

Effect of Monetary Policy on Bank Performance in Nigeria (1988-2015)

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Abstract

The study examines the effects of monetary policy on banks performance in Nigeria. Specifically, it examines the effect of interest rates on deposit money banks profit; it assessed the effect of central bank rate on deposit money banks profit and evaluated the effect of foreign exchange rate on deposit money banks profit. Secondary data was used for the purpose of this paper which was sourced from CBN Statistical Bulletin for the period of 1988 to 2015. Descriptive statistics was used to show the trends of monetary policy variables such as deposit banks interest rates, central banks rates and foreign exchange rates. Ordinary least Square regression was used to examine the impacts of monetary policy variables on deposit money banks' profits. The results show that foreign exchange rates and cash reserves ratio had negative impacts on deposit money banks profit where ($\beta = -0.012172$) and ($\beta = -0.000785$) respectively. Furthermore the results show deposit money banks interest rates had positive and significant impacts on deposit money banks profit ($\beta = 0.528037$). It was concluded that monetary policy affects banks performance in the Nigerian Economy.

Keywords: Monetary Policy, Banks Interest rate, Central bank rates, Foreign Exchange rates, Banks Profit

Date of Submission: 12-09-2022

Date of Acceptance: 28-09-2022

I. BACKGROUND OF THE STUDY

Monetary policy is a policy of economic regulation; it is essentially designed to control the volume, cost, quantity and direction of money and credit in an economy for the purpose of achieving specific macro-economic objectives. It is a deliberate attempt by the monetary authority, that is, the Central Bank, to control the money supply and money demand for the purpose of achieving certain macro-economic objectives. It is also meant to regulate cost of credit in such a way as to affect aggregate demand in a direction that is conducive to healthy balance of payment, price stability, job opportunity and economic growth (Anyanwu, Oyefusi, Oaikhenan and Dimowo, 1997).

Monetary policy consists of the application of certain measures by monetary authorities such as issue of currency, liquidity ratio, monetary policy rates and other credit terms and direct controls with a view to achieving stated economic objectives. According to Keynes (1936) monetary policy is used to control the rate of money supply which has a significant effect on interest rate and vital to economic development. Lipsey (1979) explains that the major effect of monetary policy is the varying supply of bank money. A decrease in the supply of bank money through bank rates imposed by the monetary authorities will have the effect of raising the market interest rates while increase in the supply of bank money through reduction in bank rate will improve the economy.

Generally the broad objectives of monetary policy are essentially to achieve price stability, maintenance of balance of payments equilibrium, promotion of employment growth, output growth and sustainable development both at enterprise level in particular and national level in general. These objectives are necessary for the attainment of internal and external balance, and the promotion of long run economic growth. The importance of price stability derives from the harmful effect of price volatility which undermines these objectives. This is indeed a general consensus that domestic price fluctuations undermines the role of monetary values as a store of value, and frustrate investments and growth of commercial businesses such as banking.

Historically, monetary policy originated from the Classical economists led by Adam Smith (1776) and its model of monetary regulation is theoretically found to be efficacious in managing money demand and supply in an economy. This theory is found to be suitable for regulating the demand and supply of money in an autonomous financial market structure, that is, a market that is absent of government intervention. According to the monetarists, the instruments of monetary policy can be classified into two broad categories. These are direct and indirect instruments. The three tools under this strategy includes: open market operation, legal cash reserve ratio and bank rate. The recent additions to them are special deposit and stabilization security.

The indirect instruments are also referred to as quantitative or traditional techniques. These are meant for quantitative controls as the main objective is to regulate the quantity of money in circulation and the volume of credit that can be created by commercial banking system since these credits constitute part of the money supply. Never-the-less, monetary policy has numerous policy instruments but the essential ones for this study include the following: bank interest rate, bank rate, exchange rate and cash reserve ratio. Generally, these policy instruments are meant to stabilize the financial market to ensure equilibrium between the demand for money and the supply of money in the entire financial market.

Over fifty years that the central bank of Nigeria (CBN) had been established and saddled with the responsibility of ensuring a vibrant and efficient monetary policy to improve both the real sector and the financial sector of the country, it remains doubtful that the monetary policy has engineered the growth of bank performance in the area of profitability and overall transformation of the Nigerian economy. Monetary policy is meant to control the activities of banks and other financial sectors in the economy, and the inflationary rate is very high, commercial bank's profitability is falling resulting to distress and liquidation. As a result the economists have been interested in analyzing the effects of fiscal and monetary policies as means of economic regulation.

II. STATEMENT OF THE PROBLEM

The deposit money banks in Nigeria are in problem to perform profitably well under the central bank (CBN) monetary policy regulation. The reported growth in banks' profits has not been a sustainable and commensurate reward of enterprise as there is the evidence of increasing rate of bank distress, liquidation, merging, total take-over and mass retrenchment of workers due to very poor profit performance in the banking sector of the Nigerian economy. As a result, the problem this study is looking into is the very low, non-steady, non-continuous and non-sustainable profits being realized in the banking sector of Nigeria. This serious problem of poor profit performance has effected badly on the financial sector as follows: Several banks are already distressed, some have merged while some have been bought by bigger banks and the banking sector is presently experiencing massive retrenchment of their workers.

This problem of poor profit performance is traceable to over-regulation by the central bank of Nigeria. To guide against this poor profit making in the banking sector, monetary authorities formulated policy guidelines geared toward enhancing and making effective the policy of regulation to ensure optimal profit performance of the banking sector but this has not yielded positive results. Certain problems are encountered in the implementation of the policy of regulation in the banking sector, these problems, include the following: ability of the banks to comply with the various monetary policy guidelines, for instance, a change in the required reserve ratio is to alter the magnitude of money supply, credit expansion and hence the ability of the banks to make profit. Similarly, the use of interest rate policy, credit ceiling and discount rate policy are meant to alter the level of profits being made by the entire banking sector.

Furthermore, in every fiscal year the monetary authority, that is, the Central Bank of Nigeria (CBN) formulates guidelines geared towards enhancing and developing policy variables designed to ensure optimal performance of the banking industry and advance the macroeconomic objectives. In the implementation of such policy instruments certain conflicting issues should be addressed, this includes the ability of the banks to comply with various monetary policy guidelines and the ability of the banks to satisfy depositors, shareholders and other stakeholders invested interest in the business. In fact, banks are reluctant in their responsibility to comply with the rules and regulations set by the central bank such as the open market operation, required reserve ratio, bank rate, liquidity ratio, exchange rate, bank interest rate selective credit control and moral suasion.

III. CONCEPT OF MONETARY POLICY

Onyido (1999) defined monetary policy as the actions taken by the monetary authorities, usually the central bank, to regulate monetary and other financial variables to influence the availability and cost of credit to achieve the broad objectives of sustainable growth of output, price stability and a healthy balance of payment position. The discretionary control of the money stock to him involves the expansion or contraction of money supply depending on the prevailing economic conditions. He went further by classifying the instrument of monetary policy into two broad categories, that is, direct and indirect instruments. Under a system of direct monetary control, the central bank uses some criteria to determine monetary, credit and interest rate targets that would achieve the goal of economic policy. In a regime of indirect monetary control, the monetary base, specifically bank reserve, is managed while the market is left to determine interest rate and credit allocation. The central bank of Nigeria CBN (2006) defines monetary policy as that which deals with the terms and conditions under which money and credit are provided to the economy by the monetary authority. The term monetary policy include all actions of the government, central bank and public authorities that influence the quantity of money and bank credit, thus it includes policy relating to choice of the nation's monetary standard,

determination of monetary unit in terms of metal or foreign currencies, determination of the types and amount of the government owned monetary issue.

Furthermore CBN (2006) defined monetary policy as a measure taken by the monetary authority to influence directly or indirectly or both the supply of money and credit to the economy and the structure of interest rates with a view to achieving a sustainable rate of economic growth, price stability and balance of payment equilibrium. Although monetary policy has been conducted under a wide range of economic environments, the strategy has remained the same. Monetary and banking activities in Nigeria and elsewhere are interwoven in several ways, such as follows: they tend to have profound influence on the performance of each other, their activities are often controlled in the same process (through the same instruments) and finally, they are often regulated by the same authority. Monetary policy is a device for controlling the activities of banks and other financial sectors in the economy, but in spite of the key position this control occupies in the economy, care had not been taken to really exploit the trend of events in the economy so as to come up with the appropriate regulation and deregulation policy. Akanbi and Ajagbe (2012) conceptualize monetary policy as an instrument given to the central bank of Nigeria by the Federal government as a function which is a documentary policy to control aggregate demand in the circulation or cost. The policy is to see to the stability in wages and prices of goods and services. It is also necessary to control the volume of money in circulation and to give the domestic money a value via other controls. In the monetary policy there are many tools used in the central bank of Nigeria to achieve the overall objective.

IV. THEORETICAL FRAMEWORK

4.1 The Classical Quantity Theory of Money

Iving Fisher (1926) propounded the quantity theory of money, this theory adopted the cash transaction approach. The Classical quantity theory of money states that the quantity of money is the main determinant of the price level or the value of money. Any change in the quantity of money produces exactly proportionate change in the price level. As the quantity of money in circulation increases the price level also increases in direct proportion and the value double and the value of money will be one half. On the other hand if the quantity of money is reduced by one half, the price level will also be reduced by one half and the value of money will be twice.

Fisher (1926) gave the mathematical expression of his theory in terms of his equation of exchange, that is $PT = MV + M^1V^1$ where P – Price level, $1/P$ = the value or price of money, M = the total quantity of legal tender money, V = the velocity of circulation of money, M^1 = the total quantity of credit money, V^1 = the velocity of circulation of money and T = the total amount of goods and services exchanged for money or transactions performed by money. The equation equates the demand for money (PT) to supply of money $MV = M^1V^1$.

4.2 The Keynesian Monetary Theory

Keynesian monetary theory was named after a famous economist Keynes (1936). Keynes formulated monetary theory that focused on output rather than on prices. In his book, the general theory of employment, interest and money published in (1936), he contended that a change in money supply does not have direct and proportional effect on prices. He therefore formulated a theory, which shows an indirect and non-proportional relationship between the quantity of money supplied and market prices, that is, the interest rate. In summary, Keynes's contention is that when there is full employment, prices will change in the same proportion with the quantity of money supplied but as long as there is unemployment, output will change in the same proportion as the quantity of money.

4.3 The Monetarist New Quantity Theory

The monetarist new quantity theory stresses that the demand for money is a stable function of many variables and that money supply is the most important determinant of interest rate, income (Output), employment and prices. The monetarists contend that all changes in money income can be traced to changes in the supply for or demand for money. The monetarists essentially hold a common view point on monetary issues but the central point in all their views is that money matters in economic activities and as such, monetary policy is a more reliable economic stabilization measure than fiscal policy.

4.4 The Theory of monetary Transmission Mechanism

The monetary transmission mechanism refers to the mechanisms by which changes in the supply of money create changes in income and in the general price level. The transmission mechanisms of monetary policy through the various channels to the rest of the economy have been broadly examined under the monetarist and Keynesian theoretical framework. Both the Keynesians and the monetarists base their theories of the transmission mechanism on the portfolio approach.

The monetarist transmission mechanism is based on portfolio adjustment process in which changes in money supply lead to substitution of assets and changes in their prices, which ultimately impact on investment, consumption, income and inflation. Milton Friedman has stated that the second best measure of monetary policy is the money supply rather than the new narrowly defined market rates of interest considered by the Keynesians.

The monetarist transmission process is clearly described by Friedman and Schwarts (1963) as follows: suppose the money supply increases as a result of open market operation by the central Bank (purchases of securities), the stock of money. Increase, which also means increase in reserves for deposit money bank and more ability to create credit and hence, increase the money supply through the multiplier effect.

V. EXPERIENCE OF MONETARY POLICY IN NIGERIA

Monetary policy in Nigeria in the year 2013 aimed primarily at sustaining the already moderated rate of inflation which was achieved in the first half of 2013. The inflation rate of 8.0 percent by December 2012, fell to 8.4 percent by the end of June 2013, this is an evidence of the effectiveness of the policy. Besides, monetary policy also aimed at limiting pressure on the exchange rate, boosting the external reserves potion, sustaining stability in the money market and reducing the spread between lending and deposit rates. These goals were largely achieved through the use of a number of instruments, which helped to strengthen investors' confidence in the economy.

The monetary Policy Rate (MPR) was the principal instrument used to control the direction of interest rates and anchor inflation expectations in the economy. The other intervention instruments included Open Market Operations (OMO), Discount rate, Cash Reserve Ratio (CRR) and Foreign Exchange rate. Open Market Operations (OMO) was the major tool for liquidity management, this is achieved through the issuance of CBN bills. The sale of CBN bills declined by 52.8 percent in the second half compared with the first half. In the second half, the volume of transactions of the standing lending facility rose by 30.66 percent, while that of standing deposit facility rose by 53.6 percent, compared with the first half.

The Monetary Policy Committee (MPC) held six regular meetings during the review period, and the MPR was successively maintained at 13.0 percent with a symmetric corridor of +/-200 basic points. The MPC introduced a higher cash reserve ratio (CRR) for public sector deposits with the deposit money banks (DMBs), in order to further tighten money supply. Beside the change in the CRR on public sector deposits, other existing policies were retained, and complemented with administrative measures. The net open position (NOP) limit was sustained at 1.0 percent, Liquidity ratio (LR) at 30.0 percent and the mid-point of the exchange rate at N155/US\$ +/-30 percent. The decision of the MPC to retain most of the existing measures was to assure the market of the continuity of the tight monetary policy regime. Monetary policy continued to contribute significantly to the robust performance of the economy after the shock of the global financial crisis in 2008 (on the one hand and the domestic banking crisis of 2009 on the other). In spite of these developments, output remained relatively high while inflation decelerated in 2013.

Most measures of inflation moderated throughout the period in response to the policy measures implemented by the Bank. Year-on-year headline inflation decreased to 8.0 percent in December 2013, from 8.4 percent in June 2013 and 12.0 percent in December 2012. Food inflation also declined marginally to 9.3 percent from 9.6 percent over the same period. However, core inflation rose from 5.5 percent to 7.9 percent between June and December 2013.

Table 1.1: Summary of empirical literature

S/N	Authors and years	Research topics	Models used	Theories	Countries	Empirical result
1.	Punita and Somaiya (2006)	Monetary policy and bank profitability	Regression	Liquidity ratio theory	India	Interest rate has positive and significant influence on bank profitability while bank rate, cash reserve ratio and liquidity ratio have significant and negative effects on banks' profitability
2.	Echekoba, Egbunike and Ezu (2012)	Determinanats of bank profitability	Camel model	Profitability theory	Nigeria	Liquidity has a significant effect on bank profitability while capital adequacy, asset quality and management efficiency did not
3.	Akanbi and Ajagbe (2012)	Monetary policy and commercial banks profitability	Regression model	Profitability theory	Nigeria	An increase in interest rate led to a decrease in bank profit while liquidity ratio and cash reserve ratio are statistically significant to the profit of the selected banks
4.	Andrew and Osuji (2013)	Liquidity management and	Descriptive Statistics	Liquidity management	Nigeria	There is significant relationship between efficient

		banking sector performance		theory		liquidity management and banking performance.
5	Ongeri (2013)	Exchange rate and the performance of the commercial banks	Descriptive Statistics	Exchange rate theory	Kenya	Exchange rate has positive and significant effect on bank performance
6.	Tomola (2013)	Interest rate and bank profitability	Regression Model	Interest rate theory	Nigeria	Interest rate contributes to higher bank performance and growth
7.	Ogunbiyi and Iherijika (2014)	Interest rate and deposit money bank	Multivariate regression Analysis	Interest rate theory	Nigeria	Real interest rate and cash reserve ratio have negative and significant effects on profitability
8	Udeh (2015)	Monetary policy instruments and profitability of commercial banks	Pearson product movement correlation	Cash reserve ratio and bank rate theories	Nigeria	Cash reserve ratio, liquidity ratio and interest rate did not have significant effect on the profit before tax while bank rate has significant effect on the profit before tax of the banks.

VI. RESEARCH METHODOLOGY

6.1 Study Area

The study area is Nigeria, located in West Africa and it is a member of the Commonwealth of Nations. The economy of Nigeria is one of the fastest growing in the world. It is the largest second economy in Africa and is regional power that is prominent in West Africa. Nigeria has a very vibrant financial sector with numerous types of sophisticated banks including deposit money banks with a network of twenty banks operating in the system.

6.2 The Study Population

The study population includes all deposit money banks operating in the financial sector of Nigeria. presently there are twenty (20) deposit money banks operating in the Nigerian economy as at the duration of this study. The number twenty is a post deregulation figure of 1988. The analysis is in the appendix: The deposit money banks are arranged in alphabetical order. Some of these banks are listed on the stock exchange while the rest are not.

6.3 Source of Data and Data collection techniques

The study employed the use of secondary data. Time series data were obtained from 1988 to 2015, that is, a period of twenty-eight years. These data are sourced from CBN Statistical Bulletin of various editions. Data are sourced on the various variables of the study. These variables includes: (i) Deposit money bank's profit (DMBP), the values for this variable were obtained from the balanced sheet of all Deposit money banks in Nigeria as contained in the CBN statistical bulleting of the year 2014, They constituted the dependent variable of the study while (ii) Central Bank rate (CEBR), (iii) Deposit money bank interest rate (DMBI), (iv) Foreign exchange rate (FOREX). Constituted the independent variables of the study, their values are sourced from the financial sector ratios in CBN statistical bulletin of various editions.

6.4 Techniques of Data Analysis

The methods of analysis used are descriptive statistics and regression analysis. The descriptive statistics is used to summarize the various data of the study while multiple regression analysis is employed to build the model of the study of the study and analyze the data. To estimate the relationship between monetary policy and deposit money banks' profit the following statistical criteria were observed: (i) **Student 't' test**; (ii) **Coefficient of determination (R^2)**; (iii) **Adjusted (R^2)**, It explains goodness of fit and gives allowance for degree of freedom. It determines the one to one relation between the adjusted (R^2) and the residual variance. (iv) **F-test**; It is an improvement over the (t) ratio. It is a test of overall significance of the independent variables taken together and the dependent variable. (v) **Durbin Watson Statistics (DW)**; The (DW) is interpreted to mean that any regression with significance of auto correlation means that the successive data in the series are dependent on one another and that some of the variables used in explaining the dependent variable are too related to the dependent variable.

6.5 Models' Specification and Measurement of Variables

Models of deposit money banks' profit is formulated using statistical technique. These models of deposit money banks' profit are adapted from the Classical regression model (Damoda, 1995). The procedure is as follows: deposit money banks' profit is a function of monetary policy instruments. The weighted average of

net profit after tax and interest (NPATI) of all Deposit money banks in Nigeria is used as a proxy for deposit money banks' profit (DMBP). The following stand proxy for the monetary policy instruments; Central bank rate (CEBR), deposit money banks interest rate (DMBI), Foreign Exchange Rate (FOREX), Three models are built to capture the objectives of the study, they are single equation models establishing the short run relationship between the dependent and independent variables of the study.

Model 1:

Model regressing DMBP on CEBR, that is, $DMBP = g(CEBR)$

The functional dimension is $DMBP = b_0 + b_1 CEBR + U_i$

Model 2:

Model regressing DMBP on CBIR, that is, $DMBP = g(CBIR)$

The function dimension is $DMBP = b_0 + b_1 CBIR + U_i$

Model 3:

Model regressing DMBP on FOREX, that is, $DMBP = g(FOREX)$

The functional dimension is $DMBP = b_0 + b_1 FOREX + U_i$

The structural equation for the study is as follows:

$$DMBP = b_0 - b_1 CEBR - b_2 DMBI - b_3 FOREX + U_i$$

While the logarithmic transformation is as follow:

$$\ln DMBP = b_0 - b_1 \ln CEBR - b_2 \ln DMBI - b_3 \ln FOREX + U_i$$

The a-priori expectations of the model are specified as follows:

- (i) $F_{CEBR} < 0$ i.e. $b_1 < 0$
- (ii) $F_{DMBI} < 0$ i.e. $b_2 < 0$
- (iii) $F_{FOREX} < 0$ i.e. $b_3 < 0$

Where F_{CEBR} = Partial derivative of deposit money banks' profit with respect to central bank rate.

F_{CBIR} = Partial derivative of deposit money banks' profit with respect to foreign exchange rate.

The variables of the study are defined as follows:

DMBP = Deposit money banks' profit

CEBR = Central bank rate

DMBI = Deposit money bank interest Rate

FOREX = Foreign exchange rate

U = Stochastic error term.

Table 6.1 Measurement of variables and analysis of objectives

S/N	Objectives of the study Method of analysis	Dependent variable	Independent variable
i.	To examine the effect of deposit money bank interest Simple-regression	DMBP	DMBI
ii.	Rate (DMBI) on deposit money banks' profit (DMBP) To assess the effect of central bank rate (CEBR) on Simple-regression	DMBP	CEBR
iii.	Deposit money banks' profit (DMBP) To evaluate the effect of foreign exchange rate (FOREX) Simple-regression On deposit money banks' profit (DMBP)	DMBP	FOREX

Source: Author's compilation (2022)

7. DATA ANALYSIS AND INTERPRETATION

7.1 Analysis of Descriptive Statistics And Simple Regression For The Study Objectives:

Table 7.1.1 Analysis of descriptive statistics for objective 1

Parameters	DMBI
Mean	6.227143
Median	4.190000
Maximum	16.66000
Minimum	1.410000
Std. Dev.	4.76350
Skewness	1.164969
Kurtosis	2.899317
Jarque-Bera	4.758904
Probability	0.092601
Sum	130.7700
Sum Sq. Dev.	453.8854.

Source: Author's survey (2022)

Table 7.1.2: of Analysis of Simple regression for objective 1
Dependent Variable: DMBP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3906.904	2053.136	1.902896	0.0709
CEBR	-182.6783	145.6795	-1.253974	0.2236
R-squared	0.695662	Mean dependent var		1443.209
Adjusted R-	0.625361	S.D. dependent var		2895.541
S.E. of regression	2858.588	Akaike info criterion		18.83698
Sum squared resid	1.72E+08	Schwarz criterion		18.83698
Log likelihood				

7. 11 Interpretation of Descriptive Statistics and Simple Regression for Objective 1

The result of the analysis above indicates that (DMBI) has a negative and insignificant impact on (DMBP), this can be seen from the value of the coefficient of (DMBI) of (-222.48) and a probability value of (0.09) which is higher than (0.05). The result of the (R^2) and that of (Adj. R^2) of (0.53) and (0.50) respectively indicates that the line of best fit are properly fitted. It also implies that (52%) of the variation in (DMBP) is attributed to variation in independent variable of the model. An increase (DMBI) will lead to a decrease in DMBP, though the level of decrease within the period under study is insignificant.

Table 7.2.1: Analysis of descriptive statistics for objective 2

Parameters	CEBR
Mean	13.61619
Median	13.50000
Maximum	26.00000
Minimum	6.130000
Std. Dev.	4.364338
Skewness	0.796193
Kurtosis	4.448477
Jarque-Bera	4.054558
Probability	0.131693
Sum	285.9400
Sum Sq. Dev.	380.989.
Observations	21

Source: Author's survey (2022)

Table 7.2.2: of Analysis of Simple regression for objective 2

Dependent Variable: DMBP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3906.904	2053.136	1.902896	0.0709
CEBR	-182.6783	145.6795	-1.253974	0.2236
R-squared	0.695662	Mean dependent var		1443.209
Adjusted R-	0.625361	S.D. dependent var		2895.541
S.E. of regression	2858.588	Akaike info criterion		18.83698
Sum squared resid	1.72E+08	Schwarz criterion		18.83698
Log likelihood				

7.22 Interpretation of descriptive statistics and simple regression for objective 2

The result of the analysis above indicates that Central Bank Rate (CEBR) has a negative and insignificant impact on (DMBP), this can be seen from the value of the coefficient of (CEBR) of (-18.268) and a probability value of (0.22) which is greater than (0.05). The result of the (R^2) and that of ($-R^2$) of (0.70) and (0.63) respectively indicates that the line of best fit are properly fitted. It also implies that (70%) of the variation in (DMBP) is attributed to variation in independent variation included in the model. An increase in (CEBR) will lead to a decrease in DMBP, though the level of decrease within the period under study is not significant.

Table 7.3.1: Analysis of descriptive statistics for objective 3

Parameters	FOREX
Mean	92.19048
Median	116.0000
Maximum	158.0000
Minimum	9.000000
Std. Dev.	55.37564
Skewness	-0.487186
Kurtosis	1.524600
Jarque-Bera	2.735429
Probability	0.254688
Sum	1936.000
Sum Sq. Dev.	61329.24
Observations	21

Source: Author's survey (2022)

Table 7.3.2: Analysis of simple regression for objective 3

Dependent Variable: DMBP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1145.810	1078.913	-1.062005	0.3003
FOREX	-26.31350	9.553235	2.754407	0.0119
R-squared	0.653945	Mean dependent var		1443.209
Adjusted R-	0.630413	S.D. dependent var		2895.541
S.E. of regression	2540.145	Akaike info criterion		18.60077
Sum squared resid	1.35E+08	Schwarz criterion		18.69951
Log likelihood	-211.9089	Hannan-Quinn criter	18.62560	
Prob(F-statistic)	0.011882	Durbin-Watson stat	1.514181	

Source: Author's survey (2022)

7.33 Interpretation of descriptive statistics and simple regression for objective 3

The result of the analysis above indicates that Foreign Exchange Rate (FOREX) has a negative and insignificant impact on (DMBP), this can be seen from the value of the coefficient of (FOREX) of (-26.31) and a probability value of (0.26) which is greater than (0.05). The result of the (R^2) and that of (Adj. (R^2)) of (0.65) and (0.63) respectively indicates that the line of best fit is properly fitted. It also implies that (65%) of the variation in (DMBP) is attributed to variation in independent variation of the model. An increase in FOREX will lead to a decrease in (DMBP) and that the level of increase within the period under study is not significant.

VII. CONCLUSION

In compliance with the objective of the study, the paper has been able to investigate the impact of three monetary policy variables such as central bank rate, bank interest rate, and foreign exchange rate on banks performance. It identified that the management and operations of monetary policy in Nigeria affect banks performance.

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APPENDIX

S/N	Names of banks	Number of Branches	Status of banks
1	Access bank PLC	310	Listed
2	City bank Nigerian limited	13	Listed
3	Diamond bank Nigerian PLC	194	Listed
4	Eco bank Nigerian PLC	133	Listed
5	Enterprise bank limited	180	Not listed
6	Fidelity bank PLC	166	Listed
7	First bank of Nigeria PLC	650	Listed
8	FCMB	310	Listed
9	GTB bank	191	Listed
10	Key stone bank limited	250	Not listed
11	Main street bank limited	204	Not listed
12	Sky bank PLC	160	Listed
13	Stanbic-IBTC bank PLC	56	Listed
14	Standard chartered bank Nigeria PLC	18	Not listed
15	Sterling bank PLC	177	Listed
16	Union bank of Nigeria	382	Listed
17	United bank for Africa	600	Listed
18	Unity bank PLC	241	Listed
19	Wema bank PLC	127	Listed
20	Zenith bank PLC	340	Listed

OlubunmiIkeolape OLAIFA Ph.d. "Effect of Monetary Policy on Bank Performance in Nigeria (1988-2015)." *International Journal of Humanities and Social Science Invention (IJHSSI)*, vol. 11(09), 2022, pp 142-150. Journal DOI- 10.35629/7722