

ECONOMETRIC ANALYSIS OF FISCAL AND MONETARY POLICY INSTRUMENTS ON ECONOMIC GROWTH OF NIGERIA FROM 1985-2016

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Abstract:-

The study carried out Econometric analysis of fiscal and monetary policy instruments on economic growth of Nigeria from 1985-2016 in order to determine the appropriate mix of both policies in promoting economic growth in Nigeria. Keynesian theory was adopted as the theoretical framework of the study. The study employed ordinary least square method and whereby the time series properties of fiscal and monetary variables were first examined using Diagnostic test such as Descriptive statistics of the data, followed by Augmented Dickey-Fuller unit root test and also Johansen cointegration test among the series using annual data for the period 1985-2016. Data were sourced mainly from Statistical Bulletin published by the Central Bank of Nigeria and World Bank Economic Indicator. The unit root test results revealed that all fiscal and monetary policy variables are non-stationary and attained stationarity at first and second difference. The result also showed that all the fiscal and monetary variables of interest co-integrated with the economic growth series in the country. This suggests that there is a long run relationship among fiscal and monetary variables and economic growth. The study, however, found that the current level of broad money supply, domestic interest rate, and government expenditure exerted negative influence on growth, while current level of exchange rate, and government revenue have positive effect on economic growth of Nigeria. Therefore, we recommend that fiscal and monetary policy instruments should be combined in making decisions that will promote economic growth of Nigeria both in the short and long run. The study concluded that fiscal and monetary are still complementary in promoting economic growth of Nigeria.

Keywords: - Fiscal, Monetary, Policy, Instruments, Economic Growth, Nigeria.

1.0 INTRODUCTION

Fiscal and monetary policies are the two major strategies of managing resources and demand pressures in the economy. Monetary policy is concerned with the use of monetary instruments such as credit, money supply and interest rates to influence overall demand in the economy, while fiscal policy is the use of government taxes and expenditure, including debt to control aggregate demand in the economy.

Monetary policy is implemented primarily by the monetary authorities, particularly the Central Bank, while fiscal policy is implemented by the fiscal authorities, particularly the Ministry of Finance or Treasury. Although monetary and fiscal policies pursue the same ultimate objective, i.e. the attainment of high, stable and sustainable economic growth, they employ different instruments. In many countries, monetary policy plays a supporting role to fiscal policy (Idowu, 2010). Fiscal policy actions could affect the effectiveness of monetary policy in various ways: via its impact on the general price level which cast doubts on the efficacy of monetary policy, via short-run effects on aggregate demand and by modifying the long-term conditions for economic growth and inflation. On the other hand, monetary policy may be accommodative to fiscal policy or counteractive. The need to offset the impact of expansionary fiscal policy on aggregate demand and inflation in the economy could prompt the central bank to tighten monetary policy, by raising interest rates or reducing credit in the financial system. The resulting high interest rates could depress economic activity, attract short-term and easily reversible capital inflows, thereby adding to inflation and appreciation pressures on the currency, and eventually damaging macroeconomic and financial stability (Muhammad, Afaque, Amanat and Faiz-Ur-Rahman, 2010).

Hence, governments are often wary over whether to go for more of monetary policies or lean more on the fiscal policies as the necessary panacea for the attainment of overall economic growth in the economy (Onyeiwu, 2012). The regulation and control of the volume and price of money is the discretionary control of money-discretionary in the sense that it is made at the instance of the money authorities. Monetary policy affects the non-bank public's holding of real and financial assets in the system. It can thus sustain a divergence between the non-bank public's desired portfolio holding (Ajaji, 2008). Therefore, the combination of both fiscal and monetary policies can lead to the growth and development of an economy. The Structural Adjustment Programme (SAP) was adopted in July, 1986 against the crash in the international oil market and the resultant deteriorating economic conditions in the country. It was designed to achieve fiscal balance and balance of payments viability by altering and restructuring the production and consumption patterns of the economy, eliminating price distortions, reducing the heavy dependence on crude oil exports and consumer goods imports, enhancing the non-oil export base and achieving sustainable growth (Anyanwu, 2008).

In order to improve macroeconomic stability, a number of measures were introduced to reduce liquidity in the system. These included the reduction in the maximum ceiling on credit growth allowed for banks, the recall of the special deposits requirements against outstanding external payment arrears to CBN from banks, abolition of the use of foreign guarantees/currency deposits as collaterals for naira loans and the withdrawal of public sector deposits from banks to the CBN. The rising level of fiscal deficits was identified as a major source of macroeconomic instability (CBN 2010). Consequently, government agreed not only to reduce the size of its deficits but also to synchronize fiscal and monetary policies. By way of inducing efficiency and encouraging a good measure of flexibility in banks' credit operations, the regulatory environment was improved. Consequently, the sector-specific credit allocation targets were compressed into four sectors in 1986 and to only two in 1987 (Olanipekun & Flororunso, 2015).

Statement of the Problem

Taking into account the fact that an economy is a complex dynamic system which is influenced by a multitude of factors whose number is constantly increasing, which makes it unstable, the coordination of macroeconomic policies, especially monetary and fiscal policy is a necessity of modern developments. This is especially important in the light of the fact that the abandoned Keynesian - monetarist controversy based on the affirmation of one instrument of economic policy at the expense of another and thus generating a need for permanent checking and analysis of the mechanism of combined application of instruments and measures of monetary and fiscal policy, given that no proper interaction between them exists, we can hardly talk about any purposeful and effective economic policy. The problem becomes more evident in the light of the fact that monetary and fiscal policy, while conducted by separate and relatively independent institutions, so related to one another, it is often very difficult to make a distinction between them, and with complete precision to answer to what extent it is an effect of the one policy, and where the effect of the other begins. However, it should be noted, it is certain that based on its interconnectedness, the interdependence between them is evident (Van, Bas, Engwerda, and Joseph, 2002).

Though several authors have examined the relative effects of monetary and fiscal policy on various macroeconomic aggregates and economic activities in both developed and developing countries, this study takes a new dimension by using real gross domestic product as against gross domestic product utilized in the work of Olanipekun and Flororunso (2015). Secondly, government expenditure was broken down into its two components: recurrent and capital which was also lacking in the work of Olanipekun and Flororunso (2015). Thirdly, this study used up to date data spanning from 1985 to 2016 as against Olanipekun and Flororunso (2015) whom stopped at 2013 and applying a superior ARDL econometric modelling.

Objective of the Study

The main objective of this study carried out an Econometric analysis of fiscal and monetary policy instruments on economic growth of Nigeria from 1985-2016. The specific objectives of the study are to:

- i. examine the effect of monetary policy rate on economic growth of Nigeria,
- ii. Ascertain the effect of liquidity ratio on economic growth of Nigeria,
- iii. Examine the effect of exchange rate on economic growth of Nigeria,
- iv. Investigate the effect of recurrent government expenditure on economic growth of Nigeria,
- v. examine the effect of capital government expenditure on economic growth of Nigeria
- vi. Evaluate the effect of fiscal deficit on economic growth of Nigeria.

Hypotheses of the Study

The following hypotheses guides this study; **H₀₁**: Monetary policy rate has no significant effect on economic growth of Nigeria, **H₀₂**: Liquidity ratio has no significant effect on economic growth of Nigeria, **H₀₃**: Exchange rate has no significant effect on economic growth of Nigeria, **H₀₄**: Recurrent government expenditure has no significant effect on economic growth of Nigeria, **H₀₅**: Capital government expenditure has no significant effect on economic growth of Nigeria. **H₀₆**: Fiscal deficit has no significant effect on economic growth of Nigeria.

2.0 REVIEW OF RELATED LITERATURE

Conceptual Review

Concept of Fiscal Policy

Okoro (2013), defines fiscal policy as the efforts by the government to use taxes and government spending to ensure the smooth running of the economy. That is, the government uses these tools to try to prevent high unemployment and high inflation. Fiscal policy determines government spending and tax rates. Expansionary fiscal policy, usually enacted in response to recessions or employment shocks, it increases government spending in areas such as infrastructure, education and unemployment benefits. According to Keynesian economics, these programs prevent a negative shift in aggregate demand by stabilizing employment among government employees and people involved with stimulated industries. Extended unemployment benefits help stabilizes the consumption and investment of individuals who become unemployed during a recession (Hall, 2018). According to Hall (2018), contractionary fiscal policy can be utilized to reduce government spending and sovereign debt or to correct out-of-control growth fuelled by rapid inflation and asset bubbles. In relation to the equation for aggregate demand, fiscal policy directly influences the government expenditure element and indirectly impacts the consumption and investment elements.

Concept of Monetary policies

Munongo (2012) defines monetary policy as a deliberate action of the monetary authorities to influence the quantity, cost and availability of money credit in order to achieve desired macroeconomic objectives of internal and external balances. The action is carried out through changing money supply and/or interest rates with the aim of managing the quantity of money in the economy. Jawaid (2010) defines that monetary policy as any conscious action undertaken by the monetary authorities to change or regulate the availability, quantity, cost or direction of credit in any economy, in order to attain stated economic objectives. Monetary policy is designed to influence the behaviour of the monetary sectors; this is because changes in the behaviour of the monetary sector influence various monetary variables or aggregates.

Onyeiwu (2012) noted that the importance of money in economic life has made policy makers and other relevant stakeholders to accord special recognition to the conduct of monetary policy. The Central Bank of Nigeria is the organ that is responsible for the conduct of monetary policy in Nigeria. Monetary policy can either be expansionary or contractionary, depending on the overall policy thrust of the monetary authorities. Monetary policy is expansionary when the policy adopted by the central bank increases the supply of money in the system and contractionary, when the actions reduce the quantity of money supply available in the economy or constrains the growth or ability of the deposit money banks to grant further credit.

Concept of Economic Growth

Economic growth is an increase in the capacity of an economy to produce goods and services, compared from one period of time to another. It can be measured in nominal or real terms, the latter of which is adjusted for inflation. Traditionally, aggregate economic growth is measured in terms of gross national product (GNP) or gross domestic product (GDP), although alternative metrics are sometimes used (Okoro, 2013). In simplest terms, economic growth refers to an increase in aggregate productivity. Often, but not necessarily, aggregate gains in productivity correlate with increased average marginal productivity. This means the average labourer in a given economy becomes, on average, more productive. It is also possible to achieve aggregate economic growth without an increased average marginal productivity through extra immigration or higher birth rates.

Impact of Fiscal and Monetary Policies on Economy

Fiscal and monetary policies are powerful tools that the government and concerned monetary authorities use to influence the economy based on reaction to certain issues and prediction of where the economy is moving. The monetary authorities need to make accurate predictions based on solid information to properly adjust the money flow and rates of interest. There is an inverse relationship in money flow and interest rates. Increasing money flow and decreasing interest rates can

encourage spending and, as a result, stimulates the economy. More spending means more jobs and curbing unemployment (Cyrus & Elias, 2014).

Okoro, (2013) exerts that in order to create balance in the economy central bank uses various techniques of contraction and expansion. These techniques are helpful if based on accurate data and records. A central bank buys and sells government securities to bring accurate momentum and money flow. Sometimes a central bank sets a required reserve ratio which bound other commercial banks to keep a certain amount of cash with them at all times. One of the techniques is to offer a discount or lower the interest rate to encourage borrowing, and as a result, involve more people in borrowing and spending. These are some of the quantitative techniques that central banks exercise to regulate economy properly. Apart from that, a central bank can exercise certain qualitative techniques like Regulation of consumer credit, Direct Action and Rationing of the credit to ensure the smooth running of the economy. It is a continuous process and changes with the requirements of the economy.

The fiscal and monetary policies have an impact on individual's life too. If a government thinks the economy is overheating and growing very fast, there are chances of inflation so, the government may decrease spending. In this regard, fiscal policy encourages growth. Decline in government spending means lowering the overall demand in the economy and, as a result, there will be lower production. Low production means unemployment and investments. So, a cut in government spending will hurt general people as they will have less money in pockets to invest in their stores or shops and there will be a general decline in the economy. Similarly, taxes play a vital role in fiscal and monetary policy. Decreasing in taxes can stimulate the economy as people will have more money in their pockets to either invest or save. The investment will increase production and more people will be hired reducing the level of unemployment.

Theoretical Framework

The Classical View of Monetary Policy

The classical economists' view of monetary policy is based on the quantity theory of money. The quantity theory of money is usually discussed in term of fisherian equation of exchange, which is given by the expression $MV = PY$. In the expression, M denotes the supply of money over which the Federal Government has some control; V denotes the velocity of circulation which is the average number of times a currency is spent on final goods and services over the course of a year; P denotes the price level GDP. Hence PY represents current nominal GDP. The equation of exchange is an identity which states that the current market value of all final goods and services (nominal GDP) must equal the supply of money multiplied by the average number of times a currency is used in transaction in a given year. The classical economist believes that the economy is always at or near the natural level of real GDP. Thus, they assume that in the short run, the Y in the equation of exchange is fixed. They further argue that the velocity of circulation of money tends to remain constant. So that V can also be regarded as Fixed.

The Monetarist View of Monetary Policy

Monetarist is a school of thought led by Milton Friedman. This school of thought is a modern variant of classical macroeconomics. They developed a subtler and relevant version of the quantity theory of money. The monetarists are of the opinion that the free-market economy has strong self-regulating tendencies; if a satisfactory general climate is maintained the economy will tend naturally toward full employment and a relatively stable price level (Lipsey and Steiner, 1981:706). At the same time, private initiative, spurred by the profit motive, will yield a satisfactory growth of real national income. In this view, governments' attempts to stabilize the economy will usually be perverse. They will cause larger recessions on the downward side and bigger inflations on the upside, than would have occurred had government policy been passive. Instead of trying to stabilize the economy, government policy should take a very passive stance.

The Neoclassical Growth model

According to the Neoclassical growth model, debt has direct effect on economic growth. This is because the amount borrowed, if used optimally, is anticipated to increase investment. As long as countries use the borrowed funds for productive investment and do not suffer from macroeconomic instability, policies that distort economic incentives or sizable adverse shocks, growth should increase and allow for timely debt repayment. On the other hand, the indirect effect of debt is its effect on investment. The transmission mechanism through which debts affect growth is its reduction on the resources available for investment by debt servicing. Also, public debt can act as an implicit tax on the resources generated by a country and create a burden on future generations which come in the form of a reduced flow of income from a lower stock of private capital. This in turn, may lead to an increase in long-term interest rates, a crowding out of private investments necessary for productivity growth, and a reduction in capital accumulation.

Empirical Reviews

Studies by Keran (1970), Elliot (1975) and Batten & Hafer (1983) also found that the monetary influence on investment and economic activity was more important than that of fiscal influence in Canada, Germany, Japan and England. The earlier evidence from developed countries, thus, strongly supports monetary policy while fiscal policy has little role, if any, to play in enhancing economic activities in these economies. In a more recent study on developed countries, Senbet (2011) criticized the single equation model used in most of the previous studies in testing the relative importance of monetary and fiscal policy on nominal GNP stabilization. The author opined that there is possible endogeneity between both policies and economic activity and misspecification of the model coupled with the wrong use of nominal instead of

real economic growth. The results further confirmed that monetary policy is relatively better than fiscal policy in affecting the real output.

In a study, Shahid *et al* (2008) confirmed that monetary policy is a powerful tool than fiscal policy in South Asian countries. The result of Simorangkir and Adamanti (2010), however, showed that the combination of fiscal and monetary policies boosts economic growth of Indonesia effectively. Similar results by Mahmood and Sial (2011) showed that monetary and fiscal policies both play significant role in the economic growth of Pakistan. The study of Anna (2012), however, suggested that monetary influence is relatively stronger and more predictable than fiscal policy in determining economic activity in Zimbabwe. Nevertheless, Munongo (2012) found no significant role for monetary policy but has support for fiscal policy in Nigeria.

Contrary to this finding, Ezigbo (2012) revealed that monetary policy in a developing country plays an important role in increasing the growth rate of the economy by controlling inflation and maintaining equilibrium in the balance of payments. In the case of Nigeria, Ajayi (1974), Ajisafe and Folorunso (2002) and Adefeso and Mobolaji (2010) found that monetary policy impacted greater influence than fiscal policy while Olaloye and Ikhida (1995), Philip (2011) and Medee and Nenbee (2011) argued that fiscal policies are more crucial for economic growth in the country. Familoni (1989) also denounced the classical preference of monetary policy over fiscal policy on the basis of their empirical evidence and predicted that it would only work for a developed economy.

Effiong (2012), however, investigated accounting implications of fiscal and monetary policies on the development of the Nigerian stock market. It was discovered that only a mixture of monetary and fiscal policy exerted a significant impact on the development of Nigerian stock market.

Enahoro (2013) reported that fiscal and monetary policies had enhanced operational efficiency in the Nigerian financial institutions, by reducing financial indiscipline in the financial and fiscal systems. The paper concluded that fiscal and monetary policies had galvanized government to commit budgetary management which would also address anomalies in the financial system.

Ali, Irum and Ali (2008) examined the effectiveness of monetary and fiscal policy for economic growth in South Asia Region (i.e. Pakistan, India, Srilanka and Bangladesh) through Auto Regressive Distributed Lag (ARDL) and Error Correction Model (ECM) using annual data series during 1990 to 2007. Results suggested that the monetary policy instead of fiscal policy has greater influence on economic growth in South Asian Countries. They considered Gross domestic product, broad money (M2) and fiscal balance for the study.

Adefeso and Mobolaji (2010), also investigated fiscal - monetary policy and economic growth in Nigerian by employing Jobansen Maximum Likelihood Cointegration procedure. The result shows that there is a long – run relationship between economic growth, degree of openness, government expenditure and broad money supply (M2).

Chukwu (2009), analyzed the effect of monetary policy innovations in Nigeria. The study used a Structural Vector Auto Regression (SVAR) approach to trace the effects monetary policy stocks on output and prices in Nigeria. The study also analyzed three alternative policy instrument, that is, broad money (M2), minimum rediscount rate (MRR), and the real effective exchange rate (REER). The study found evidence that monetary policy innovations have both real and nominal effect on economic parameter depending on the policy variable selected.

Amin (1999) analyzed the relationship between public and private investment stressing the crowding in or crowding out of private investment by public expenditures in Cameroon. Based on secondary data from the public sector, the results of a growth model show that the relevant factors have positive effects on growth while those of the investment model show the crowding in of infrastructures and social sector. The study concluded by recommending the relocation of more resources to productive sectors and increasing and sustaining of spending on those productive sectors or those components of public expenditures that crowd in the private sector.

Gaps in literatures

There are studies combining monetary and fiscal policy but most of them are concentrated in other countries of the world such as Kenya, Bangladesh, U.S, UK, South Asia, America and Spain among others. In Nigeria, based on internet search, the only study that have combined both monetary and fiscal policy was Olanipakun and Flororunso (2015) who studied fiscal and monetary policy instruments and growth sustainability in Nigeria from 1995-2013. In this regard, it becomes justifiable to carry out empirical investigation on effect of both monetary and fiscal policies on economic growth in Nigeria. This study takes a new dimension by using real gross domestic product as against gross domestic product utilized in the work of Olanipakun and Flororunso (2015). Secondly, government expenditure was broken down into its two components: recurrent and capital which was also lacking in the work of Olanipakun and Flororunso (2015). Thirdly, this study used up to date data spanning from 1985 to 2016 as against Olanipakun and Flororunso (2015) whom stopped at 2013 and applying a superior ARDL econometric modelling.

3.0 RESEARCH METHODOLOGY

Research Design

This research work adopted an ex-post facto research design in studying the effect of monetary and fiscal policy instruments on economic growth of Nigeria from 1985 to 2016. In an ex-post facto research design, the researcher is incapacitated from manipulating or altering the data as they are published by government established agencies of parastatals. The adoption of an ex-post facto research design within the period studied is to ensure enough data points for the econometric analysis in order to cater for the loss of degree of freedom. The data used in this study were secondary in nature. The data were collected for the period of 1985 to 2016 from the Central Bank of Nigeria (CBN) and National Bureau of Statistic (NBS) official reports. All the data were on an annual basis as provided in the various official reports and publications of the above mentioned data sources.

Model Specification

This study adopted and modified the model of Olanipekun and Folorunso (2015). The original model of Olanipekun and Folorunso (2015) is stated as:

$$RGDP = (MS, INTR, EXR, INF, GRV, GEXP) \dots 3.1$$

Where:

RGDP = Real gross domestic product

MS = Money supply

INTR = Interest rate

EXR = Exchange rate

INF = Inflation

GRV = Government revenue

GEXP = Government Expenditure

The model was modified by removing money supply, interest rate, inflation and revenue, while introducing monetary policy rate, liquidity ratio, fiscal deficit and breaking down government expenditure into recurrent and capital expenditure. Consequently, the modified model of Olanipekun and Folorunso (2015) which is now the model of this study is stated as:

Monetary policy model:

$$RGDP = (MPR, LR, EXCHR) \dots \dots \dots 3.2$$

Fiscal policy model:

$$RGDP = (REXP, CEXP, FD) \dots \dots \dots 3.3$$

Logging the dependent and independent variables to provide for easy interpretation of the result and eliminate the possible effect of outlier led to the following equations:

Model 1

$$\text{LogRGDP}_t = \alpha_0 + \alpha_1 \text{LogMPR}_t + \alpha_2 \text{LogLR}_t + \alpha_3 \text{LogEXCHR}_t + \varepsilon \dots 3.4$$

Model 2

$$\text{LogRGDP}_t = \alpha_0 + \alpha_1 \text{LogREXP}_t + \alpha_2 \text{LogCEXP}_t + \alpha_3 \text{LogFD}_t + \varepsilon_t \dots 3.5$$

Where:

RGDP = Real gross domestic product

MPR = Monetary policy rate

LR = Liquidity ratio

EXCHR = Exchange rate

REXP = Recurrent expenditure

CEXP = Capital expenditure *FD* = Fiscal deficit

Method of Data Analysis

The models were estimated using Autoregressive Distributive Lag (ARDL) technique of data analysis, while the Structural Vector Auto-regression (SVAR) Model was used to determine the response of economic growth to shocks in monetary policy and fiscal policy instruments. The research hypotheses and questions formed the basis on which the result of the analysis were presented. Diagnostic test of Unit root test of stationarity for each of the variables adopting the Augmented Dickey-Fuller (ADF) specification was utilized to ascertain the stationarity of the data. The suitable lag length for ADF estimation starts with maximum lag.

The co-integration relationship between the variables was ascertained by Auto- Regressive Distributed Lag (ARDL) bound as against the conventional technique of Johansen co-integration. The effect of monetary policy and fiscal policy instruments on economic growth in Nigeria was ascertained using the Granger causality test. ARDL Error Correction Model estimation was also done. The use of the methodology of Co-integration and ECM add more quality, flexibility and versatility to the econometric modelling of dynamic systems and the integration of short-run dynamics with the long-run equilibrium.

A Priori Expectation

Table 1: A Priori Expectation of the Monetary and Fiscal Policy Instruments

Symbol	Variable	Substitution	Supposed Signs
MPR	Monetary Policy Rate	Monetary Policy	-
LR	Liquidity Ratio	Monetary Policy	-
EXCHR	Exchange Rate	Monetary Policy	-
REXP	Recurrent Expenditure	Fiscal Policy	+
CEXP	Capital Expenditure	Fiscal Policy	+
FD	Fiscal Deficit	Fiscal Policy	+

Source: Researcher's Assumption from Keynesian Theory of Monetary and Fiscal Policy

The Keynesian monetary theory as well as the Keynesian theory of government expenditure envisages the positive effect of monetary and fiscal policy on economic growth. Table 1 presents the supposed signs of the monetary policy and fiscal policy instruments relative economic growth based on theoretical consideration

Descriptive Properties of Variables

Table 2: Descriptive Properties of Data

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	P-value	Obs
RGDP	33918289	2447791	69023930	14953910	18125995	0.742811	2.082446	9.065306	0.001988	32
MPR	13.49594	13.25000	26.00000	6.000000	3.905638	0.809740	4.892447	8.272093	0.015986	32
LR	45.78531	44.65000	65.00000	29.10000	9.493145	0.303991	2.622255	7.683110	0.020664	32
EXCHR	86.08086	107.0243	253.4923	0.893800	70.87116	0.253828	1.976941	9.739154	0.019129	32
REXP	1201485	520450.0	4178590	7580.000	1403997	0.912738	2.298037	8.100154	0.048076	32
CEXP	413319.1	315200.0	1152800	5460.000	370662.4	0.498988	1.913658	9.901460	0.034399	32
FD	-373250.4	-112467.7	32049.40	-2208220	551831.0	-1.732864	5.314572	23.15801	0.000009	32

Source: Output data from E-views 9.0

The descriptive properties of the variables in the models are contained in Table 2. The attributes of the descriptive properties were the mean, median, maximum, standard deviation, skewness, kurtosis, Jarque-Bera, p-value and number of observations of the data. From Table 2, the mean of the data were disclose to be 33918289 for RGDP, 13.49594 for MPR, 45.78531 for LR, 86.08086 for EXCHR, 1201485 for REXP, 413319.1 for CEXP and -373250.4 for FD. The median of the data were shown as 2447791, 13.25000, 44.65000, 107.0243, 520450.0, 315200.0 and -112467.7 respectively for RGDP, MPR, LR, EXCHR, REXP, CEXP and FD. The maximum and minimum values reveal 69023930 and 14953910 for RGDP, 6.000000 and 3.905638 for MPR, 65.00000 and 29.10000, 253.4923 and 0.893800 for EXCHR, 4178590 and 7580.000 for REXP, 1152800 and 5460.000 for CEXP and 32049.40 and -2208220 for FD. The standard deviation of the variables are 18125995, 3.905638, 9.493145, 70.87116, 1403997, 370662.4 and 551831.0 for RGDP, MPR, LR, EXCHR, REXP, CEXP and FD respectively. The skewness coefficient dispels that the data were positively skewed towards normality but with the exception of fiscal deficit. With inferences from the Kurtosis coefficients, MPR and FD are not leptokurtic in nature. In terms of the normality of the data, the pvalues of the Jarque-Bera statistic are significant at 5% level of significance. This implies that the data are normally distributed that is, the data follows normal distribution.

Diagnostic Test Result

Serial Correlation LM Test

Table 3: Serial Correlation LM Test

Model Estimates	F-statistic	P-value
RGDP → MPR + LR + EXCHR	2.841260	0.1355
RGDP → REXP + CEXP + FD	3.036931	0.1198

Source: Output data from E-views 9.0

The serial Correlation test is an alternative to the Q-statistic test for serial correlation. The null hypothesis of LM test is that there is no serial correlation up lag order 2. The p-value of the Breusch-Godfrey serial correlation test in Table 3 suggests that the null hypothesis could not be rejected. Consequently, the models are free from autocorrelation.

ARCH Heteroskedasticity Test

Table 4: Harvey Heteroskedasticity test

Model Estimates	F-statistic	P-value
RGDP → MPR + LR + EXCHR	0.320638	0.9801
RGDP → REXP + CEXP + FD	1.350600	0.2561

Source: Output data from E-views 9.0

Table 4 presents the ARCH test of heteroscedasticity for the models. The ARCH test is a Lagrangian Multiplier (LM) test for autoregressive conditional heteroskedasticity in the residuals. The probability of the Chq. statistic for the models are insignificant at 5% level of significance, suggesting that there is no existence of heteroskedasticity in the models. This is in line with econometric assumption that a model should be free from problem of heteroskedasticity.

Ramsey RESET Test

Table 5: Ramsey Reset Specification

Model Estimates	t-statistic	df	P-value
RGDP →MPR + LR + EXCHR	0.412935	7	0.6920
RGDP →REXP + CEXP + FD	1.212649	11	0.2507

Source: Output data from E-views 9.0

The Ramsey RESET test determines whether a model is correctly specified/fitted or not. It also gives an inference as whether or not variable(s) are neglected in a model. The p-values as depicted in Table 5 is insignificant at 5% level of significance. The alternate hypothesis that the model is well specified is accepted.

Stationarity Test

Augmented Dickey-Fuller (ADF)

Table 6: ADF Test Result at Level

Variables	Constant	Trend and Constant	None	Remark
RGDP	-0.922352 (0.77)	-2.065955 (0.54)	0.166929 (0.73)	Not Stationary
MPR	-3.039349 (0.04)**	-3.565456 (0.04)**	-0.614533 (0.54)	Stationary
LR	-4.082776 (0.00)*	4.066568 (0.01)*	-1.084049 (0.25)	Stationary
EXCHR	0.972844 (0.99)	-1.599340 (0.77)	2.639293 (0.99)	Not Stationary
REXP	1.969006 (0.99)	-1.073647 (0.92)	3.695280 (0.99)	Not Stationary
CEXP	-1.252741 (0.64)	-2.293773 (0.42)	-0.238379 (0.52)	Not Stationary
FD	4.342353 (1.00)	-0.285281 (0.98)	5.082890 (1.00)	Not Stationary

Source: Output data from E-views 9.0

Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

Table 7: ADF Test Result at First Difference

Variables	Constant	Trend and Constant	None	Remark
RGDP	-5.761356 (0.00)*	-5.155997 (0.00)*	-3.256680 (0.00)*	Stationary
MPR	-6.702611 (0.00)*	-6.064627 (0.00)*	-5.457440 (0.00)*	Stationary
LR	-7.431656 (0.00)*	-6.348991 (0.00)*	-6.525491 (0.00)*	Stationary
EXCHR	-3.669242 (0.01)*	-3.995108 (0.02)**	-3.041231 (0.00)*	Stationary
REXP	-5.614567 (0.00)*	-5.257659 (0.00)*	-3.719801 (0.00)*	Stationary
CEXP	-7.021884 (0.00)*	-6.921931 (0.00)*	-6.900748 (0.00)*	Stationary
FD	-4.116066 (0.00)*	-4.635338 (0.00)*	-3.825461 (0.00)*	Stationary

Source: Output data from E-views 9.0

Note: The optimal lag for ADF test is selected based on the Akaike Info Criteria (AIC), p-values are in parentheses where (*) and (**) denote significance at 1% and 5% respectively.

The ADF stationarity test result in Table 6 depicts that most of the variables were not stationary at level form even though the estimation was done at constant, trend and constant; and none. Nevertheless, the data became stationary at first difference as shown in Table 7. By implication of the result in Table 7, the order of integration of the data is order one that is, I(1)

Co-integration ARDL Result

Table 8: Bound Test for Real Gross Domestic Product and Monetary Policy

T-Test	5% Critical Value Bound		Remark
F-Statistic	Lower Bound	Upper Bound	
7.428925	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

Table 9: Bound Test for Real Gross Domestic Product and Monetary Policy

T-Test	5% Critical Value Bound		Remark
F-Statistic	Lower Bound	Upper Bound	
6.300442	3.23	4.35	Null Hypothesis Rejected

Source: Output data from E-views 9.0

The stationarity test conducted using the ADF have provided evidence that the data are stationary and free from any defect that may likely cast a dent on the statistical reliability of the result which permits for testing the co-integration relationship between the variables. Tables 8 and 9 shows the result of the ARDL long run relationship between monetary policy, fiscal policy and economic growth in Nigeria. From the result in Table8, there is a long run relationship between monetary policy and economic growth in Nigeria. This is based on the fact that the f-statistic of 7.428925 is greater than the lower and upper bound critical value of 3.23 and 4.35 respectively. Similarly, Table 9 also reveals the presence of a long run relationship between fiscal policy and Nigeria’s economic growth. The f-statistic of 6.300442 is higher the lower and upper bound critical value of 3.23 and 4.35 respectively.

Nature of ARDL Long Run relationship and Error Correction Model

Table 10: ARDL Error Correction RGDP→MPR, LR and EXCHR

Short Run Co-integrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RGDP(-1))	0.229732	0.260801	0.880871	0.4041
D(RGDP(-2))	-0.170050	0.258276	-0.658403	0.5288
D(RGDP(-3))	-0.364356	0.264879	-1.375559	0.2062
D(MPR)	46137.95	58993.62	0.782084	0.4567
D(MPR(-1))	88983.26	59233.91	1.502235	0.1714
D(MPR(-2))	165301.5	64977.13	2.543996	0.0345
D(MPR(-3))	88650.75	57310.17	1.546859	0.1605
D(LR)	-77701.65	30657.91	-2.534473	0.0350
D(LR(-1))	-23162.35	25144.57	-0.921166	0.3839
D(LR(-2))	44231.14	35523.24	1.245132	0.2483
D(LR(-3))	92829.51	26806.15	3.462993	0.0085
D(EXCHR)	-7603.046	11840.95	-0.642098	0.5388
D(EXCHR(-1))	7927.861	15031.66	0.527411	0.6122
D(EXCHR(-2))	-38415.61	14555.62	-2.639229	0.0297
D(EXCHR(-3))	-22462.80	15443.62	-1.454503	0.1839
CointEq(-1)	-0.259663	0.057615	-4.506858	0.0020
Long Run Coefficient				
MPR	-1118166.19	425974.10	-2.624963	0.0304
LR	-864963.188	156777.51	-5.517138	0.0006
EXCHR	338840.166	36195.511	9.361386	0.0000
C	71855307.724	6404343.899	11.219777	0.0000

Source: Data output via E-views 9.0

Having established that monetary and fiscal policy instruments are related with economic growth in the long, it then become necessary to determine the speed of adjustment to equilibrium otherwise called the error correction model. This was ascertained using the ARDL approach. As can be seen in Table 10 the error correction model coefficient showed the supposed negative which is statistically significant at 5% significance level. The implication of this result is that there is significant error taking place. There is tendency of the model to move towards equilibrium following disequilibrium in previous periods. About 25.97% of error generated in past years was corrected in current. The significance of the p-value (0.0020) of the ECM coefficient (0.259663) is a further affirmation of the long run relationship between monetary policy and economic growth in Nigeria as revealed earlier. As expected, the error correction coefficient of the long run relationship between fiscal policy and economic growth in Table 18 revealed the supposed negative sign and statistically significant.

This is another insight that the model returns to equilibrium owing to disequilibrium in previous period thus 28.39% of error generated in previous years is corrected in present year. The ARDL correction model determination has further authenticated the result of the long run relationship between monetary policy, fiscal policy and economic growth in Nigeria.

Table 11: ARDL Error Correction RGDP→REXP, CEXP and FD

Short Run Co-integrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(REXP)	0.513013	1.662156	0.308643	0.7629
D(REXP(-1))	-5.311950	1.875286	-2.832609	0.0151
D(REXP(-2))	1.539909	1.802515	0.854311	0.4097
D(REXP(-3))	4.502328	1.033000	4.358498	0.0009
D(CEXP)	-3.437315	1.894674	-1.814199	0.0947
D(CEXP(-1))	-2.813747	2.677484	-1.050892	0.3140
D(CEXP(-2))	-8.195623	2.636420	-3.108618	0.0090
D(FD)	3.179355	0.745549	4.264450	0.0011
D(FD(-1))	-6.591027	2.214466	-2.976350	0.0116
D(FD(-2))	-3.028197	2.802087	-1.080693	0.3011
D(FD(-3))	7.526993	2.524090	2.982062	0.0114
CoimtEq(-1)	-0.283926	0.116278	-2.441789	0.0311
Long Run Coefficient				
REXP	16.617152	3.4208580	4.857597	0.0004
CEXP	19.974852	11.216764	1.780803	0.1003
FD	29.674442	16.308599	1.819558	0.0938
C	21150292	1400543.7	15.101487	0.0000

Source: Data output via E-views 9.0

ARDL Short Run Relationship

Having ascertain the nature of the long run relationship between monetary policy, fiscal policy and economic growth in Nigeria, it is necessary to determine the short run relationship using the Auto-regressive Distributive Lag (ARDL) model was utilized in estimating the short run relationship between fiscal policy instruments and selected macroeconomic variables. The statistical criteria for interpretation of the ARDL regression result was based on Adjusted R-square, f-statistic, Durbin Watson and coefficients of the dependent and independent variables.

Table 12: ARDL Regression: Economic Growth and Monetary Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGDP(-1)	0.970070	0.276876	3.503626	0.0080
RGDP(-2)	-0.399782	0.355009	-1.126116	0.2928
RGDP(-3)	-0.194307	0.388621	-0.499991	0.6305
RGDP(-4)	0.364356	0.264879	1.375559	0.2062
MPR	46137.96	58993.62	0.782084	0.4567
MPR(-1)	6451.638	57131.45	0.112926	0.9129
MPR(-2)	-88983.26	59233.91	-1.502235	0.1714
MPR(-3)	-165301.5	64977.13	-2.543996	0.0345
MPR(-4)	-88650.75	57310.17	-1.546859	0.1605
LR	-77701.65	30657.91	-2.534473	0.0350
LR(-1)	-32998.63	27089.70	-1.218125	0.2579
LR(-2)	23162.32	25144.57	0.921166	0.3839
LR(-3)	-44231.14	35523.24	-1.245132	0.2483
LR(-4)	-92829.51	26806.15	-3.462993	0.0085
EXCHR	-7603.046	11840.95	-0.642098	0.5388
EXCHR(-1)	42636.62	13796.79	3.090328	0.0149
EXCHR(-2)	-7927.861	15031.66	-0.527411	0.6122
EXCHR(-3)	38415.61	14555.62	2.639229	0.0297
EXCHR(-4)	22462.80	15443.62	1.454503	0.1839
C	18658137	4115283.	4.533865	0.0019
R-squared	0.999605	Mean dependent var		36561216
Adjusted R-squared	0.998668	S.D. dependent var		17867352
F-statistic	1066.142	Durbin-Watson stat		2.570834
Prob (F-statistic)	0.000000			

Source: Data output via E-views 9.0

Economic Growth and Monetary Policy Instruments

Table 12 insights that in the short run, monetary policy rate has positive but insignificant relationship with economic growth, whereas liquidity ratio and exchange rate have negative relationship with economic growth. The negative relationship between liquidity ratio and economic growth is significant at 5% level of significance. When monetary policy instruments are held constant, economic growth would amount to ₦18, 658,137 million. A percentage increase in monetary policy rate leads to ₦46, 137.96 million increase in real gross domestic product. Economic growth would be down by ₦77701.65 million and ₦7603.05 million following a unit increase liquidity ratio and depreciation in exchange rate respectively.

The adjusted R-square reveals that 99.87% variation in real gross domestic product was attributed to changes in monetary policy instruments of the Central Bank of Nigeria within the period covered by this study. The f-statistic (1066.142) and p-value (0.00) show that monetary policy instruments significantly explained the changes in economic growth of Nigeria.

The Durbin Watson value of 2.5 depict the absence of autocorrelation problem in the model. In addition, the serial correlation LM test has also provided evidence of no autocorrelation in the model.

Economic Growth and Fiscal Policy

Table 13: ARDL Regression: Economic Growth and Fiscal Policy

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGDP(-1)	0.716074	0.116278	6.158288	0.0000
REXP	0.513013	1.662156	0.308643	0.7629
REXP(-1)	4.935323	1.378190	3.581017	0.0038
REXP(-2)	5.311950	1.875286	2.832609	0.0151
REXP(-3)	-1.539909	1.802515	-0.854311	0.4097
REXP(-4)	-4.502328	1.033000	-4.358498	0.0009
CEXP	-3.437315	1.894674	-1.814199	0.0947
CEXP(-1)	-1.900667	2.240309	-0.848395	0.4128
CEXP(-2)	2.813747	2.677484	1.050892	0.3140
CEXP(-3)	8.195623	2.636420	3.108618	0.0090
FD	3.179355	0.745549	4.264450	0.0011
FD(-1)	3.153773	1.660518	1.899270	0.0818
FD(-2)	6.591027	2.214466	2.976350	0.0116
FD(-3)	3.028197	2.802087	1.080693	0.3011
FD(-4)	-7.526993	2.524090	-2.982062	0.0114
C	6005127.	2155751.	2.785631	0.0165
R-squared	0.999591	Mean dependent var		36561216
Adjusted R-squared	0.999079	S.D. dependant var		17867352
S.E. of regression	542129.1	Akaike info criterion		29.53996
Sum squared resid	3.53E+12	Schwarz criterion		30.30121
Log likelihood	-397.5594	Hannan-Quinn criter.		29.77268
F-statistic	1954.383	Durbin-Watson stat		2.912076
Prob (F-statistic)	0.000000			

Source: Data output via E-views 9.0

Table 13 provides evidence that government recurrent expenditure and fiscal deficit have significant positive relationship with economic growth in the short run, while capital expenditure has negative insignificant relationship with economic growth. Economic growth would be valued at N6005127 million if fiscal policy instruments: recurrent, capital expenditure and fiscal deficit are held constant. A unit increase in government recurrent expenditure and fiscal deficit result in N51.30 million and N317.94 million appreciation in economic growth, whereas a percentage rise in capital expenditure would reduce economic growth by N343.73 million. The result in Table 13 depicts the coefficient of the adjusted R-square as 0.999079. By implication, 99.91% changes in economic growth was significantly as a result of joint variation in recurrent, capital expenditure fiscal deficit as evidence by f statistic (1954.38) and p-value (0.00). There is no element of autocorrelation in the model as divulged by the Durbin Watson value (2.9).

Structural Analysis Variance Decomposition

Table 14: Variance Decomposition of RGDP and Monetary Policy

Period	S.E.	RGDP	MPR	LR	EXCHR
1	1001316.	100.0000	0.000000	0.000000	0.000000
2	1828997.	97.65382	0.677971	1.624893	0.043315
3	2468079.	90.10636	2.838242	5.219814	1.835586
4	2966702.	75.86878	5.502717	9.050075	9.578427
5	3483478.	57.11657	6.923096	11.24228	24.71805
6	4125841.	40.76677	6.241947	11.17699	41.81429
7	4884428.	30.52150	4.667504	9.830203	54.98079
8	5686346.	25.09207	3.455238	8.283347	63.16934
9	6457735.	22.14149	2.926684	7.010826	67.92100
10	7153244.	20.17957	2.906050	6.089789	70.82459

Source: Data output via E-views 9.0

The variance decomposition was carried out to ascertain which of the monetary policy and fiscal policy instrument that has much influence or causes more changes in economic growth. The variance decomposition result in Table 14 reveals exchange rate as the monetary policy instrument that influences or causes more changes in economic growth. In the second place is liquidity ratio, and monetary policy the least. The variation in economic growth proxied by real gross domestic product was more explained by fluctuation in real gross domestic product itself

Table 15: Variance Decomposition of RGDP and Fiscal Policy

Period	S.E.	RGDP	REXP	CEXP	FD
1	774524.2	100.0000	0.000000	0.000000	0.000000
2	1726427.	83.54251	5.271708	8.226192	2.959588
3	3161643.	60.04315	13.02692	16.27810	10.65182
4	5009550.	45.32594	16.40755	24.66234	13.60417
5	7167727.	35.82193	17.51659	31.49808	15.16339
6	9569294.	29.31070	17.36509	37.41731	15.90690
7	12151294	24.68619	16.54886	42.37074	16.39420
8	14843359	21.36235	15.38784	46.63192	16.61788
9	17551863	18.94319	14.10213	50.33157	16.62311
10	20171771	17.13434	12.82486	53.61564	16.42516

Source: Data output via E-views 9.0

With regard to economic growth and fiscal policy, Table 15 dispels that capital expenditure causes more changes in the economic growth compared to other fiscal policy instruments. This is flowed by recurrent expenditure and then fiscal deficit. It is concluded that exchange rate and capital expenditure are the monetary policy and fiscal policy variables that great influence economic growth in Nigeria.

Impulse Response Function

Table 16: Impulse Response Function of RGDP and Monetary Policy

Period	RGDP	MPR	LR	EXCHR
1	1001316.	0.000000	0.000000	0.000000
2	1504696.	-150597.8	233144.6	38065.45
3	1490639.	-387568.5	513423.9	332211.0
4	1090277.	-558052.5	691784.3	855111.0
5	503413.0	-596472.6	753446.9	1468473.
6	-93122.24	-471644.0	733759.2	2029390.
7	-584942.8	-225869.0	665314.5	2449337.
8	-911973.5	60653.13	577171.8	2703404.
9	-1058356.	321342.6	495274.9	2810540.
10	-1045056.	516234.3	438633.9	2813453.

Source: Data output via E-views 9.0

Table 17: Impulse Response Function of RGDP and Fiscal Policy'

Period	RGDP	REXP	CEXP	FD
1	774524.2	0.000000	0.000000	0.000000
2	1374823.	396391.0	495162.3	297005.0
3	1874001.	1070067.	1175573.	988201.6
4	2317954.	1677916.	2135885.	1532740.
5	2651259.	2209482.	3161233.	2091971.
6	2904519.	2627180.	4252175.	2603032.
7	3099987.	2921231.	5319636.	3104919.
8	3258302.	3077054.	6338758.	3522317.
9	3360240.	3088825.	7232805.	3820610.
10	3370729.	2956393.	7943980.	3952665.

Source: Data output via E-views 9.0

The impulse response function in this study details how economic growth responds to sudden shocks in monetary policy and fiscal policy instrument. Put differently, it ascertain the magnitude of variation in economic growth attributed to a unit change in monetary and fiscal policy instruments.

As can be seen in Table 16, economic growth respond positively to any shock in liquidity ratio and exchange rate in short and long run. Similarly, economic growth responds negatively to any shock in monetary policy rate only in the short run but positively in the long run.

With regard to economic growth and fiscal policy instrument, Table 17 provides evidence that economic growth responds positively to shock in all the fiscal policy instruments: recurrent, capital expenditure and fiscal deficit both in short and long run.

Hypotheses Testing

Decision Rule: If the p-value of f-statistic in granger causality test is significant at 5% level of significance, the null hypothesis is rejected. On the other hand, the null hypothesis is accepted if the p-value of statistic in granger causality test is insignificant at 5% level of significance.

Restatement of Hypotheses H₀₁: Monetary policy rate has no significant effect on real gross domestic product. **H₀₂:** Liquidity ratio has no significant effect on real gross domestic product. **H₀₃:** Exchange rate has no significant effect on real gross domestic product.

H₀₄: Recurrent expenditure has no significant effect on real gross domestic product.

H₀₅: Capital expenditure has no significant effect on real gross domestic product. **H₀₆**: Fiscal deficit has no significant effect on real gross domestic product.

Table 18: Test of Hypotheses

Hypotheses	Independent Variables	F-Statistic	P-Value	Decision
Hypothesis 1	Monetary Policy Rate	0.92266	0.3450	Accept H ₀ and Reject H ₁
Hypothesis 2	Liquidity Ratio	1.77401	0.1936	Accept H ₀ and Reject H ₁
Hypothesis 3	Exchange Rate	11.3216	0.0022	Reject H ₀ and Accept H ₁
Hypothesis 4	Recurrent Expenditure	0.22865	0.6362	Accept H ₀ and Reject H ₁
Hypothesis 5	Capital Expenditure	17.1402	0.0003	Reject H ₀ and Accept H ₁
Hypothesis 6	Fiscal Deficit	4.88637	0.0354	Reject H ₀ and Accept H ₁

Source: Granger Causality Output in Tables 21 – 22

On one hand, Table 18 depicts the acceptance of the null hypothesis for hypothesis one, two and four as the p-values of the f-statistic are greater than 0.05 (insignificant at 5% level of significance). On the other hand, it reveals the rejection of the null hypothesis for hypothesis three, five and six.

Discussion of Findings

The long run relationship between monetary policy, fiscal policy instruments and economic growth in Nigeria points to the critical role of the monetary policy decision of the Central Bank of Nigeria and Federal Government fiscal policy programmes on growth and development of economy. It could be adduced from this finding that for Nigeria to achieve the desire level of economic growth and development appropriate monetary policy and fiscal sustainability be practiced by the government having consideration that Nigeria is a developing economy and wants to attain development in the nearest future. It also brings to light that monetary and fiscal policy of the government is indispensable in the regulation, stabilization and intervention of eventual developments within the economy.

The positive relationship between gross domestic product and fiscal deficit and the relationship is in line with the Keynesian theory that fiscal deficit spurs economic growth. This supports the works of Olanipekun and Folorunso (2015) and Okoro (2013) that the level of economic growth attained by Nigeria at current time was a result of government's fiscal deficit over the years. Monetary policy rate having a positive relationship with real gross domestic product is unexpected owing to its ultimate effect on prime lending rate which affect productive economic activities. This refutes the study of Olanipekun & Folorunso (2015) that interest rate has not helped in mobilizing funds for economic investment. Invariably, the assertion that a change in interest rate brings about a corresponding decrease in real gross domestic product would be affirm by the result of this study.

Exchange rate having a negative relationship with real gross domestic product and exerting a significant effect on economic growth is evident in the devastating effect of deterioration in Nigeria's exchange rate over the years. Ordinarily, a change in exchange rate is expected to bring about corresponding increase in gross domestic product of Nigeria but the reverse is the case in Nigeria. The exchange rate of Nigerian Naira against other countries of the world, especially the USA Dollar, British Euro and European Euros has greatly depreciated over the years starting from 1986 when the Structural Adjustment Programme (SAP) was introduced in Nigerian. The negative relationship between exchange rate and economic growth is not in tandem with the studies of Tesfay (2010), Chowdhury & Afzal (2015) and Chuku (2010).

Government recurrent expenditure was found to have positive significant relationship with economic growth. This is in line with the Keynesian postulation that public spending increases output. This is in line with findings of Michael and Ebibai (2014), Onyeiwu (2012) and Rakic and Raenovic (2013). It is quite unfortunate that despite the increasing government over the years, the country still lack basic infrastructures such as good road, good healthcare centres, power supply just to mention a few. The budgetary system of the country is standing on a weak platform. Cases of budget delays, padding, weak structure for budget implementation monitoring is prevalent. In addition corruption in the management of public funds, extra-budgetary spending, awarding of contracts to cronies and embezzlement of public funds are not lacking in Nigerian news. The country which is public sector driven up to 80% have not achieved excellence in growth as always planned because of the aforementioned factors among others.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

This research work examine the effect of monetary policy and fiscal policy instruments on economic growth in Nigeria. The role of government monetary and fiscal policy in the regulation, stabilization and intervention of eventual developments within the economy is indispensable. The inter-relationship between monetary policy, fiscal policy and economic growth has been a topic of importance in literature, yet researchers have not arrived at a consensus opinion. With this, this study concludes that fiscal policy affect economic growth in Nigeria more than monetary policy.

Recommendations

In view of the findings of this study, the following recommendations are put forward for consideration by decision makers:

1. Government should allocate and effectively monitor funds sourced as a result of fiscal deficit to the provision of critical economic infrastructures such as electricity, access road, health, communication among others to reap the benefit associated with fiscal deficit.
2. The Central Bank of Nigeria should make policies that will keep the exchange rate at a stable rate since exchange rate volatility is affecting the growth of Nigerian economy.
3. Governments should make policies that will help increase government revenue generation to spend more on capital projects and ensure that public funds are not diverted into private pockets which result in no execution of projects.
4. The Central Bank of Nigeria should further develop the financial sector through making more funds available to the private sector by reducing monetary policy rate which affects interest rate ceiling on loans to the private sector.
5. Monetary policy should be structured in a way to compliment fiscal policy so that the level of inflation would be lowered whenever government relies majorly on fiscal deficit as an instrument of fiscal policy.
6. There should be consistency in policy objectives of the CBN. Policy inconsistency often sends the wrong signal to stakeholders in agricultural sector and prevent the sector's long term capital investments that could endanger increased productivity in the agricultural sector.

Contribution to Knowledge

The major contribution of this study to knowledge is in its attempt to determining whether economic growth is more propelled by monetary policy or fiscal policy which is lacking in previous studies in the context of Nigeria. This study makes a contribution by providing a time series assessment for an emerging country on the effect of monetary policy and fiscal policy instruments on economic growth in Nigeria using up-to-date data on variables of interest. The use of a superior tools of analysis: ARDL against the OLS estimation contributes to knowledge in this subject area.

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