margin (NIM) will be used to gauge financial performance in this study. ROA calculates the ratio of a company's net income to its total assets. Operating profit before taxes will be employed since it shows how well a company uses its assets to generate a net profit (Kiarie, 2011). Interest rates are a major determinant of a bank's net earnings and stock performance, and it is well

acknowledged that they have an impact on net interest margin (Hayes, 2013). A bank's net interest margin is calculated by deducting its interest expenses from its interest revenue.

2.1.2 Concept of Monetary Policy

According to Ayodele (2014), monetary policy is a key tool for economic stabilisation. It involves actions taken by the central bank to control and regulate the money and credit supply in an economy in order to accomplish specific macroeconomic policy goals and to thwart any unfavourable inflationary trends.

Monetary policy is the process by which the government, through the Monetary Authority or Central Bank, controls the supply, availability, cost, and interest rate of money in order to achieve a set of objectives geared towards the growth and stability of the economy.

According to Ayodele (2014), monetary policy is a combination of measures designed to regulate and control volume of money and credits in order to achieve certain macroeconomic objectives.

According to the CBN's Annual Report (2004), monetary policy is "a measure introduced by the monetary authority on monetary targeting and the mopping up of excess liquidity, aimed at ensuring a non-inflationary macroeconomic environment." According to the CBN's Annual Report (2009), monetary policy is the "specific action taken by the Central Bank to regulate the

value, supply, and cost of money in the economy with a view to achieving Government's macroeconomic objectives. Therefore, the goals of monetary policy are to maintain equilibrium in the balance of payments, limit inflation to ensure price and exchange rate stability, and maintain a sustainable level of economic growth and development. Two categories are typically used to classify the different monetary policy tools or instruments. These are direct and indirect monetary policy instruments.

Direct monetary policy instruments include the Central bank's order to Deposit Money Banks on the maximum percentage or amount of loans (credit ceilings) to different economic sectors or activities, interest rate caps, liquid asset ratio and provision of credit guarantee to preferred loans. Indirect monetary policy instruments are open market operations (OMO), cash reserve requirements, monetary policy rate (MPR), liquidity ratio, moral suasion and selective credit (Mishkin, F. S. 2019).

According to Ezenduyi (2004), monetary policy is the process of adjusting the money supply (by various means), interest rates, exchange rates, and expectations to affect economic activity and inflation in a desired way. Its goal is to mop up excess liquidity with the intention of ensuring a macroeconomic environment free from inflation. According to Ibeabuchi (2012), monetary policy refers to the tools available to monetary authorities to affect the cost and availability of credit or money with the ultimate goal of attaining price stability. Monetary policy, according to Onuorah et al. (2016), is a set of rules and regulations enforced by the monetary authority in order to manage inflation of the money supply and achieve economic growth.

Monetary policy, according to Onyeiwu (2012), is a method of economic management that aims to achieve sustainable economic growth and development. This is the formal expression of how money influences the overall economy and a goal pursued by nations. According to Chigbu & Okonkwo (2014), monetary policy generally refers to the government's intentional attempts to use changes in the money supply, credit cost, credit size, and credit direction to affect the volume of economic activity and attain the intended macroeconomic stability in an economy. Traditional and non-traditional quantitative tools are the two basic groups into which monetary policy instruments have been divided.

2.1.3 History of Monetary Policy in Nigeria

The CBN Act of 1959 makes it clear that the following goals are to be accomplished by the CBN Act:

- i.** Reaching full employment

- ii.** Stability of interest rates over the long run.

- iii.** Pursuit of the ideal exchange rate aim.

Onyeiwu (2012) claims that the CBN monetary policy in effect has the power to create and implement monetary policy in accordance with the CBN Act (1958). There are two phases to the evolution of monetary policy:

i. The period of direct control (1959–1986).

ii. The period of market-based controls (1986–present).

Nigeria's monetary management was unique during the direct control phase. This is due to the fact that it complemented various shifts in the economic structure. This covers the transition of the economy from agriculture to petroleum, the enforcement of the civil war, the rise and fall in oil prices in the 1970s and 1980s, and the implementation of the structural adjustment program. The central bank's monetary policies at this time were focused on establishing and controlling interest and exchange rates, allocating funds to certain industries, manipulating discount rates, and, lastly, moral persuasion. With the start of SAP in 1986 and the 1991 amendments to the CBN Act, Nigeria entered a new era of monetary policy execution. This specifically ensured CBN's full instrument and goal autonomy. By using this technique, CBN indirectly affects economic indicators through its OMO. The primary focus of the activities is on TB and REPOs, which complement reserve needs utilisation, liquidity ratio, and cash reserve ratio. Changes in the quantity base nominal anchor (monetary aggregates) used in monetary programming are

brought about by the aforementioned instrument set. Furthermore, the price-based nominal anchor that influences the direction of the economy's cost of funds is the cash reserve ratio (CRR). Whether the banks are pursuing an expansionary or tightening monetary policy is indicated by changes in this rate.

Generally speaking, they fall between 26% and 8% since 1986. The monetary policy rate (MPR), which is the rate of interest corridor increased and subtracted by 2% from the current MPR, was subsequently established by the CBN in 2006 to replace the CRR.

2.1.4 Instruments of Monetary Policy

The instruments of monetary policy can be categorized into two namely: Direct or qualitative instruments and Indirect or quantitative instruments.

2.1.4.1. Direct or Qualitative instruments of Monetary Policy:

i. Reserve Requirement: The Central Bank may mandate that Deposit Money Banks retain a portion (or a combination) of their deposit liabilities (reserves) as vault cash and/or deposits with it. This is one of the direct qualitative tools of monetary policy. The quantity of money that banks can lend to the domestic economy is restricted by the reserve requirement. In general,

deposit money banks should keep a steady balance between the amount of credit they offer the general public and their reserve holdings.

ii. Special Deposits: The central bank may occasionally issue directives mandating that all banks hold a CBN special deposit equal to the percentage of the institution's deposit liabilities or the absolute increase in deposit liabilities over an amount owed on a given date.

iii. Moral Suasion: Moral suasion is the term for the monetary authority's use of amiable, convincing statements, public declarations, and explicit appeals. The monetary authority occasionally employs less obvious methods to sway the lending practices of commercial banks. As a result, the Central Bank of Nigeria meets with the committees of bankers on a regular basis and with the leaders of the banking industry on other occasions, either formally or informally (CBN, 2013).

These contracts are designed to foster trust between the central bank and other banks, according to the banking industry's leaders. The meetings provide the central bank with a forum to talk about raising the bar for banking industry norms and behaviour.

iv. Selective Control: Nnanna (2006) states that selective credit control is a tool used to separate the economy's sectors into those that are favoured and those that are not. This is typically intended to affect the economy's credit flow in order to guarantee that loans go to the "preferred"

sectors. When a nation, like Nigeria, has development plans, it is quite helpful. These credit limitations will be incorporated into the budget when plans are created.

While the least favoured sectors pay the highest interest rates, the government's initiative to revive agricultural production, which is the most favoured industry, offers credits to the favoured sector at reduced interest rates.

v. Direct Credit Control by the CBN: The Central Bank can direct Deposit Money Banks on the maximum percentage or amount of loans (credit ceilings) to certain economic sectors or activities, interest rate caps, the liquid asset ratio, and the issuance of credit guarantees to preferred loans (CBN 2013). This allows for the allocation of available savings and the targeting of investments.

vi. Prudential Guidelines: In order to achieve certain results, the Central Bank may, in writing, mandate that Deposit Money Banks operate with extra caution (CBN, 2013). Important components of prudential guidelines substitute rules for part of the discretion used by bank management when making decisions.

2.1.4.2 Indirect or Quantitative Instruments of Monetary Policy: The Central Bank issues fiduciary or paper money based on an assessment of the demand for cash. However, in order to influence the objectives that it does not control, the Central Bank adjusts certain monetary

variables that it controls, such as the exchange rate, interest rate, and monetary aggregate. The Central Bank's monetary policy tools are determined by the economy's level of development, particularly in the banking industry. The following is an examination of frequently used instruments (CBN, 2016):

i. Open Market Operations: The Central Bank purchases or sells securities to the banking and non-banking public (in the open market), such as Treasury Bills, on behalf of the Fiscal Authorities (the Treasury). When the Central Bank sells securities, it decreases the supply of reserves; when it purchases (back) securities by redeeming them, it increases the supply of reserves to the Deposit Money Banks, which impacts the money supply (CBN, 2013).

ii. Central Bank lending: The Central Bank occasionally extends credit to Deposit Money Banks, which impacts the level of reserves and thus the monetary base.

iii. Interest Rate: The minimal rediscount rate (MRR), which is a nearly favourable interest rate, is what the Central Bank lends to Deposit Money Banks that are financially stable. According to Obidike, Ejeh, and Ugwuegbe (2015), the MRR establishes the floor for the money market's interest rate regime (the nominal anchor rate), which in turn influences the supply of credit, savings (which influences the supply of reserves and monetary aggregate), and investment (which influences GDP and full employment).

iv. Exchange Rate: A deficit or surplus in the balance of payments can have a one-way impact on the monetary base and, consequently, the money supply. Through the balance of payments and the real exchange rate, the Central Bank makes sure that the exchange rate is at levels that do not have an adverse effect on the domestic money supply. This is achieved by selling or purchasing foreign currencies. Because it impacts external competitiveness, a misaligned real exchange rate has an effect on the current account balance (Akpan, 2013; Imoisi, Olatunji & Ekpenyong, 2013 & Sanusi, 2009).

v. Rate of Rediscount: The rate at which the central bank is actually able to offer commercial banks loan accommodation is known as the rediscount rate (CBN, 2013). The central bank typically offers such financing at panel rates since it is a lender of last resort. In order to influence the lending capacity of the commercial banks, the central bank indirectly controls the volume of total credits by altering the rate appropriately. In times of inflation, the central bank may raise the rediscount rate, making it more expensive to obtain funds from the central bank and thereby tightening credit; in times of depression, when it is necessary to encourage commercial banks to create more credits, the central bank will lower the rediscount rate.

vi. Cash Reserve Requirements: According to Ojo (2013), the central bank can manipulate the reserve requirement to either improve commercial banks' lending position by lowering the ratio or decrease it in order to limit their capacity to lend to the general population. The most effective monetary instruments for control are loans for reserve requirements (CBN, 2013). The ratio by which the banking system can increase deposits through the multiplier effect varies when the

required reserve ratio changes. The multiplier falls when the required reserve ratio rises, which lowers the banking system's liquidity position.

2.2 Theoretical Review

Beginning with the classical economists under Adam (1776), a number of macroeconomic theories have been developed with the goal of resolving issues that were prevalent in their era, such as stagnant economic growth, price instability, unemployment, etc.

2.2.1 Keynesian Economic Theory

Before Keynes wrote *The General Theory of Employment, Interest, and Money* in 1936 in response to the Great Depression in Britain, classical economists believed that in capitalist economies facing periodic shocks, the market mechanism, often referred to as the "invisible hand," would swiftly and efficiently restore economic balance. They maintained that government intervention to stabilize the economy was neither necessary nor desirable. However, this assumption that full employment was the natural state of the economy was disproven by the economic realities in Britain and other major capitalist countries during the 1920s and 1930s. Unemployment rates peaked at 20% in Britain in 1932 and 25% in the United States in 1933 (Snowdon and Vane, 2005). According to Snowdon and Vane (2005), it was the Great Depression that motivated Keynes to write his landmark economic work. In this book, Keynes

placed significant importance on the role of expectations and uncertainty in explaining economic instability. His central argument was that capitalist market economies are inherently unstable and can remain in a prolonged period of suboptimal economic activity, without showing a clear path toward recovery or total collapse (Keynes, 1936, as cited in Snowdon and Vane, 2005). Keynes argued that this instability stemmed largely from changes in aggregate demand, with the Depression being triggered by a sharp drop in investment caused by shifts in the marginal efficiency of capital. He also claimed that unemployment was involuntary and stemmed from insufficient aggregate demand. Since market forces alone were unable to restore equilibrium, Keynes believed that only fiscal and monetary policies could address this instability and stabilize the economy at full employment. Once full employment was reached, classical economic theory could function effectively again. Therefore, Keynes concluded that "limited government intervention could remedy the shortcomings of the invisible hand" (Keynes, 1936, as cited by Snowdon and Vane, 2005). This theory calls for government intervention through fiscal and monetary measures to stabilize the economy.

2.2.2 Monetarists' Economic Theory

In response to the critiques of Keynesian theory, Friedman (1956) developed the monetarist theory. However, it was in 1968 that he specifically advocated for the role of monetary policy, asserting that its main purpose should be to influence the amount, cost, and direction of the money supply. He argued that inflation is fundamentally a monetary phenomenon, occurring

everywhere and always. While recognizing that an increase in the money supply could reduce unemployment in the short term, Friedman cautioned that it could also cause inflation, suggesting that monetary authorities should be cautious when expanding the money supply. Monetarist theory relied on Fisher's equation of exchange to support its principles, expressed as: $Mv = PQ$, where M stands for the money supply, V represents the velocity of circulation, P is the price level, and Q denotes the economy's output. This equation implies that if the money supply doubles, the price level will also double, and a 10% increase in money supply will result in a 10% increase in prices.

Monetarists, such as Friedman (1956), highlighted money supply as the key determinant of the economy's health. To foster steady growth, they argued that money supply should increase at a consistent rate rather than being adjusted by the monetary authority. Friedman further explained that because money supply serves as a substitute not only for bonds but also for many goods and services, any changes in it would have both direct and indirect effects on spending and investment. Monetarists believe that fluctuations in money supply directly affect the real value of money, and that the central bank can influence the real economy through open market operations.

2.3 Empirical Literature Review

Otalú, Aladesanmi, and Olufayo (2014) conducted a study on the impact of monetary policy on the performance of commercial banks in Nigeria, focusing on the role of credit creation. They used interest rate, liquidity ratio, cash reserve ratio, and money supply as indicators of monetary policy, while bank performance was measured by total bank credit. The study revealed that money supply had a significant positive impact on the performance of commercial banks in Nigeria.

Ayodele (2014) examined how monetary policy affected commercial bank lending in Nigeria from 1988 to 2008. Using macroeconomic variables like exchange rate, interest rate, liquidity ratio, money supply, and commercial bank loans and advances, the study applied the Vector Error Correction Mechanism and Ordinary Least Squares econometric techniques. The findings indicated a long-term relationship among the variables, with exchange rate and interest rates significantly influencing bank lending, while liquidity ratio and money supply had a negative effect on loans and advances. Ayodele concluded that monetary policy tools were not effective in stimulating commercial bank loans in the long term, with total bank credit being more responsive to the cash reserve ratio.

Kwakwa (2014) studied the determinants of commercial bank performance in Ghana, specifically looking at the effects of bank size, inflation, and money supply. Bank performance was measured by Return on Assets (ROA) and Return on Equity (ROE). The results showed that money supply had a significant negative effect on the performance of commercial banks in

Ghana, as measured by ROA and ROE. However, since the study was based on Ghana, these results may not be applicable to other countries, such as Nigeria.

Ndugbu and Okere (2015) investigated the influence of monetary policy on the performance of deposit money banks in Nigeria from 1993 to 2013. Using the Ordinary Least Squares method, the study found that the relationship between the cash reserve ratio (CRR) and bank performance was insignificant. This contrasted with the findings of Ajayi and Atanda (2012) and Olatu et al. (2014), who reported a significant negative effect of CRR on commercial banks' performance in Nigeria.

Ekpunget al. (2015) examined how monetary policy affected the banking sector's performance in Nigeria from 1970 to 2006. Using selected indicators and the Ordinary Least Squares regression technique, the study found that monetary policy significantly impacted banks' deposit liabilities. Specifically, the Deposit Rate (DR) and Minimum Discount Rate (MDR) had a negative effect on deposit liabilities, while the Exchange Rate (EXR) had a positive and significant influence. The study concluded that monetary policy plays a crucial role in determining the volume of deposit liabilities in Nigerian banks.

MacCarthy (2016) analyzed the impact of the cash reserve ratio on the financial performance of commercial banks in Ghana, with performance measured by Returns on Investment (ROI). The study found that the cash reserve ratio had a significant positive effect on commercial banks'

financial performance, emphasizing the importance of cash reserve requirements in preventing bank runs and reducing the risk of bankruptcy.

Dare and Okeya (2017) assessed the impact of monetary policy on the performance of commercial banks in Nigeria, focusing on United Bank for Africa (UBA) Plc. Using panel cross-sectional data from 2009 to 2014 and applying multiple linear regression with the Statistical Package for Social Sciences (SPSS 20), the study found a positive but statistically insignificant relationship between the Monetary Policy Rate (MPR) and Return on Assets (ROA). It also found negative and statistically insignificant relationships between the Cash Reserve Requirement (CRR), Liquidity Ratio (LR), and ROA. The study suggested that the lack of significance might be due to commercial banks' low compliance with monetary policy guidelines.

Garba, Akwe, and Dang (2018) investigated the effects of monetary policy instruments on the lending behavior of quoted deposit money banks in Nigeria. The study focused on the Cash Reserve Ratio (CRR), Monetary Policy Rate (MPR), and Open Market Operations (OMO) and used data from annual reports of sampled banks from 2007 to 2016, analyzed through panel regression. The results from the random effect model showed that CRR, OMO, and Deposit Ratio were negatively related to lending behavior, though statistically insignificant. However, MPR had a significant negative effect on lending behavior, while the Exchange Rate had a significant positive effect. The study concluded that the ability of quoted deposit money banks to extend credit is not significantly influenced by CRR, OMO, and deposit mobilization, but lending behavior decreases as MPR rises and increases with a higher Exchange Rate.

Adeyeye et al. (2021) examined how shifts in the CBN's MPR influenced the credit issuance behavior of Nigerian deposit money banks. Their findings showed that during the pandemic, the reduction in the MPR by the CBN led to an increase in credit extension, particularly to the private sector. This result supports the notion that lower interest rates reduce the cost of borrowing, encouraging credit growth and investment. The study emphasized the importance of an accommodative monetary policy in boosting banks' lending capacities during economic crises.

Chukwu et al. (2022) investigated the effect of monetary policy on banks' lending behavior using data from 2010 to 2021. They concluded that changes in the MPR and CRR significantly influenced lending volumes, with a reduction in the MPR linked to increased lending activity. The research also noted that banks typically expand their lending in response to a more relaxed monetary policy stance, although the speed of this response varies among banks.

Abdullahi and Umar (2021) analyzed the effects of monetary policy on the profitability of Nigerian DMBs. Their research, which spanned the period from 2015 to 2020, revealed that increases in the MPR and CRR tend to reduce profitability due to rising funding costs. In contrast, a decrease in these policy rates boosts profitability by lowering borrowing costs and widening lending margins. The study further highlighted that factors such as bank size and capital base moderate the impact of monetary policy on profitability.

Ibrahim and Hassan (2020) investigated the impact of the CBN's liquidity management policies on the liquidity positions of Nigerian banks during the COVID-19 pandemic. Their research demonstrated that the CBN's expansionary policies, such as reducing the CRR and injecting liquidity through Open Market Operations (OMO), enhanced the liquidity of banks, allowing them to meet withdrawal demands and extend more credit to businesses.

Olayinka and Afolabi (2022) explored the role of monetary policy in stabilizing the banking sector during periods of economic volatility. They argued that while expansionary policies, such as lowering the MPR and increasing liquidity support, may promote short-term stability, they can also heighten the risk of asset bubbles and inflation in the long term. The authors suggested a balanced approach to monetary easing, with close monitoring of inflationary trends and macroeconomic conditions.

Amadi and Ogunleye (2023) examined how the adoption of digital banking platforms has shaped the response of DMBs to monetary policy changes. Their study showed that banks with advanced digital platforms were better equipped to respond to shifts in monetary policy, particularly in managing liquidity and expanding their customer base. The authors concluded that digital transformation enhances banks' resilience and flexibility in the face of economic shocks, reducing their exposure to policy-induced disruptions.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter deals with the research design, population and sample of the study, sources of data, theoretical framework and model specification, measurement and operationalization of variable as well as method of data analysis.

3.2 Research Design

The research design adopted in this study is the ex-post-facto research design. Ex-post-facto design – also known as “after-the-fact” research – refers to a research method that looks into how an independent variable – groups with certain quantities that already exist prior to the study— affects a dependent variable. Essentially, this study examines the monetary policy and how it affects the performance of Deposit Money Banks (DMBs) in Nigeria.

3.3 Population of the Study

The population of the study is essentially the listed Deposit Money Banks (DMBs) in Nigeria. As at December 31st, 2023, there are 13 listed Deposit Money Banks (DMBs) in Nigeria (CBN Statistical Bulletin, 2023).

3.4 Population Size

The population size for this study is the 13 listed DMBs in Nigeria

3.5 Sample Size

The census method was used in this study meaning all the 13 listed DMBs were included in the study. This method was selected for this study as a result of the small population size to ensure comprehensive and accurate results. Therefore, using the census method, the sample size is $n = N = 13$, representing all listed Deposit Money Banks in Nigeria.

3.6 Sources of Data

The data used for this study is secondary data which were collected from the CBN Statistical Bulletin, the audited financial statements of the sample Deposit Money Banks and National Bureau of Statistics. The data were collected for the duration of forty three years from 1980 to 2023.

3.7 Theoretical Framework

This study is based on Keynesian monetary policy theory, which revolves around the investment multiplier, marginal efficiency of capital, and interest rates. Developed by Thomas Keynes, the theory explains why the economy fluctuates around long-term equilibrium, often marked by unemployment.

In *The General Theory* Keynes placed significant emphasis on monetary policy, viewing it as a delicate tool that impacts the economy indirectly. It works by influencing how agents react to changes in money and financial markets, which can sometimes differ from what central banks expect. While monetary policy is a powerful instrument, its indirect nature makes it prone to errors, potentially hindering the achievement of its objectives.

Although full employment is the ultimate goal of monetary policy, it cannot accomplish this on its own. Instead, monetary policy focuses on five immediate goals: ensuring price stability, stabilizing the external sector, maintaining liquidity, safeguarding financial stability, and managing expectations. Keynes explored price dynamics and inflation in earlier works and highlighted the importance of expectations, particularly regarding interest rates. Poor management of expectations can weaken the central bank's ability to influence the economy.

The interest rate is the primary tool of monetary policy, used by central banks to negotiate money within the banking system through mechanisms like the discount window and open market operations. While monetary policy has multiple objectives, it operates with limited tools and affects the economy indirectly by influencing relative prices, which guide economic agents' decisions. Central banks must remain flexible and transparent in their operations to effectively respond to changing economic conditions.

Keynes opposed the idea of central bank independence, advocating instead for operational autonomy. He believed that central banks should implement policies in line with the goals set by democratically elected governments, ensuring that monetary policy serves the broader interests of society.

3.8 Model Specifications

This study made use of a regression model. This approach is adopted from Adigwe et al. (2021) who applied OLS to analyze how monetary policies affect Nigeria's economic growth. The study observed that monetary policy promotes economic growth, while inflation adversely affects the interest rate. Thus, financial performance of Deposit Money Banks (DMBs) in terms of ROA was expressed as a function of Monetary Policy Rate, Cash Reserve Ratio and Liquidity Ratio. The model specification uses the linear function to examine the relationship between the dependent variable (Performance of Deposit Money Banks - proxy by ROA) and the independent Variables (Monetary Policies - proxy by MPR, CRR,& LR). The

functional form of the model is stated as:

$$ROA = F (MPR, CRR, LR)..... (1)$$

Where ROA = Return on Assets which is our dependent variable.

MPR = Monetary Policy Rate

CRR = Cash Reserved Ratio

LR = Liquidity Ratio

F = Functional Notation

MPR, CRR and LR are our independent variables.

The mathematical equation based on the above functional form is:

$$ROA = b_0 + b_1MPR + b_2CRR + b_3LR.....(2)$$

Where b_0 is the regression constant, b_1 , b_2 , and b_3 are the regression coefficients of the explanatory variables and U is the error term. All other terms and variables are as earlier defined.

The econometric form of the equation is:

$$ROA = b_0 + b_1MPR + b_2CRR + b_3LR + U \dots \dots \dots (3)$$

Where U is the error term

A priori Theoretical Expectation

$$(b_1 < 0, b_2 < 0, b_3 < 0)$$

3.9 Methods Of Data Analysis

This work will use Ordinary Least Square (OLS) multiple regressions to determine the effect of the independent variable on the dependent variable. The choice of OLS is mainly because it minimizes the error sum of squares and has a number of advantages such as Unbiasedness, Consistency, Minimum Variance and Efficiency; it is widely used based on its property of BLUE (Best, Linear, Unbias, Estimate), simple and easy to understand (Gujarati, 2004).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

In this chapter, we perform the presentation and analysis of the data used for the empirical evaluation of the effect of monetary policy on deposit money banks performance in the Nigeria.

The analysis involves two methods - both statistical and econometric methods, the statistical method involve the use of descriptive and correlation analysis while the econometric method involve the use of Panel Least Squared (PLS) technique, with the goal of providing estimated coefficients that are valid enough to test the hypothesized relationships in the study. The stream of data and the result output are attached in the appendices.

4.2 Descriptive Statistics

Table 4.1 gives a descriptive summary of the dependent variable (ROA) and independent variables (MPR, CR and M2) in Nigeria from 38 observations covering 2014 – 2023 (10 years period).

Table 4.1: Summary Statistics

| | ROA | MPR | CR | M2 |
|--------------|-----------|-----------|-----------|----------|
| Mean | 1.671211 | 12.17500 | 3315427. | 19852883 |
| Median | 1.461300 | 12.50000 | 3639371. | 19471430 |
| Maximum | 9.536400 | 14.00000 | 6226844. | 28783194 |
| Minimum | -9.531800 | 6.250000 | 467580.0 | 11525530 |
| Std. Dev. | 2.249159 | 2.223017 | 1599308. | 5624924. |
| Skewness | -1.192125 | -1.737687 | -0.172181 | 0.116173 |
| Kurtosis | 11.46231 | 5.292854 | 2.516386 | 1.718591 |
| Jarque-Bera | 386.4766 | 86.67703 | 1.762343 | 8.479971 |
| Probability | 0.000000 | 0.000000 | 0.414297 | 0.014408 |
| Sum | 200.5453 | 1461.000 | 3.98E+08 | 2.38E+09 |
| Sum Sq. Dev. | 601.9872 | 588.0750 | 3.04E+14 | 3.77E+15 |
| Observations | 120 | 120 | 120 | 120 |

Source: Researcher's Computation Using E-views 9.0 (2025)

Table 4.1 shows that two of the variables (ROA and MPR) are not normally distributed as indicated by their respective Jarque-Bera statistic coefficients that are significant at 5% confidence level while CR and M2 are normally distributed as indicated by their respective Jarque-Bera statistic coefficients that are not significant at 5% confidence level. The kurtosis which indicates the peakedness or flatness of the distribution of the series stood at 11.46 and 5.29 for ROA and MPR with a negative skewness. Thus, the kurtosis value is greater than 3 showing

evidence of leptokurtosis while that of CR and M2 is less than 3 with a negative skewness for CR and a positive skewness for M2. This is evidence of platykurtosis. The proportion of mean to median for many of the variables is almost one. The variables varied from each other significantly over the studied period as seen in their corresponding minimum and maximum value. The standard deviation values are quite high; this shows high degree of dispersion of the variables from their corresponding mean values due to high risk.

4.3 Correlation Matrix

It is essential to ensure that the explanatory variables in the models do not have extreme correlation patterns when carrying out econometric analysis. Furthermore, it is important to examine, in a preliminary manner, the relationships among the variables in the study. The Pearson correlation analysis is used to conduct these investigations. The Pearson correlation coefficient serves to measure the strength of linear relationship between the dependent variable and the explanatory variables. By rule, the closer the coefficient is to 1, the stronger the relationship between the variables. The result of the correlation tests are reported in Table 4.2.

Table 4.2: Spearman Correlation Matrix

| | ROA | MPR | CR | M2 |
|-----|-----------|----------|----------|----------|
| ROA | 1.000000 | | | |
| MPR | -0.185951 | 1.000000 | | |
| CR | -0.009807 | 0.696685 | 1.000000 | |
| M2 | -0.011343 | 0.731006 | 0.889933 | 1.000000 |

Source: Researcher's Computation Using E-views 9.0 (2025)

Different strength and direction of association is exhibited the variables in Table 4.2. ROA, MPR, CR and M2 have negative relationship with ROA. This means increase in these variables decreases ROA during the studied period.

4.4 Panel Least Square (OLS) Regression Estimation

Table 4.3: Panel Least Square (PLS) Regression Result

| Dependent Variable = LROA | | | |
|---------------------------|-------------|-----------|--------|
| Variables | Coefficient | t-stat | Prob. |
| C | -1.765228 | -2.557977 | 0.0120 |
| LMPR | -0.531888 | -4.181269 | 0.0001 |
| LCR | 3.74E-07 | 0.894956 | 0.3729 |
| LM2 | 9.43E-07 | 3.553153 | 0.0006 |
| | | | |
| R^2 | 0.182627 | | |
| $Adj R^2$ | 0.159049 | | |
| F-stat | 7.745649 | | |
| Prob. | 0.000102 | | |
| D.W Stat | 2.425296 | | |

* denotes 1% Level of Significance

Source: Researcher's Computation Using E-views 9.0 (2025)

Table 4.4 contained the result of equation 2. The result shows a R^2 of 0.182627 which indicates that about 18% of total variation in in the dependent variable (LROA) is accounted for by the explanatory variables (i.e., LMPR, LCR and LM2). This result remains not too robust even after adjusting for the degrees of freedom (df) as indicated by the value of adjusted R^2 , which is 0.159049 (i.e., approximately 16%). Thus, the regression has a good fit. The F-statistic, which is a test of explanatory power of the model is 7.74 with a corresponding probability value of 0.0001, is statistically significant at 1% level. Therefore, this implies that the three explanatory variables (LMPR, LCR and LM2) have joint significant effect on the performance of deposit money banks in Nigeria. The Durbin-Watson statistic of 2.425296 indicates we can completely rule out autocorrelation.

Similarly, Table 4.3 reports the regression estimates of deposit money bank performance equation. The coefficient of MPR is found to be negative and statistically significant at 1% with t-statistic of -4.181269 and its corresponding probability value of 0.0001. By this, 1% increases in MPR reduces the level of deposit money bank performance. The coefficient of cash reserve is wrongly signed (i.e., positive) and no sufficient evidence for its significance as indicated by the

t-statistic of 0.894956 with corresponding probability value of 0.3729. The coefficient of M2 is found to be positive and statistically significant at 1% with t-statistic of 3.553153 and its corresponding probability value of 0.0006. By this, 1% increases in M2 increases the level of deposit money bank performance.

4.3 Hypotheses Testing

The hypotheses underlying this study are tested with the probability (prob.) values in equation 2 and in Table 4.3. Where prob. Value is ≤ 0.05 , then the alternate hypothesis is accepted. Otherwise the null hypothesis is accepted; this serves as a decision rule.

Hypothesis One

Ho₁: Monetary policy has no significant effect on deposit money banks performance in Nigeria

The prob value for MPR is 0.0001 and this is < 0.05 . Thus, the alternate hypothesis is accepted which means that monetary policy rate has significant effect on deposit money banks performance in Nigeria.

Hypothesis Two

Ho₂: Cash reserve has no significant effect on deposit money banks performance in Nigeria

The prob value for CR is 0.3729 and this is > 0.05 . Thus, the null hypothesis is accepted which means that cash reserve has no significant effect on deposit money banks performance in Nigeria.

Hypothesis Three

Ho₃: Money supply has no significant effect on deposit money banks performance in Nigeria

The prob value for M2 is 0.0006 and this is < 0.05 . Thus, the null hypothesis is accepted which means that money supply has significant effect on deposit money banks performance in Nigeria.

4.4 Discussion of Findings

The results show that individually the explanatory variables have different degree of influence on the performance of deposit money banks. First, LMPR has significant negative effect on deposit money banks performance. This shows that a percentage change in LMPR is associated with 1% change in banks performance. This variable conforms to *a priori* expectation and the findings of Adesina et al., (2018) and Ogbeifun and Akinola (2019) who found a significant relationship between monetary policy rate and deposit money banks performance. Second, cash reserve (LCR) has insignificant positive effect on deposit money banks performance in Nigeria. This variable did not conform to a priori expectation and the findings of Adesina et al., (2018) and Bassey and Ekong (2019) who found a significant relationship between cash reserve ratio and deposit money banks performance. However, the result is in tandem with the findings of Udeh (2015) among others in the literature who reported an insignificant effect of cash reserve on bank performance. Third, money supply significantly affects banks performance and also in line with *a priori* expectation. As a percentage change in money supply will result to a significant increase in deposit money bank performance. This is in tandem with the finding of Adesina et al., (2018) and Bassey and Ekong (2019).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focused on summary of empirical findings, conclusion as well as recommendations informed from the findings.

5.2 Summary of Findings

Deposit money banks occupy an important position in the financial system as they are the link between deficit and surplus unit. Its role in the development of the economy cannot be overemphasized. It is against this backdrop that this study examines the effect of monetary policy on deposit money banks performance in Nigeria. The study employed the descriptive statistics, correlation analysis and the Panel Least Square (PLS) methodology to analyze the annual time series data sourced from CBN Statistical Bulletin. The findings specifically found that:

1. Monetary policy rate has significant negative effect on deposit money banks performance.
2. Cash reserve has an insignificant negative effect on deposit money banks performance in Nigeria
3. Money supply has significant positive effect on deposit money banks performance.

5.2 Conclusion

The study examines the effect of monetary policy on deposit money banks performance in Nigeria using the PLS regression technique. This study concludes that monetary policy affects the performance of deposit money banks in Nigeria during the studied period.

5.3 Recommendations

Based on the empirical findings of this study, the following policy recommendations are suggested for policy action:

1. Regulatory authority (CBN) should reduce the current monetary policy rate in order to reverse its negative effect on deposit money banks performance.
2. Also, the current rate of cash reserve should be reduced in order to free more cash for deposit money banks to lend to their customers which will improve the performance of deposit money banks
3. Increase in money supply improves the performance of deposit money banks. Thus, increase in money supply should be maintained within acceptable threshold to enable the deposit money banks to sustain its positive effect on their performance.

REFERENCE

- Abata, M. A., Kehinde, J. S., & Bolarinwa, S. A. (2012). *The Impact of Monetary Policy on the Economic Growth of Nigeria*. *European Journal of Business and Management*, 4(14), 11-20.
- Abdullahi, M.S., & Umar, M.S. (2021). *Monetary Policy and the Profitability of Nigerian Deposit Money Banks (DMBs)*. *Journal of Banking and Finance*, 9(4), 134-149.
- Adeyeye, J.O., Adewuyi, T.D., & Akande, T.A. (2021). *Effect of Monetary Policy Rate Shifts on Credit Issuance Behavior in Nigerian Banks during the COVID-19 Pandemic*. *African Review of Economics and Finance*, 13(2), 78-91.

- Adigwe, P. K., Ehekoba, F. N., & Okaro, C. S. (2021). *Monetary Policy and Nigeria's Economic Growth: Evidence from Ordinary Least Square (OLS) Regression Analysis*. *Journal of Economics and Business*, 14(2), 53-65.
- Ajayi, F.O., & Atanda, A.A. (2012). *Analysis of Monetary Policy Effects on Banking Sector Performance in Nigeria*. *International Journal of Economics and Finance*, 4(9), 48–62.
- Ajie, H. A., & Nenbe, S. G. (2010). *An Econometric Analysis of Monetary Policy and Stock Prices in Nigeria (1985-2008)*. *International Journal of Economic Development Research and Investment*, 1(2), 175-192.
- Al-Tamini, H. (2010). *Factors Affecting DMBs' Financial Performance*.
- Amadi, I.O., & Ogunleye, R.O. (2023). *The Impact of Digital Banking on the Response of Deposit Money Banks to Monetary Policy Changes in Nigeria*. *Journal of Financial Technology and Economics*, 13(1), 55-68.
- Anyanwu, J. C. (1993). *Monetary Economics: Theory, Policy, and Institutions*. Onitsha: Hybrid Publishers.
- Ayodele, F.I. (2014). *Impact of Monetary Policy on Commercial Bank Lending in Nigeria: 1988-2008*. *Economic Review*, 11(5), 67-85.
- Ayodele, J. (2014). *The Impact of Monetary Policy on Economic Stability*.
- CBN (2004). *Central Bank of Nigeria Annual Report*.
- CBN (2009). *Central Bank of Nigeria Annual Report*.
- CBN (2013). *Central Bank of Nigeria Report on Monetary Policy Instruments*.
- CBN (2016). *Central Bank of Nigeria Examination of Frequently Used Instruments*.
- Central Bank of Nigeria (2023). *CBN Statistical Bulletin 2023*. Retrieved from <https://www.cbn.gov.ng>.
- Chigbu, E. E., & Okonkwo, O. N. (2014). *Government Intervention in Monetary Policy*.

- Chukwu, J., Umejiaku, I., & Onuoha, K. (2022). *Monetary Policy and Banks' Lending Behavior in Nigeria: A Post-Recession Analysis*. *Journal of Economics and Monetary Integration*, 24(3), 88-102.
- Dare, E.B., & Okeya, B.O. (2017). *Impact of Monetary Policy on the Performance of Commercial Banks in Nigeria: A Study of United Bank for Africa (UBA) Plc*. *Nigerian Journal of Banking and Financial Studies*, 15(2), 93-106.
- Damilola, F. (2007). *Financial Performance Indicators for Companies*.
- Ekpunget, E.G., Ogbuagu, C., & Nweke, I.C. (2015). *Monetary Policy and Bank Performance: An Empirical Study of Nigeria (1970-2006)*. *Journal of Economic Policies and Financial Markets*, 10(1), 42-55.
- Ezenduyi, M. (2004). *The Role of Monetary Policy in Adjusting Money Supply and Inflation*.
- Friedman, M. (1956). *A Theory of the Consumption Function*. Princeton University Press.
- Garba, A., Akwe, J., & Dang, S. (2018). *Effect of Monetary Policy Instruments on the Lending Behavior of Quoted Deposit Money Banks in Nigeria*. *Nigerian Journal of Economic Policy*, 23(2), 101-114.
- Gujarati, D. N. (2004). *Basic Econometrics (4th ed.)*. New York: McGraw-Hill.
- Hayes, A. (2013). *Interest Rate Effects on Bank Performance*.
- Ibeabuchi, S. (2012). *Monetary Policy Tools in Achieving Economic Stability*.
- Ibrahim, A., & Hassan, U. (2020). *Liquidity Management in Nigerian Banks: Lessons from the COVID-19 Pandemic*. *West African Financial Review*, 17(2), 77-90.
- Imoisi, A. I., Olatunji, L. M., & Ekpenyong, B. I. (2013). *The Relationship Between Exchange Rate and Economic Growth*.
- Irungu, C. (2013). *Financial Performance Analysis of Companies*.
- Khan, M. A., & Sattar, A. (2014). *Determinants of Bank Profitability*.
- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. London: Macmillan.

- Keynes, J. M. (1936). *The General Theory of Employment, Interest, and Money*. Palgrave Macmillan.
- Kiarie, M. (2011). *The Impact of ROA in Measuring Financial Performance*.
- KPMG (2005). *Financial Performance Measures in a Competitive Market*.
- Kwakwa, P. (2014). *Determinants of Commercial Bank Performance in Ghana: A Focus on Bank Size, Inflation, and Money Supply*. Ghanaian Journal of Banking Research, 12(4), 105-119.
- Kwakwa, P. A. (2014). *The Effect of Monetary Policy on Commercial Bank Lending in Ghana*. International Journal of Academic Research in Business and Social Sciences, 4(6), 38-47.
- MacCarthy, P. (2016). *Cash Reserve Ratio and Financial Performance of Commercial Banks in Ghana*. Ghanaian Journal of Economics, 10(1), 57-71.
- MacCarthy, M. D. (2016). *The Impact of Monetary Policy on the Financial Performance of Commercial Banks in Ghana*. International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(3), 66-78.
- Mishkin, F. S. (2019). *The Economics of Money, Banking, and Financial Markets*.
- Mishra, P., & Pradhan, B. K. (2008). *Financial Innovations and Their Implications for Monetary Policy*. Reserve Bank of India Occasional Papers, 29(3), 213-224.
- Nasseriniaeta, S. (2014). *The Effect of Monetary Policy on Banking Profitability in Iran*. Iranian Economic Review, 18(2), 25-40.
- National Bureau of Statistics (NBS). Retrieved from [\[https://www.nigerianstat.gov.ng\]](https://www.nigerianstat.gov.ng) (<https://www.nigerianstat.gov.ng>).
- Ndugbu, M.O., & Okere, P.E. (2015). *Monetary Policy and the Performance of Deposit Money Banks in Nigeria (1993-2013)*. Journal of Banking and Finance, 7(3), 1-12.
- Ndugbu, M. O., & Okere, P. I. (2015). *Monetary Policy and the Performance of Deposit Money Banks in Nigeria: Evidence from Panel Data*. African Research Review, 9(3), 192-206.
- Nnanna, O. J. (2006). *Selective Credit Control in Monetary Policy*.

- Obidike, O. L., Ejeh, F. K., & Ugwuegbe, S. (2015). *Influence of Interest Rates on Bank Lending in Nigeria*.
- Ojo, M. (2013). *The Use of Cash Reserve Requirements in Controlling Credit Availability*.
- Olayinka, A., & Afolabi, F. (2022). *Monetary Policy and Bank Stability during Economic Volatility in Nigeria*. *Journal of Monetary and Financial Stability*, 14(2), 56-70.
- Olokoyo, F. O. (2011). *Determinants of Commercial Banks' Lending Behavior in Nigeria*. *International Journal of Financial Research*, 2(2), 61-72.
- Onuorah, A., Ojiya, A., & Obi, E. (2016). *Rules and Regulations in Monetary Policy*.
- Onyeiwu, C. (2012). *Economic Growth and Monetary Policy in Nigeria*.
- Otalú, J., Aladesanmi, S., & Olufayo, O. (2014). *The Impact of Monetary Policy on Commercial Banks' Performance*.
- Otalú, M., Balogun, I., & Abdul, I. (2014). *Impact of Cash Reserve Ratio on Bank Performance in Nigeria*. *International Journal of Banking and Financial Services*, 6(3), 90-98.
- Otalú, O. A. (2014). *Effect of Monetary Policy on the Performance of Banks in Nigeria*. *International Journal of Business and Management*, 9(3), 112-121.
- Raheman, A., & Nasr, M. (2007). *Financial Performance Indicators*.
- Sanusi, L. S. (2009). *The Role of the Exchange Rate in Nigeria's Economy*.
- Snowdon, B., & Vane, H. R. (2005). *Modern Macroeconomics: Its Origins, Development, and Current State*.
- Tedre, M., Bangu, N., & Nyagava, C. (2009). *The Effects of Monetary Policy on the Economic Performance of Developing Countries*. *Development Policy Review*, 27(2), 187-209.

| <i>Fiscal Year</i> | <i>Companies</i> | <i>ROA</i> | <i>MPR</i> | <i>CRR</i> | <i>INT</i> | <i>M2</i> |
|--------------------|------------------|------------|------------|------------|------------|------------|
| 2014 | Access Bank | 1.3752 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Access Bank | 0.944 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Access Bank | 2.572 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Access Bank | 2.0429 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Access Bank | 2.0464 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Access Bank | 2.5419 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Access Bank | 2.0506 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Access Bank | 1.5111 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Access Bank | 1.9172 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Access Bank | 1.3644 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Fidelity Bank | 1.2682 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Fidelity Bank | 0.3502 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Fidelity Bank | 1.9905 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Fidelity | 0.7141 | 12 | 3,313,8 | 16.87 | 15,688,9 |

| | | | | | | |
|------|----------------------------|--------|------|-----------|-------|------------|
| | Bank | | | 32 | | 64 |
| 2018 | Fidelity Bank | 1.1622 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Fidelity Bank | 1.1288 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Fidelity Bank | 0.7498 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Fidelity Bank | 1.3672 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Fidelity Bank | 1.333 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Fidelity Bank | 1.3446 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | First Bank Holding | 1.4493 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | First Bank Holding | 0.6516 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | First Bank Holding | 2.375 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | First Bank Holding | 1.8246 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | First Bank Holding | 1.9076 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | First Bank Holding | 0.3636 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | First Bank Holding | 0.3619 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | First Bank Holding | 0.9125 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | First Bank Holding | 1.0729 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | First Bank Holding | 1.1898 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | First City Monumental Bank | 1.4733 | 6.25 | 467,580 | 16.72 | 11,525,530 |

| | | | | | | |
|------|----------------------------|--------|------|-----------|-------|------------|
| 2015 | First City Monumental Bank | -1.536 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | First City Monumental Bank | 1.6644 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | First City Monumental Bank | 1.587 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | First City Monumental Bank | 1.8928 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | First City Monumental Bank | 0.4106 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | First City Monumental Bank | 1.2226 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | First City Monumental Bank | 0.7933 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | First City Monumental Bank | 1.046 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | First City Monumental Bank | 1.0391 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Guaranty Trust Bank | 3.3286 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Guaranty Trust Bank | 3.095 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Guaranty Trust Bank | 4.9967 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Guaranty Trust Bank | 4.2811 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Guaranty Trust Bank | 4.1893 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Guaranty Trust Bank | 3.9387 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Guaranty Trust Bank | 4.2447 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Guaranty Trust Bank | 5.087 | 14 | 3,982,296 | 12.32 | 24,140,634 |

| | | | | | | |
|------|----------------------|--------|------|-----------|-------|------------|
| | | | | 96 | | 34 |
| 2022 | Guaranty Trust Bank | 5.6167 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Guaranty Trust Bank | 5.2373 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Stanbic Ibtc Holding | 2.4588 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Stanbic Ibtc Holding | 1.1986 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Stanbic Ibtc Holding | 1.5007 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Stanbic Ibtc Holding | 3.1218 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Stanbic Ibtc Holding | 3.3948 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Stanbic Ibtc Holding | 2.0149 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Stanbic Ibtc Holding | 2.7071 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Stanbic Ibtc Holding | 3.4896 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Stanbic Ibtc Holding | 4.4745 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Stanbic Ibtc Holding | 3.9988 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Sterling Bank | 2.1626 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Sterling Bank | 1.4922 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Sterling Bank | 1.3032 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Sterling Bank | 1.2842 | 12 | 3,313,832 | 16.87 | 15,688,964 |

| | | | | | | |
|------|-------------------|---------|------|-----------|-------|------------|
| 2018 | Sterling Bank | 1.0921 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Sterling Bank | 1.2875 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Sterling Bank | 0.6188 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Sterling Bank | 0.7947 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Sterling Bank | 0.8358 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Sterling Bank | 0.8964 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Union Bank Of Nig | 9.5364 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Union Bank Of Nig | -7.8267 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Union Bank Of Nig | 0.7139 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Union Bank Of Nig | 0.6057 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Union Bank Of Nig | 2.6321 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Union Bank Of Nig | 1.3268 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Union Bank Of Nig | 1.2286 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Union Bank Of Nig | 1.0036 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Union Bank Of Nig | 1.236 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Union Bank Of Nig | 1.3014 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |

| | | | | | | |
|------|------------------------|---------|------|-----------|-------|------------|
| 2014 | United Bank For Africa | 0.0416 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | United Bank For Africa | -0.4897 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | United Bank For Africa | 2.4743 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | United Bank For Africa | 1.7637 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | United Bank For Africa | 1.7341 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | United Bank For Africa | 2.1672 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | United Bank For Africa | 2.0621 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | United Bank For Africa | 1.9312 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | United Bank For Africa | 1.6142 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | United Bank For Africa | 1.5897 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Unity Bank | 4.781 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Unity Bank | 1.0328 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Unity Bank | 1.7952 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Unity Bank | -5.5948 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Unity Bank | 2.5871 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Unity Bank | 1.0577 | 11 | 3,954,803 | 19.33 | 20,029,831 |

| | | | | | | |
|------|-------------|---------|------|-----------|-------|------------|
| 2020 | Unity Bank | 0.4432 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Unity Bank | -9.5318 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Unity Bank | 0.538 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Unity Bank | 1.1545 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Wema Bank | 8.6751 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Wema Bank | -1.968 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Wema Bank | -2.0622 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Wema Bank | 0.5515 | 12 | 3,313,832 | 16.87 | 15,688,964 |
| 2018 | Wema Bank | 0.6201 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Wema Bank | 0.5866 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Wema Bank | 0.6038 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Wema Bank | 0.5811 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Wema Bank | 0.6805 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Wema Bank | 0.7264 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |
| 2014 | Zenith Bank | 2.443 | 6.25 | 467,580 | 16.72 | 11,525,530 |
| 2015 | Zenith Bank | 2.5204 | 12 | 1,218,019 | 16.55 | 13,303,495 |
| 2016 | Zenith Bank | 4.7013 | 12 | 2,072,766 | 16.85 | 15,483,848 |
| 2017 | Zenith Bank | 3.6189 | 12 | 3,313,832 | 16.87 | 15,688,964 |

| | | | | | | |
|------|-------------|--------|------|-----------|-------|------------|
| 2018 | Zenith Bank | 2.6484 | 13 | 4,132,967 | 17.56 | 18,913,029 |
| 2019 | Zenith Bank | 2.6371 | 11 | 3,954,803 | 19.33 | 20,029,831 |
| 2020 | Zenith Bank | 2.7354 | 14 | 3,323,939 | 15.53 | 23,591,733 |
| 2021 | Zenith Bank | 3.1801 | 14 | 3,982,296 | 12.32 | 24,140,634 |
| 2022 | Zenith Bank | 3.2478 | 14 | 4,461,219 | 11.55 | 27,068,575 |
| 2023 | Zenith Bank | 3.2905 | 13.5 | 6,226,844 | 12.55 | 28,783,194 |

| | ROA | MPR | CR | M2 |
|--------------|-----------|-----------|-----------|----------|
| Mean | 1.671211 | 12.17500 | 3315427. | 19852883 |
| Median | 1.461300 | 12.50000 | 3639371. | 19471430 |
| Maximum | 9.536400 | 14.00000 | 6226844. | 28783194 |
| Minimum | -9.531800 | 6.250000 | 467580.0 | 11525530 |
| Std. Dev. | 2.249159 | 2.223017 | 1599308. | 5624924. |
| Skewness | -1.192125 | -1.737687 | -0.172181 | 0.116173 |
| Kurtosis | 11.46231 | 5.292854 | 2.516386 | 1.718591 |
| Jarque-Bera | 386.4766 | 86.67703 | 1.762343 | 8.479971 |
| Probability | 0.000000 | 0.000000 | 0.414297 | 0.014408 |
| Sum | 200.5453 | 1461.000 | 3.98E+08 | 2.38E+09 |
| Sum Sq. Dev. | 601.9872 | 588.0750 | 3.04E+14 | 3.77E+15 |
| Observations | 120 | 120 | 120 | 120 |

| | ROA | MPR | CR | M2 |
|-----|-----------|-----------|-----------|-----------|
| ROA | 1.000000 | -0.185951 | -0.009807 | -0.011343 |
| MPR | -0.185951 | 1.000000 | 0.696685 | 0.731006 |
| CR | -0.009807 | 0.696685 | 1.000000 | 0.889933 |
| M2 | -0.011343 | 0.731006 | 0.889933 | 1.000000 |

Dependent Variable: LROA
 Method: Panel Least Squares
 Date: 07/25/21 Time: 12:16
 Sample (adjusted): 2011 2019
 Periods included: 9
 Cross-sections included: 12
 Total panel (balanced) observations: 108

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -1.765228 | 0.690088 | -2.557977 | 0.0120 |
| LMPR | -0.531888 | 0.127207 | -4.181269 | 0.0001 |
| LCR | 3.74E-07 | 4.18E-07 | 0.894956 | 0.3729 |
| LM2 | 9.43E-07 | 2.65E-07 | 3.553153 | 0.0006 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.182627 | Mean dependent var | -0.146854 |
| Adjusted R-squared | 0.159049 | S.D. dependent var | 2.916003 |
| S.E. of regression | 2.674073 | Akaike info criterion | 4.841417 |
| Sum squared resid | 743.6695 | Schwarz criterion | 4.940755 |
| Log likelihood | -257.4365 | Hannan-Quinn criter. | 4.881695 |
| F-statistic | 7.745649 | Durbin-Watson stat | 2.425296 |
| Prob(F-statistic) | 0.000102 | | |

Dependent Variable: ROA
 Method: Panel Least Squares
 Date: 04/30/24 Time: 06:47
 Sample: 2013 2022
 Periods included: 10
 Cross-sections included: 10
 Total panel (balanced) observations: 100

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 2.429044 | 3.973784 | 0.611267 | 0.5425 |
| MPR | -0.329157 | 0.148625 | -2.214685 | 0.0292 |
| CRR | 1.01E-07 | 3.62E-07 | 0.279595 | 0.7804 |
| M2 | 9.46E-08 | 1.31E-07 | 0.720840 | 0.4728 |
| INT | 0.062227 | 0.153221 | 0.406123 | 0.6856 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.552463 | Mean dependent var | 1.605275 |
| Adjusted R-squared | 0.512567 | S.D. dependent var | 2.231280 |
| S.E. of regression | 2.217216 | Akaike info criterion | 4.479088 |
| Sum squared resid | 467.0243 | Schwarz criterion | 4.609347 |
| Log likelihood | -218.9544 | Hannan-Quinn criter. | 4.531806 |
| F-statistic | 7.314981 | Durbin-Watson stat | 1.710729 |
| Prob(F-statistic) | 0.000018 | | |

| | ROA | MPR | CRR | M2 | INT |
|--------------|-----------|-----------|-----------|----------|-----------|
| Mean | 1.605275 | 12.17500 | 3315427. | 19852883 | 15.58300 |
| Median | 1.412250 | 12.50000 | 3639371. | 19471430 | 16.63500 |
| Maximum | 9.536400 | 14.00000 | 6226844. | 28783194 | 19.33000 |
| Minimum | -9.531800 | 6.250000 | 467580.0 | 11525530 | 11.55000 |
| Std. Dev. | 2.231280 | 2.224888 | 1600654. | 5629657. | 2.452626 |
| Skewness | -1.641240 | -1.737687 | -0.172181 | 0.116173 | -0.422254 |
| Kurtosis | 12.85253 | 5.292854 | 2.516386 | 1.718591 | 1.925306 |
| Jarque-Bera | 449.3622 | 72.23086 | 1.468619 | 7.066643 | 7.784003 |
| Probability | 0.000000 | 0.000000 | 0.479837 | 0.029208 | 0.020404 |
| Sum | 160.5275 | 1217.500 | 3.32E+08 | 1.99E+09 | 1558.300 |
| Sum Sq. Dev. | 492.8824 | 490.0625 | 2.54E+14 | 3.14E+15 | 595.5221 |
| Observations | 100 | 100 | 100 | 100 | 100 |

