RESEARCH ARTICLE

MACROECONOMIC POLICIES AND ECONOMIC GROWTH IN NIGERIA

*,1OBAYORI, Joseph Bidemi, 2NWOGWUGWU, Uche Collins and 3OMOZUAWO, Musah Buhari

*,1,2, Department of Economics, Nnamdi Azikiwe University Awka, Nigeria
3Department of Humanities and Social Sciences, School of General Studies, Auchi Polytechnic,
Auchi. Edo State, Nigeria

ARTICLE INFO	ABSTRACT
	Macroeconomic policies and economic growth in Nigeria was determined through co-integration and error correction modeling techniques. The time series properties of the variables were investigated by conducting a unit root test using annual series data for the period 1980-2013 and the data source was mainly Central Bank of Nigeria Statistical Bulletin. The result of the parsimonious ECM analysis shows that monetary rather than fiscal policy exerts a great positive impact on economic growth in Nigeria. Also, the granger causality results show bidirectional causation between GDP, total government expenditure and broad money supply. But a unidirectional causation between total government expenditure and broad money supply. Meaning that the emphasis on fiscal action of the government has led to greater distortion in the Nigerian economy. We are, however, of the opinion that a well-coordinated macroeconomic policy is needed to achieve economic growth in Nigeria. Also, both monetary and fiscal policies should be complementary.

INTRODUCTION

The basic objective of government; be it democratic or military, is to promote sustainability in all ramifications of her society. In doing this, different governments choose different institutional arrangements for economic management. The regulated approach, the deregulated approach or the coordination of both could be chosen. Whichever one is pursued largely depends on the socio-politico-economic and international politics of the time. Therefore, policy instruments are required for government to redirect the system for stability. To achieve this, macroeconomic policies are used. Thus, macroeconomic policies affect the performance of the economy. Macroeconomic policy refers to action taken by government agencies responsible for the conduct of economic policy to achieve some desired objectives of policy through the manipulation of a set of instrumental variables (Anyanwu and Oaikhenan, 1995). Macroeconomic policy is also known as economic stabilization or demand management policy Tom-Ekine, (2013) and Todaro and Smith, (2011). The two major types of macroeconomic policies this study rest upon are fiscal and monetary policies. Fiscal policy, which is determined at the

national, state, and local levels, concerns government spending and taxation, while monetary policy determines the rate of growth of the nation's money supply, and is under the control of a government institution known as the Central Bank (Abel, Bernanke and Croushore, 2008). It is a widely accepted fact among economists that monetary and fiscal policies are very important tools that are used to influence macroeconomic performance as well as fine-tune and direct an economy to achieve the policy goals. However, an evaluation of economic performance in Nigeria in terms of stability in key macroeconomic goals may be elusive. Indeed the behavior of output over the years has shown apparent growth in the economy, except for some years in which negative GDP growth rates were recorded. Unfortunately, there has been little or no development in Nigeria as depicted by some rising inflation, unemployment, trade deficit, misery, hunger, and deteriorating infrastructure and quality of life generally (Anyanwu and Oaikhenan 1995). The above scenario is not far fetch from the fact that monetary and fiscal policies have not been properly articulated and coordinated to fine-tune and direct the economy to achieve the policy goal of economic growth in Nigeria. Given the above therefore, the broad objective of this paper is to examine the relative effects of monetary and fiscal policies on economic growth in Nigeria from 1980 to 2013.

*Corresponding author: OBAYORI, Joseph Bidemi
Department of Economics, Nnamdi Azikiwe University Awka, Nigeria

The paper is divided into five sections namely: introduction, literature review, methodology, results and discussion and section five centres on conclusion.

LITERATURE REVIEW

Theoretical Framework: The question of whether an expansionary monetary policy or fiscal policy will help to raise output starts from the basic Keynesian model. In general, either an increase in government expenditure or an expansionary monetary policy, leading to an increase in investment via lower interest rate, will lead to an increase in output. Nevertheless, for many years, and to some extent and even now, there is the view that Keynesians ascribe that only fiscal policy can affect income and output, while monetarists believe that only monetary policy can have such an effect. It turns out, therefore, that in certain special cases, only fiscal policy works and in another special case, only monetary policy works. It has, however, been observed that only fiscal policy will work, and monetary policy will not have any effect, if one of the links between changes in money supply and changes in investment is broken. The accounts of Keynesian theory concentrate on the liquidity trap as the extreme Keynesian special case. The important implication of the liquidity trap is that once the rate of interest has fallen to the level at which the liquidity trap occurs, an increase in the money supply will not reduce the interest rate any further.

However, in a liquidity trap, an increase in government expenditure will still increase output. In fact, as long as we remain in liquidity trap, an increase in government expenditure will have the full effect on income predicted by the multiplier because interest rates do not rise at all and there is no crowding out of private investment to offset any of the effects of the increase in government expenditure. Hence, the support for the fiscal action of the government to boost output. On the other hand, those who accuse Keynesian believe that only fiscal policy can work, and that monetary policy cannot, then point out the extreme unlikelihood of liquidity trap, and the lack of evidence that it has ever occurred. It seems to us, however, that most of those Keynesians who claim that monetary policy cannot raise income did not have liquidity trap in mind. Instead they usually based their view on the other link between monetary policy and investment. If investment is completely insensitive to the rate of interest, then monetary policy will have no effect even if it does to a fall in the interest rate accept that investment is sensitive to interest rate. By now, virtually all economists accept that investment is sensitive to interest rate. It follows therefore that the general theoretical framework accepted by Keynesians indicated that provided the economy was not in a liquidity trap and provided that there was some sensitivity of investment to interest rates, monetary policy would affect output. This view is now accepted as the empirically relevant case. The converse case in which monetary policy can affect income while fiscal policy is powerless will also not occur in the general Keynesian model. This view referred to as the monetarists' view is expressed by making reference to the "Quantity Theory of Money" as in the equation below:

$$MV = PY \qquad \qquad \text{...........................(1)}$$

Where; M stands for money stock;
V, velocity of circulation;
P, an index of the price level; and
Y, the income.

The right-hand side of the equation above is the value of nominal national income. If V is constant then the equation tells us that there is a one-to-one relationship between changes in the stock of money and changes in the value of national income.

$$M = kPY \qquad \qquad \text{...........(2)}$$

If, in addition, as in the present context of our discussion of monetary and fiscal policy, we keep the price level (P) fixed, then the only way that Y can change is if M changes. The implication is that any other change, such as a change in government expenditure will not affect the level of real income. Hence, fiscal policy must be powerless while monetary policy will affect real output. Considering equation (2) as a demand for money which is not dependent at all on interest rates, one has the idea that there is one, and only one, level of national income which would lead to a demand for money balances which is equal to the exogenously given money supply. This suggests that if there is an increase in one of the components of desired expenditure, such as government expenditure, what will happen is that there will be an excess demand for funds which will drive up the interest rate in the financial markets. The process will only stop when enough investment has been crowded out by the rise in interest rates so as to leave total expenditure back to its old level.

The end result of the dynamic process is however clear from the model in equation (3) below:

$$Y = C + I + G \qquad \qquad \text{.........(3)}$$

An increase in government expenditure will lead to a drop in private investment of exactly the same magnitude leaving total expenditure and output unchanged. In terms of equation (3), the increase in G will be matched by a fall in I, and there is full crowding out. Hence fiscal policy cannot have any effect in the special case where the demand for money is completely insensitive to interest rate. Given the above discussion, the tendency now is for the monetarists to say that Keynesians believe only in fiscal policy and for Keynesians to accuse monetarists of believing only monetary policy. The issue now is to determine which view is more relevant to the Nigerian economy Ajisafe and Folorunso (2002).

Empirical Literature

Literature abounds on the effectiveness of monetary and fiscal policies in both developed and developing countries of the world. However, there has been contrasting opinions on which of the two policies exert greater influence on economic activity. This section hereby critically reviews. For instance, Ogunmuyiwa and Ekone (2010) investigated the relationship between money supply and economic growth in Nigeria by using OLS and Error correction mechanism. Also, the Granger causality tests was used for checking the causality. The study

found that economic growth is influenced by the level of money supply in the economy.

Ali, Irum and Ali (2008) examines the effects of fiscal and monetary policy on economic growth by using annual time series data from 1990 to 2007 in case of South Asian countries Autoregressive distributed lag (ARDL) model has been used. Results indicate that money supply has significant and positive effect on economic growth in both short run as well as in long run, while Fiscal policy has insignificant effect on economic growth both in the short run and long run. They conclude that monetary policy is a more powerful tool than fiscal policy in enhancing the economic growth in case of South Asian countries.

Udah (2011) investigate the impact of stabilization policies (monetary and fiscal policies) and electricity supply on economic development in Nigeria using the OLS estimation technique. The time series characteristics of the variables were tested using the Ng and Perron (2001) modified unit root test and the (ARDL) bounds testing approach to co integration proposed by Pesaran, Shin and Smith (2001). The result of the parsimonious estimates showed that broad money supply, government expenditure and electricity supply were important determinants of per capita GDP growth rate in Nigeria. The findings of this paper showed that demand management is useful for the purpose of economic stabilization in Nigeria.

Jawaid, Qadri and Ali (2011) empirically examined the effect of monetary, fiscal and trade policy on economic growth in Pakistan using annual time series data from 1981 to 2009. Money supply, government expenditure and trade openness are used as proxies of monetary, fiscal and trade policy respectively. Co integration and error correction model indicate the existence of positive significant long run and short run relationship of monetary and fiscal policy with economic growth. Result also indicates that monetary policy is more effective than fiscal policy in Pakistan. In contrast, trade policy has insignificant effect on economic growth both in the short run and in the long run. Jawaid, Arif and Nacemullah (2010) investigate the comparative effect of fiscal and monetary policy on economic growth in Pakistan using annual time series data from 1981 to 2009. Co integration test confirms positive long run relationship between monetary and fiscal policy with economic growth. However, monetary policy is found to be more effective than fiscal policy in enhancing the economic growth of Pakistan. They suggested that policy makers should focus more on monetary policy than fiscal policy to ensure economic growth however; the short run relationship should also have been checked.

Adefeso and Mobolaji (2010) empirically examine the relative effectiveness of fiscal and monetary policy on economic growth in Nigeria. Annual time series data from 1970 – 2007 is employed. Error correction mechanism and co-integration technique have been used in the study. Gross domestic product, broad money, government expenditure and degree of openness have been used in the study. Results indicate that the effect of monetary policy on economic growth in Nigeria is much stronger than fiscal policy. They recommended that policy makers should emphasize on monetary policy for the purpose

of economic stabilization in Nigeria. Taban (2010) re-investigate the government spending-economic growth nexus for the Turkish economy using bounds testing approach and MWALD Granger causality test by using the quarterly data from 1987:Q1 to 2006:Q4. Results show that share of total government spending and the share of government investment to GDP have significant and negative effect on growth of real per capita in the long run. On the other hand, government consumption spending to GDP ratio has insignificant effect on per capita output growth. Results also show that there is bidirectional causality between total government spending and economic growth, unidirectional relationship running from per capita output growth to government investment to GDP ratio. Owolabi (2011) made an econometric analysis of the relative effectiveness of fiscal policy management in Nigeria, between 1970 and 2007. It employed reduced forms model in addition to, Beta coefficient, Theil's inequality and Root Means Square Error (RMSE) techniques to investigate the stability and effectiveness of the estimated fiscal model which represent government spending, during and after estimation periods. The results reveal stability of the models and further confirmed the fact that government spending is the major determinant which influences and predict Nigeria macroeconomic activity. There is what appears to be a manifestation of the so-called 'crowding out' effects of fiscal policy actions in Nigeria. These are associated with the negative sings assumed by coefficients of the lagged fiscal policy variables (except recurrent expenditures).

Javed and Sahinoz (2005) examined the relationship between economic growth and government spending in Turkish economy with and without using money supply as an explanatory variable. The study employed a quarterly data set for the period 1992:1 to 2003:3 of GNP growth, government spending and money supply. The study checked the long run relationship among these variables by using Engle granger, Philips – Ouliaris and Johansen's co integration test while Granger test is used to check the causality. Engle granger and Philips – Ouliaris found no long run relationship between economic growth and government spending however the evidences of long run relationship were found after the inclusion of money supply in the equation. The study found bi-directional causality between economic growth and money supply after excluding government spending while uni-directional causality between government spending and money supply after excluding economic growth.

Srinivasan (2013) investigated the causal nexus between public expenditure and economic growth in India using cointegration approach and error correction model. The analysis was carried out over the period 1973 to 2012. The Cointegration test result confirms the existence of long-run equilibrium relationship between public expenditure and economic growth in India. The empirical results based on the error-correction model estimate indicates one-way causality runs from economic growth to public expenditure in the short-run and long-run, supporting the Wagner's law of public expenditure.

Monetary Policy and the Economy

All over the world, the major preoccupation of Central Banks is the formulation and implementation of monetary policy. This is

predicated on the use of monetary policy as a tool for enhancing the macroeconomic environment generally and in particular an efficient financial system/market, in order to promote economic growth. Central Banks in developing economies are further entrusted with other developmental functions with a view to engendering rapid economic development. In pursuance of these objectives, central banks are usually given the core mandate of maintaining internal and external value of the currency, which in the domestic economy, translates to keeping inflation low and stable. They also undertake an evaluation of the economy, which forms the basis for monetary policy formulation and implementation. To the extent that monetary policy is a tool for macroeconomic management, its application varies from country to country and produces different results Mordi (2009). He stated that sometimes, the outcomes of monetary policy intended and dissatisfactory.

Lipsey and Crystal (1995) stated that a good monetary policy in itself cannot make an economy rich, but a bad monetary policy does disrupt the real economy thereby cause a loss of real output. According to Mordi (2009) monetary policy are a blend of measures and or set of instruments designed by the central bank to regulate the supply, value and cost of money consistent with the absorptive capacity of the economy or the expected level of economic activity without necessarily generating undue pressure on domestic prices and the exchange rate. In similar words, Folawewo and Osinubi (2006) have stated that in general terms, monetary policy refers to a combination of measures designed to regulate the value, supply and cost of money in an economy, in consonance with the expected level of economic activity. That the objectives of monetary policy include price stability, maintenance of balance of payments equilibrium, promotion of employment and output growth, and sustainable development. Monetary policy is an economic policy which refers to the combination of measures designed to control supply of money and credit conditions in an economy for the purposes of achieving macro-economic goals of full employment, economic growth, stability of price and wealth, efficient resources allocation, favourable balance of payments and increase in industrialization, Ogunmuyiwa and Ekone (2010). From the forgoing, it could be deduced that monetary policy plays important role in the economy by influencing the cost and availability of credit to control inflation and maintaining equilibrium in the balance of payments, ensure full employment, promote sound financial system and exchange rate stability, and sustainable growth and development, amongst others. To attain such goals, monetary policy instruments which are of two types- quantitative and qualitative are normally used. But the quantitative variant is necessarily mentioned here, Jhingan (2008).

Fiscal Policy and the Economy

Fiscal policy aims at changing aggregate demand by suitable changes in government spending and taxes, Ahuja (2007). Samuelson and Nordhaus (2001) saw fiscal policy as the setting of taxes and public expenditure to help dampen the swings of the business cycle and contribute to the maintenance of a growing, high-employment economy, free from high or volatile inflation. It concerns government spending and taxation, Abel, Bernanke and Croushore (2008). Onuchukwu, Ofoezie and Nteegah (2006) states that the money raising and spending activities of any institution or individual are its fiscal activities, and the way the institution or individual carries out its fiscal activities is its fiscal policy. They state that government plans and objectives are usually articulated in her macroeconomic policies. And the essence of the policies can be summarized as;

-Achieving acceptable growth rate in the National income.
-Maintaining acceptable price stability
-Achieving full employment and
-Maintaining healthy balance of payment position.

The principal objective of fiscal policy according to Keynes was to solve the real problem, fundamentally yet essentially, to provide employment for everyone. Keynes, by contrast, believe that the unemployment problem should be solved speedily and directly by one primary method – direct job creation through public works. To Ohale and Onyema (2001), fiscal policy is concerned with the use of government spending and financing powers to influence aggregate demand or aggregate supply in the economy. It involves mainly government spending, taxation and borrowing policy. It is concerned with action of the government to spend money, or to collect money in taxes, with the purpose of influencing the condition of the national economy Tom-Ekine (2013). Gbosi (2005) conceptualized that fiscal policy is the deliberate change of levels of government expenditure, taxes and borrowing in order to achieve such national economic goals as full employment, price stability, growth in Gross Domestic product and balance of payments equilibrium. He went ahead to outline the instrument of fiscal policy to include:Government taxes, Government expenditure and Borrowing (a supplementary instrument of fiscal policy when fiscal operations result in deficit). The tools of fiscal policy as mentioned above are usually conducted according to the condition of an economy.

Onuchukwu, Ofoezie and Nteegah (2006) posited that government can control deflationary and inflationary pressures in the economy by a judicious combination of expenditure and taxation programmes for example, an increase in public expenditure during depression adds to the aggregate demand for goods and services within the economy and leads to a larger increase in income via the multiplier process. Similarly, a reduction in taxes has the effect of raising disposable income thereby increasing consumption and investment expenditure of the people. On the other hand, a reduction of public expenditure during inflation reduces aggregate demand, national income, employment output and prices.

METHODOLOGY

The study is analytical in nature because of the kind of data used. The Ordinary Least Square (OLS) analysis and co-integration/error correction mechanism is employ as the main analytical tools. The OLS was used because the estimates possess the properties of BLUE (Best Linear Unbiased and Efficiency), while the cointegration technique establishes the long run equilibrium relationship between the variables in the model.

The model for the study and the apriori, expectations is specified as:

$$GDP = \partial_0 + \partial_1 GEX + \partial_2 BMS + U$$

Where: GDP = Gross Domestic Product (Proxied for Economic Growth), GEX = Government Expenditure (Proxied for Fiscal Policy), BMS = Broad Money Supply (Proxied for Monetary Policy), ∂_0 =Intercept Parameter, U= Error Term, ∂_1 - ∂_2 =Slope Parameters. on the apriori; $\partial_1 > 0$ and $\partial_2 > 0$.

The unit root test via the ADF test precedes the cointegration and ECM test in order to test for stationarity of the two variables. The unit root model is presented thus:

$$\Delta Y_1 = \alpha Y_{t-1} + \sum_{i=1} \beta \Delta Y_{t-1} + \delta + Y_{1+} \varepsilon_1 \quad (1.2) \quad \text{for levels}$$

$$\Delta \Delta Y_1 = \alpha \Delta Y_{t-1} + \sum_{i=1}^{m} \beta \Delta \Delta Y_{t-1} + \delta + Y_1 + \varepsilon_1 \quad (1.3) \quad \text{for first difference}$$

ΔY is the first difference of the series, m is the number of lags and t is the time. Therefore, assuming the integration of order I(1) and cointegration between the levels of Economic Growth (GDP$_t$), Total Government Expenditure (GEX$_t$) and Broad Money Supply (BMS$_t$). The following ECM, according to Engel, Johansen and Granger (1987), are formulated:

$$\Delta Yt = ln\delta 0 + \sum \delta_1 \Delta GEXt + \sum \delta_2 \Delta BMSt + ECMt_{-1} \quad (1.4)$$

From equation 1.1, Δ indicates difference operator, Y represents the dependent variable, t implies time, $\delta 0$ is the intercept and ECMt-1 is the error correction mechanism obtained from the long-run cointegration regression. While δ_1 is the coefficients of explanatory variable. The short run which is inevitable to achieve the long run equilibrium can be provided by the causal relationship between the variables (Granger, 1986).

RESULTS AND DISCUSSION

This section presents both the short and long runs analysis of the regression results. The short run result of GDP model as reported in Table I above shows that the coefficient of determination-R^2 is 0.949, indicating that the variation in gross domestic product explained by total government expenditure and broad money supply is 95 percent. Therefore, the explanatory power of the model estimated is 95 percent. The coefficient of Total Government Expenditure (GEX) variable appeared with positive sign and statistically significant. Also, the regression coefficient of BMS (Broad Money Supply) variable appeared with negative sign instead of positive sign and statistically not significant at 5 percent level. This does not conform to a priori expectation. Also, the overall model is significant at 5 percent level given the f-value of 292.0 with the probability (F-stat=0.0000). The Durbin Watson value of 0.8285 is far from 2.0, depicting the presence of serial autocorrelation. From the analysis, it is clear that the regression result is not good enough for policy recommendation. This is so because the R^2 is very high, only one variable is statistically significant while the other is not. Also, the DW shows the presence of serial autocorrelation. This may be attributed to non-stationarity of time series data that are used for the study. Therefore, there is need to conduct stationarity test and the long run analysis in order to confirm the long run equilibrium of the

model. A test of stationarity which has become widely popular over the past several years is the unit root test (Gujarati, 2007). The assumption of stationarity of regressors and regressands is crucial for the properties of the OLS estimators. In this case, the usual statistical results for the linear regression model and consistency of estimators hold. But when variables are non-stationary, then the usual statistical results may not hold. In other words, the test for stationarity is the foundation for cointegration to be conducted. Also Granger (1969) opined that most time series variables are non-stationary and using non-stationary variable in model might lead to spurious regression. The summarized result presented in table II above shows that at various levels of significance (1%, 5% and 10%), the variables were stationary, although Gross Domestic Product (GDP) was integrated of order zero, Total Government Expenditure (GEX) and Broad Money Supply (BMS) were not stationary at level. In line with Granger and Newbold (1974), the variables were differenced.

Thus, BMS became stationary at second difference (integrated of order two) and GRX was integrated of order three. Hence, all the variables in this study are stationary. Having established stationarity, the long-run relationship among the variables were conducted the using the Johansen (1998) co-integration framework. Table III above shows that there are three co-integrating equations at 5% level of significance. Put differently; three variables are co-integrated at 5% significance level. This is strong evidence from the unit root test conducted, where all the variables were stationary at various levels. Conclusively, there exists a long-run equilibrium among the variables. Table IV above indicates that the dynamic model is a good fit. This is so because the variation in the regressors account for 77 percent of the total variation in the model based on the R^2. This shows a more realistic value of R^2 than 95 percent value at level. Also, the Durbin Watson (DW) value of 1.9 suggested lesser level of auto correlation. An important attribute to be notice in table IV is the coefficient of the parameter of error correction term. The coefficient of the error correction term appears with the right sign (negative) and statistically significant at 5 percent level, with the speed of convergence to equilibrium of 18 percent. The implication of this is that 18 percent is been reconciled every year for the period under review since the data used were time series. This result reveals that macroeconomic policies variables adjust rapidly to long run dynamic during the period of our study.

Moreover, the coefficients of lags value of Broad Money Supply were rightly signed (positive) but statistically not significant at 5 percent level. The implication of this result is that monetary policy variable alone will not significantly increase economic growth during the period of study. Meaning that other variable factors are needed with the monetary policy variable in order to significantly in Nigeria. Meanwhile, the coefficients of lags value of Total Government Expenditure were not rightly signed and not statistically significant at 5 percent level. Meaning that fiscal policy has not been well articulated and coordinated towards increasing economic growth during the period of study. Theoretically, the parsimonious ECM result shows that a well-coordinated macroeconomic policy will help to enhance economic growth during the period covered by this study.

Table I: Regression Results at Level

Variable	Coefficient	t-Statistic	Prob
C	215460.7	16.17277	0.0000
GEX	0.184287	6.360093	0.0000
BMS	-0.007179	-0.848912	0.4024
R^2=0.949, F-Statistic=292.0296, DW=0.828532, Prob(F-stat=0.0000)			

Source: Authors' *Computed Result (E-view 7.1)*

Table II: Unit Root Test for Stationarity (Augmented Dickey Fuller)

Variables	ADF Test	Critical Value			Order of integration
		1% critical value	5%critical value	10%critical value	
GDP	6.675360	-3.653730	-2.957110	-2.617434	1(0)
GEX	-12.24374	-3.661661	-2.960414	-2.619160	1(3)
BMS	-3.605681	-3.596616	-2.933158	-2.604867	1(2)

Source: Authors'Computed Result (E-view 7.1)

Table III: Johansen Co-integration Test

Eigen value	Max-Eigen Statistic	5% critical value	Prob. **	Hypothesis of CE(s)
0.610555	29.23399	21.13162	0.0029	None *
0.539629	24.04740	14.26460	0.0011	At most 1*
0.172479	5.868952	3.841466	0.0154	At most 2*

Source: Authors'Computed Result (E-view 7.1)
Note: * denote rejection of the hypothesis at the 0.05 level.
**Mackinnon-Haug-Michelis (1999) p-values.
Max-eigenvalue test indicate 3 co-integrating eqn(s) at 0.05 level

Table IV: Parsimonious Error Correction Mechanism

Dependent Variable: D(GDP)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8150.487	3910.266	2.084382	0.0495
D(GDP(-1))	0.554177	0.187788	2.951085	0.0076
D(GDP(-2))	0.304076	0.205441	1.480117	0.1537
D(GDP(-3))	-0.023441	0.074727	-0.313686	0.7569
D(GEX(-1))	-0.010949	0.017478	-0.626447	0.5378
D(GEX(-2))	-0.018870	0.018187	-1.037586	0.3113
D(BMS(-1))	0.004735	0.005715	0.828532	0.4167
D(BMS(-2))	0.003562	0.005679	0.627192	0.5373
ECM(-1)	-0.183713	0.077525	-2.369711	0.0275
R-squared	0.765168	Mean dependent var		25952.86
Adjusted R-squared	0.675708	S.D. dependent var		23390.11
S.E. of regression	13319.88	Akaike info criterion		22.07523
Sum squared resid	3.73E+09	Schwarz criterion		22.49559
Log likelihood	-322.1284	Hannan-Quinn criter.		22.20971
F-statistic	8.553194	Durbin-Watson stat		1.900855
Prob(F-statistic)	0.000039			

Source: Authors'Computed Result (E-view 7.1)

Policy Implication of the Results

The implication of the result is that monetary policy with other variable factors is needed in the coordination of the Nigerian economy in other to achieve growth. Also, fiscal policy of Total Government Expenditure has not been well articulated and coordinated towards increasing economic growth during the period of study. Meaning that the emphasis on fiscal action of the government has led to a greater distortion in the Nigerian economy. Therefore, a well-coordinated macroeconomic policy is needed to enhance economic growth in Nigeria.

Conclusion

The empirical model is developed in the light of recent developments in them methodology of econometric modeling

and the analysis of time series with stochastic non-stationary components Starting with an analysis of the short run OLS and then the unit root properties of the relevant series, the results clearly show that the tests fail to reject the null hypothesis that these variables are non- stationary and they are, indeed, integrated at various orders. Given the non-stationarity of the series, the Johansen co-integration equations were estimated. The evidence shows that GDP co-integrates with both GEX and BMS. On the basis of this information, a parsimonious error correction model was developed which was shown to be well-specified relative to its own information set. Adopting co-integration and error correction modeling strategy, the relationship between Nigeria's GDP and macroeconomic policy (i.e both fiscal and monetary policy) were analyzed through a

series of reduction from over-parameterized model interrelating GDP, GEX BMS and error correction term. The estimated results suggest that monetary rather than fiscal policy exert positive impact on economic growth in Nigeria. The conclusion, therefore, is that the emphasis on fiscal action of the government has led to a greater distortion in the Nigerian economy. However, the combination and coordination of both monetary and fiscal policy are highly recommended for the Nigerian economy.

REFERENCES

Abel, A. B., Bernanke, B.S. and Croushore, D. 2008. Macroeconomics. USA: Pearson Education Incorporated.

Adefeso, H.A. and 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.

Ahuja, H.L. 2007.Managerial Economics: Analysis of Managerial Decision Making. S. Chand and Company Ltd., New Delhi

Ajisafe, R.A. and B.A. Folorunso, 2002. The Relative Effectiveness of Fiscal and Monetary Policy in Macroeconomic Management in Nigeria. Afr. Econ. Bus. Rev., 3 (1): 23-40.

Ali, S., Irum, S. and Ali, A. 2008. Whether Fiscal Stance or Monetary Policy is Effective for Economic Growth in Case of South Asian Countries?" *The Pakistan Development Review*, 47(4):791 – 799.

Anyanwu, J.C. 1993. Monetary Economics: Theory, Policy and Institutions. Onitsha: Hybrid Publishers Limited.

Anyanwu, J.C. and Oaikhenan, H.E. 1995. Modern Macroeconomics: Theory and Applications in Nigeria. Onitsha: Joanie Educational Publishers Ltd.

Folawewo, A. O. and Osinubi, T.S. 2006. Monetary Policy and Macroeconomic Instability in Nigeria: A Rational Expectation Approach. *Journal of Social Sciences*, I 2(2):93- 100.

Gbosi, A.N. 2005. Modern Macroeconomics and Public Policy.Port Harcopurt: Sherbrooke Associates.

Granger, C. 1986. Developments in the Study of Co-integrated Economic Variables. *Oxford Bulletin of Economics and Statistics,* 48(3):355-369.

Granger, CWJ, Newbold, P. 1974. Spurious Regressions in Econometrics, *J. Econometrics.,* 2: 111-120

Gujarati, D.N. 2007. Basic Econometrics. New Delhi: Tata McGraw-Hill Publishing Company Limited.

Jawaid, S. T., Arif, I., Nacemullah, S. M. 2010. Comparative Analysis of Monetary and Fiscal Policies: A Case Study of Pakistan". *Nice Research Journal,* 3 (1), pp 58-67.

Jawaid, S.T., Qadri, F.S.and Ali, N 2011. Monetary-Fiscal-Trade Policy and Economic Growth in Pakistan: Time Series Empirical Investigation. *International Journal of Economics and Financial Issues.*1, (3):133-138

Jhingan, M.L. 2008. Macroeconomic Theory. Vrinda Publications (P) Ltd Delhi.11th Edition

Johansen,S. 1998. Statistical Analysis and Cointegrating Vectors. *Journal of Economic Dynamics and Control,* 12(2-3), 231-254.

Lipsey, R.E. and Chrystal, K.A. 1995. An Introduction to Positive Economics. Oxford University Press, New York, 8th Edition.

Mordi, C.N.O. 2009. Overview of Monetary Policy Framework in Nigeria". Bullion Publication of CBN 33, (1).

Ogunmuyiwa, M.S. and, Ekone, F.A. 2010. "Money Supply-Economic Growth Nexus in Nigeria". *Journal of Social Sciences;* 22, (3); 199-204.

Ohale, L. And Onyema, J. I. 2001. Foundations of Macroeconomics. Springfield Publishers, Nigeria.

Onuchukwu,O.,Ofoezie,K.E. and Nteegah,A.2006. "Fiscal Policy Measures And Macroeconomic Stability In Nigeria". *Nigerian Journal of Monetary Economics*, 6, (6 And 7).

Owolabi,A.U. 2011."Econometric Evaluation of Government Spending, System of Government and Economic Growth in Nigeria". *Journal of Economics and Sustainable Development*, 2, (4).

Samuelson, P.A. and Nordhaus, W.D. 2001. Macroeconomics. Mcgraw-Hill, New York.

Srinivasan, P. 2013. Causality between Public Expenditure and Economic Growth: The Indian Case.Int. *Journal of Economics and Management*, 7 (2): 335 – 347 (2013) ISSN 1823 - 836X

Taban, S. 2010. An Examination of the Government Spending and Economic Growth Nexus for Turkish using the Bound Test Approach. *International Research Journal of Finance and Economics,* 48, 184-193.

Todaro, M.P.and Smith, S.C. 2011. Economic Development 11th Edition. England: Pearson Education Limited.

Tom-Ekine, N. 2013. Macroeconomics: Dimensions of Competitive Indicators and Policy Performance. Port Harcourt: Dominus Printing Company.

Udah, E.B. 2011. Energy crisis, Stabilization Policies and Economic Performance in Nigeria: An Empirical Investigation. *Interdisciplinary Journal of Research in Business,* 1, (9); pp: 27-37

****