



EFFECTIVENESS OF MONETARY AND FISCAL POLICY ON ECONOMIC GROWTH IN NIGERIA: SHORT AND LONG RUN IMPLICATIONS

Solawon, M. Deborah

Department Of Banking and Finance,
Adekunle Ajasin University Akungba-Akoko
modupeoluwasolawon@gmail.com

Demehin, J. Adeniyi

Department of Banking and Finance,
Adekunle Ajasin University, Akungba-
Akoko
adeniyiomomorayo2@gmail.com

Adekunle, E Oludayo

Department of Banking and Finance
adekunleoludayo@gmail.com
08100241231
Corresponding Author

Abstract

This study examined the short and long run implication of the effectiveness of monetary and fiscal policy on economic growth in Nigeria by employing, Bound Testing and Autoregressive Distributed Lag to examine the effect of money supply, government expenditure, government revenue and interest rate on gross domestic product. Data analyzed were collected from Central Bank of Nigeria Statistical Bulletin which spanned from 1981 to 2016. The bound test result indicated that there is a long run equilibrium relationship among the macroeconomic variables. The result of the ARDL regression indicated that Money Supply and Government Revenue had positive and significant effect on Gross Domestic Product. Also it was revealed that, government expenditure had negative and insignificant effect on Gross Domestic Product while Interest Rate had positive and insignificant effect on Gross Domestic Product in the long run. Based on the findings it was concluded that, monetary policy proves to be more effective both in the short run and long run while fiscal policy is more effective in the short run than in the long run.

Keywords: Monetary Policy, Fiscal Policy, Money Supply, Government Expenditure, Interest Rate and Economic Growth

INTRODUCTION

The macroeconomic objectives of a sovereign nation comprise of price stability, employment creation, improvement in balance of payment and economic growth. The extents at which these objectives are achieved depend largely on the effectiveness of monetary and fiscal policy thrust of the country.

Monetary policy involves the adoption of monetary policy instruments by central bank to influence economic activities. Kareem, Afolabi, Raheem and Bashir (2013) defined monetary policy as a policy employed by the central bank in controlling of the money supply as an instrument for achieving the objectives of economic policy. It is the combination of policy instruments designed to influence the growth, value and price of money in the economy. Falade and Folorunso (2015) asserted that macroeconomic objectives of most developing and developed countries include price stability, maintenance of balance of payments equilibrium, promotion of employment and output growth, and sustainable development.

Fiscal policy involves the adoption of government expenditure and taxation power to stimulate economic activities and growth. Enahoro, Jayeola and Onou (2013) viewed fiscal policy as the combination of taxation, public expenditure, reliefs, concessions and fiscal incentive policies. The policy thrust of monetary policy and fiscal policy can either be expansionary or contractionary. The main instruments of achieving macroeconomic objectives are fiscal and monetary policies. Today, monetary and fiscal policies are both commonly accorded outstanding roles in the pursuit of macroeconomic stabilization in developing countries, but the relative efficiency of these policies has been a major debate between the Keynesians and the Monetarists (Hasan, Islam, Hasnat and Wadud, 2016). Siyan and Adegioriola (2015) opined that there is heated debate among economists that monetary and fiscal policies jointly and individually affect the level of economic activities and the extent of effectiveness and superiority of one instrument over the other in stimulating economic growth has been subject of controversies among policy makers, economists and experts.

It is believed by the monetarists led by Milton Friedman that money supply have far reaching effect on economic activities while the Keynesians economics led by John Maynard Keynes are of the opinion that government expenditure produce greater influence on economic activities (Adefeso & Mobolaji, 2010; Adeolu, Sunday & Abike, 2012; Siyan & Adegioriola, 2015).

Udude (2014) asserted that over the reduction of inflation and exchange rate stability is the main of Central Bank of Nigeria. Enahoro *et al.*, (2013) opined that of great importance among the macroeconomic objectives is maintenance of single digit inflation, reduction of speculative demand for the US Dollar to keep exchange rate stable, achieving positive real return on fixed income securities among others. Since the late 1970s, fiscal policy has become a major instrument in Nigeria. The reason for this is the dominant role of the public sector in major economic activities in Nigeria. This can be traced to several factors among which is oil boom in early 1970s; the need for reconstruction after the civil war; the industrialization strategy adopted at the time (import substitution industrialization policy) and the militarization of governance (Siyan & Adegioriola, 2015).

From inception, monetary and fiscal policies are formulated in Nigeria with the aim of stabilizing the economy and promoting growth. However, little has been achieved in terms of major macroeconomic objectives of Nigerian with the economy still plunged in the

problem of uncontrollable inflation, high unemployment rate, incessant poverty, under utilization of resources and slow growth rate. Monetary and fiscal policies authorities in Nigeria use various instruments to achieve macroeconomic objectives. Some of the instruments adopted by authorities include open market operation (OMO), required reserve ratio (RRR), bank rate, liquidity ratio, selective credit control and moral suasion, government expenditure and taxation. Also there are various regimes of monetary and fiscal policy in Nigeria. Sometimes, monetary and fiscal policies are tight and at other times loose (Udede, 2014).

However, despite the different policy thrust in the economy the growth of the economy has not been encouraging which has received attention of scholars, policy makers and expert around the globe. Some of the problems encountered in the formulation of monetary and fiscal policy are the issue of conflicting objective, fiscal indiscipline on the part of government, failure of financial institutions to comply with Central Bank of Nigerian directives and underdeveloped financial system among others. Thus, with the country's macroeconomic objectives which are embedded in her vision 2030, it of great importance to assess the effectiveness of monetary and fiscal policy in stimulating growth and development in Nigeria which is the main focus of this paper. The rest of this paper is thus divided into four which include review of literatures, methodology, analysis and interpretations of results and finally conclusion and recommendations.

LITERATURE REVIEW

Monetary theory provides insight into achieving optimal monetary policy. Monetary policy rests on the relationship between the rates of interest in an economy, that is the price at which money can be borrowed, and the total supply of money. Monetary policy uses a variety of tools to economic growth, inflation, exchange rates with other currencies and unemployment (Enahoro, *et al.*, 2013).

According to Agwu, Okwo, Ugwunta and Idika (2015) fiscal policy is the means by which a government adjusts its level of spending to monitor and influence a nation's economy. It is used along with the monetary policy, which the central bank uses to influence money supply in a nation. Fiscal policy involves the adoption of government spending, taxation and borrowing power to enhance the level of economic activities for the purpose of achieving various macroeconomic objectives. According to Adeolu *et al.* (2012) fiscal policy entails management of the economy through the manipulation of income and spending by the government towards achieving desired macroeconomic objectives (Medee & Nembee, 2011).

The objectives of monetary and fiscal policies in Nigeria are multi-facet and wide-ranging. These include increase in gross domestic product (sustainable growth), reduction in the rate of inflation and unemployment, improvement in the balance of payment, accumulation of financial saving and external reserves as well as exchange rate stability (Siyan & Adegriola, 2015). According Zarra-Nezhad, Motamedi and Ojat (2015) to monetary and fiscal policies are of major policies of demand side and having an inevitable role in managing of economic stability policy. Relative effect of monetary and fiscal policies has roots in Keynesians and Monetarists discussions. After failure of the classic and neoclassic theories in distinguishing problems and presenting solutions for rescuing economy from the Great Depression of the 1930s, Keynes was successful in solving economic problems of this

period and restoring economic demolitions after the Second World War by presenting some policy recommendations (Zarra-Nezhad, *et al.*, 2015).

Keynes' successes in this period led to general acceptance of his perspectives on the relative importance of fiscal policies. Critical perspectives of Keynesians were the most severe criticism of classics and neoclassic perspective during this period. Then reactions of quantity theorists, especially Milton Friedman in theoretical development of the quantity theory and occurrence of stagflation of 1970s included the factors effective in discussing monetary policies again. Friedman's monetary principles and increased independence of the central bank in 1980s increased importance of coordination of monetary and fiscal policies in this period. Indeed, Central bank independence does not mean that there is no coordination between monetary and fiscal policies (Zarra-Nezhad, *et al.*, 2015).

Oziengbe (2011) examined the relative effectiveness of monetary and fiscal policy in Nigeria using a quarterly time series data from 1981-2009 employing cointegration and error correction methodology. The study reported a significant and positive relationship between real gross domestic product and government expenditure and a positive relationship between real gross domestic product and one-quarter lagged value of money supply while the impact of monetary policy action on economic activities was more significant than fiscal policy within the period covered by the study. Sanni, Amusa, and Agbeyangi (2012) using an annual time series data from 1960-2011, investigated the superiority of fiscal and monetary policies in controlling economic activities in Nigeria. Error Correction methodology was employed and the empirical result showed that none of the policies can be said to be superior to another and that a proper mix of the policies may enhance a better economic growth.

Iyeli, Uda, and Akpan (2012) focused on the relative effectiveness of broad money supply and government fiscal deficits and their effect on Gross Domestic Product (GDP). It was discovered that contribution of broad money supply (MS2) to the inflationary cycle in Nigeria is weak, but its immediate year lagged value is strong, positive and significant. Kareem *et al.*, (2013) examined the impact of fiscal and monetary policies on the Nigerian economy during democracy. The study employed descriptive statistics, regression and correlation analysis on fiscal and monetary variables (i.e., inflation, interest rate, narrow money, broad money, government recurrent and capital expenditure). The result showed that broad money and re-curent expenditure have positive relationship with RGDP

Musa, Asare and Gulumbe (2013) investigated the effectiveness of monetary-fiscal policies interaction on price and output growth in Nigeria. The dynamic correlations of variables were captured by the analyses of impulse response and variance decomposition. It was reported that money supply and government revenue had more positive impact on price and economic growth in Nigeria specifically in the long run. Enahoro *et al.* (2013) in their study assessed statutory functions of financial institutions as affected by fiscal and monetary policies in Nigeria. First bank, Access bank and Ecobank selected for the study. Questionnaires were administered and analyzed using the Analysis of Variance and Regression. Results showed that fiscal and monetary policies had enhanced operational efficiency in the Nigerian financial institutions, by reducing financial indiscipline in the financial and fiscal systems. Ezeji and Michael (2013) investigated the impact of monetary and fiscal policies on Nigerian Economic Growth by employing econometric methodology of analysis of unit root test, co integration and VAR model and it was found that fiscal policy measures exert greater effect than monetary policy measures on the level of economic

development in Nigeria and concluded that monetary and fiscal policies measures are jointly statistically significant to level of economic activities in Nigeria.

Havi and Enu (2014) examined the relative importance of monetary and fiscal policy on growth in Ghana by using OLS estimation techniques for the period 1980-2012. The study showed that while the effect of monetary policy is more powerful, both policies positively affect growth. Ogar, *et al.*, (2014) examined the empirical link on the effect of fiscal and monetary policy on the economic growth of Nigeria from 1986 to 2010 using secondary data, from Central Bank of Nigeria statistical Bulletin which were analyzed using ordinary least squares method of statistical analysis. It was found out that government revenue and expenditure had a positive impact and statistical significant on gross domestic product while money supply had a positive impact on gross domestic product and it discovered that this variable was statistically significant. Also it was found that exchange rate variable had a positive impact on the performance of Nigeria economy while inflation had a positive impact but there was no significant relationship between inflation and gross domestic product. Falade and Folorunso (2015) examined the relative effectiveness of fiscal and monetary policy instruments on economic growth sustainability in Nigeria in order to determined the appropriate mix of both policies employing error correction mechanism . The study found that all the fiscal and monetary variables of interest co-integrated with the economic growth series in the country. It was also found that the current level of exchange rate and its immediate past level, domestic interest rate, current level of government revenue and current level of money supply are the appropriate policy instrument mix in promoting economic growth both in the short and long run.

Siyani and Adegioriola (2015) investigated the relative impact of money supply and government expenditure on economic growth in Nigeria. The Beta Coefficients techniques and Two Stage Least Square were employed to analyze the data and it was found that the government expenditure is relatively more effective compared with money supply on economic activities. It was further revealed that government expenditure as a fiscal policy instrument is greater, more reliable (predictable) and faster than the use of money supply as a monetary policy instrument in stabilizing the economy. Hasan *et al.*, (2016) explored the relative effectiveness of monetary and fiscal policies on economic growth in Bangladesh for the period from fiscal year of 1974 to 2015 employing cointegration and Vector Error Correction Model (VECM). Nominal GDP was employed as a proxy for economic growth, while broad money supply (M2) and reserve money (RM) as proxies for monetary policy. The result of VECM indicated that there is a weak long run causality running from monetary and fiscal policies to economic growth. Okorie, Sylvester and Simon-Peter (2017) employed the auto regressive distributed lag (ARDL) model to ascertained the relative effectiveness of monetary and fiscal policies in Nigeria using a quarterly time-series from 1981-2012. The study discovered that monetary and fiscal policies both have significant positive impact income with monetary policy effecting income faster than fiscal policy.

A review of related literatures revealed that the effectiveness of monetary and fiscal policy on economic growth has received the attention of scholars in Nigeria. However, none of this study reviewed the current trends in Nigerian monetary and government policies in their econometric analysis and given the current under performance of the Nigerian economy which is embedded in her low standard of living and high unemployment rate it is of great necessity to re-examined the effectiveness of monetary and fiscal policy on

economic growth using current data which spanned from 1986 to 2016 with the optimism of contributing to existing literatures and Nigerian economy.

METHODS

The design used for this paper was ex post facto research design because the study evaluated the effect of the explanatory variables (proxy as Money Supply, Government Expenditure, Government Revenue and Interest Rate) on the dependent variable (Proxy as Gross Domestic Product). This research work made use of time series data which are obtained from secondary sources from 1981 to 2016. The data used for this study are collected from the Central Bank of Nigeria Statistical Bulletin.

In order to capture the monetary and fiscal policy on economic growth in Nigeria, a multiple regression model will be formulated. This is given as:

$$GDP = f(MS, GE, GR, INT)$$

The linear equation of this model can be written as:

$$GDP_t = \beta_0 + \beta_1 MS_t + \beta_2 GE_t + \beta_3 GR_t + \beta_4 INT_t + e_t$$

Where:

GDP = Gross Domestic Product

MS = Money Supply

GE = Government Expenditure

GR = Government Revenue

INTR = Interest Rate

β_0 = Constant Term

$\beta_1 - \beta_4$ = Parameters of the variables to be estimated

e = Unexplained Error Term

Estimation Procedures

This study employed Augmented-Dick-Fuller (ADF) unit root test, Bound Test and Autogressive Distributed Lag to evaluate the effect monetary and fiscal policy on economic growth in Nigeria. The analysis commenced by testing the time series properties of data employed in the estimation equation for stationarity using Augmented-Dick-Fuller (ADF) unit root test in order to avoid the problem of spurious regression. Also, Bound test was employed to check the existence of long run relationship among the variables in estimation. An Error Correction Mechanism is employed to ascertain the speed of adjustment from the short run equilibrium to the long run equilibrium state. Thus, in estimating the model the study relied on the developments in the co integration theory, otherwise referred to as the "error correction mechanism" using the Autogressive Distributed Lag.

In order to test the significance effect of the explanatory variables as (Measured as Money Supply, Government Expenditure, Government Revenue and Interest Rate) on the dependent variable (Proxy as Gross Domestic Product) the study employed T-statistics which is employed to evaluate effect of the individual independent variables on economic growth.

Also, the regression result will be tested for reliability and robustness using by conducting diagnostics test on the regression result. For this purpose, Jarque Bera normality test is employed to test if the macroeconomic variables are normally distributed, Lagrange Multiplier test to check if the variables are serially correlated in order to avoid spurious or nonsense regression, Breuch Pagan test, to test for Heteroscedacity of the variables and finally, Cusum Test in order to test for the level of stability of the regression model.

RESULTS AND INTERPRETATIONS**Test of Stationarity for the Variables****Table 1: Summary of the Unit Root Test**

VARIABLES	TEST STATISTIC	5% CRITICAL VALUE	Prob.	LEVEL	S/NS
GDP	/3.086936/	/2.951125/	0.0371	1(1)	S
MS	/3.297546/	/2.951125/	0.0229	1(1)	S
GE	/4.640474/	/3.552973/	0.0040	1(1)	S
GR	/2.989652/	/2.976263/	0.0486	1(0)	S
INTR	/5.044926/	/2.954021/	0.0002	1(1)	S

Source: Researcher's Computation, 2018

Table 3 presents the summary of unit root test for the macroeconomic variables using Augmented Dickey Fuller test. It was revealed that Gross Domestic Product, Money Supply, Government Expenditure and Interest Rate are free from unit root problem at first difference 1(1), since their respective t-statistics are greater than the critical value at 5% level of significance in absolute term as shown in table. Hence, the null hypothesis of unit root was therefore rejected for the entire variables. However, since the macroeconomic variables employed are mixture of I(0) and I(1) orders variables thus the study employs the Autoregressive Distributed Lag of short run and long run equilibrium.

Table 2: Bound Test

Test Statistic	Value	k
F-statistic	7.327509	4

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Researcher's Computation (2018)

Table 2 revealed the result of the long run relationship among the macroeconomic variables using the bound test. In order to reject the null hypothesis of no long run relationship, the F-statistics must be greater than the upper bound (I1) at 5% level of significance. It could be seen from the above result that the F-statistics value is 7.327509 and it is greater than the critical value of 4.01. Thus, the null hypothesis of no long association-ship was rejected for the model implying that Money Supply, Government Expenditure, Government Revenue and Interest Rate are good determinants of Gross Domestic Product in the long run.

Table 3: Short Run Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(MS)	0.241366	0.067409	3.580612	0.0015
DLOG(GE)	0.005513	0.045076	0.122306	0.9037
DLOG(GE(-1))	0.148115	0.064220	2.306369	0.0300
DLOG(GR)	0.071120	0.028037	2.536666	0.0181
D(INTR)	0.003622	0.001198	3.024668	0.0059
D(INTR(-1))	-0.018163	0.004637	-3.917113	0.0006
CointEq(-1)	-0.312959	0.089559	-3.494459	0.0019

Source: Researchers' Computation, 2018

Table 3 above presents the result of the long run and short run ARDL result. The result of the short run result shows a co-integration value of -0.312959 which is significant at 5% level which implies that ARDL result has a self adjusting mechanism. This implies that disequilibrium, Gross Domestic Product will adjust back to equilibrium at 31.2% in the short run. Also, in the short run it was revealed that that Money Supply, Government Expenditure, Government Revenue have positive significant impact on Gross Domestic while Interest Rate has negative significant effect on Gross Domestic product.

Table 4 Long Run Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(MS)	0.771236	0.120379	6.406724	0.0000
LOG(GE)	-0.124854	0.256744	-0.486296	0.6312
LOG(GR)	0.327251	0.145741	2.559278	0.0320
INTR	0.035928	0.021859	1.643616	0.1133
C	2.426501	0.117624	20.629381	0.0000

Source: Researchers' Computation, 2018

The result of the long run relationship revealed that Money Supply has a positive and significant effect on Gross Domestic Product in Nigeria with a coefficient of 0.771236, implying that 1% increase in Money Supply will lead to increases in 77% increase Gross Domestic Product. Also, Government Expenditure was found to have insignificant negative effect on Gross Domestic Product with a coefficient value of -0.124854 which means that 1% increase in Government Expenditure will lead 12% fall in Gross Domestic Product in the long run.

Furthermore, the result of the Autoregressive Distributed Lag result indicated that Government Revenue has a coefficient value of 0.327251 which implies that 1% increase in Government Revenue will lead to 33% increase in Gross Domestic Product in the long run which is significant 5% level. Finally, the long run ARDL model revealed that there is an insignificant direct relationship between Interest Rate and Gross Domestic Product with a

coefficient value of 0.035928 implying that 1% increase in Interest Rate will increase Gross Domestic Product by 4%.

Table 5: Diagnostics Results

Diagnosics test	Observed value	P-value (Chi-square)
Normality Test	1.147112	0.5635
Breusch-Godfrey LM test for autocorrelation	4.437354	0.1088
Heteroskedasticity Test: Breusch-Pagan-Godfrey	5.773213	0.7624
Ramsey RESET Test	1.298113	0.2663

Source: Researcher's Computation, (2018)

Table 5 revealed the diagnostics test for the regression result. The Jarque-Bera normality test revealed that the residual of the model is normally distributed since the P value is insignificant and greater than 5% level of significant. Also, Breusch-Godfrey Lagrange Multiplier test (LM) revealed that the regression model is not serially correlated since the p-value of 0.1088 is insignificant and greater than 5% conventional level which leads to the acceptance of null hypothesis of no serially correlation. The result of Breusch-Pagan test was conducted to check the presence heteroscedasticity in the model and it shows a probability value of 0.7624 which is statistically insignificant at 5% critical value thus leading to the acceptance of null hypothesis that the residual is homoscedastic. Finally, the result revealed that there is no misspecification in the regression model as revealed by the Ramsey Reset Test.

CONCLUSION AND RECOMMENDATIONS

Monetary and fiscal policies serve as macroeconomic policy thrust that are employed by government to stimulate economic growth. Based on the macroeconomic policies of nation, government and monetary authority can either adopt expansionary or contractionary monetary and fiscal policies to achieve the macroeconomic objectives of price stability, full employment, enhanced economic growth and maintenance of balance of payment. However, the effectiveness of monetary and fiscal policy as a tool of economic growth and development has received attentions of scholars in the recent years in Nigeria. Thus, this study examined the effectiveness of monetary policy and fiscal policy on the economic growth of Nigeria employing data that spanned from 1981 to 2016.

The study revealed that money supply and government revenue exact significant effect on economic growth in Nigeria. Also, government expenditure and interest rate was found exact significant effect on economic growth mostly in the short run. Based on findings it was concluded that, monetary policy proves to be more effective both in the short run and long run while fiscal policy is more effective in the short run than in the long run. Based on the findings of this research work, it is recommended that:

Government capital expenditure should be centered more on capital expenditure to ensure investment in infrastructural facilities that could improve economic growth through enhancement of both domestic and foreign investment.

Effective framework that will ensure the monitoring of budget should be put in place in order to ensure that the fiscal goals of budget implementation are achieved optimally.

The rate of interest should be stabilized through the formulation of effective monetary policy rate policies while the growth rate of money supply should be put unchecked to avoid inflationary tendency in the economy.

References

- Adefeso, H.A. & Mobolaji, H I. (2010). The fiscal-monetary policy and economic growth in Nigeria: Further empirical evidence. *Pakistan Journal of Social Sciences*, 7(2), 137-142.
- Adeolu, A.M., Sunday, K.J. & Abike, S.A. (2012). Fiscal/monetary policy and economic growth in Nigeria: A theoretical exploration. *International Journal of Academic Research in Economics and Management Sciences*, 1(5), 78-88.
- Afolabi, A.J., Raheem, K.A. & Bashir N.O. (2013). Analysis of fiscal and monetary policies on economic growth: Evidence from Nigerian democracy. *Current Research Journal of Economic Theory*, 5(1), 11-19.
- Agwu, S.U., Okwo, I.M., Ugwunta, O.D. & Idika, A. (2015). Fiscal policy and economic growth in Nigeria: Emphasis on various components of public expenditure. *SAGE*. 1–12
- Enahoro, J.A., Jayeola, O. & Onou, D.P. (2013) operational performance of fiscal and monetary policies in Nigerian financial institutions. *Asian Economic and Financial Review*, 3(1), 62-74
- Ezeji, C.E. & Michael, N. (2013). The impact of monetary and fiscal policies on Nigerian economic growth: 1990-2010. *European Journal of Business and Management*, 5(2), 13-26.
- Falade, O.E. & Folorunso, B.A. (2015). Fiscal and monetary policy instruments and economic growth sustainability in Nigeria. *American Journal of Economics*, 5(6), 587-594.
- Hasan, A., Islam, A., Hasnat, A. & Wadud, A. (2016). The relative effectiveness of monetary and fiscal policies on economic growth in Bangladesh. *Economics*, 5(1), 1-7.
- Havi, E. D. K. & Enu, P. (2014). *The effect of fiscal policy and monetary policy on Ghana's economic growth: Which policy is more potent?* *International Journal of Empirical Finance*, 3(2), 61-75.
- Iyeli, I. I., Uda, E.B., & Akpan, E. (2012). The relative effectiveness of monetary and fiscal policies in economic stabilization in a developing economy: An empirical evidence from Nigeria. *Annals of Humanities and Development Studies*, 3(1).
- Medee, P.N. & Nembee, S.G. (2011). Econometric analysis of the impact of fiscal policy variables on Nigeria's economic growth (1970 - 2009). *International Journal of Economic Development Research and Investment*, 2(1).
- Musa, Y., Asare, B.K. & Gulumbe, S.U. (2013). Effect of monetary-fiscal policies interaction on price and output growth in Nigeria, *CBN Journal of Applied Statistics*, 4(1), 55-74.
- Ogar, A., Nkamare, S.E. & Emor, E.G. (2014). Fiscal and monetary policy and its effect on the growth of Nigeria economy. *European Journal of Business and Management*, 6(29), 220-232.
- Oziengbe, S.A. (2011). Examining the relative effectiveness of monetary and fiscal policies in Nigeria: A co-integration and error correction approach. *Working Papers Series*.
- Sanni, M.R., Amusa, N.A. & Agbeyangi, B.A. (2012). Potency of monetary and fiscal policy instruments on economic activities of Nigeria (1960-2011). *Journal of African Macroeconomic Review*, 3(1), 161-176.
- Udude, C.C. (2014). Monetary policy and economic growth of Nigeria. *Journal of Policy and Development Studies*, 9(1), 234-247.
- Zarra-Nezhad, M., Motamedi, S., Ojat, A.H.M. & Anvari, E. (2015). An investigation into the efficiency of monetary and fiscal policies in Iran case study: The 4th economic development plan. *Asian Economic and Financial Review*, 5(5), 734-746.