

Impact of Monetary Policy Implementation on the Performance of Deposit Money Banks in Nigeria

ADEYANJU, Olanrewaju David

Department of Finance, Redeemer's University, P. O Box 230, Ede, Osun State

Tel.: 07037794073, 08124268974

ABSTRACT

This study investigates the effect of monetary policy implementation on Deposit Money banks' performance in Nigeria. Secondary data was used, mainly from the CBN statistical bulletin and the financial statements of the selected banks for a period of 16 years, using the OLS regression techniques. The study discovered that exchange rate, interest rate, are all negatively related with return on equity while monetary policy rate is positively related and money supply is found to be statistically insignificant. The study concludes that monetary policy plays a vital role in determining the volume of money supply and bank's performance in Nigeria. It is recommended that government and the monetary authorities should strive to create a conducive environment for banking sectors to grow in the country by packaging appropriate monetary policies that would guarantee and enhance development and growth.

Keywords: Monetary policy, Money supply, Return on Equity, exchange rate, interest rate.

INTRODUCTION

The Central Bank of Nigeria (CBN) over the years, have instituted various monetary policies to regulate and develop the financial system in order to achieve major macroeconomic objectives which often conflict and result to distortion in the economy. Although some monetary policy variables like cash reserve and capital requirements have been used to buffer the liquidity creation process of deposit money banks through deposit base and credit facilities to the public. A solid and stable financial and banking sector is essential to ensure a well-functional national economy and a balanced liquidity management within the economy, and to foster economic growth. Nigerian deposit money banks (NDMBs) have actually been deterred in creating adequate liquidity and additional credit for the sustenance of the entire economy, through epileptic monetary policy implementation.

Monetary policy is a deliberate attempt by the monetary authority (especially the Central Bank) to control the money supply and credit condition in the economy so as to achieve certain economic objectives (Onuorah, Shaib, Oyathelemi & Friday, 2011). It is a combination of measures designed to regulate the value, supply and cost of money in an economy, in tandem with the expected level of economy activity. For most economy, the objectives of monetary policies include price stability, maintenance of balance of payments equilibrium, promotion of employment and output growth, and sustainable economic development.

The smoothing of the business cycle, preventing financial crisis and stabilizing long term interest rates and the real exchange rate have been identified recently as other supplementary objectives of monetary policy because of the recent global financial crisis which engulfed major developing and emerging economy in the world (Mishara & Pradhan, 2008).

The major targets of monetary policy include the control of money supply and credit creation, by the Central Bank through instruments such as monetary policy rate, open market operation, variable reserve requirements, selective credit control, moral suasion, publicity, etc. Some objectives are conflicting one way or the other, but consistent with the goals of government. For example, the objectives of price stability often conflicts with the objectives of interest rate stability and high short run employment (Solomon, 2012).

Monetary policy rate has positively affected the performance of NDMBs. By manipulating these instruments, Central Bank influences the rate of growth of the money supply, the level of lending rate, security prices, credit availability and liquidity creation from banks (Okoye & Eze, 2013).

Generally, macroeconomic policies in developing countries are designed to stabilize the economy, stimulate growth and reduce poverty (Fischer, 1993; Forbes 2000). In Nigeria, in ensuring monetary stability, the Central Bank, through the DMBs implements policies that guarantee the orderly development of the economy through appropriate changes in the level of money supply. The reserves of the banks are influenced by the Central Bank through its various monetary policies (Ajie & Nenbee, 2010).

Ajayi (1978) emphasized that the instrument of monetary policy will vary depending on the state of the economy. Schwartz (1969) said that the three criteria often used in judging the short term target of any monetary instrument are its measurability, controllability and easy use of its instrument as an indicator of monetary conditions.

Crockett (1973) posits that the main techniques by which the Central Bank may achieve monetary policy objectives are through market intervention and portfolio constraints. Classifying monetary instruments into quantitative and qualitative tools, Ramlett (1969) remarked that though quantitative tools operate customarily by influencing the cost, volume and availability of bank reserves and thereby affecting the supply of credits, the effect is generally impaired and impersonal; while Qualitative tools typically seek to regulate the demand for credit of specific users and are therefore selective.

Monetary policy instruments can also be classified into traditional, direct control and qualitative methods. The traditional instruments require the existence of a developed and a properly functioning money market and these are confined to the short-term (Ndiomu, 1993). The direct control instrument are non-market weapons used in well-developing countries to strike at the liquidity of DMBs while quantitative instruments are aimed at influencing the direction of bank advances and the amount that go into any particular sector of the economy.

Statement of the Problem

There have been regimes of contractionary and expansionary monetary policy in Nigeria aimed at stabilizing, regulating and controlling prices, employment and value of money. But the economy has not been a sustainable one as there are evidences of growing poverty, unemployment and spiral inflation in the comity. The problems were seen to be a direct derivative of structural imbalances in the economic system. The imbalances started from the colonial era, nurtured by in-appropriate policies after independence in 1960, and reinforced by the wind fall gains from petroleum business in the 70's. Monetary policies however, had not received the required attention, and in spite of the key position the instrument of control occupies in the economy, they are yet to yield appropriate impact.

These policies are part of measures used by the nation to mobilize and channel its scarce resources to different sectors of the economy. Therefore, when these economic policies are seemingly deficient, it poses a high level of challenges, including the reaction of the authority to the attitude of the banks to use their powers to lend to make remarkable impact on the economic positions and their profitability. Some of the far-reaching but harmful macroeconomic consequences of monetary policies are distorted economic signals, leading to depressed investment atmosphere, purely speculative and short term investment decisions, and inequitable distribution of income.

Therefore, this study is focused on determining how monetary policies influence the entire economy within the framework of financial system performance.

Research Question

1. What is the relevance of monetary policy rate to the performance of deposit money banks (DMBs) in Nigeria?
2. To what extent does interest rate variability influence the performance of DMBs in Nigeria?
3. Is there any significant relationship between money supply and performance of DMBs in Nigeria?
4. What is the impact of exchange rate variability on DMBs performance in Nigeria?
5. In what ways does inflation rate impact on DMBs performance in Nigeria?

Research Objective

The broad objective of study is to investigate the impact of monetary policy implementation on deposit money banks (DMBs) performances in Nigeria. The specific objectives include to:

1. Determine the relevance of monetary policy rate to DMBs performance.
2. Assess how interest rate variability affects the performance of DMBs in Nigeria.
3. Ascertain whether money supply has any effect on DMBs performance in Nigeria.
4. examine the impact of exchange rate variability on the performance of DMBs
5. Determine how inflation rate impacts the performance of DMBs in Nigeria.

Research Hypotheses

H1: There is no significant relationship between monetary policy rate and the performances of DMBs in Nigeria.

H2: There is no significant relationship between interest rate variability and the performance of DMBs in Nigeria.

H3: There is no significant relationship between money supply and the performance of DMBs in Nigeria.

H4: There is no significant relationship between Exchange rate variability and performance of DMBs in Nigeria.

H5: There is no significant relationship between inflation rate and performance of money deposit banks in Nigeria.

Significance and Justification of the Study

The study will be of invaluable benefit and be useful to all major stakeholders in banking sector as it will serve as a useful guide into making calculated decisions relating to their financial wealth and financial decisions, in relation to the impacts of monetary policy implementation. Also, it will be useful to monetary authority in monitoring the performance of the particular policies. In view of the constant reviews of areas of impact of the adoption of monetary policy guidelines in Nigerian and the identified gaps noticed, this study is justified to add to body of knowledge in this important economic discourse.

LITERATURE REVIEW

Some of these macro-economic objectives include price stability, full employment, sustainable economic growth and balance of payment equilibrium. The monetary instruments include bank rate, open market operation, variable reserve requirements, moral suasion, selective credit allocation etc. Economic activities are not directly affected by monetary policy instruments; they work through their effects on the financial markets. It affects economic activities through its effects on available resources in the banking sector.

Concept of Monetary Policy

Monetary policy is the combination of measures taken by monetary authorities especially, the CBN and the ministry of finance, to influence directly or indirectly both the supply of money and credit to the economy and the structure of interest rate of economic growth, price stability and balance of payment equilibrium ((CBN, 1991; Onyido, 1993; Odufalu, 1994; Anyanwu, 1999; Nwankwo, 2000). This shows that the flexible interests rate is not only desirable but it is the pre-requisite for effective and efficient conduct of MP base on free market mechanism (Aderibigbe, 1997). MP is the management of the expansion and contraction of the volume of money in circulation for the specific purpose of achieving certain declared national objectives (Uzoaga, 1998).

Traditional Instruments of Monetary Policy

a. Open Market Operations (OMO): These are monetary instruments periodically issued by CBN to mobilize excess funds in the economy. They double as indirect credits to Government to finance its current budgets, involving the trading of government securities with the banks and the non-bank public, aimed either to reducing or increasing money supply; to alter the structure of interest rates and liquidity, with direct and immediate effects on the economy (CBN, 2014 a, b).

b. The Bank Rate: This is the minimum rediscount rate of CBN which is the rate at which the CBN discounts treasury bills or provides loans to DMBs and discount houses, that is, the rate at which CBN acts as the lender of last resort to banks and other financial institution. It helps in mopping up of excess liquidity since commercial bank's lending rate will increase, as bank rate is reduced under expansionary policy (CBN, 2014 a, b; Victor & Eze, 2013).

c. Reserve Requirement: Cash Reserve Ratio (CRR) is the minimum level of cash deposit that must be kept with the central Bank of Nigeria (CBN), aimed at ensuring that banks have sufficient cash or suitable liquid assets to meet daily demand of cash and reduce dependence on the functions of CBN (CBN, 2014 a, b).

d. Liquidity ratio is the proportion of bank deposit liability to the bank's total liquid asset. The banks liquid assets are made up of vault cash, balances with CBN, net money at call, treasury bills/certificates, bills discounted, eligible development stocks, bankers unit funds and certificates of deposits, while deposit liabilities are made up of demand, saving, and time deposits from customers. When the CBN wants to reduce money supply using the reserve ratio, it will only need to adjust the ratio upwards to curtail lending activities, and vice versa (CBN, 2014 a, b).

Non-Traditional Tools include Special Deposit/stabilization securities; Selective Credit Control (measures of credit ceiling aimed at influencing sectoral allocation of credit) and Moral Suasion (involving the persuasion of bankers by the CBN to follow policies which the central bank believes are in the interest of the whole economy and carries no legal backing (CBN, 2014 a, b; Udeh, 2015).

Monetary Policy Implementation Framework

Prior to the banking sector consolidation exercise that was concluded in December 2005, the framework for monetary policy in Nigeria had witnessed some transformation (Adejumobi, 2006; Zamani, 2006). This included the shift from the use of direct monetary policy control to indirect (market-based) monetary management, and the switch from short-term framework to a two-year medium-term framework in the conduct of monetary policy. Although the objectives of monetary policy remained basically the same and monetary aggregates remained the intermediate target for achieving the ultimate objective of inflation during this period, there were

some fundamental changes in the strategies and instruments employed in the conduct of monetary policy to cope with the evolving financial environment.

Era of Direct Control (Pre-SAP Period)

The monetary policy framework placed emphasis on direct monetary control, due to the relatively underdeveloped nature of money and capital markets in the country at this period. The framework relied heavily on sectoral credit allocation; credit ceilings and cash reserve requirements; administrative fixing of interest and exchange rates; as well as imposition of special deposits. The set monetary targets were hardly realized. Instead, the strategy created a lot of distortions and bottlenecks in resource allocation, resulting in wide spread inefficiencies in resource allocation and utilization (CBN Website, retrieved 18/7/20).

Period of Indirect or Market Approach (Post-SAP Era)

In line with the economic deregulation embodied in the SAP, there was a paradigm shift from the hitherto repressive direct monetary control method to an indirect approach anchored on the use of market instruments in monetary management. This was borne out of the desire to eliminate the distortions and inefficiencies in the financial system caused by the prolonged use of administrative controls and the need to engender competition among banks and other operators in the financial system. Two major policy regimes of short-term and medium-term frameworks can be identified during this period (CBN, 2011).

Regime of Short-Term Monetary Policy Framework (1986-2001) - a number of monetary targets and instruments were adopted during period (1986-2001). OMO, through the use of the Nigerian Treasury Bills (NTBs), continued to be the primary instrument. This was complemented by the cash reserve requirement (CRR) and the liquidity ratio (LR). Other policy instruments employed included the discount window operations, and a requirement of 200 per cent treasury instrument to cover for banks' foreign exchange demand at the Autonomous Foreign Exchange Market (AFEM). Interest rate policy was deregulated through the proactive adjustment of minimum rediscount rate (MRR) to signal policy direction consistent with liquidity conditions (CBN.gov.ng/Out/EduSeries/Monetary Policy Implementation Framework and Outcome.pdf, retrieved 18/10/19; Obidike, Ejeh, & Ugwuegbe, 2015).

Regime of Medium-Term Monetary Policy Framework (2002-2005) - In 2002, the CBN commenced a two-year medium-term monetary policy framework, aimed at freeing monetary policy from the problem of time inconsistency and minimizing over-reaction due to temporary shocks. Under the framework, monetary policy guidelines are open to half-yearly review in the light of developments in monetary and financial market in order to achieve medium- to long-term goals. The major objectives of monetary policy since 2002/2003 have been to subdue inflation to a single-digit level and maintain a stable exchange rate of the naira. Attention has also been focused on the need for a more competitive financial sector geared towards improving the payments system. The OMO has continued to be the primary tool of monetary policy, and is

complemented by reserve requirements, discount window operations, foreign exchange market intervention and injection/withdrawal of public sector deposits in and out of the DMBs.

The CBN has also continued to ensure banking soundness and financial sector stability, not only to ensure the effective transmission of monetary policy actions to the real sector but also to enhance the efficiency of the payments system. The measures taken to strengthen the banking sector and consolidate the gains of monetary policy included the introduction of a 13-point reform agenda in the banking sector in July 2004 (including the 25 billion minimum capital base for DMBs). The 2004/2005 monetary policy and credit guidelines were fine-tuned in 2005 in the light of changing environment. ([https://www.cbn.gov.ng/Out/EduSeries/Monetary Policy Implementation Framework](https://www.cbn.gov.ng/Out/EduSeries/Monetary_Policy_Implementation_Framework) retrieved 26/09/2020)

The CBN was able to achieve the targets owing to the pro-active implementation of sound monetary policies, including zero tolerance on government borrowing from the CBN. From monetary policy point of view the reform of the financial system, a key component of which was bank consolidation, was intended to minimize macroeconomic instability arising from banking systemic distress; deepen the capital market; finance productive activities in the private sector, particularly non-oil sectors; minimize the counterfactual shocks of creating distortions in the money markets and the financial system; encourage investment inflows through effective participation of the industry in the global financial system, among others. Virtually all the banks have been listed in the Nigerian Stock Exchange (NSE) with the capital market becoming more liquid and more capitalized.

The CBN can now focus on a fewer number of banks for effective supervision and zero tolerance towards infractions, and improved corporate governance: greater transparency is being enforced and deployment of IT infrastructure (e.g. FASS and RTGS) has significantly helped the process.

Monetary Policy Implementation Framework Post-Consolidation (2006-2007)

The key feature of the monetary conditions during the period, 2006/2007 included: persistence excess liquidity despite reversal of historic conditions, for example, ways and means and emergence of a new but very important source of excess liquidity (increased private inflows). The objectives of monetary policy during the period remained unchanged. The monetary policy strategy during the period 2006- 2007 included Zero tolerance on ways and means advances; Gradual run-down of CBN holding of TBs; aggressive liquidity mop-up operations, by frequent OMO sales supported by discount window operations; unremunerated reserve requirements; increased coordination between the Bank and the fiscal authorities; restructuring of debt instruments into longer tenor debts; increased deregulation of foreign exchange market; and occasional foreign exchange swap (CBN, 2011).

Determinants of Financial Performance

The financial performance of banks is expressed in terms of profitability and the profitability is further expressed in terms of an increase of Net Asset. Warren (2005) contested that profitability is a company's ability to earn a reasonable profit on the owner's investment. Most organizations exist to earn profit and profitability ratios show a company's overall efficiency and performance. Ratios that show performance margins represent the firm's ability to translate sale into profits at various stages of measurement; and ratios that show performance returns represent the firm's ability to measure the overall efficiency of the firm in generating returns for its shareholders (Bessis, 2005). The most popular profitability measurements are: Profit margin on sale, Return on Assets ratios, Return on Equity, etc. These are depicted as

Return on Asset (ROA) = (Net Income / Total Assets) * 100

Return on Equity (ROE) = (Net Income / Total Equity) * 100

Profit Margin (PM) = (Net Income / Net Sales) * 100

Profitability ratios are often used in a high stream as the indicators of credit analysis in banks, since profitability is associated with the results of management performance (Waymond, 2007). Also, Mishkin (2002) posited that ROA and ROE are the most commonly used ratios. Measuring profitability is the most important measure of the success of the business.

Increasing profitability is one of the most important tasks of the business managers.

Return on Equity (ROE) i.e. Profitability Indicator

ROE is an important indicator to measure the profitability of the banks. Foong (2008) indicated that the efficiency of banks can be measured by using the ROE which illustrates to what extent banks use reinvested income to generate future profits. In addition, ROE takes the retained earnings from the previous periods into account and tells the investors how efficiently the capital is reinvested. Waymond (2007) posits profitability ratios are often used in a high esteem as the indicators of credit analysis in banks, since profitability is associated with the results of management performance.

Joetta (2007) presented the purpose of ROE as the measurement of the amount of profit generated by the equity in the firm. It is also mentioned that the ROE is an indicator of the efficiency to generate profit from equity. This capability is connected to how well the assets are utilized to produce the profits as well. The effectiveness of assets utilization is significantly tied to.

Money Supply and Bank Performance in Nigeria

Money supply is the amount of money within a specific economy available for purchasing goods or services. For the purposes of this paper, the broad definition of money supply (M2+) is adopted which includes currency in circulation, demand deposits, quasi money and foreign

currency deposits at any given time (Anyanwu, 2000). The money creating activities of the deposit money banks impact directly on money supply and given that the central bank is responsible for controlling money supply in an economy, it is important to evaluate the role of these banking institutions on the convergence process.

There are two criteria employed in measuring money supply. The first criteria define the stock of narrow money (usually designated by M1) as currencies and coins in circulation in the hands of the non-banking public and secondly, M1 plus the demand deposit (of the non-banking public) with commercial bank (Ajakaiye, 2002).

The Monetary Policy Transmission Mechanism

This is the Monetary transmission mechanism through which changes in money supply affects the decisions of firms, households, financial intermediaries, investors and ultimately alters the level of economic activities and prices, such as interest rate, exchange rate, bank lending rate, and the wealth channels (Kutner, 2003).

THEORETICAL REVIEW AND FRAMEWORK

This study is anchored on the Keynesian Theory. In the Keynesian analysis, monetary policy plays a crucial role in affecting economic activity. It contends that a change in the supply of money can lead to a permanent change in microeconomic variables such as the rate of interest, the aggregate demand and the level of employment, and income. Keynes believed in the existence of unemployment equilibrium. The rise in supply of money affects the rate of interest which tends to fall. Given the marginal efficiency of capital, a fall in the rate of interest will increase investment. The increased investment will raise effective demand through the multiplier effect thereby increasing macroeconomic variables like income, output and employment.

The rate of interest is determined by the demand for and supply of money. If either the demand for money or the supply of money changes the equilibrium rate of interest would change. The supply of money is determined by the monetary authority which is normally fixed in the short-run. The demand for money is the desire to hold cash for transaction, precautionary and speculative purposes. The speculative demand for money depends upon the rate of interest or bond prices. Thus Keynes believed on the basis of his experience that monetary policy operated under certain limitations upon which its effectiveness depend on first, the increase in the supply of money reduces the rate of interest provided the demand for money does not become infinite (i.e. perfectly elastic), and second, the reduction in the rate of interest increases investment demand provided it is not inelastic to the rate of interest becomes ineffective. Keynesians posit that change in money stock facilitates activities in the financial market affecting interest rate, investment, output and employment.

The Modigliani School supports the above view but introduced the concept of capital market rationing and said willingness of banks to lend affects monetary policy transactions (Modigliani,

1963). Other relevant theories include the Classical monetary theory (Jhingan, 2003; 2010; Anyanwu, 1993); the Cambridge School theory, propounded Pigou and Mashall (1975); the Monetarist theory (Diamond, 2003) and the Modern theory which is based on the portfolio adjustment process.

EMPIRICAL REVIEW

In the study conducted by Somoye and Ilo (2009), the result of co-integration and Vector Error correction used showed that there exist long-run relationship between bank lending and macroeconomic instability. Okoye and Eze (2013) found out that monetary policy rate has positive effect on the performance of money deposit banks. Ajayi and Atanda (2012) study on the impact of monetary policy on banks performance in Nigeria show that monetary policy instruments are not effective to stimulate credit in the long-run, and that bank rate, inflation rate and exchange rate are positively related to banks credit, but liquidity ratio and cash reserves ratio are negatively related to total credit of the banks.

Onyeiwu (2012) studied the effect of monetary policies on selected macroeconomic variables GDP, inflation rate and balance of payment between 1981 and 2008, and found that monetary policy exerts a positive impact on GDP growth and Balance of payment but negative impact on rate of inflation. Amassoma, Ditimi, Nwosa and Olaiya (2011) found that monetary policy had a significant influence in maintaining price stability within the Nigeria economy. Folawemo and Osinubi (2006) study showed that the effects of monetary policy at influencing the finance of government fiscal deficit through the determination of the inflation and tax rates affects both the rate of inflation and exchange rate, thereby causing volatility in their rates. Chukwu (2009) found that exchange rate and money supply (M2) had a negative impact on inflation, while exchange rate was significant in explaining inflation for the period, M2 was not. Adeyeye and Fakiyesi (1980) established that there exists some significant positive relationship between inflation and growth in bank credit, money supply and government expenditure, although the relationship with growth in government revenue was unclear.

Kashyap and Stein (1995) found evidence that business lending may respond to a tightening of monetary policy. Punita and Somaiya (2006) found that banks rate, lending rates, cash reserve ratio and statutory ratio, when regressed on banks profitability independently; lending rate was found to exact positive and significant influence on banks' profitability, while bank rate, cash reserve ratio and statutory ratio were found to have negative but significant effect on profitability of banks. Amidu & Wolfe (2008) and Mohammed & Simon (2008) support the finding of previous studies that the Central Bank prime rate and inflation rate negatively affect bank lending. Prime rate was found statistically significant while inflation was insignificant.

In summary, the overall findings of the works reviewed indicate that there is somehow a general consensus that there is a direct relationship between monetary policy implementation and bank performance. However, there is need to harmonize the variables, the design and tests the variables in measuring banks' performance which is the thrust of this study.

METHODOLOGY

The research design is descriptive and measures the correlation in the variables of the study. The variables used for this study include money supply, exchange rate, interest rate, inflation rate and monetary policy rate as independent variables and Return on Equity as dependent variable. The population of study consists of all the 20 active deposit money banks in the sector. The random sampling technique is used to select the representative from the population of the study, and three banks, Guarantee Trust Bank, First Bank and Zenith Bank were selected, based on criteria of value of Assets and Liabilities, branch network and clientele base.

The source of data is based on secondary data; which is obtained from the CBN statistical bulletin and the financial statements of the selected banks for a period of 16 years specifically, from 2003-2018. There was also a critical review of the audited annual reports relating to trend of the profitability and equity shareholding of banks over the period as well as relevant literatures obtained from journals, publication and Bank’s website. The researcher makes use of graphical analysis, simple regression models to test the relationship between the dependent variable (Return on Equity) and independent variables (EXCR, INTR, MS, INFR and MPR) using the OLS model. The Pearson correlation co-efficient was also employed in testing strength of the relationship between the dependent and the independent variable

MODEL SPECIFICATION

- Y = Dependent variable: Bank Performance (ROE)
- X = Independent variable: Monetary Policy
- ROE = f (EXCR, INTR, MS, INFR, MPR)..... 1

The OLS equation for the model is specified as

$$ROE = \beta_0 + \beta_1 EXCR + \beta_2 INTR + \beta_3 MS + \beta_4 INFR + \beta_5 MPR + e.....2$$

Where

- ROE = Return on Equity
- EXCR = Exchange Rate
- INTR = Interest Rate
- MS = Money Supply
- INFR = Inflation Rate
- MPR = Monetary Policy Rate
- β_0 = Constant parameter/Intercept
- e = Error Term
- β_1 - β_5 = Coefficients of independent variables

Table 1 - A- PRIOR EXPECTATION

VARIABLES	SYMBOL	SIGN	A PRIOR EXPECTATION
Exchange rate	EXCR	-	NEGATIVE
Interest Rate	INTR	+	POSITIVE
Money Supply	MS	+	POSITIVE
Inflation rate	INFR	-	NEGATIVE
Monetary policy rate	MPR	+	POSITIVE

Source: Researcher Compilation

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

	ROE	EXCHANG E RATE	INTERES T RATE	MONEY SUPPLY	INFLAT ION RATE	MONETA RYPOLIC Y RATE
Mean	21.4643 5	136.0972	18.27250	6708561.0	11.8102 3	12.56023
Median	18.6015 0	132.1470	17.95000	4027902.0	11.6000 0	12.50000
Maximum	43.2300 0	165.0070	24.85000	17339054	18.8700 0	19.00000
Minimum	12.6700 0	102.1052	15.14000	699734.0	5.38000 0	8.750000
Std. Dev.	7.52018 7	18.84471	2.259338	5674300.0	3.58549 4	2.571028
Skewness	1.29184 4	-0.052714	1.550171	0.550426	0.13209 5	0.796618
Kurtosis	3.72471 1	1.839934	5.601134	1.814700	2.62623 5	3.512077
Jarque-Bera	13.2011 9	2.487593	30.02637	4.797485	0.38407 7	5.134473
Probability	0.00136 0	0.288288	0.000000	0.090832	0.82527 5	0.076747
Sum	944.431 3	5988.276	803.9900	2950.08	519.650 0	552.6500

Sum Sq. Dev.	2431.788	15270.30	219.4982	138.15	552.7979	284.2379
Observations	44	44	44	44	44	44

TABLE 2 - DESCRIPTIVE ANALYSIS VARIABLES

Source: Researcher's Computation Using E-views 8.0

Interpretation

From the table 2 above, there is an indication that all the data series for the variables are normally distributed going by the Jarque-Bera statistic and Kurtosis values, as well as the degree of skewness which are all positive.

CORRELATION ANALYSIS

TABLE 3 - CORRELATION ANALYSES BETWEEN THE DEPENDENT VARIABLE (ROE) AND THE INDEPENDENT VARIABLES

Variables	ROE	EXCHANGE RATE	INTEREST RATE	MONEY SUPPLY	INFLATION RATE	MPR
ROE	1.000000					
EXCHANGE RATE	0.510273	1.000000	-			
INTEREST RATE	0.471070	-0.220617	1.000000			
MONEY SUPPLY	-0.021174	0.902227	-0.390225	1.000000		
INF. RATE	-0.396793	-0.030028	0.285613	-0.191321	1.000000	
MPR	0.487171	-0.242598	0.835033	-0.347190	0.469452	1.000000

Source: Researcher's Computation Using E-views 8.0

Interpretation

As put forward by Cohen (1988), the interpretation of result between 0 and 1 is

When $r = 0.10$ to 0.29 or -0.10 to -0.29 (there is weak relationship)

When $r = 0.30$ to 0.49 or -0.30 to -0.49 (there is moderate relationship)

When $r = 0.50$ to 1.0 or -0.50 to -1.00 (there is strong relationship)

The table 3 above reveals that there exist higher correlation between monetary policy rate and return on equity (0.487171), implying that a moderate positive relationship exist between monetary policy rate and return on equity (ROE), whereas the low correlation between money

supply, as well as inflation rate and return on equity translates to a weak negative relationship indicated by the R-values of -0.021174 and -0.396793 respectively.

TEST OF HYPOTHESES

Hypothesis One

There is no significant relationship between monetary policy rate and the performances of money deposit banks in Nigeria.

Table 4 – E-View Computation

Dependent Variable: ROE
Method: Panel Least Squares
Date: 05/10/20 Time: 10:02
Sample: 2003 2018
Periods included: 16
Cross-sections included: 3
Total panel (unbalanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MONETARY POLICY				
RATE	0.220975	0.451322	0.046474	0.0312
C	21.20090	5.783598	3.665694	0.0007
R-squared	0.230051	Mean dependent var		21.46435
Adjusted R-squared	0.223757	S.D. dependent var		7.520187
S.E. of regression	7.608991	Akaike info criterion		6.940927
Sum squared resid	2431.663	Schwarz criterion		7.022027
Log likelihood	-150.7004	Hannan-Quinn criter.		6.971003
F-statistic	5.002160	Durbin-Watson stat		0.740104
Prob. (F-statistic)	0.031653			

Source: Researcher's Computation Using E-views 8.0

Interpretation and Discussion

From the results obtained in Table 4 above, β_1 (MPR) have positive coefficient values showing a positive relationship with the Return on Equity (ROE); indicating that an increase in monetary policy rate will cause an increase in ROE, MPR is however statistically significant at approximately 5% level of significance. The result shows that about 23.00% of the total variation in the regressed variable (ROE) can be explained by the independent variable, as indicated by R^2 value of 0.230051. The F-statistic value of 5.002160 shows that the overall model is significant at 5% level as indicated by the probability value (0.031653). A unit increase in monetary policy

rate will result to about 0.220975 (22%) increases in return on equity. Therefore, the null hypothesis is accepted and the alternative hypothesis rejected, and concludes that there is no significant impact but a positive relationship between monetary policy rate and the performance of money deposit banks in Nigeria.

Hypothesis Two

There is no significant relationship between interest rate variability and the performance of money deposit banks in Nigeria.

Table 5 – E view Computation

Dependent Variable: ROE
Method: Panel Least Squares
Date: 05/10/20 Time: 10:02
Sample: 2003 2018
Periods included: 16
Cross-sections included: 3
Total panel (unbalanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INTEREST RATE	-0.166656	0.512953	-0.324895	0.0469
C	24.50957	9.442697	2.595611	0.0130
R-squared	0.222507	Mean dependent var		21.46435
Adjusted R-squared	0.212243	S.D. dependent var		7.520187
S.E. of regression	7.599642	Akaike info criterion		6.938469
Sum squared resid	2425.692	Schwarz criterion		7.019568
Log likelihood	-150.6463	Hannan-Quinn criter.		6.968544
F-statistic	9.105557	Durbin-Watson stat		0.720306
Prob(F-statistic)	0.046873			

Source: Researcher's Computation Using E-views 8.0

Interpretation and Discussion

From Table 5 above, it is observed that the constant parameter (β_0) has a positive relationship with Return on Equity (ROE); indicating that an increase in interest rate will cause a decrease of about 0.166656 (17%) in ROE. Interest rate is however statistically significant at 5% level of significance. About 22.25% of the total variation in ROE can be explained by the interest rate (R^2 value of 0.222507). This implies that interest rate accounts for 22.25% of changes in ROE. Since the p-value (0.046873) is less than the significance value (0.05), null hypothesis is accepted and the alternative hypothesis is rejected, and concludes that interest rate has negative

and significant effect on performance of money deposit banks in Nigeria. This finding confirms previous studies by Maddaloni and Peydro (2011) and Yourougou (1990).

Hypothesis Three

There is no significant relationship between money supply and the performance of money deposit banks in Nigeria.

Table 6 – Computation of E-View

Dependent Variable: ROE

Method: Panel Least Squares

Date: 05/10/20 Time: 10:02

Sample: 2003 2018

Periods included: 16

Cross-sections included: 3

Total panel (unbalanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MONEY SUPPLY	-2.80812	2.040071	-0.137254	0.8915
C	21.65260	1.787894	12.11067	0.0000
R-squared	0.130448	Mean dependent var		21.46435
Adjusted R-squared	0.123351	S.D. dependent var		7.520187
S.E. of regression	7.607480	Akaike info criterion		6.940530
Sum squared resid	2430.698	Schwarz criterion		7.021630
Log likelihood	-150.6917	Hannan-Quinn criter.		6.970606
F-statistic	2.018839	Durbin-Watson stat		0.740750
Prob(F-statistic)	0.891486			

Source: Researcher's Computation Using E-views 8.0

Interpretation and Discussion

From Table 6 above, it is observed that the constant parameter (β_0) has a positive relationship with Return on Equity (ROE) while β_1 (Money Supply - MS) shows a negative relationship with ROE. This means that an increase in MS will cause a decrease in ROE; MS is however statistically insignificant at 5% level (F-statistic value of 2.018839), indicating that about 13.04% of the total variation in ROE can be explained by MS (R^2 value of 0.130448). Since the probability value (0.891486) is greater than the significance value (5% or 0.05), the null hypothesis is rejected and the alternative hypothesis is accepted, and concludes that Money supply has a significant impact on the performance of money deposit banks in Nigeria.

Hypothesis Four

There is no significant relationship between Exchange rate variability and performance of money deposit banks in Nigeria.

Table 7 – E-View Computation

Dependent Variable: ROE
 Method: Panel Least Squares
 Date: 05/10/19 Time: 10:00
 Sample: 2003 2018
 Periods included: 16
 Cross-sections included: 3
 Total panel (unbalanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EXCHANGE RATE	-0.004100	0.061573	-0.066579	0.0472
C	22.02228	8.458 077	2.603698	0.0127
R-squared	0.260106	Mean dependent var		21.46435
Adjusted R-squared	0.233701	S.D. dependent var		7.520187
S.E. of regression	7.608785	Akaike info criterion		6.940873
Sum squared resid	2431.531	Schwarz criterion		7.021973
Log likelihood	-150.6992	Hannan-Quinn criter.		6.970949
F-statistic	4.004433	Durbin-Watson stat		1.738574
Prob(F-statistic)	0.047232			

Source: Researcher’s Computation Using E-views 8.0

Interpretation and Discussion

From Table 7 above, it is observed that the constant parameter (β_0) has a positive relationship with ROE while β_1 (Exchange rate - EXCR) have a negative coefficient values showing a negative relationship with the ROE, indicating, that an increase in Exchange rate will cause a decrease in ROE, but it is statistically significant at 5% level.

There is about 26.01% of the total variation in the dependent variable, ROE as indicated by R^2 (0.260106). This implies that exchange rate (EXCR) account for 26.01% of changes in ROE. The F-statistic value of 2.018839 testing for overall significance shows that the overall model is significant at 5% level. Since the P-value (0.047232) is less than the significance value (5% or

0.05), therefore, the null hypothesis is accepted and the alternative hypothesis is rejected, and conclude that there is no significant relationship between exchange rate and the performance of Deposit money banks in Nigeria.

Hypothesis Five

There is no significant relationship between inflation rate and performance of money deposit banks in Nigeria.

Table 8 – E-View Computation

Dependent Variable: ROE

Method: Panel Least Squares

Date: 05/05/20 Time: 10:02

Sample: 2003 2018

Periods included: 16

Cross-sections included: 3

Total panel (unbalanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFLATION RATE	-0.180361	0.322436	0.559371	0.0389
C	19.33424	3.975845	4.862926	0.0000
R-squared	0.157395	Mean dependent var		21.46435
Adjusted R-squared	0.116239	S.D. dependent var		7.520187
S.E. of regression	7.581000	Akaike info criterion		6.933556
Sum squared resid	2413.806	Schwarz criterion		7.014656
Log likelihood	-150.5382	Hannan-Quinn criter.		6.963632
F-statistic	4.812896	Durbin-Watson stat		0.716693
Prob (F-statistic)	0.038880			

Source: Researcher's Computation Using E-views 8.0

Interpretation and Discussion

From Table 8 above, it is observed that the constant parameter (β_0) has a positive relationship with ROE while β_1 (Inflation rate - INFR) has a negative relationship with ROE. However, inflation rate (INFR) is statistically significant at 5% level. It also shows that about 15.74% of the total variation in the dependent variable, ROE can be explained by the independent variable, INFR, as indicated by the R^2 value of 0.157395; implying that INFR accounts for 23.00% of

changes in ROE. The F-statistic value of 4.812896, testing for overall significance shows that the overall model is significant at 5% level.

Therefore, since the probability value (0.038880) is less than the significance value (5% or 0.05) the null hypothesis is accepted and the alternative hypothesis rejected, and concludes that Inflation rate have no significant impact on performance of money deposit banks in Nigeria. This finding supports the exertion in Ramadan *et al* (2011).

Overall, the results of Durbin-Watson statistics tests reveal that the model is free of the presence of serial correlation.

Summary, Conclusion and Recommendations

This study examined the impact of monetary policy on performance of Deposit money banks, using exchange rate, interest rate, inflation rate, money supply and monetary policy rate as proxy for the independent variables while return on equity (ROE) was used as proxy for bank performance. The result of the regression analysis showed a significant relationship between monetary policy and performance of deposit money banks in Nigeria. Inflation rate has significant and negative impact on performance of deposit money banks in Nigeria, implying that an increase in inflation rate will result in decrease in return on equity; Money supply has no significant impact, which implies that an increase or decrease in money supply will not significantly impact on return on equity; there is a significant negative relationship between exchange rate and performance of banks in Nigeria, indicating that an increase in exchange rate will result in decrease in return on equity (ROE). Also, Interest rate has significant effect that is, interest rate exerts a negative effect on return on equity (that is, an increase in interest rate will result in decrease in return on equity).

From the empirical results, all the variables of monetary policy aligned with the theoretical expectations. Considering the t-values, all the other variables were statistically significant except for money supply.

Based on the summary of findings, it is recommended that:

1. Banks should review their lending rate and explore strategies that will lead to lower operational cost for deposit attraction and also diversifying their sources of deposits. High lending rate discourages the borrower's ability to collect credit.
2. Policy makers should implement policies that promote lending like low MPR, low rate of inflation, and growth in output to ensure credit expansion and invariably increased returns and profitability of deposit money banks.
3. Government should implement sustainable macroeconomic policies that will promote economic growth, increase business friendliness and conducive environment that will

enhance capacity utilization of industries so as to allow for high level of credit demand and absorption in the economy.

4. Banks should strive to improve their operational efficiency internally and be productive in deploying both financial and human capital in managing and generating a well-diversified risk assets portfolio as this will ensure that both interest sensitive risk assets and liabilities are utilized towards maximizing returns.

REFERENCES

- 1) Abdullahi, B. M. (2014). Monetary Policy Transmission Mechanism and the Nigerian Economy.
- 2) Adegbite, D. E. O. (2005). Financial Sector Reforms and Economic Development in Nigeria:
 - a. The Role of Management. *East Asia*, 5(7.00), 9-00.
- 3) Adejumobi, S. (2006) "The Bogey of Reforms". The GUARDIAN, August 16, 2006.
- 4) Adeolu, A. M. (2012). Fiscal/Monetary policy and economic growth in Nigeria: A theoretical exploration. *International Journal of Academic Research in Economics and Management Sciences*, 1(5): ISSN: 2226-3624.
- 5) Aderibigbe, J. O. (1997). Monetary Policy and Financial Sector Reform "Abuja; the Central
 - a. Bank of Nigeria bulletin October/December
- 6) Adeyeye, E. A. & Kakiyesi, T. O. (1980). "Productivity, Prices and Income Board and anti-
 - a. inflationary Policy in Nigeria. Nigeria under Military Proceedings". Annual conference of the Nigerian economic Society.
- 7) Ahmed, A. (2005). *The Management of Commercial Bank Portfolio Case Study of Kano Co-*
 - a. *Operative Bank* (Doctoral Dissertation).
- 8) Ajakaiye, D. O. (2002). Economic Development in Nigeria: A review of experiences during
 - a. the 1990s. NISER Monograph Series, No. 1
- 9) Ajayi, I. & Atanda, K. (2012). Economic Development and Planning. Ogui New Layout
 - a. Enugu: Lincon Press
- 10) Ajayi, L. O. (1978). "A Theoretical framework of monetary analysis". J. Polit. Econ. 18

- a. March/April Economics: An African Perspective: John West publications ltd. P. 354.
- 11) Ajie, H. A. & Nenbee, S. G. (2010): monetary policy and stock prices in Nigeria, 1980 –
a. 2008: An Econometric Analysis. The international Journal Series on Tropical Issues, 11 (2): 183-194, July
- 12) Alade, S. O. & Ajayi, M. (2003). Money and Banking, An Introduction to Analysis of
a. Policy, John Wiley and Sons, Santa Barbara, 1977 pg. 425.
- 13) Amassoma, O., Ditimi, N., Nwosa, P. & Olaiya, S. (2011). “An Appraisal of Monetary Policy
a. and Its Effect on Macro Economic Stabilization in Nigeria.” *Journal Trends in Economics and Management science (JETEMS)*, Vol. 2 (3). pp 233-237.
- 14) Anyanwu, C. M. (2010). An Overview of Current Banking Sector Reforms and the Real
a. Sector of Nigerian Economy, Central Bank of Nigerian Economic and Financial
b. Review, 48 (4).
- 15) Anyanwu, J. C. (2009). Monetary economics: Theory, policy and institutions. Onitsha: Hybrid
a. Publishers Ltd
- 16) Anyanwu, J. C. (1993) Monetary Policy Management in Nigeria: Enugu, Ozone Publishers
- 17) Amassoma, O. (2011). An Appraisal of Monetary policy and its Effect on Macro Economic Stabilization in Nigeria. *Journal trends in Economics and management science (JETEMS)*, Vol. 2 (3). Pp 233-237.
- 18) Amidu, M. & Wolfe, S. (2008). The impact of Monetary Policy on Bank’s Credit in Ghana. IAABD2008 Proceeding, track 1
- 19) Apere, T. O. and Karimo, T. M. (2015). Monetary policy and performance of the Nigerian
a. banking sector. *African Journal of Social Sciences*, 5 (1), 70-80.
- 20) Asika, N. (2007). “Research Methodology, A Process Approach” The process of Research
a. design and methodology. Mukugamu & Brothers Enterprises
- 21) Ayodele, O. S., Obafemi, F. N. & Akongwale, S. (2013). Policy Options for Low and

- a. Sustainable Lending Rates in Nigeria. *Mediterranean Journal of Social Sciences*, 4(3), 147.
- 22) Bakare, F. (2011). An Empirical study of the Determinant of money supply Growth and its effects it inflation rate in Nigeria. *Journal of Research in International Business and Management*. Vol.1 (5), pp. 124-129.
 - a. *Management*. Vol.1 (5), pp. 124-129.
- 23) Baljit, S. (2000).The General Role of monetary policy in developing economy, VIKAS
 - a. Publishers House PVT Ltd.
- 24) Bessis, J. (2005). Risk Management in Banking. 2nd Ed. John Wiley, Chichester, England
- 25) Central Bank of Nigeria (2014). “Payments System, Bankers Clearing & Settlement and the
 - a. Role of CBN”, A Paper delivered at a Lecture for Central Bank of Nigeria Staff, on Thursday, September 29, 2014.
- 26) Central Bank of Nigeria (2014). “Recent Payments System Initiatives In The Bank”, A Paper
 - a. delivered at a Lecture for Central Bank of Nigeria Staff, on Thursday, September 29, 2014
- 27) Central Bank of Nigeria (2012). Monetary sector model for Nigeria, Research Department Central
 - a. Bank of Nigeria.
- 28) Central Bank of Nigeria (2011). “Understanding monetary policy series No 3: Monetary
 - a. Policy Framework”, Central Bank of Nigeria.
- 29) Central Bank of Nigeria (1993): Central Bank of Nigeria, Annual report and statements of
 - a. Account. CBN.gov.ng/Out/EduSeries/Monetary Policy Implementation Framework
 - b. and Outcome.pdf, retrieved 18/10/19
- 30) Chimezie, E. M. (2012). *The Performance of Monetary Policy in the Nigerian Economy*
 - a. (Doctoral Dissertation, Caritas University).
- 31) Chukwu, A. C. (2009). Measuring the Effects of Monetary Policy Innovation in Nigeria:
 - A
 - a. Structural Autoregressive (AVAR) Approach, *African Journal of Accounting, Economics, Finance and Banking Research*, Vol. 5, No. 5, 2009, Uyo, Nigeria.

- 32) Chukuigwe, E.C. (2008). An econometric analysis of the impact of monetary and fiscal policies on non-oil exports in Nigeria. *African economic and business review*, 6(2), ISSN: 1109-5609.
- 33) Crockett A. (1973): Optimal choice of monetary policy instruments in a simple stochastic macro model, *Quarterly Journal Economics*. 84 (2): 197-216
- 34) Dewald, W. G. & Marchon, M. N. (1978). Instruments and Indicators of Monetary Policy: in
a. *Journal of monetary Economics*, Vol. 9(1).
- 35) Diamond, R. (2003). Irving Fisher on the international transmission of boom and depression
a. through money standard: *Journal of money, Credit and banking*, Vol. 35 pp. 49 online edition.
- 36) Ekpung, G. E., Udude, C.C. & Uwalaka, H. I. (2015). The impact of monetary policy on the
a. banking sector in Nigeria. *International Journal of Economics, Commerce and Management*, 3 (5), 1015-1031.
- 37) Fischer, S. (1993), "The Role of Macroeconomic Factors in Growth," *Journal of Monetary Economics*, Vol. 32 (1), 485-512.
- 38) Folawewo, A.O. & Osinubi, T. S. (2006). Monetary Policy and Macroeconomic Instability in
a. Nigeria: A rational Expectation Approach. *Journal of Social Science*, vol. 12 (2): pp.93-100.
- 39) Fontana, G. (2003). Post Keynesian approaches to endogenous money: a time framework
a. Explanation, *Review of Political Economy*, 15(3), 291-314.
- 40) Foong, K. K. (2008). "Funding Higher Education in Malaysia", Australian, Canberra, East
a. Asia Bureau of Economic Research, Working paper No. 44.
- 41) Forbes, K. (2000), "A Reassessment of the Relationship Between Inequality and Growth,"
a. *American Economic Review*, 90 (1), 869-887
- 42) Friedman, M. & Meiselman, D. (1963). The Stability of Monetary Velocity and the

- a. Investment Multiplier in the United States, 1887-1957 in Stabilization Policies. Prentice Hall, Englewood.
- 43) Hameed, G. K. (2012). Linkage between monetary instruments and economic growth,
a. *Universal Journal of Management and Social Sciences*, 2(5), pp. 69-76.
- 44) Husnan, J. & Astiyah, S. (2005). Monetary Policy Transmission in Indonesia. Vol. 56, No. 4.
- 45) Isedu, M. (2013). *Effects of monetary policy on macro-economic performance: the case of Nigeria*
a. *Nigeria* (Doctoral dissertation, University of Greenwich).
- 46) Ituwe, C. E. (2003). Monetary and Financial Policy: Intl. An Empirical Investigation: *Nigeria*
a. *Journal of Banking*.
- 47) Jhingan, M.L. (2003). Advanced Economic Theory: Micro Economies, 12 Third ed. Delhi:
a. Vrinda Publications Ltd
- 48) Jhingan, M. L. (2010). Macro-economic theory. 11th Revised Edition Delhi: Vrinda Publications (p)
a. Limited
- 49) Joetta, C. (2007). Credit Risk Management: How to Avoid Lending Disasters and Maximize
a. Earnings”, McGraw-Hill, New York.
- 50) Kashyap, A. K. & Stein, J., C. (1995). The impact of Monetary Policy on Bank Balance
a. Sheets, Carnegie-Rochester Conference series on public Policy, 42: 151-195.
- 51) Kutter, K. & Mosser, P. (2003). The Monetary Transmission Mechanism: some answers and
a. Further Questions, U.S: *FRBNY Economic Policy Review*.
- 52) Mansaray, M. & Swaray, S. (2013). Financial Liberalization, Monetary Policy and Money
a. Demand in Sierra Leonf. *Journal of Monetary and Economic Integration*, 12(2), 63-90 March/April Economics; An Africa perspective; John West Publications Ltd., P. 354.
- 53) Mishkin, F. S. (2013). The Economics of money, banking, and financial markets (10th ed.).
a. Pearson Education, New York.

- 54) Mishra, G. and Pradhan, E., (2008). Monetary Economics, Nigeria: Perry Barr Ltd
- 55) Mishra, P. K. & Pardhan, B. B. (2008): Financial Innovation and Effectiveness of Monetary
a. Policy.
- 56) Mishra, P. K. & Pradhan, B. B. (2013). Financial innovation and effectiveness of monetary
a. policy. <http://ssrn.com/abstract=1262657>
- 57) Modigliani, M. (1963). "Handbook of Empirical Corporate Finance: Empirical Corporate
a. Finance" edited by B. Espen Eckbo.
- 58) Mohammed, M. A. & Simon, A. R. (2008). Entrepreneurship in Nigeria Realities on Ground.
a. *Pyrex Journal of Business and Finance Management Research*, 006-009
- 59) Morander, F. & Schmidt, K. (2002). Monetary Policy under Uncertainty and learning:
Ed. 1.
a. Vol. 13. Chap 11. pp. 413-450.
- 60) Ndiomu, O. (1993): On Effectiveness of Monetary Policy Economics Review. March pp.
a. 500.540
- 61) Ndugbu, M. O. & Okere, P. (2015). Monetary policy and the performance of deposit money
a. banks: The Nigerian experience. *European Journal of Business and Management*,
7
b. (17), 65-72.
- 62) Nwankwo, L. (2000). "The Management of Monetary and Banking Polices by the CBN."
a. CBN Bullion, Lagos, Vol. 21(2), pp. 9-26.
- 63) Nwankwo, G.O. (2000). Basic Economics, An introduction for West African Students,
a. Cambridge University Press, p. 23.
- 64) Obidike, P. C., Ejeh, G. C. & Ugwuegbe, S. U. (2015). The impact of interest rate spread on
a. the performance of Nigerian Banking Industry. *Journal of Economics and Sustainable
Development* , 6(12), 131-139

- 65) Odufalu, O. (1994). Monetary and banking profitability in Nigeria. First Bank Nigeria Plc,
a. Bi-Annual Review, 4(8).
- 66) Odozi, V. A. (1992). Recent Monetary Policy Developments and measures to Attract Foreign
Investment in Nigeria. CBN Bullion.
a. Investment in Nigeria. CBN Bullion.
- 67) Okoro, A. S. (2013). Impact of monetary policy on Nigerian economic growth. *Prime Journal of Social Science*, 2(2), 195-199.
a. *Journal of Social Science*, 2(2), 195-199.
- 68) Okoye, V. and Eze, R.O. (2013), effect of bank lending rate on the performance of Nigerian
deposit money banks, *International Journal of Business and Management Review*, Vol. 1, No. 1, March 2013, pp.34-43.
a. deposit money banks, *International Journal of Business and Management Review*, Vol. 1, No. 1, March 2013, pp.34-43.
- 69) Onafowora, O. A. (2012). *Research Companion Nigeria*,
- 70) Onouorah, C. A., Shaib I. O., Oyathelemi E. & Friday, O. I. (2011), “The Impact of
Monetary Policy on Micro Economy and Private Investment in Nigeria”,
Research Journal of Finance and Accounting, Vol. 2, No. 6: 65 -75
a. Monetary Policy on Micro Economy and Private Investment in Nigeria”,
Research Journal of Finance and Accounting, Vol. 2, No. 6: 65 -75
- 71) Onyeiwu, C. (2012). Monetary policy and Economic growth of Nigeria, *Journal of Economics and Sustainable Development*, 3(7), pp. 62-70.
a. *Economics and Sustainable Development*, 3(7), pp. 62-70.
- 72) Onyido, C. B. (1993). Evolution of the Monetary Policy Framework in Nigeria.
- 73) Orji, C. G. (2006). The effect of monetary policy on price stability in Nigeria. A Research
project submitted to the department of Economics, Faculty of social sciences,
NnamdiAzikiwe University, Awka, Nigeria.
a. project submitted to the department of Economics, Faculty of social sciences,
NnamdiAzikiwe University, Awka, Nigeria.
- 74) Pius, P. I. (2015). The Impact of the Central Bank of Nigeria (CBN) Cashless Policy On
The Banking Sub Sector In Sokoto Metropolis.
a. Banking Sub Sector In Sokoto Metropolis.
- 75) Punita, R. & Somaiya, K. J. (2006). Monetary policy: Its impact on the Profitability of
Banks in India, *International Business & Economics Research Journal*, 5(3).
a. in India, *International Business & Economics Research Journal*, 5(3).
- 76) Ramlett, A. (1969). “On Effectiveness of Monetary Policy”. *American Economic Review*,
a. March pp.500-540

- 77) **Schwartz, O. (1969): Money, income and causality Am. Economics Review pp. 58, 1969.**
- 78) Solomon, O. (2012), "Credit Risk Management as a tool For Bank Survival"
- 79) www.independent.academia.edu/kingsooloo.
- 80) Somoye, Y. & Ilo, T. (2009). "The Management of Monetary and Banking Polices by the
a. CBN." CBN Bullion, Vol. 21(2). pp. 9-26. Lagos.
- 81) Somoye, R. and Ilo, M. (2009a). Inflationary Rigidities and Orthodox Stabilization
Policies.
a. Lessons from Latin America, *World Bank Economic and Financial review*, Vol.
2, pp.1-27, New York.
- 82) Udeh, S. N. (2015). Impact of monetary policy instruments on profitability of commercial
a. banks in Nigeria: Zenith bank experience. *Research Journal of Finance and*
b. *Accounting*, 6 (10), 190-206.
- 83) Udoh, E. B. (2008). Monetary Policy and macroeconomic Management: A simulation
a. Experiment, *Global journal of social sciences*, Vol. 8 (1), pp. 1-12. Nigeria.
- 84) **Umole, J. A. (1985). Monetary and banking systems in Nigeria: *International Journal of*
a. *Business Performance*.**
- 85) **Uzoaga, W. O. (1998). Money and Banking in Nigeria. Enugu: Fourth Dimension
a. Publishers.**
- 86) Victor, O. & Eze, O. R. (2013). Effect of bank lending rate on the performance of
Nigerian
a. deposit money banks. *International Journal of Business and Management*
Review,
b. 1(1), 34-43.
- 87) Warren, K. (2005). Improving strategic management with the fundamental principles of
a. system dynamics, John Wiley Online Library. <https://doi.org/10.1002/sdr.325>
- 88) Waymond, A. G. (2007). Credit Analysis of Financial Institutions, 2nd Ed., Amazon.com
- 89) Zamani, A. (2006) Re-engineering the Malaysian financial system to promote sustainable
a. Growth. BIS Papers No 28, 269 – 276.