

Fiscal Instruments and Economic Growth in Nigeria

Atuma, Emeka* Eze, Onyebuchi Michael

Department of Economics, Ebonyi State University, Abakaliki, Ebonyi State, Nigeria

Abstract

The study investigated the impact of fiscal policy instruments on economic growth in Nigeria for the period 1970- 2015, using time series data obtained from the Central Bank of Nigeria (CBN) statistical bulletin. Cointegration test, Vector Error Correction Model (VECM) and Granger causality test were utilized in the analysis. The variables employed in the investigation include real gross domestic product (RGDP), government recurrent expenditure (GRE), government capital expenditure (GCE), tax revenue (TAR), external debt (EDT), domestic debt (DDT) and total export (TEXP). The results of the cointegration test indicated that long run equilibrium relationship exists among the variables under study. Similarly, the results of the Vector Error Correction Model (VECM) revealed that government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) have negative and significant impact on economic growth in Nigeria. The results also indicated that government recurrent expenditure (GRE) and total export (TEXP) have positive and significant impact on economic growth in the economy. Similarly, the results showed that external debt (EDT) has positive and insignificant impact on economic growth in Nigeria. Furthermore, the result of the Pairwise Granger causality test revealed that unidirectional relationship exists between RGDP and GCE, GRE, TAR, TEXP with causality running from real GDP to GCE, TAR, and TEXP respectively. The result also indicated that causality runs from GRE to RGDP. However, the result showed no causality between EDT and RGDP. The implication of these results is that while RGDP is the major determinants of GCE, TAR and TEXP; GRE is one of the major determinants of real GDP in the Nigerian economy. Therefore, the study recommends that government should expand its recurrent budget expenditures more than its capital budget expenditure in Nigeria, since it has positive and significant contribution to economic growth in the economy. In so doing, economic growth will improve. More so, government should as a matter of urgency review its tax policy in the country, bring in experts free of corruption in the implementation and administration of tax policy in Nigeria. It is only in this way that the contribution of tax revenue to economic growth will positively improve in the economy.

Keywords: Fiscal policy, Economic growth, Cointegration, Vector error correction model, Granger causality

1. Introduction

From the inception of economics, the achievement of macroeconomic goals such as full employment, stability of price level, high and sustainable economic growth have been a policy priority of every economy being it developed or developing economy, given the susceptibility of macroeconomic variables to fluctuation in the economy (Omitogun & Anyinla, 2007). The realization of these goals, undoubtedly, is not automatic, but requires policy guidance, which represents the objective of economic policy. The formulation and proper implementation of these appropriate macroeconomic policies often targeted for economic growth alongside improved access to social services and infrastructures are essential ingredients in any strategy for poverty reduction, especially in the developing countries. To attain these macroeconomic goals, fiscal policy instruments are often used by government to influence and stabilize economic activities. Fiscal policy is government deliberate actions in spending money and levying taxes with a view to influencing macroeconomic variables in a desired direction. It also involves the manipulation of fiscal policy instruments such as public expenditure, taxation and borrowing by government to influence economic activities (Musa & Asare, 2013).

Using fiscal policy, government easily influences aggregate demand in an economy. In other words, by changing taxation and spending, the government can change the amount of cash in hands of consumers, and adjusts its own demand for goods and services. That is, tax increases with reduced government spending, which in turn results to a decline in the aggregate demand. On the other hand, tax cuts and increased government spending, a tend to pull out an economy from a recession, while a decrease in public expenditure or increased taxes tend to slow down a boom (Abata, Kehinde & Bolarinwa, 2012).

In Nigeria, since the late 1980s, fiscal policy has become a major instrument of stabilization. The reasons for the instrumentality are not inconsiderable. First, due to the dominant role of the public sector in major economic activities in Nigeria; this can be traced to several factors, which include the emergence of oil sector and its attendant oil boom of the early 1970s, the need for reconstruction of the devastated areas in Nigeria after the civil war that lasted between 1967 and 1970, the industrialization strategy adopted (import substitution policy) in the economy and the militarization of governance. The second reason for increasing dominance of fiscal policy in the management of the economy is the fall in the international price of oil in the late 1980s. Furthermore, the persistent fiscal deficit since the early 1970s and given the decline in oil revenue require a new fiscal focus that witness the emergency of the major economic activities (Borges,2003).

The socio-economic dimensions of the collapse of the oil prices and the general mismanagement of the economy in the 1980s brought about the issue of economic growth to the core. By the mid 1980s, it was observed that the formal private sector was going extinct, economic activities as measured by aggregate output, industrial production, non-oil export exports, etc., were all showing distress signs. Above all, there was strong widespread evidence of pervasive and massive poverty in the land in spite of growing public expenditure and fiscal deficit. By 1986, all major socio-economic indicators were pointing downwards. The rate of unemployment was high, purchasing power of the people was down, and poverty was becoming entrenched with economic growth being negative. In sum, there was severe macroeconomic imbalance domestically and externally and it was apparent that the economy required major adjustment.

Given the above negative economic situations, the IMF-World Bank supported structural adjustment programme (SAP) and other economic reforms were adopted in 1986 to correct the perceived imbalances in the economy. Just immediately after the introduction of the structural adjustment programme, it was observed that social indicators were not responding positively to the reformed measures; that is, they were getting worse. This was the common feature of fiscal behaviour in Nigeria at the end of the second quarter of every year. The actual fiscal activities of the government were totally at variance with the budget proposals. The government regular funds itself engaging in extra-budgetary expenditure occasioned largely the observed suffering of the majority of the people. For decades of years now, the economy of Nigeria has been plagued with several challenges. Some of which include misappropriation of public funds, corruption and ineffective economic policies, lack of integration of macroeconomic plans. Others include the absence of harmonization and coordination of policies, inappropriate and ineffective policies, and inability to efficiently manage her enormous human and material endowment by harnessing her economic potentials, in spite of many frequent changing of macroeconomic policies (Ogbole, Sonny & Isaac, 2011). This means that-the growth and development of the Nigeria's economy has been unstable over the years and as a result, the country's economy has witnessed so many shocks and disturbances both internally and externally over, despite the fiscal measures introduced since 1986, and given the prominence role of fiscal policy in macroeconomic management in Nigeria. Growth of the economy has remained mirage as economic recession remained widespread and pervasive, particularly in the rural areas, even though fiscal measures are still recognized as potent tool for enhancing growth, redistributing income and reducing poverty.

However, considering Keynesian theory which sees fiscal policy as a tool for overcoming fluctuations in an economy by postulating a positive relationship between deficit financing and investment, and consequently, on the economic growth. This in other words, signifies that increase in debt of a nation and other fiscal policy instruments can as well transform the economy positively. But the evidence from statistical data in Nigeria indicates that, these variables have not toed in pattern of direction with the theory. For instance, the growth rate of government revenue (taxes) and investment (government expenditure) increased from 19.7% to 52.8%, 79.2% to 116.8% in 1974 down to 1975 in real terms respectively, while that of GDP decreased from 199.8% to 70.6% in the corresponding years. Within these periods, although that tax revenue increased considerably alongside the government expenditure, but these increase have not translated to GDP growth. Similarly, debt growth rate equally increased from 19.4% to 32.7% with the same period (CBN, 2014). The same was also observed between 1993 and 1994 where government revenue growth rate increased from 16.2% to 36.0%, while investment and GDP decreased from 106.0% to 15.8% and 1.2% to 0.2% respectively. Still in those years, debt growth rate decreased from 53.8% to 48.8%. Observing another two years; 2004 and 2005, both government revenue and investment increased from 12.9% to 38.7% and 16.3% to 27.7% respectively, while that of GDP within the same periods, decreased from 10.4% to 6.5% and debt itself increase from 3.0% to 11.3%. In the same vein, it is equally observed that government revenue slightly increased from 54.2% to 59.4% from 2013 to 2014. However, investment and GDP decreased from 12.5% to 11.7% and 10.% to 0.6% respectively and the debt as usual increased from 8.8 % to 11.0 % within the same periods (CBN,2014).

From the above trend, it is observed that there is low level of investment in both human and non human productive sectors like agriculture, commerce and industry. On the aspect of human resources which comprise education and health, the values of HDI shows that Nigeria is ranked 156 with the value of 0.459 out of the 187 countries. The rank places Nigeria at the bottom, which means that the country is considered to have low level of human capital development. On the aspect of non-human resources, the trend equally indicates that the country's most investments are bogus as they are not usually being completed; and every incomplete project has no significant economic implication. Therefore, the likely adverse economic implication of such deviations, or in other words, the cyclical fluctuations in the country's economic activities would leads to the periodic increase in the country's unemployment and inflation rates as well as the external sector disequilibria; and these factors are highly conjectured as being able to militate against the growth of any economy. Therefore, having observed the above problem, the need to empirically research on the impact of the instruments of fiscal policy on economic growth in Nigeria becomes imperative.

2. Review of Related Literature

2.1 Theoretical Review

Fiscal policy has undergone a vast and complex evolution since the study of the economic phenomenon came into lime light. It has drawn the attention of many researchers with different views on the role and efforts of government in attaining macroeconomic objectives. The proponents of government intervention in economic activities maintain that such intervention such as fiscalists can spur growth in the short run as against the monetarists who argued that government's intervention in an economy would crowd-out private investments and reduced economic growth. They cited government's role in ensuring efficiency in resource allocation, regulation of markets, economic stabilization and harmonization of social conflicts as some of the ways in which government could facilitate economic growth. Opponents held the view that government operations are inherently facing bureaucracy and inefficiency. Hence, this can stifle rather than promoting growth. However, whether government's fiscal policy stimulates or slides growth, remains an empirical question. Even so, the existing empirical findings are mixed with some researchers finding the relationship between fiscal policy and growth positive with others finding negative impact between the two variables.

Tanzi (1997) stated that a multiplicity of factors, some of which are of a non-economic nature plausibly affect the performance of an economy from period to period. That is, a country's growth over a long period of time is ultimately determined by three factors:

1. Given the state of technical know-how in that country, the efficiency with which any existing stock of resources is utilized depends on cultural, institution and political as well as economic parameters.
2. The accumulation of productive resources overtime would include human and other forms of intangible capital.
3. Technological progress in which most countries depend on their ability to absorb it from abroad.

2.1.1 Theories of Fiscal Policy

Theories of fiscal policy owe much to North European economists. These economists include: Jan Tinbergen, Bent Hansen, Leif Johansen, and others who for several decades ago developed the theories of fiscal policy. In spirit, if not in geography, Richard Musgrave could be placed among this group. There were obviously also contributors from North America in the persons of: Alvin Hansen, Lawrence Klein, Abba Lerner, Robert Solow, Paul Samuelson, among others, but in their writing, they focused mostly on the stabilization role of fiscal policy. The Keynesian stabilization policy is only a part, though an important part of the modern theory of fiscal policy. In the conception of this theory, especially well developed in Musgrave (1959) and in Johansen (1965) treatises, the goals of fiscal policy extend beyond stabilization, because fiscal tools can be used for redistribution of income and reallocation of resources (Vito, 2004).

Classical Theory of Fiscal Policy

The Classical school is the earliest organized school of macroeconomic thought. The classical economists including Jean Baptist Say, Adam Smith, David Ricardo, Pigou, etc were the proponents of the price mechanism. This theory assumes a smooth functioning market where there is effective resource allocation and a guarantee to economic freedom to all and sundry, with built in flexibility that excludes the need for conscious government planning and intervention (Ekabem & Iyoha, 1999). However, it has certain limitations and inefficiencies, which result in a condition referred to as market failure. Market failed to achieve a satisfactory level of welfare for the society by providing an equitable or fair distribution of income and wealth (Ogiji, 2004). The great depression of 1930 was a confirmation of the reality of the failure of the market economy, which led to the evolution of Keynesian economics. Again, classical economists believe that fiscal deficit is incessantly financed by debt crowding out private investment and by extension, lowering the level of economic growth. To the classical economists, debt issue by the public has no effect on the private sector savings (Tchokote, 2001). They equally maintained that a deficit financed by increasing the supply of securities, *ceteris paribus*, reduces its price and raises real interest rates, which crowds out private investment.

Keynesian Theory of fiscal Policy

The great depression of 1930s was the major factor that led to the evolution of Keynesian theory. The Keynesian school of thought postulated a positive relationship between deficit financing and investment, and consequently economic growth (Tchokote 2001). This school of thought sees fiscal policy as a tool for overcoming fluctuations in an economy. Hence, Keynesian school regards deficit financing as a paramount tool towards achieving the level of aggregate demand, which consist of full employment. When debt is used to finance government expenditures, consumers' income will be increased. Given that resources are not fully utilized, crowding out of private investment by high interest rates would not occur. Keynes submitted that the lingering unemployment and economic depression were as a result of failure on the part of the government to control the economy through appropriate economic policies (Iyoha, 2003). Consequently, Keynes proposed the concept of government intervention in the economy through the use of macroeconomic policies such as fiscal policies. Fiscal policy deals with government deliberate actions in spending money and levying taxes with a view to influencing macroeconomic variables in a desired direction in order to achieve sustainable economic growth,

high employment creation and low inflation (Microsoft Corporation, 2004). Thus, fiscal policy aims at stabilizing the economy. Increase in government or a reduction in taxes, tend to pull the economy out of recession while reduced spending or increased taxes slow down a boom (Dornbusch & Fisher, 1990).

Neo-Classical Theory of Fiscal Policy

The position of the Keynesian school of thought on the possible effects of fiscal deficits on economic activities was dully challenged by the neoclassical school of thought. This challenge was on the premise that the Keynesian school ignores the significance of how fiscal deficits are financed and the effect of this policy variable on macroeconomic performance. That is, the neoclassical school postulated that the manner, in which deficits are financed, is capable of influencing the level of consumption and investment, and by extension affect economic growth. However, one of the labels attached to the neoclassical argument was the Ricardian equivalence. The Ricardian equivalence states that consumers foresee tax cut today, paid for, by deficit and borrowing would lead to a tax increase in the future. In anticipation of the future tax increase, consumers save rather than spend the income from tax cut. If the Ricardian equivalence holds, therefore, then reduction of fiscal deficit will not affect the level of consumption or balance of payments in the economy and the basis for deficit reduction as part of stabilization programmes, is no longer in existence (Tchokote, 2001).

2.1.2. Instruments of Fiscal Policy

Fiscal policy in economics involves the use of government expenditure and taxes to influence an economy. It deals with the overall effect of the budget outcome on economic activity. Unlike monetary policy that focused on the stabilization of the economy by controlling interest rate and money supply, fiscal policy attempts to stabilize the economy by using two main instruments including:

1. Government spending and
2. Taxation.

Meanwhile, a change in the composition and level of government spending and taxation will have effect on the following variables in the economy, namely:

1. Income distribution
2. Aggregate demand and the level of economic activity
3. The pattern of resource allocation.

The three possible stances of fiscal policy include neutral, expansionary and contractionary stances. The neutral stance of fiscal policy has to do with balanced budget where government spending equates tax revenue. In this case, government spending is fully funded by tax revenue and the overall budget outcome has a neutral effect on the level of economic activity. The expansionary stance of the fiscal policy deals with net income in government spending via a fall in taxation or increases in government spending or the combination of the two. This type of stance results to larger budget deficit. Thus, expansionary fiscal policy is often associated with a budget deficit. Similarly, a contractionary fiscal policy is observed when net government spending is reduced either through higher taxation revenue or reduced government spending or a combination of the both. Hence, it leads to government surplus budget in an economy.

Generally, government uses fiscal policy instruments to influence aggregate demand level in the economy in an attempt to achieve the macroeconomic objectives of price stability, full employment and sustainable growth and development (Chigbu & Njoku, 2013). According to Keynesians, adjusting government spending and rates of tax such as tax incentives (capital allowance, income tax relief, company income tax, exemption etc), relief from import duties, tariff measures and budgeting allowances are the best options to stimulating aggregate demand. They can be employed as essential tools during economic recession or low economic activity to provide a framework for strong economic growth and working toward full employment. The government can implement these deficit spending policies due to its size and stimulate trade.

2.1.3 Economic Growth

Economic growth is the long term rise in capacity to supply increasingly diverse economic goods to its population. This growing capacity based on advancing technology and institutional and ideological adjustments that it demands. This entails a sustained rise in national output which is a manifestation of economic growth. Ability to provide a wide range of goods and services to people is the sign of economic growth and maturity. The availability of a wide range of goods and services will certainly increase standard of living of the people. The production of goods and services is not possible without sustainable increases in technology advancement (Udabah, 2002).

Economic growth is a crucial policy objective of any government. In an attempt to address the pertinent issues in economic management, policy-makers and economic planners have chooses between or combine some of the macroeconomic variables. Economic growth, proxies by gross domestic product (GDP) confers many benefits which include raising the general standard of living of the people as measured by per capita national income, making income distribution easier to achieve, enhance time frame of accomplishing the basic needs of man to a substantial majority of the people (Uwakaeme, 2015).

However, economic stagnation can bring destabilizing consequences on the citizenry (Lewis, 1978).

Controversies that trail growth-related issues are many, but the present and more incontrovertible is the discourse on economic growth within the context of macro-economic behaviour of the economy. This is in relation to how the economic policy goals could be achieved by the available policy instruments. Generally, the consensus is that the rate at which declining economic growth rate is permeating the developing countries requires urgent policy response in order to bring about sustainable economic growth.

Basically, the Nigerian economy is an open economy with international transactions constituting an important proportion of her aggregate economic activity. Consequently, the economic prospects and development of the country, like many developing countries, rest critically on her international interdependence. Over the years, despite the considerable degree of her trade openness, her performance in terms of her economic growth has remained sluggish and discouraging (Uwakaeme, 2015). More so, Nigeria's trade policy since her independence in 1960 has been characterized by policy swings, from high protectionism to liberalism. The main objective of her trade policy was aimed at influencing trade process that can promote sustainable economic growth but this objective has become very difficult to achieve at present (Yesufu, 1996). It is also believed that the Nigerian economic environment has been unable to attract foreign direct investment to its fullest potentials, given the unstable operating environment, which is characterized by inefficient capital markets, high rate of inflation, unstable polity, stringent policies and fragile financial system, etc.

2.2 Empirical Review

Ghali & Al-Shamsi (1997) examined the causality between fiscal policy and economic growth from 1973 to 1995 in U.A.E. using cointegration test and error correction model. The results provided evidence in support of existence of cointegration between government expenditure and GDP. The results of the causality tests showed that causation runs from government expenditure to GDP. Enache (2009) investigated the relationship between fiscal policy and economic growth in Romania from 1992 to 2003. The results of the estimation indicated weak evidence for the positive impact of the fiscal policy on the economic growth in the economy. Sikiru & Umaru (2007) studied fiscal policy and economic growth relationship in Nigeria using unit root test, cointegration test and error correction model (ECM) from 1977 to 2009. The study found that productive expenditure positively impacted on economic growth during the period covered and a long run relationship exists between the variables.

Taiwo & Agbatogun (2011) investigated the implications of government spending on the growth of the Nigerian economy for the period 1980 – 2009 through the applications of Johansen cointegration and error correction model (ECM). The findings of the study indicated that total capital expenditure, inflation rate, degree of openness and current government revenue are significant variables that improve growth in Nigeria. Danmola, Olateju & Abba (2013) studied the links between the different components of government expenditures and real gross domestic product in Nigeria, using Granger causality test, Error correction model and cointegration techniques. The results revealed that the relationship between capital expenditure and real gross domestic product supports Wagner's law through the granger causality test which showed a unidirectional causality. However, the total recurrent expenditure and real gross domestic product indicates bi-directional causality.

More so, Oziengbe (2013) examined the impact of federal capital and recurrent expenditures on Nigeria's economy by using cointegration test and ECM among the variables under study. The estimated results of the ECM revealed that significant short-run impact exist between the explanatory variable and GDP. However, the results showed that RECEXP exerting greater impact on GDP than the influence of CAPEXP in the economy. Loto (2011) employed the method of cointegration and error correction mechanism to investigate the impact of government expenditures in various sectors of the economy such as education, health, national security, transportation and communication, and agriculture on economic growth in Nigeria from 1980 to 2000. The study found that government expenditure on agriculture and education impact negatively on economic growth, though the impact of expenditure on education is observed to be insignificant. The impact of expenditure in the health sector on economic growth is observed to be positive and significant, while the impact of expenditure on national security, transportation and communication are observed to be positive and statistically insignificant. Aigheyisi (2011) studied the effectiveness of monetary and fiscal policies in Nigeria through the applications of cointegration and error correction using quarterly data from 1981Q3 to 2009Q4. The study found that total government expenditure has positive effect on real gross domestic product (RGDP) in the short run.

Modebe, Okafor, Onwumere & Ibe (2012) investigated the impact of recurrent and capital expenditures on Nigeria's economic growth through the use of multiple regression analysis for data covering the period 1987 to 2010. The study found that the impact of both components of expenditure was statistically insignificant, though the impact of recurrent expenditure was positive and that of capital expenditure was negative. Onakoya & Somole (2013) employed three-stage least square simultaneous equations to examine the impact of public capital expenditure on economic growth in Nigeria in the context of macroeconomic framework. The results revealed that public capital expenditure contributes significantly to economic growth in Nigeria. The results also showed that public capital expenditure has positive impact on the output of oil and manufacturing sectors, but adversely affected the output of the agriculture. The impact on the services sector is however observed to be insignificant.

Further evidence from the empirical results is that public capital expenditure indirectly enhances economic growth by encouraging private sector investment attributable to the role of government in the provision of public infrastructures.

Dilrukshini (2002) examined the relationship between public expenditure and economic growth in Sri Lanka for the period 1952-2002 by applying Johansen cointegration technique and Granger causality test. The results showed that increase in public expenditure in Sri Lanka is not directly determined by economic growth. Olugbenga & Owoye (2007) investigated the relationship between government expenditure and economic growth for a group of 30 countries during the period of 1970-2005. The findings of the study showed that long-run relationship exist between government expenditure and economic growth. Also, the causality runs from economic growth to government expenditure in 10 of the countries, which confirmed the Wagner's law. Muritala & Taiwo (2011) conducted a research to examine the effects of government spending on the growth rate of real gross domestic product in Nigeria using Ordinary Least square (OLS) technique. The result showed that there is a positive relationship between real GDP as against the recurrent and capital expenditure. Sinha, Arora & Bansal (2011) carried out a study on the determinants of public debt for middle and high income group countries using panel data regression. The model was estimated using the Indian Market with the public debt to gross domestic product (GDP) as the dependent variable while the independent variables were government expenditure, long term interest rate, foreign direct investment, population density, current account balance, real GDP growth rate and inflation at consumer price. The findings revealed that government expenditure, long term interest, real GDP growth rate, inflation at consumer price, and FDI are significant while current account balance and population density were insignificant.

Ogujuba & Abraham (2012) examined the relationship between government revenue and expenditure in Nigeria from 1970 to 2011 through the applications of correlation analysis, Granger causality test., vector error correction model and impulse response analysis. The findings revealed that revenue and expenditure are highly correlated and that causality runs from revenue to expenditure in Nigeria. The study concludes that shocks from crude oil price passes through oil revenue to affect expenditure. Sulaiman & Azeez (2012) examined the effect of external debt on the economic growth in Nigeria using Ordinary Least Square (OLS), Johansen co-integration test and Error Correction Method (ECM). The results found that external debt has contributed positively to the Nigerian economy. Ezeabasili, Isu & Muojekwu (2011) investigated the relationship between Nigeria's external debt and economic growth between 1975 and 2006 by applying econometric analyses. The finding showed that external debt has negative relationship with economic growth of Nigeria. Eboigbe & Idolor (2013) investigated the impact of external debt on public sector investment in Nigerian economy, using the cointegration technique from 1980 to 2011. The results of the study showed that there is a positive relationship between external debt and public investment, which means that an increase in debt stock leads to increase in capital expenditure and public investment in the economy. Oyinlola & Akinnibosun (2013) examined the relationship between public expenditure and economic growth in Nigeria for the period 1970-2009 by using the Gregory-Hansen structural breaks cointegration technique and disaggregated public expenditure. The study confirmed Wagner's law in two models in the long run. The long run elasticity results showed that economic growth does not translate to growth in recurrent expenditure, administrative expenses and transfer expenditures. The result also showed that economic growth leads to growth in capital expenditure as well as in social community service.

Mah, Mukkudem-Petersen, Miruka & Petersen (2013) carried a research on the impact of government expenditure on debt in Greece from 1976 to 2011 using the vector correction model (VECM) and Granger causality test. The results showed that a significant positive relationship exists between gross government debt and gross national expenditure. Oni, Aninkan & Akinsanya (2014) investigated the joint effects of capital and recurrent expenditures of government on economic growth of Nigeria using ordinary least square method for estimating multiple regression models. The findings showed that both capital and recurrent expenditures have positive effects on economic growth of Nigeria for the period of under study. Siew-Peng & Yan-Ling (2015) examined the contribution of public debt to economic growth in Malaysia over the period of 1991 to 2013. Time series data was collected from the DataStream database. Using the Gross Domestic Product (GDP) per capita as a proxy for economic growth, the debt – growth model was estimated and quarterly data was employed. The findings of the study showed that economic growth as measured by GDP per capita has negative association with the public debt. Inuwa (2012) studied government expenditure and economic growth in Nigeria using cointegration test and causality test. The result revealed that government expenditure granger cause economic growth, while no causal relationship was observed between government recurrent expenditure and economic growth. Michael & Oderinde (2012) used vector auto regression model to study public education expenditure and defence spending in Nigeria. The study observed that military spending and public education expenditure in Nigeria between 1970 and 2003 is positive and statistically significant, and there is significant relationship between public education expenditure and defence spending in Nigeria. Bakare (2012) assessed the role of public spending for sustainable growth using ordinary least square multiple regression model. The study observed that the allocation of public expenditures does not fulfill the pareto-optimal criterion.

Similarly, Ogbulu & Torbira (2012) examined the relationship between budgetary operations and economic growth in Nigeria using multivariate model of linear formation. The study revealed that five budgetary items: Non-oil revenue, economic, administrative, social services and transfer expenditures exerted significant effects on gross domestic product (GDP). Muhammad, Bilal & Muhammad (2012) used regression analysis to investigate the impact of human capital expenditure on economic growth with emphasis on intermediary role of technology in Pakistan. The study establishes a long run relationship between human capital expenditure and economic growth, and short run relationship by using error correction model. Saad & Kalakech (2009) studied the growth effects of government expenditure in Lebanon over a period of 1962-2007 with particular focus on four sectoral expenditures including defense, education, health and agriculture by applying cointegration test. The study revealed that education expenditure had positive effect on growth in the long-run and negative effect in the short run. Also health expenditure was found to be positively correlated with and insignificantly related to growth in the short run. Odo, Nwachukwu & Agbi (2016) examined the implications of public expenditure on social capital for economic growth of Nigeria from 1970 to 2008. Error correction mechanism and Johansen Cointegration test were applied in the analysis. The study showed that government expenditure on health (both capital and recurrent) has incremental impact on economic growth in Nigeria. This means that any policy shift which allows increase in budgetary allocation to the health sector increases economic growth performance in Nigeria

Odo, Igberi & Anoke (2016) investigated the causal relationship between total public debt and public expenditure in Nigeria from 1980 to 2015 by applying cointegration test, vector error correction model and Wald test econometric tools of analysis to public debt, government capital expenditure, government recurrent expenditure and interest rate. The findings of the VEC test indicated that government capital and recurrent expenditure have significant positive relationship with public debt in the Nigerian economy. The Wald test result showed that unidirectional causality runs from both capital and recurrent expenditure to public debt in Nigeria. Uguru (2016) studied the link between public debt and government expenditure in Nigeria from 1980 to 2013 using ordinary least square estimation technique. The results revealed that significant relationship exists between public debt and government expenditure in Nigeria. Adofu & Abula (2010) investigated the relationship between domestic debt and economic growth in Nigeria. The result showed that domestic debt affected the growth of the economy negatively. Duc-Anh, Phu & Arnelie (2015) analyzed the correlation among government expenditure, tax on returns to asset, public debt, and economic growth. The study described public debt in two forms, domestic and external debt. The results of the study showed that an increase in the tax rate on returns to asset leads to an increase in government expenditure, consumption, and domestic debt which brings uncertain impact of tax rate on external debt. It further explained that when the productivity of capital on production is low and the tax rate is lower than a threshold, the relation between external debt and the tax rate will have a bell-shaped form, i.e. external debt firstly rises then decreases with the tax rate.

Furthermore, Grace (2014) examined the implications of shocks of public debt and government expenditure on human capital development and growth looking at the role of fiscal constraints through the introduction of government budget constraint for a set of preferred developing countries from 1980 to 2013. The study captured fiscal challenges facing developing countries in developing human capital which is essential for sustainable growth. The results disclosed that high stocks of public debt, beyond the 30-40% debt/GDP threshold affect human capital on output growth by limiting government expenditure resources available for developing human capital. The result of the study also indicates that government expenditure has a positive role to play in developing human capital and sustainability seems uncertain for countries that have fiscal constraints. Nurudeen & Usman (2010) examined the impact of government expenditure on economic growth in Nigeria over the period of 1970-2008, using forecasted time series data. The result showed that government total capital expenditure, total recurrent expenditure and expenditure on education have negative effect on economic growth, while expenditure on health, transport and communication enhance growth in the economy. Danda (2010) examined the effect of investment spending in education on economic growth in Nigeria over the period of 1977 to 2007. The study employed cointegration and error correction Model. The result showed positive and significant effect of educational expenditure on economic growth. Onaolapo, Abdul-Rahamoh, Fasina, Taiwo, Adegbite & Adejare(2013) analyzed the effect of petroleum profit tax on Nigerian economy using multiple regressions. The study found that income from a nation's natural resource has a positive influence on economic growth and development.

Ogbole, Sonny & Isaac (2011) studied the impact of fiscal policy on economic growth in Nigeria from 1970 to 2006 using time series econometric analysis. The study found that there is difference in the effectiveness of fiscal policy in stimulating economic growth during and after regulation periods. Nathan (2012) employed cointegration test and Error Correction Mechanism in studying the impact of fiscal policy on the Nigerian economy. The findings of the study indicated that significant causal relationship exists between exports and gross domestic product and hence fiscal policies. Mihaela & Özay (2014) empirically carried study on fiscal Policy in crises time with evidence from Romania and Turkey, and the study found that pro-cyclical fiscal policy

does not assist in dampening the GDP shock. Adefeso (2010) examined the impact of fiscal policy on economic growth in Nigeria from 1970 to 2005, using error correction technique to test the predictive ability of the endogenous growth model. The findings of the study were consistent with earlier empirical findings in other countries, which revealed that productive government expenditure has positive effect on economic growth. Employing the ordinary least squares estimation technique, Muritala & Taiwo (2011) investigated the effect of recurrent and capital expenditure on GDP, and the study found that both components of government expenditure have significant positive effects on the GDP. Modebe (2012) investigated the impact of recurrent and capital expenditure on Nigeria's economic growth using multiple regression analysis for data covering the period 1987 to 2010 and found that the impact of both components of expenditure was statistically insignificant, though the impact of recurrent expenditure was positive and that of capital expenditure was negative.

This study is an improvement on other research carried out on the topic under study. In the evaluation of the fiscal policy instruments and economic growth in Nigeria, the study has consciously examined various empirical studies in Nigeria and other economies in the world whether developed or developing economy. The study has confidently maintained that, despite the works that have been done in the study in terms of scope, geographical location, specification of the variables, methodology and econometrics test, it discovered issues of miss-specification of appropriate variables of fiscal policy instruments like tax, government expenditure and debt, range of data and erroneous methodology in the studies already existed in Nigeria.

For instance, in the case of miss-specification of appropriate variables, so many researchers failed to include all the major instruments of fiscal policy in their model, and that gives room for mis-specification of model, which is capable of making recommendations from such findings unreliable as it can render policies formulated on the basis of such models impotent. Such studies include Omitogun & Anyinla (2007); Sikiru & Umaru(2007); Aigheyisi (2011); Taiwo & Agbatogun (2011); Modebe, Okafor, Onwumere & Ibe (2012); Uguru (2016), among others.

On the aspect of data coverage, the study observed larger scope (44 years: 1970-2014) than previous studies in the geographical location, which gives more room for long run relationship among the variables. Examples include Omitogun and Anyinla (2007); Sikiru and Umaru (2007); Modebe, Okafor, Onwumere and Ibe (2012); Abata, Kehinde & Bolarnwa (2012); Dauda (2010); Nathan (2012); Aigheyisi (2011); Modebe (2012); Ogbole, Sonny & Isaac (2011); Onaolapo et al. (2013); Danda (2010); Nurudeen & Usman (2010); Adofu & Abula (2010); etc. Finally, the direction of causality among the variables specified in the model was not ascertained in some previous studies. These studies include Dauda (2010); Aigheyisi (2011); Modebe (2012); Danda (2010); Nurudeen and Usman (2010); Adofu & Abula (2010); Ogbole, Sonny & Isaac (2011); Onaolapo et al. (2013), etc.

3. Methodology

This study followed the model of Keynesian theory of fiscal policy. The theory sees fiscal policy as a tool for overcoming fluctuations in the economy by postulating a positive relationship between deficit financing and investment, and consequently, on the economic growth. In other words, it postulates that increase in government revenue (taxes) increases investment (government expenditure) and consequently economic growth. Keynesian analysis leads to the conclusion that demand management policies can and should be used to stimulate macroeconomic performance. The activist macroeconomic policy, involves setting fiscal variables in each time period at the values which are thought necessary to achieve the government's objectives.

In fact, the basic premise of Keynesian economics is that the private sector is inherently unstable. In the light of this theory, the model which is used for investigating the fiscal policy instruments and economic growth in Nigeria is based on that proposed by Nathan (2012) with modification. The author proposed that gross domestic product in Nigeria (GDP) is affected by broad money supply (MS), fiscal deficit (FD) and export (EX). In this study, the model is modified to include government expenditure (GEX) which may significantly influence economic growth as a veritable instrument of fiscal policy. Besides, the GDP is deflated while each instrument is split to enable us examine its significance on the real GDP. Based on this relationship, a functional form of the fiscal policy instruments on economic growth in Nigeria is illustrated as:

$$RGDP = f(GRE, GCE, TAX, EDT, DDT, TEXP) \quad 1$$

Where;

RGDP = Real Gross Domestic Product, GRE = Government Recurrent Expenditure, GCE = Government Capital Expenditure, TAR = Tax Revenue, EDT = External Debt, DDT = Domestic Debt and TEXP= Total Export.

In linear function, it is illustrated as:

$$RGDP_t = \beta_0 + \beta_1 GRE_t + \beta_2 GCE_t + \beta_3 TAX_t + \beta_4 EDT_t + \beta_5 DDT_t + \beta_6 TEXP_t + U_t \quad 2$$

Where; RGDP is the dependent variable, while GRE, GCE, TAX, EDT, DDT and TEXP are the independent variables; β_0 is the constant term, U_t is the error term and t is the current time period.

3.1 Data Discussion

In the specified estimated model, it is stated that real gross domestic product (RGDP) is a function of Government Recurrent Expenditure (GRE), Government Capital Expenditure (GCE), Tax Revenue (TAR), External Debt (EDT), Domestic Debt (DDT) and Total Export (TEXP). Thus, these variables are discussed below;

1. **Real Gross Domestic Product (RGDP):** This is the total monetary value of goods and services produced within a country usually a year. With this, the standard of living of the populace in the country can be determined. It is all the goods and services produced in country in a year which is measured in monetary terms. It is concerned with domestic production and does not, include net income from abroad. RGDP is chosen because it is an indicator of growth. It is used because it is a deflated GDP.
2. **Government Recurrent Expenditure (GRE):** This refers to the money spent on maintenance and running costs. It is incurred on civic administration, defense, force, public health and education and maintenance of government machinery. This kind of government expenditure is of recurring type which is incurred year after year.
3. **Government Capital Expenditure (GCE):** These are expenses on capital project which can last for many years. It is incurred on buildings of durable asserts like high ways, multipurpose dams, irrigation projects, buying machinery and equipments. Such expenditure is expected to improve the productive capacity of the economy.
4. **Tax:** Tax is an involuntary contribution levied on private units. Examples are persons, properties or business for support of the government. They do not include government receipts from borrowing, gifts, reparations, user charges fees, fines or postal rates. That is, tax is a compulsory levy imposed on persons or properties by the government so as to enable her provide adequate security, social amenities and create conditions for economic well being of the society. Hence, one asserts that tax is a non punitive but compulsory contribution to the state revenue, levied by the government on personal income and business profits or added to the cost of some goods, services and transactions, at fixed rate mostly proportionate to the amount on which the contribution is levied. Therefore, taxation is one of the major sources of revenue to the government, without which, government finds it extremely difficult to provide infrastructure and social amenities for the people.
5. **Public debt:** Public debt is seen as the total of the nation's debt; whether it is local, state and federal governments. Debt occurs when expected government revenue is less than expected expenditure. It is an indicator of how much government expenditure is funded by borrowing as an alternative to taxes. In other words, debt results from borrowing. Therefore, debt refers to the resources of money that is used in any organization, which is not generated by the owners and as a result, does not belong to them in any form. It is a commitment represented by a financial instrument or its equivalent. Hence, public debt emanates from money borrowed by government. Public debt as another instrument of fiscal operation is divided in to two. These include: internal and external public debt. In a country, when possibilities of borrowing have been exhausted, the government can turn to borrow externally from abroad. Since foreign debt can be serviced only through exports, then, the export ratio becomes an indicator of the external foreign debt level of sustainability.

3.2 Sources of Data

The data for this research are obtained from the following sources:

- Central Bank of Nigeria Statistical Bulletin, vols. 23; 26, 2013 and 2015
- World Bank data.

4. Results and discussion

This section of the study dealt with the results and discussion of the results as estimated in the econometric methods mentioned above.

4.1 Unit Root Test

This test is mainly carried out using the Augmented Dickey-Fuller (ADF) stationarity test to examine the order of integration of the time series. It is used to find the long term properties of the variables employed in the study. If the series are found to be stationary in any level, it therefore, means that the mean, variance and covariance are constant overtime. Hence, the results of the unit root test are shown below.

Table 1: Augmented Dickey-Fuller (ADF) Unit Root Test (at level)

Trend and Intercept

Variables	ADF Statistic	5% Critical Value	Prob.
RGDP	-1.056169	-2.928142	0.7248
GCE	-0.646073	-2.928142	0.8495
GRE	3.175468	-2.928142	1.0000
TAR	-0.630973	-2.928142	0.8532
DDT	6.913274	-2.928142	1.0000
EDT	-2.422707	-2.928142	0.1415
TEXP	-1.284088	-2.928142	0.6287

Source: Researcher's compilation from E-view 8

Table 2: Augmented Dickey-Fuller (ADF) Unit Root Test (at first difference)

Trend and Intercept

Variables	ADF Statistic	5% Critical Value	Prob.
RGDP	-6.274490	-2.929734	0.0000
GCE	-8.325194	-2.929734	0.0000
GRE	-5.266580	-2.929734	0.0001
TAR	-7.667389	-2.929734	0.0000
DDT	-3.010761	-2.929734	0.0416
EDT	-4.195762	-2.929734	0.0019
TEXP	-3.658022	-2.929734	0.0083

Sources: Researcher's compilation from E-views 8

The above tables (1 and 2) represent the results of the stationarity test by applying the Augmented Dickey-Fuller (ADF) unit root test at 5% critical value. The results revealed that all the variables such as RGDP, GCE, GRE, TAR, DDT, EDT and TEXP are not stationary at level. However, all the variables became stationary after first differencing at 5% critical value. This claim is shown by the p-values of the respective variables used in the investigation (see tables 1 and 2). Having achieved stationarity after first differencing, means that the variables possessed long run properties, and that their variance, mean and covariance are constant overtime. Thus, since all the variables are indicated to be stationary after first differencing; it therefore, implies that the series are integrated of the same order one

4.2 Cointegration Test

This test is applied mainly to examine the long run relationship among the variables. In this work, the variables used are real gross domestic product (RGDP), government capital expenditure (GCE), government recurrent expenditure (GRE), tax revenue (TAR), domestic debt (DDT), external debt (EDT) and total export (TEXP). Hence, Johansen Co integration was adopted to test for the presence of this long run relationship among the series of the same order of integration through forming a co integration equation. The basic idea behind co integration is that, if at the long-run, two or more series move closely together, it would imply that the series are defining a long run relationship as the difference between them is stationary. In contrast, lack of cointegration indicates that the variables do not have long run relationship. The result of the Johansen Co-integration Test is shown in the Table below. The model with lag 1 was chosen with the linear deterministic test assumption.

Table 3: Unrestricted Co integration Rank Test (Trace) for the series; RGDP and the explanatory variables; GCE, GRE, TAR, DDT, EDT and TEXP.

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.951452	440.5534	125.6154	0.0001
At most 1 *	0.912021	310.4695	95.75366	0.0000
At most 2 *	0.907635	205.9513	69.81889	0.0000
At most 3 *	0.744139	103.5250	47.85613	0.0000
At most 4 *	0.514547	44.91080	29.79707	0.0005
At most 5	0.206378	13.83591	15.49471	0.0876
At most 6 *	0.086633	3.896547	3.841466	0.0484

Trace test indicates 5 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

Source: Researcher's compilation from E-view 8

Table 4: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)
 Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.951452	130.0840	46.23142	0.0000
At most 1 *	0.912021	104.5182	40.07757	0.0000
At most 2 *	0.907635	102.4263	33.87687	0.0000
At most 3 *	0.744139	58.61420	27.58434	0.0000
At most 4 *	0.514547	31.07489	21.13162	0.0015
At most 5	0.206378	9.939367	14.26460	0.2159
At most 6 *	0.086633	3.896547	3.841466	0.0484

Source: Researcher's compilation from E-view 8

The above tables (3 and 4) represent the estimation results of the Johansen co integration test. The results indicate 5 co integrating equations. This implies that there is existence of long run equilibrium relationship among the variables under study. The claim is evidenced by trace statistics and the maximum eigenvalue statistics and its respective p-values in the results of the Johansen co integration test. In the estimation results, both the trace statistic and the maximum eigenvalue statistic revealed that long run relationship exist among the variables at 5% critical value. Thus, this shows that long run equilibrium relationship exist among RGDP, GCE, GRE, TAR, DDT, EDT and TEXP.

This result is in line with the findings of Sikiru & Umaru (2007); Taiwo & Agbatogun (2011); Oziengbe (2013); Loto (2011); Owoye (2007); Sulaiman & Azeez (2012); Odo et al. (2016); etc who carried out studies on fiscal policy and economic growth in Nigeria, and found long run equilibrium relationship between the variables. However, the result negate the finding of Oyinlola & Akinnibosun (2013) who examined the relationship between public expenditure and economic growth in Nigeria using cointegration approach, and found no evidence of long run relationship between the variables in the economy.

4.3 Vector Error Correction Model (VECM)

The presence of long run equilibrium relationship among the variables as found from the Johansen co integration, led to the application of VECM. The VECM is employed to investigate the short run dynamics and long run equilibrium relationship among the variables of the study. The VECM results are shown in table 5 below.

Table 5: VECM SYSTEM EQUATION

	Coefficient	Std. Error	t-Statistic	Prob.
CointEq1	-0.055324	0.017933	-3.085000	0.0047
C(RGDP(-1))	0.430448	0.179373	2.399733	0.0236
C(RGDP(-2))	-0.120365	0.215519	-0.558486	0.5811
C(GCE(-1))	-0.263851	0.087246	-3.024216	0.0054
C(GCE(-2))	-0.052691	0.081371	-0.647541	0.5227
C(GRE(-1))	0.463993	0.084668	5.480161	0.0000
C(GRE(-2))	-0.024267	0.095680	-0.253627	0.8017
C(TAR(-1))	-0.019927	0.018189	-1.095543	0.2830
C(TAR(-2))	-0.045476	0.018582	-2.447344	0.0212
C(DDT(-1))	-0.259211	0.053750	-4.822547	0.0000
C(DDT(-2))	-0.110256	0.036038	-3.059423	0.0050
C(EDT(-1))	0.018022	0.014929	1.207138	0.2378
C(EDT(-2))	0.033188	0.017502	1.896176	0.0687
C(TEXP(-1))	-0.007955	0.021545	-0.369256	0.7148
C(TEXP(-2))	0.077595	0.016094	4.821436	0.0000
C	17.67960	8.807636	2.007304	0.0548

R-Squared = 0.715974, F-Statistics = 4.537, Prob(F-Statistic) = 0.0003, DW= 2.029815

Source: Researcher's compilation from E-view 8

$$\text{Model: } RGDP = \beta_0 + \beta_1 GCE + \beta_2 GRE + \beta_3 TAR + \beta_4 DDT + \beta_5 EDT + \beta_6 TEXP + U_t$$

Table 5 above depicts the results of the vector error correction model (VECM). The estimation results indicate that apriori expectation is met, and as well satisfied the stability condition of the study. This implies that the estimation results possessed the desired signs for each of the equation. The error correction term (ECT) value

is -0.055324, and its associated t-statistical value is -3.085000 with its p-value being 0.0047. This result means that the speed of adjustment towards long run equilibrium from short run disequilibrium is 5.5% annually.

Furthermore, the estimation results indicated that the coefficient of government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) are -0.263851, -0.045476 and -0.259211 with its corresponding p-values being 0.0054, 0.0212 and 0.0000 respectively, which implies that each of the variable is negative and statistically significant. Hence, it is estimated on average that 1% increase in GCE, TAR and DDT will respectively lead to 0.26%, 0.05% and 0.26% decrease in RGDP. However, the results showed that the coefficient of government recurrent expenditure (GRE), and total export (TEXP) are 0.463993 and 0.077595 with its p-values being 0.0000 and 0.0000 respectively, which means the parameters are positive and statistically significant. It is estimated on average that 1% increase in GRE and TEXP will result to 0.46% and 0.08% increase in RGDP. The result also showed that the coefficient of external debt is 0.018022 while the p-value is 0.2378. This means that the parameter is positive and statistically insignificant. Hence, it is estimated that 1% increase in EDT will lead to 0.018% increase in RGDP.

More so, the estimation results also revealed that F-statistic value is 4.537448, while its associated Prob(F-statistic) value is 0.000323, which implies that the joint influence of the explanatory variables (GCE, GRE, TAR, DDT, EDT and TEXP) on the dependent variable (RGDP) is statistically significant. Furthermore, the computed coefficient of multiple determination (R^2) value is 0.715974. This result means that 71.6% of the variations in real GDP are explained by the explanatory variables such as GCE, GRE, TAR, DDT, EDT, and TEXP while the remaining 28.4% of the variations are attributed to other factors not included in the model.

Similarly, the result indicated that the value of Durbin Watson (DW) statistics is 2.029815. In this study, the tabulated value of the lower limit (dL) of Durbin Watson statistic is 1.271, and the upper limit value is 1.651. Since the Durbin Watson statistic value computed of 2.029815 is greater than the upper limit value of 1.651, the study concludes that evidence of serial correlation is not found in the model. In confirming this claim, the result of Breusch-Godfrey Serial Correlation LM Test indicated that Obs*R-squared value of LM Test is 0.959949, while the p-value is 0.6188. Since LM p-value of 0.6188 is greater than 5% chosen level of significance, the study concludes that evidence of serial correlation is not found in the model. These results are in line with the findings of Sikiru & Umaru (2007); Aigheyisi (2011); Muritala & Taiwo (2011); Ezeabasili et al. (2011); Duc-Anh et al. (2015); etc who studied the impact of fiscal policy and economic growth using standard econometric methods, and positive impact of fiscal policy on economic growth the various economies.

4.4 *Paiwise Granger Causality Test*

This method is employed to investigate the causality between RGDP and GCE, GRE, TAR, DDT, and EDT in Nigeria. The results of the Granger causality test are illustrated in table 7 below.

Table 7: Paiwie Granger Causality test

Null Hypothesis:	Obs	F-Statistic	Prob.
GCE does not Granger Cause RGDP	44	0.92391	0.4055
RGDP does not Granger Cause GCE		5.44162	0.0082
GRE does not Granger Cause RGDP	44	4.76038	0.0141
RGDP does not Granger Cause GRE		1.31141	0.2811
TAR does not Granger Cause RGDP	44	1.08129	0.3491
RGDP does not Granger Cause TAR		3.47561	0.0408
DDT does not Granger Cause RGDP	44	1.36573	0.2671
RGDP does not Granger Cause DDT		1.27895	0.2897
EDT does not Granger Cause RGDP	44	0.77186	0.4691
RGDP does not Granger Cause EDT		0.84411	0.4376
TEXP does not Granger Cause RGDP	44	1.41215	0.2558
RGDP does not Granger Cause TEXP		6.14590	0.0048
GRE does not Granger Cause GCE	44	3.68407	0.0342
GCE does not Granger Cause GRE		10.6504	0.0002
TAR does not Granger Cause GCE	44	2.00645	0.1481
GCE does not Granger Cause TAR		2.83522	0.0709
DDT does not Granger Cause GCE	44	4.02161	0.0258
GCE does not Granger Cause DDT		6.06563	0.0051
EDT does not Granger Cause GCE	44	1.88287	0.1657
GCE does not Granger Cause EDT		1.52175	0.2310
TEXP does not Granger Cause GCE	44	3.70179	0.0337
GCE does not Granger Cause TEXP		1.92666	0.1592
TAR does not Granger Cause GRE	44	2.53591	0.0922
GRE does not Granger Cause TAR		1.95920	0.1546
DDT does not Granger Cause GRE	44	0.28208	0.7557
GRE does not Granger Cause DDT		11.6710	0.0001
EDT does not Granger Cause GRE	44	0.53307	0.5910
GRE does not Granger Cause EDT		0.37932	0.6868
TEXP does not Granger Cause GRE	44	5.03807	0.0113
GRE does not Granger Cause TEXP		1.07532	0.3511
DDT does not Granger Cause TAR	44	0.39955	0.6733
TAR does not Granger Cause DDT		6.05334	0.0051
EDT does not Granger Cause TAR	44	1.34366	0.2727
TAR does not Granger Cause EDT		0.46108	0.6340
TEXP does not Granger Cause TAR	44	3.31049	0.0470
TAR does not Granger Cause TEXP		1.73114	0.1904
EDT does not Granger Cause DDT	44	2.70080	0.0797
DDT does not Granger Cause EDT		0.76532	0.4720
TEXP does not Granger Cause DDT	44	5.48342	0.0080
DDT does not Granger Cause TEXP		1.76314	0.1849
TEXP does not Granger Cause EDT	44	2.65920	0.0827
EDT does not Granger Cause TEXP		0.71170	0.4971

Source: Researcher's compilation from E-view 8

$$\text{Model: } RGDP = \beta_0 + \beta_1 GCE + \beta_2 GRE + \beta_3 TAR + \beta_4 DDT + \beta_5 EDT + \beta_6 TEXP + U_t$$

The table 7 illustrates the results of the Paiwise Granger causality test. The estimation results showed that unidirectional relationship exists between RGDP and GCE, GRE, TAR, TEXP with causality running from RGDP to GCE, TAR, and TEXP respectively, while causality runs from GRE to RGDP. However, causality does not run between EDT and RGDP. This claim is evidenced by their respective p-values in which the estimation results show that the p-value of the causality that runs from RGDP to GCE is 0.0082, and the causalities that run from GRE to RGDP, RGDP to TAR, EDT to TRGDP and RGDP to TEXP are 0.0141, 0.0408, 0.4691 and 0.0048 respectively. This result is in accordance with the findings of Inuwa (2012); Danmola (2013); etc who investigated the relationship between fiscal policy instruments and economic growth in Nigeria using Granger causality method, and found causality between the two variables, and negate the findings of Ogujiuba & Abraham (2013); etc who also examined the relationship between fiscal policy instruments and economic growth using Granger causality approach, and found no causality between the two variables.

4.5 Policy Implications of the Results

In order to critically evaluate the relationship existing between fiscal policy instruments and economic growth in Nigeria for the period 1970-2015, the following selected variables including real gross domestic product (RGDP), government capital expenditure (GCE), government recurrent expenditure (GRE), tax revenue (TAR), domestic debt (DDT), external debt and total export (TEXP) were employed in the investigation. The estimation results indicate that government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) have negative and significant impact on real gross domestic product (RGDP) in Nigeria. These results imply that any economic policy geared towards increasing government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) by 1% in Nigeria will lead RGDP to decrease by 2.6%, 0.4% and 2.5% respectively.

However, the estimation result also discovered that government recurrent expenditure (GRE), and total export (TEXP) have positive and significant impact on real GDP while external debt (EDT) is positive and statistically insignificant, which implies that government recurrent expenditure (GRE), external debt (EDT) and total export (TEXP) each contributed significantly to the growth of the Nigeria's domestic economy compared to capital government expenditure. Thus, it is estimated on average that any government's economic policy that has the ability to increase government recurrent expenditure (GRE), external debt (EDT) and total export (TEXP) by 1% will increase real GDP by 4.6%, 0.03% and 0.78% respectively in the economy.

5. Conclusion and Recommendations

The study is centered on fiscal policy instruments and economic growth in Nigeria from 1970 to 2015. Specifically, it set to determine the extent to which government capital expenditure impact on economic growth; examined the significant impact of government recurrent expenditure on economic growth; ascertained how tax revenue has significantly impacted on economic growth; determined the significance of domestic debt on economic growth; examined the extent that foreign debt stock affects economic growth; and find out whether there are significant causality existing between fiscal policy instruments and economic growth in Nigeria within the period under study.

Augmented Dickey-Fuller (ADF) unit root test, cointegration test, Vector Error Correction Model (VECM) and Ganger causality test were utilized in the analysis. The study adopted ex post facto research design by employing Nigeria's data obtained from the Central Bank of Nigeria (CBN) statistical bulletin, volume 24, 26; 2013 and 2015 respectively and World Bank statistical data ranging from 1970 to 2015. The variables used in the study include real gross domestic product (RGDP) as the dependent variable, whereas the independent variables include government capital expenditure (GCE), government recurrent expenditure (GRE), tax revenue (TAR), domestic debt (DDT), external debt (EDT) and total export (TEXP).

The results of the stationarity test showed that all the variables were non-stationary at level. However, they became stationary after first differencing at 5% level of significance. The results of the Johansen cointegration test indicated that long run equilibrium relationship exists among the variables under study. Similarly, the results of the Vector Error Correction Model (VECM) revealed that a priori expectation is met, and as well satisfied the stability condition of the study. It showed that the speed of adjustment towards long run equilibrium from short run disequilibrium is 5.5% per annum.

The results further indicated that government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) have negative and significant impact on economic growth in Nigeria. Hence, it is estimated on average that 1% increase in government capital expenditure (GCE), tax revenue (TAR) and domestic debt (DDT) will result to 0.26%, 0.05%, and 0.26% decrease in real gross domestic product (RGDP). More so, the results indicated that government recurrent expenditure (GRE) and total export (TEXP) have positive and significant impact on economic growth in the economy. Thus, it is estimated that 1% increase in GRE and TEXP will result to 0.46% and 0.078% increase in real GDP. Similarly, it was also indicated in the study that external debt (EDT) has positive and insignificant impact on economic growth in Nigeria. Hence, 1% increase in EDT will lead to 0.03% increase in real GDP.

Furthermore, the result of the Pairwise Granger causality test showed that unidirectional relationship exists between RGDP and GCE, GRE, TAR, TEXP with causality running from real GDP to GCE, TAR, and TEXP respectively. The result also revealed that causality runs from GRE to RGDP. However, the result showed that causality does not run between EDT and RGDP. These results imply that while RGDP is the major determinants of GCE, TAR and TEXP; GRE is one of the major determinants of real GDP in the Nigerian economy. The study therefore, recommends that government should expand its recurrent budget expenditures more than its capital budget expenditure in Nigeria, since it has positive and significant contribution to economic growth in Nigeria. In so doing, economic growth will improve. More so, government should as a matter of urgency review its tax policy in the country, bring in experts free of corruption in the implementation and administration of tax policy in Nigeria. It is only in this way that, the contribution of tax revenue to economic growth will positively improved in the economy.

References

- Aigheyisi O. S. (2011). Examining the relative effectiveness of monetary and fiscal policies in Nigeria. A Available at SSRN:<http://ssrn.com/abstract=1944585>
- Abata, M., Kehinde, J. & Bolarnwa, S.(2012). Fiscal/monetary policy and economic growth in Nigeria: A theoretical exploration. *International Journal of Academic Research in Economics and Management Sciences*, 1(5)
- Adofu, L. & Abula, M. (2010). Domestic debt and the Nigeria economy. Current research. *Journal of Economic theory* 2 (1), 22 – 26.
- Bakare, A. S. (2012). Assessing the role of public spending for sustainable growth: Empirical analysis. *Journal of International Finance*, 3(2), 25-30.
- Burges, O. (2003). Having Global Poverty. *Journal of Economic Perspective*, 17, 3-22.
- Central Bank of Nigeria (2014). Fiscal Policy and Government Finance. *Central Bank of Nigeria Annual Report*.
- Danmola, R. A., Olateju, A. O. & Abba, M. W. (2013). Nexus between public expenditure and economic growth by testing Wagner’s law time series: Evidence from Nigeria. *International Journal of Development and Sustainability*, 2(4).
- Danda, R.O. (2010). Investment in education and economic growth in Nigeria: An empirical evidence. *International Research Journal of Finance and Economics*, 55,158-169.
- Dornbusch, R. & Fischer, S. (1990). *Macroeconomic* (5th ed.) New York: McGraw-Hill Publishing Company.
- Duc-Anh, L. L., Phu, N. & Arnelie, B. C. (2015). Government expenditure, external and domestic public debts, and economic growth. Universite Paris Pantheon-Sorbonne.
- Dilrukshini, W. A. (2002). Public expenditure and economic growth: Cointegration analysis and causality testing. *Staff Studies Centre of Sri Lanka*, 34(1), 51-68.
- Eboigbe, S. & Idolor, E. J. (2013). External debt and public sector investment: The Nigerian perspective. *Journal of Accounting and Contemporary Studies*, 2(1), 7 – 16.
- Ezeabasili, V. N., Isu, H. O. & Mojekwu, J. N. (2011). Nigeria’s external debt and economic growth: An error correction approach. *International Journal of Business and Management*, 6(5), 156 – 170.
- Ghali, K. & Al- Shamsi, F. (1997). Fiscal policy and economic growth: A study relating to the United Arab Emirates. *Economic International journal*, 50(5), 19-33.
- Grace, G. (2014). Impact of shocks to public debt and government expenditure on human capital and growth in developing countries. *Journal of Economics and Behavioral Studies*, 6(1), 44-67.
- Mah, G., Mulkudem-Petersen, J., Miruka, C. & Petersen, M. A. (2013). The impact of government expenditure on the Greek government debt: an econometric analysis. *Mediterranean Journal of Social Sciences*, 4(3), 323 – 330.
- Mihaela, G. & Ozay, O. (2014). An empirical study on fiscal Policy in crises time: Evidence from Romania and Turkey. *Procedia Economics and Finance*, 15, 975 – 984.
- Michael A. & Oderinde O. (2012). Public education expenditure and defence spending in Nigeria: An empirical investigation. An implication of vector auto regression (VAR) models.
- Microsoft Corporation (2004). *Microsoft Encarta Encyclopedia*.
- Muritala, T. & Taiwo, A. (2011). Government expenditure and economic development: Empirical evidence from Nigeria. *European Journal of Business and Management*, 3(9), 18 – 28.
- Muhammed, A., Bilah M. & Muhammed S. (2012). Impact of human capital on economic growth with emphasis on intermediary role of technology: Time series evidence from Pakistan. *Africa Journal of Business anagement*, 6, 280- 285.
- Modebe, N. J., Okafor, J.U., Onwumere, J. & Ibe, I. J. (2011). Impact of capital and recurrent expenditure on Nigeria’s economic growth. *European journal of business and management*. 4(19), 66-74.
- Nathan, P. (2012). The impact of fiscal policy on the Nigerian economy. *International Review of Social Sciences and Humanities*, 4(1), 142-150.
- Nurudeen, S. & Usman, A. (2010). Government expenditure and economic growth in Nigeria. A disaggregated analysis, *Business and Economics Journal*, 4, 1-11.
- Loto, A. (2011). Impact of government sectoral expenditure on economic growth. *journal of Economics and International Finance*, 3(11), 646-652.
- Onaolapo, A., Abdul-Rahamoh, F., Taiwo, H. & Adegbite ,T. A. (2013). The analysis of the effect of petroleum profit tax on Nigerian economy. *Asian Journal of Humanities and Social Sciences*, 1(1), 2320-9720.
- Ogiji, P. (2004). *Reading in public finance and policy social science study group*. (SSSG) Monograph Series 1 (1). Makurdi: Kingdom Printing and Publishing Company Ltd.
- Omitogun, O. & Anyinla, T. (2007). Fiscal policy and nigerian economic growth. *Journal of Research in National Development*, 5(2).
- Ogbole, F., Sonny, N. & Isaac, D. (2011). Fiscal policy: its impact on economic growth in Nigeria. *Journal of economics and international finance*, 3(6), 407-452.

- Odo, S. I., Igberi, C. O. & Anoke, C. I. (2016). Public debt and public expenditure in Nigeria: A causality analysis. *Research Journal of Finance and Accounting*, 7(10), 27-40.
- Odo, S. I., Nwachukwu, J. O. & Agbi, P. E. (2016). Public expenditure on social capital: Implications for economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 7(6), 32-45.
- Onakoya, A. B. & Somole, R. O. C. (2013). The impact of public capital expenditure on economic growth in Nigeria. *Global Journal of Economics and Finance*, 2(1), 1-11.
- Oziengbe, S. A. (2013). The relative impacts of federal capital and recurrent expenditures on Nigeria's Economy. *American Journal of Economics*, 3(5): 210-221.
- Ogbulu, O. M. & Torbira, A. (2012). Budgetary operations and economic growth: The Nigerian perspective. *British Journal of Arts and Social Sciences*, 4(2), 1-20.
- Ogujuba, K. & Abraham, T. W. (2012). Testing the relationship between government revenue and expenditure: Evidence from Nigeria. *International Journal of Economics and Finance*, 4(11), 172 – 182.
- Olugbenga, A. O. & Owoye, O. (2007). Public expenditure and economic growth: *New Evidence from OECD Countries*.
- Oni, L. B., Aninkan, O. O. & Akinsanya, T. A. (2014). Joint effects of capital and recurrent expenditures in Nigeria's economic growth. *European Journal of Globalization and Development Research*, 9(1), 530-543.
- Oyinlola, M. A. & Akinnibosun, O. (2013). Public expenditure and economic growth nexus: Further evidence from Nigeria. *Journal of Economics and International Finance*, 5(4), 146 – 154.
- Sikiru, J. & Umaru, A. (2007). Fiscal policy and economic growth relationship In Nigerian. *International Journal of Business and Social Sciences*, 2(17).
- Saad, W. Kalakech, K. (2009). The nature of government expenditure and its impact on sustainable economic growth” *Middle Eastern Finance & Economics*, 4, 38-47.
- Sinha, P., Arora, V. & Bansal, V. (2011). Determinant of Public debt for middle income and high income group countries using panel data regression. *Munich Personal RePEc Archive*. http://mpira.ub.muenchen.de/32079/1/MPRA_paper_32079.pdf
- Sulaiman, L. A. & Azeez, B. A. (2012). Effect of external debt on economic growth of Nigeria. *Journal of Economics and Sustainable Development*, 3(8), 71 – 79.
- Taiwo, A. S. & Agbatogun, K. K. (2011). Government expenditure in Nigeria: A sine qua non for economic growth and development. *Journal*, 9(2), 1596 – 8308.
- Tchokote, J. (2001). Macroeconomic of fiscal deficits in Cameroon. *Being a Ph.D Thesis proposal presented to the Department of Economics, University of Ibadan, Ibadan-Nigeria*.
- Lewis, A. W. (1978). *Theory of Economic Growth* London. George Allen Unwin Press.
- Yesufu, T. M. (1996). The Nigerian economy: Growth without development. *The Journal of Uni. Benin Social Science Series for Africa*.
- Uguru, L. C. (2015). The link between public debt and government expenditure pattern: The Nigeria experience. *Journal of Business and Management*, 18, 37-41.