

EFFECT OF MONETARY POLICY MANAGEMENT ON PERFORMANCE OF NIGERIA'S ECONOMY

Etebong Attah Umama

Department of Business Management, Faculty of Management Sciences, Ebonyi State University, Abakaliki.

Email: etebongumana@gmail.com

Nancy Chinwe Agha

Department of Business Management, Faculty of Management Sciences, Ebonyi State University, Abakaliki.

Email: nanciagha@gmail.com

and

Christian Ikechukwu Ezugwu

Department of Accountancy, Faculty of Management Sciences, Ebonyi State University, Abakaliki.

Email: iykrydz2001@yahoo.com

Abstract

This study examined the effect of Monetary Policy Management on the Performance of Nigeria Economy. An ex-post facto research design was adopted for the study. Time series data were collected from the CBN Statistical Bulletin using desk survey method from 1985-2017. The data were analyzed using Ordinary Least Square multiple regression statistical technique. Money supply had a positive and significant relationship with the performance of Nigeria's economy, issuance of treasury bills had an inverse and insignificant relationship with the performance of Nigeria's economy, monetary policy rate had an inverse and insignificant relationship with the performance of Nigeria's economy and finally exchange rate had a positive and significant relationship with the performance of Nigeria's economy. Based on these findings, the paper therefore, recommends that the CBN monetary policy should be structured in such a way that businesses and indeed the banking sector will be impacted positively by these policies. Finally, government through the CBN, should regulate money supply in a manner that will not hamper the growth of the economy.

Keywords: Monetary policy, Management, Performance, Economy.

INTRODUCTION

Monetary policy includes a number of policies by which a country controls its money stock so as to achieve microeconomic goals. It is a major economic stabilization tool which involves measures designed to regulate and control the volume, cost, availability and directions of money and credit in an economy with the aim of achieving some specific objectives (Anyanwu 1993). It involves all actions taken by monetary authorities to affect the monetary base through influencing the availability and cost of credit in pursuance of sustainable growth of output, price stability and a healthy balance of payment position (Iyoha & Oriakhi 2002).

According to Ahuja (2013), the objectives of monetary policy include price stability, maintenance of balance of payment equilibrium, employment creation, output growth and sustainable development. While the objective of monetary policy includes price stability, full employment and growth, targets of monetary policy refer to the variables such as supply of

money or bank credit, interest rates which are sought to be changed through the monetary policy instrument such as open market operation and selective credit control, and others, so as to attain the laid out objectives.

The choice of what monetary policy instruments and the degree of application is partly dependent on the prevailing circumstances within the economy. For instance, during economic boom, a contractionary monetary policy could function predominantly. However, where there is perceived depression or pessimism within the economy, the expansionary monetary policy gets uncovered. As posited by Nzotta and Okereke (2009), the success of the monetary policy in an economy depends on the operating economic environment, the institutional framework and the level of its implementation with a view that there is a stable relationship between the quantity of money in an economy and her economic activities. The principal aim being to make sure that there is a balance between money supply and the growth rate of the economy without committing errors.

The manipulation of monetary policy through money supply and interest rate is done by the CBN through the use of monetary policy instruments which include Minimum Rediscount Rate, Open Market Operations (OMO), Cash Reserve Requirement, Liquidity ratio, among others (Ajudua, Davis & Osmond, 2015). Depending on the aim, the central bank reduces or increases the monetary policy rate if the aim is to increase or reduce liquidity and investment, while the commercial banks in turn, increasing or reducing the interest rate charged to borrowers so as to attract borrowing at low interest rate or wade them off. Open market Operations also involves the buying and selling of treasury bills, treasury certificate, commercial papers, and others, by the CBN so as to determine the level of money in circulation (Ajudua, Davis & Osmond, 2015). The reserve requirement also known as the reserve ratio requires the commercial banks to put a little fraction of their reserve behind their demand and time deposit liabilities. This can be manipulated to reduce the ability of the commercial banks to make loans to the public by simply increasing the ratio and enhancing their lending position by reducing the rate (Jhingan, 1997).

The qualitative instruments are tools not directed to the use of credit, but are used in discriminating different uses of credit (Ajudua, Davis & Osmond, 2015). They are guidelines or administrative order given by the central bank to guide the activities of commercial bank while moral suasion involves the use of friendly but persuasive instructions by the central bank to persuade commercial banks to adopt a particular policy and operate in a particular direction for the realization of specified government objectives (Gbosi, 2005). Monetary policy thus becomes an indispensable and inevitable tool in controlling the growth and stability of the banking sector in general.

The inability of monetary policy to enhance the banking sector's performance has been blamed on corruption, diversion of borrowed funds, lack of integration of macroeconomic plans, inept policy implementation, financial hoarding and illiteracy as well as lack of economic potential for rapid economic growth and development. This has led to adverse inflationary trend, undulating foreign exchange rates, fall and rise of gross domestic product, unfavourable balance of payments and over reliance on oil revenue. Other reasons for ineffectiveness of monetary policy include policy reversal, poor sectorial output and arbitrary interest charges on loans and low compensation on deposits. This has further increased the leakage of funds from

the financial sector, rendering monetary policy impotent to control the output and activities of the economy in general and banking sector in particular. In view of the above, one begins to wonder if monetary policy has any significant effect on banking activities and the Nigerian economy in general. This therefore is the target of this study, to investigate the effect of monetary policy on banking performance amidst the numerous challenges in Nigeria.

The following research questions have been formulated to guide the study:

1. To what extent does money supply affect the performance of Nigeria economy?
2. How does the issuance of treasury bills affect the performance of Nigeria economy?
3. To what extent does monetary policy rate exert on the performance of Nigeria economy?
4. To what extent does exchange affect the performance of Nigeria economy?

The broad objective of this study is to examine the effect of monetary policy management on the performance of Nigeria economy. The specific objectives include:

1. To examine the extent to which money supply affects the performance of Nigeria economy;
2. To determine the extent to which issuance of treasury bills affect the performance of Nigeria economy;
3. To ascertain the effect of monetary policy rate on the performance of Nigeria economy; and
4. To assess the effect of exchange rate on the performance of Nigeria economy.

The following null hypotheses have been formulated for the study:

- H₀₁:** Money supply does not significantly affect the performance of Nigeria economy.
H₀₂: The issuance of treasury bills has no significant effect on the performance of Nigeria economy.
H₀₃: Monetary policy rate does not have any significant effect on the performance of Nigeria economy.
H₀₄: Exchange rate does not have any significant effect on the performance of Nigeria economy.

LITERATURE REVIEW

Monetary policy management is the process by which the central bank or monetary authority controls money supply, availability of money and the cost of money or rate of interest. Monetary policy is used to attain set of objectives geared towards the growth and stability of the economy. These goals usually involve stable price and low unemployment. Monetary theory provides insight into how to craft optional monetary policy. Monetary policy is a major economic stabilization weapon which involves measures designed to regulate and control the volume, cost, availability and direction of money and credit in an economy to achieve some specified macroeconomic policy objectives. In other words, it is a deliberate effort by the monetary authority to control the money supply and credit conditions for the purpose of achieving certain broad economic objectives.

Shaw (1977) defines monetary policy as any conscious action undertaken by the monetary authorities to change the quantity, availability or cost of money. In Nigeria, monetary policy is designed to attain price stability balance of payment equilibrium and high rate of economic

growth. The central Bank of Nigeria (CBN) ensures that the nation attains price stability and balance of payment equilibrium. Slavin (1991) defined monetary policy as the use of open market operations, change in discount rate, change in reserve requirement and other measures available to the monetary authorities to control the rate of growth of money supply. The author further noted that the goals of monetary policy are price stability, relatively full employment and satisfactory rate of economic growth.

Akpakpan (1994) sees monetary policy measures as a deliberate action adopted by the government to regulate and control the supply of money so as to promote the achievement of national objectives. According to Umole (1986) monetary policy is the control of supply of money as an instrument in achieving the objectives of a general economic policy. The scholar goes further to state that it is a policy which deals with the discretionary control of money supply by monetary authorities in order to achieve stated or desired economic goals. He points out that monetary policy involves measures which the government adopts using specific instruments to stimulate the economy so as to attain the desired objective which may include increased output in the industry, agriculture or other sector of the economy, employment generation, control of inflation, balance of payment and mobilization of savings.

To Anyanwu (1993) monetary policy is a government policy about money. It is a deliberate manipulation of cost availability of money and credit by one government as a means of achieving the desired level of prices, employment, output and other economic objective.

During the independent era in the 1960s, with the creation of the CBN, the monetary issues that needed prompt attention were the issue of the Nigerian currency, the establishment of a strong financial base and the promotion of domestic financial infrastructure such as the money and capital market institution and instruments. This led to the introduction of the first Nigerian money market instrument-the Treasury bill and the establishment of the Lagos stock exchange. Between 1964 and 1966 the defence credit expansion policy adopted in 1962 which subsequently led to increase in the demand for imports causing a drain on the foreign reserve. Policy instruments such as discount rate control, interest rate and moral suasion were used to reverse the trend with a ceiling of 15% imposed on commercial banks credit and granting credit to finance imports and construction were restrained, minimum rediscount rate was rate from 4% to 5% in 1965. Thus, a restrictive monetary policy was pursued in Nigeria during this period (Gbosi 2005).

With the end of the civil war in 1970, which disrupted economic activities and an upsurge in wages due to revenues from the oil boom, inflationary measures were introduced with the aim of reducing commercial bank's liquidity and also, encourage the channelling of greater credit to productive sector. Consequently, the monetary authority imposed quantitative interest rate and stabilization securities and advocated sectorial preference to agricultural sector, manufacturing sector and construction sector (sectors that will revamp the economy) with a below market lending rate. Loans and advances to these sectors were fixed at 30 to 40 percent of bank aggregate loans and advances in the early 1980s, but was reduced by 7% in 1985 while the number of sectors attracting credit was above 18% in the 1970s to 4% in 1986 (Nwaru, 2014).

With the deregulation of the economy through the adoption of the Structural Adjustment Programme (SAP), monetary policy in the era aimed at stimulating output and employment, promote domestic and external stability through a market oriented financial saving and -- efficiency resources allocation. The SAP strategy involved the deregulation of the financial system to accomplish a market oriented financial system characterized by the free entry and free exit to bank and the use of indirect instruments for monetary control that would support efficient financial intermediation so as to increase competition, strengthen the supervisory and regulatory capacity of the CBN, improve the financial structure and redress the financial repression already identified (Oke,1995). However, some direct control measures were maintained and new ones introduced to check excess liquidity. For instance, stabilization securities were introduced in 1990. Similarly, Special Treasury Bill (STBs) were also introduced in April 1999 and discontinued before the end of 2000. Specifically, under the SAP regime, the objective of monetary policy has been the stimulation of output and employment and the promotion of domestic and external sector stability while ensuring price stability and inflation control.

Types of monetary policy management refer to action of the central bank to control money supply. The type of monetary policy can either be expansionary policy, or a contractionary policy.

Expansionary Monetary Policy is a set of actions by the monetary authority to increase money supply in the economy. It is conventionally used to stimulate economic activity, usually in a recession.

Contractionary Monetary Policy is a set of action by the monetary authority which seeks to reduce the level of money supply in the economy. It is conventionally used to reduce inflationary pressure in the economy. According to CBN (2011), the Central Bank of Nigeria like other Central banks in developing countries, sought to achieve price stability through the management of money supply. Several factors influence the supply of money, some of which are within the control of the Central Bank, while others are outside its control. For many countries, the objectives of monetary policy are explicitly stated in the laws establishing the Central Bank, while for others they are not. There are two main views of monetary policy objectives. The first view calls for monetary policy to achieve price stability, while the second view seeks to achieve price stability and other macroeconomic objectives. In Nigeria, the major objectives of monetary policy are the attainment of price stability and sustainable economic growth. Other objectives include:

Price Stability- Inflation or deflation is common in most economy; it can also be called price instability. Thus, monetary policy management always tries to keep the value of money stable. It helps in reducing the income and wealth inequalities. When the economy suffers from recession the monetary policy should be an “easy money policy” but when there is inflationary situation there should be a “tight money policy”. Price stability is desirable because a rising price level creates uncertainty in a given economy. It also makes it difficult to plan for the future.

Rapid Economic Growth is the most important objective of a monetary growth by controlling real interest rate and its resultant impact on investment. If the CBN opts for a cheap and easy credit quality by reducing interest rate, the investment level in the economy can be encouraged. This increased investment can speed up economic growth. Faster economic growth is possible if the monetary policy succeeds in maintaining income and price stability.

Exchange Rate Stability is the price of home currency expressed in terms of any foreign currency. If the exchange rate is very volatile leading to frequent ups and downs, the international community might lose confidence in an economy. The monetary policy aims at maintaining the relative stability in the exchange rate. With increasing importance of the global market, the value of a country's currency relative to other currencies becomes a major consideration for the monetary authorities.

Interest Rate Stability is desirable because fluctuation in interest rate can create uncertainty and make it harder for investors to plan for the future. Upward movement in interest rate create hostility towards the monetary authorities.

Full Employment: The concept of full employment was much discussed after Keynes's publication of the "General Theory" in 1936. It refers to absence of involuntary unemployment. In simple words "Full Employment" stands for a situation in which everybody who wants a job gets a job. However, it does not mean that there is zero unemployment. This is a worthy goal for two basic reasons; first, the alternative, high unemployment causes much human misery, with affected families suffering financial distress, loss of personal self-respect and increase in crime. Secondly, when unemployment is high, the economy not only has idle workers but also idle resources. For important economic implications, the goal of high employment does not seek for an unemployment level of Zero, but rather, a level above zero that is consistent with full employment at which the demand for labour equals the supply of labour. This level of unemployment is referred to as the natural rate of unemployment in economic terms.

Stability of Financial Market: One of the major functions of the monetary authorities is to promote a stable financial system. One of the ways the Central Bank can promote stability in the financial system is by helping to prevent financial panic, through its role as the lender of last resort. The stability of financial market can also be promoted by interest rate stability since fluctuation of interest rate creates uncertainty for financial institutions.

The following are the factors that inhibit effective monetary policy implementation in Nigeria as listed by Mengesha and Holmes (2013).

Fiscal dominance: The growing fiscal expansion with corresponding large fiscal details has militated against the efficiency of monetary policy in Nigeria. Government fiscal operations, especially the inflationary financing of large budget deficits and the monetization of deficits have continued to pose serious challenges to monetary management.

Poor data quality: The poor data quality is a major constraint in the formulation of monetary policy in Nigeria. The lack of high frequency and reliable data renders econometric analysis

difficult. Similarly, fiscal shocks give rise to parameter uncertainty which also undermines the setting of accurate targets.

Inefficient payment system: The instrument of payment in Nigeria is still predominantly cash based. The dominant use of cash for transactions increase the monetary base (high powered money), which renders monetary control difficult. Cash based payment system distorts the transmission mechanism of monetary policies.

Poor Banking Habits: majority of Nigerians still prefer handling cash outside bank due to daily frequent challenges with the banks. These very poor banking habits make it difficult for the Central Bank of Nigeria to control such money outside the banking system.

There are number of literature studies identified that highlighted the effects of monetary policy management on organizational performance. Onyeiwu (2012) studied the effect of monetary policies on selected macroeconomic variables GDP, inflation rate and balance of payment between 1981 and 2008. Using the ordinary least squares method, his findings show that monetary policy exerts a positive impact on GDP growth and Balance of Payment but negative impact on rate of inflation

Olweny and Chiluwe (2012) explores the relationship between monetary policy and private sector investment in Kenya by tracing the effect of monetary policy through the transmission mechanism to explain how investment responded to change in monetary policy. The study utilizes quarterly macroeconomic data from 1996 to 2009 and the methodology draws upon unit root and co-integration testing using vector error correction model to explore the dynamic relationship of short-run and long-run effects of the variables due to an exogenous shock. The study showed that monetary policy variables of government domestic debt and treasury bill rate are inversely related to private sector investment, while money supply and domestic savings have positive relationship with private sector investment consistent with the IS-LM model. Based on the empirical results the study suggests that tightening the monetary policy by 1% has the effect of reducing investment by 2.63% while the opposite loose monetary policy tends to increase investment by 2.63%.

Udeh (2015) examined the impact of monetary policy instruments on profitability of commercial banks in Nigeria using the Zenith Bank Plc. The study utilized descriptive research design using time series data collected from published financial statements of Zenith Bank Plc and central Bank of Nigeria Bulletin from 2005 to 2012. The study used Pearson Product Moment Correlation techniques to analyze the data collected while t-test statistic was employed in testing the hypotheses. They discovered that cash reserve ratio, liquidity ratio and interest rate did not have significant impact on the profit before tax of the bank. The paper concluded that a good number of monetary policy instruments do not impact significantly on profitability of Commercial Banks in Nigeria.

Enyioko (2012) examined the performance of banks in Nigeria based on interest rate policies of the banks. The study investigated 2 Nigerian banks. Regression and error correction methods were used to analyze the relationship between interest rate and bank performance. The study

found that interest rate policies have not improved the overall performance of the banks significantly.

Alper and Anbar (2011) investigated bank specific and macroeconomic determinants of commercial bank profitability in Turkey over the period of 2002-2010. The study uses both return on asset (ROA) and return on equity (ROE) as proxy for bank profitability. By employing balanced set of panel data and fixed affect model, the result shows that only real interest rate is positively related with profitability in regards to macroeconomic variable. In other words, an increase in real interest rate would lead to an increase in commercial bank's profitability in Turkey.

Ajayi and Felix (2012) investigated the effect of monetary policy instrument on bank performance between 1980 and 2008. The study revealed that monetary policies adopted during the period under review have been effective in contributing to the volume of the economy. The multiple regression analysis result reveals that the monetary policies do have significant effects on the performance of banks. The study reveals the negative influence of liquidity ratio, interest rate and money supply are positively related. Based on their findings the study reveals the liquidity ratio and interest rate causes the economy ineffectiveness. Investors did not have access to the cash in order to increase their productivity due to high interest rate.

Taiwo and Adesola (2013) investigated the relationship between foreign exchange fluctuation and banks profitability. The authors captured profitability in two respects, firstly as, the ratio of total loan loss to total advances, and secondly as, the ratio of bank capital to deposit. Their result was significant in two respects, (a) the tendency of banks to accumulate excessive bad loans by reason of fluctuation in exchange rate (b) bank capital level might be seriously undermined due to deteriorating exchange rate. From the opinion of the authors it could be reasoned that, banks are bound to experience decline in profit given uncontained fluctuations in exchange rate.

To give sufficient direction to this study, the Keynesian, classical and monetarist theories will be reviewed thus: Keynes in his book published in 1936 "The General Theory of Employment, Interest and money" formulated a monetary theory centred on output rather than prices. He disagreed with the classical view and posited that there is an indirect and non-proportional relationship between change in money and price level (Nwaru, 2014).

Keynes posited "that economics has been divided into two compartments with no doors or windows between the theory of value and the theory of money and prices". This dichotomy between the relative price level (as determined by demand and supply of goods) and the absolute price level (as determined by demand and supply of money) arises from the failure of the classical monetary economists to integrate value theory with monetary theory. Consequently, changes in the money supply affects only the absolute price level but exercise no influence on the relative price level (Afolabi, 1998). According to Keynesian monetary transmission mechanism, given the assumption that the economy is at less than full employment equilibrium, the built-in-policy transmission mechanism works through the financial system to the real sector via interest rate thus, emphasizing that the quantity of money has an indirect relationship with prices via interest rate, thus an increase in quantity of money

will lead to a fall in interest rates which increases volume of investment and raise effective demand through the multiplier effect thereby increasing output, income and employment (Gbosi, 2005). Hence, we anchored our study on this theory.

The classical monetary theory in their study of money, posited that there is a direct and proportionate relationship between changes in the quantity of money and general price level. The theory had its roots with the work of Jean Boldin in the 16th century, John Locke in 1690 who examined the effect of money on trade, the role of interest rate and demand for money in the economy. However, the classical quantity of money is today, hinged on the theory of Irvin Fisher (1867-1947). He posited that “Other things remaining unchanged; as the quantity of money in circulation increase, the price level also increases in direct proportion while the value of money decreases and vice versa” (Jhingan, 1997). If the quantity of money doubled, the price level will also double and the value of money will be one half. Fisher’s theory also known as equation of exchange is stated thus;

$$MV = PT \quad (1)$$

Where;

M = actual money stock or money supply

V = the transaction velocity of circulation of money

P = the average price level

T = the real volume of all market transactions made during a period of time

Fisher posited that the quantity of money (M) times the velocity (V), must equal average price level (P) times the aggregate transaction (T). The equation equates the demand for money (PT) to the supply of money (MV). In the equation, T is better replacing with Q “quantity of goods involved” hence the Fisherian equation can be written as

$$MV = PQ \quad (2)$$

Fisher further stated that the average price in the economy (P) multiplied by the amount of transaction (T) when divided by the Money stock (M) gives us a volitional element called the average turnover of money or money velocity (V) i.e. $PT/M = V$.

Doubling the money stock will lead to a doubling of the price level since T and V do not change. Velocity is seen as constant because factors that would necessitate a faster movement in the velocity of money evolve slowly. Such factors include among others, population density, mode of payment (weekly/monthly), availability of credit sources, nearness of stores to individual etc., thus it is seen that there exists a direct and proportional relationship between money stock and price level. The theory is based on the assumption of neutrality of money.

The monetarist school of thought holds the view that money matters in all economic activities and as such monetary policy is a more viable economic stabilization measures than fiscal policy. Led by the work of Milton Friedman in 1968, the monetarist argued that money is the most important regulatory instrument in an economy and an excessive expansion of the money supply is inherently inflationary, and as such, the monetary authorities should focus solely on

maintaining price stability. Monetarists argue that if the money supply rise faster than the rate of growth of the national income then there will be inflation. The argument is that when money supply increases, it will eventually decompose itself as increase in the cash balance of individuals and economic agents. People will then find out that they hold excess liquidity and will have to spend the excess to restore them to the desired level. Thus he posited that inflation is always and everywhere a monetary phenomenon.

METHODOLOGY

This study adopted the ex-post facto research design. The ex-post facto design was adopted on the basis that it does provide the study an opportunity to control the variables mainly because they have already occurred and cannot be manipulated. The data in this study consists of secondary time series data for the period 1985 to 2017, sourced from the Central Bank of Nigeria (CBN) statistical Bulletin, Journals, the internet and other relevant publications.

Times series data was collected for the period between 1985 and 2017 on the Gross Domestic Product, representing the performance of Nigeria economy and the Monetary Policy Management represented by treasury bill, money supply, monetary policy rate and exchange rate. The ordinary least squares multiple regressions analytical technique was used. The adoption of this technique is justified by its feature as the best linear unbiased estimate with built-in validation criteria used in establishing relationships among variables.

Therefore, the relationship between the variables to be studied is expressed functionally thus;

$$LGDP = F (MS, TB, MPR, EXR)$$

The ordinary least square model was obtained from the above equation; the variables were converted thus;

$$LGDP_t = a_0 + b_1LMS_t + b_2LTB_t + b_3LMPR_t + b_4LEXR_t + e_t \text{ -----(3)}$$

Where:

- GDP = Gross domestic product
- a_0 = Regression constant
- b_1, b_2, b_3 and b_4 = Regression parameters
- LMS = log of money supply
- LTB = log of Treasury bill
- LMPR = log of Monetary policy rate
- LEXR = Exchange rate
- e_t = error term

RESULTS AND DISCUSSION

Presented below is the data on the performance of Nigeria's economy (BP), Money Supply (MS), Exchange Rate (EXR), Treasury Bills (TB) and Monetary Policy Rate in Nigeria (MPR) for the period 1985 -2017.

The Ordinary Least Square multiple regression was computed using E-view 9 to generate the estimate for the study. The output is as presented in table 1.

TABLE 1: Regression Analysis Result

Dependent Variable: LGDP

Method: Least Squares

Date: 10/26/19 Time: 13:07

Sample: 1985 2017

Included observations: 33

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.935965	0.241206	-3.880356	0.0006
LMS	1.170966	0.057430	20.38951	0.0000
LTB	4.96E-05	5.19E-05	0.956527	0.3473
LMPR	0.009523	0.008692	1.095604	0.2829
LEXR	-0.190361	0.064112	-2.969205	0.0062
R-squared	0.997851			
Adjusted R-squared	0.997533			
F-statistic	3134.620	Durbin-Watson stat	1.302627	
Prob(F-statistic)	0.000000			

SOURCE: RESEARCHER'S COMPUTATION, 2017 $R^2 = 0.9978$ R^2 Adjusted = 0.9975

S.E Regression = 0.1197

F-Statistics = 3134.62

Durbin Watson = 1.3026

Where;

GDP= Gross Domestic product

MS= Money Supply

TB= Treasury Bill Rate

EXR= Exchange Rate

MPR= Monetary Policy Rate

The analysis of the above result will be based on three criteria;

- I. Economic Criteria
- II. Statistical Criteria
- III. Econometric criteria

Economic Criteria

The co-efficient of multiple determination (R^2) is 0.997 and an adjusted R^2 of 0.9975. The later indicates that 99% of variation in the observed behaviour of the economy is jointly explained by the independent variables namely; Money Supply (MS), Treasury Bills (TB), Monetary Policy Rate (MPR) and Exchange Rate (EXR). This shows that the model fits the data well. Also, the F- Statistics is used to test for the significance of such or tight fit. The model reports on effectively high F- Statistics value of 3134.6 which when compared with the table value, this indicates that the higher the high-adjusted R^2 value is, the better the chance that it will occur, therefore the model is statistically robust.

Using this criterion, therefore money supply is significant at 1% level. Specifically, a 1% increase in money supply (1.17%), Treasury Bills (4.96%), Monetary Policy Rate (0.01%) will prop up the performance percentage point. On the other hand, a 1% decrease in exchange rate (-0.19) will lead to a decrease in performance. The constant term indicates that if all variables held constant, Nigeria's economy will be depressed by -0.93.

Statistical Criteria

For the overall significant of the model, the ANOVA or the F=Statistics is used. Hence, the model did not occur by chance, it actually confirms that the model fits the data well. To test for the individual statistical significant of the parameter, t-statistics of the respective variables were considered. Considering their probability values, computer software shows the constant term is negative while independent variables (MS, TB, MPR) are statistically significant at 1%.

Econometric Criteria

The Durbin Watson (DW) statistics (1.30) is used to test for the serial correlation in the residuals of the model. The decision rule states that if the calculated DW falls between d_u and $4-d_u$ (1.66 and 2.34) then there is a serial correlation in the residuals. This shows that calculated DW (1.30) falls outside and this indicates that the estimates should be taken with caution. The goodness of fit of the model indicates that the adjusted R- square shows a good fit of the model that the model fits the data well; the total variation in the observed behaviour of GDP, used as a measure of performance, is jointly explained by variation in all explanatory variables.

Test of Hypotheses (see Appendix A)

In order to test the already stated hypotheses, the following decision rule is stated;

Decision Rule

Accept H_0 : If t-calculated value < t-table value

Reject H_a ; If t-calculated value > t-table value

Hypothesis One

H_{01} : Money supply does not significantly affect the performance of Nigeria economy

H_{a1} : Money supply has a significant effect on the performance of Nigeria economy.

From the regression result;

t-calculated value MS = 20.389

t-critical value at 28 df 0.01 = 2.771

Based on this result and our decision rule, the null hypothesis is rejected and alternate hypothesis is upheld and we concluded that there is a significant relationship between money supply and performance of Nigeria economy.

Hypothesis Two

Ho₂: The issuance of Treasury Bills has no significant effect on the performance of Nigeria economy

Ha₂: The issuance of treasury bills has a significant effect on the performance of Nigeria economy

From the regression result;

t- calculated value = 0.9565

t- critical value at 28 df 0.01= 2.771

Based on these results and our decision rule, the null hypothesis is upheld and alternate is rejected and we therefore, concluded that there is no significant relationship between treasury bills and performance of Nigeria economy.

Hypothesis Three

H0₃: Monetary policy rate do not have any significant effect on the performance of Nigeria economy

Ha₃: Monetary policy rate do have a significant effect on the performance of Nigeria economy.

From the regression result;

t- calculated value = 1.0956

t- critical value at 27 df 0.01 = 2.771

Based on this result and our decision rule, the null hypothesis is upheld and alternate hypothesis is rejected and therefore, the paper concluded that there is no significant relationship between monetary policy rate and performance of Nigeria economy

Hypothesis Four

Ho₄: Exchange rate does not have any significant effect on the performance of Nigeria economy

Ha₄: Exchange rate has a significant effect on the performance of Nigeria economy

From the regression result;

t-calculated value = 2.969

t-critical value at 28 df 0.01 = 2.771

Based on this result and our decision rule, the null hypothesis is rejected and alternate hypothesis is accepted and concluded that there is a significant relationship between exchange rate performance of Nigeria's economy

CONCLUSION AND RECOMMENDATIONS

This study was carried out to examine the effect of monetary policy management on performance of Nigeria economy. The Ordinary Least Square (OLS) model was adopted to examine the relationship between money supply, treasury bill rate, monetary policy rate, exchange rate and performance of Nigeria economy. The major findings of the study include:

1. That there is a significant relationship with money supply and performance of Nigeria economy;

2. That there is no significant relationship between issuance of treasury bills and performance of Nigeria economy;
3. That there is no significant relationship between monetary policy rate and performance of Nigeria economy; and
4. That there is a significant relationship between exchange rate and performance of Nigeria economy.

The study examined the effect of Monetary Policy Management on Performance of Nigeria Economy. While money supply and exchange rate exert positive influence on performance of Nigeria economy, treasury bills and monetary policy rate exerts an inverse relationship on performance of Nigeria economy. Based on these findings, we concluded that monetary policy affects significantly the performance of Nigeria's economy for the period under study.

Based on the findings of the study, we recommended as follows:

1. Having established that many of the instruments of monetary policy do not significantly affect the performance of Nigeria's economy, government should look beyond monetary policies to enhance economic growth such as diversification.
2. Monetary authorities should reduce the monetary policy rate of banks as this will enable the customers to access loans and advances for increased productivity and expansion, especially in Agriculture.
3. CBN monetary policy should be structured in such a way that businesses and indeed the banking sector will be impacted upon positively in profitability and returns on investments.
4. The government, through the CBN, should regulate money supply in a manner that will not hamper the cost of accessing loans but reduction in inflation rate in Nigeria.

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