Fiscal Policy and the Nigerian Economy: An Empirical Evaluation

Abraham O. Agbonkhese[1] & Kingsley A. Agbonkhesea[1]

[1]Department of Economics and Development Studies, Igbinedion University, Okada, Edo State, Nigeria abrahamoni@yahoo.com

[2]Department of Mechanical Engineering Technology, National Institute of Construction Technology (Nict), Uromi, Edo State, Nigeria. kinger4real@yahoo.com

Abstract

The main objective of the study is to determine empirically the impact of fiscal policy on economic growth in Nigeria. The Ordinary Least Squares (OLS) method was used. The study indicated that all the variables (federal government expenditure, federal government revenue, public debt, and interest rate) were in conformity with our theoretical expectations as well as being statistically significant to gross domestic product (GDP) at both the five percent and ten percent levels of significance except inflation which was not. The implication is that federal government expenditure suppose to stimulate economic growth and enhance the standard of living of the people. But the reverse is the case since government has been known as bad managers of public funds. It is, therefore, recommended that, greater emphasis be placed on planning, with a view to saving part of the higher oil revenue in an "oil reserve fund" to be used in developmental projects that have best values for money and good fiscal policy measures be undertaken alongside monetary policy, as both are re-enforcing and complementary.

Key Words: Fiscal Policy, Nigerian Economy And Empirical Evaluation

1.0 Introduction

One of the remarkable trends in contemporary history has been the importance in the growth of economic life. Any serious discussion of government is bound to raise the question about revenue and expenditure. Through appropriate tax, expenditure and regulatory policies, government seek to attain certain objectives. The achievement of macroeconomic goals namely full employment, stability of price level, high and sustainable economic growth and external balance, from time immemorial, has been a policy priority of every economy whether developed or developing, given the susceptibility of macroeconomic variables to fluctuations in the economy. The realization of these goals is not automatic but requires policy guidance. The policy guidance represents the objectives of economic policy (Olawunmi & Ayinla, 2007). One of the regulatory policies used by government in achieving its objectives to bring about economic growth is fiscal policy. Fiscal policy is an outgrowth of Keynesian economics; its logical analysis suggests that it offers a sure fire means of stabilizing the economy. The goal of modern fiscal policy is to achieve economic efficiency and stability. In a modern economy, no sphere of economic life is untouched by the government. Two major instruments or tools are used by government to influence private economic activity; taxes and expenditure. The effect of taxation covers all the changes in the economy resulting from the imposition of a tax system. One may say that without taxation, a market economy would not attain certain production, consumption, investment, employment and other similar patterns. The presence of taxation modifies these patterns for good or for bad and such modifications may collectively be called the effect of taxation. Expenditure on the other hand, was meant to directly add to the effective demand in the market and generate a high value multiplier by distributing income to those sections of the population which had a high marginal propensity to consume.

Government has the responsibility of preventing calamitous business depression by the proper use of fiscal and monetary policy, as well as close regulation of the financial system. In addition, government tries to smooth out the ups and downs of the business cycles, in order to avoid either large scale unemployment at the bottom of the cycle or raging price inflation at the top of the cycle. More recently, government has become concerned with financing economic policies which boost long term economic growth. Because of the increasing importance of government conduct in a nation‟s development process, fiscal policy handles the issues of resource allocation and is preoccupied with the problems of economic growth, economic stability, employment, prices, income distribution and social welfare. Fiscal policy has developed an array of instruments to handle different facets of the economics of public sector. But by the very existence of multiplicity of goals, it is often bedeviled by inherent conflict of objectives; between long term growth and short term stability, between social welfare and economic growth, and between income redistribution and production incentives (Samuelson & Nordhaus, 2005). One of the most important objectives of macroeconomic policy in recent years has been the rapid economic growth of an economy. Economic growth is defined as "the process whereby the real per capita income of a

country increases over a long period of time". Economic growth is measured by the increase in the amount of goods and services produced in a country. A growing economy produces more goods and services in each successive time period. Thus growth occurs when an economy's productive capacity increases which, in turn, is used to produce more goods and services. In its wider aspect, economic growth implies raising the standard of living of the people and reducing inequality of income distribution (Jhingan, 2003).

The relationship between government expenditure and economic growth has continued to generate series of debate among scholars. Some scholars argued that increase in government socio-economic and physical infrastructure encourages economic growth. For example, government expenditure on health and education raises the productivity of labour and increase growth of national output. Similarly expenditure on infrastructure such as roads, communications, power, etc., reduces production costs, increases private sector investment and profitability of firms, thus, fostering economic growth. Some scholars supporting this view concluded that expansion of government expenditure contributes positively to economic growth. The intent of fiscal policy is essentially to stimulate economic and social development by pursuing a policy stance that ensures a sense of balance between taxation, expenditure and borrowing that is consistent with sustainable growth. However, the extent to which fiscal policy engender economic growth continue to attract theoretical and empirical debate especially in developing countries. In Nigeria, government expenditure has continued to rise due to the huge receipts from production and sales of crude oil, and the increased demand for public goods. Unfortunately, rising government expenditure has not translated to meaningful growth and development, as Nigeria ranks among the poorest countries in the world. In addition, many Nigerians have continued to wallow in abject poverty while so many live below the poverty line. Coupled with this, is dilapidated infrastructure (especially roads and power supply) that has led to the collapse of many industries, including high level of unemployment. Macroeconomic indicators like balance of payments, import obligations, inflation rate exchange rate and national savings revealed that Nigeria has not fared well in the last couple of years.

1.1 Statement of the Problem

There is no doubt that government is an institution saddled with a myriad of functions. However, the way and manner in which these functions are carried out vary from one society to another. Historically, prior to the Great Depression of the 1930s, there was the general belief by economic managers that the market system was sacrosanct. Primarily, at the nucleus of this belief was the famous law of the market which says that supply creates its own demand. Hence, the market system was capable of allocating societal resources equitably to all manner of citizens. In fact, it was reasoned that people should fold their hands seemingly hepless and allow the forces of demand and supply to dictate their economic fortune. Following the appearance of John M. Keynes' (1936) prescription, the complexion of the argument changed in favour of government intervention in the workings of the economy. This was path-breaking because he identified the problem to be that of aggregate demand exceeding that of aggregate supply. This reversed and modified "demand creates its own supply". According to Jumbo (2010), the fall out of this is a great influence on both economic and political thinking. Hence, states (government) started thinking of how to have a stable and predictable economic environment for sustainable social and economic growth in order to forestall the disaster of the Great Depression. Naturally, households prefer to have economic stability with continuous employment and stable income, while no economy does well in the face of volatile or unfavourable fluctuations in its macroeconomic variables.

Government intervention began to be more popular in the management of the economy. Arising from the above, government over the years embarks on diverse macroeconomic policy options to tinker the economy on policy entails government's management of the economy through the manipulation of its income and spending power to achieve certain desired macroeconomic objectives (goals) amongst which is economic growth. The power of fiscal policy as an instrument of economic stabilization was acknowledged in the works of Jhingan (2006), Gbosi (2008), to mention a few of them. Despite the lofty place of fiscal policy in the management of the economy, the Nigerian economy is yet to come on the path of sound growth and development. Successive governments have not done enough to put the nation's resources to effective productive use as to chart the path of growth and development. The net result is that the Nigerian economy is now performing below her potentials. This goes to explain that, the achievement of sustainable economic growth through fiscal policy in Nigeria has remained an illusion. In spite of the substantial increase in government expenditure over the years, the rate of economic growth has been very low. Hence the unending debate on the usefulness of fiscal policy as a tool for promoting growth and development remains inconclusive and sacrosanct, given the conflicting results of current research. This has informed the need for this study. In the light of the above scenario, the research question that come to the fore is: what has been the effect of fiscal policy on economic growth in the country over the years?. The answer to this question is the concern of this study for proper economic management in Nigeria and formed the basis for the objective of the study.

1.3 Objective of the Study

The major objective of the study is to investigate empirically the impact of fiscal policy on economic growth in Nigeria. The study covers a period of 24 years from 1990 to 2013 and relied on secondary data sourced from various issues of the Central Bank of Nigeria (CBN) Statistical Bulletin and Annual Report and Statement of Accounts. Following the introductory section is the review of literature in section two. Section three provides the theoretical framework and methodology while section four is the analyses of estimation results as well as the policy implication(s) of findings. Section five makes appropriate policy recommendations and draws conclusion.

2.1 Literature Review

2.1.1 The Concept of Fiscal Policy

Fiscal policy refers to that part of government policy concerning the raising of revenue through taxation and other sources and deciding on the level and pattern of expenditure for the purpose of influencing economic activities. It is a policy under which the government uses its expenditure and revenue programmes to produce desirable effects and avoid undesirable effects on national income, production and employment. The policy can also be seen as a deliberate spending and taxation actions undertaken by government in order to achieve price stability, to dampen the swings of business cycles, and to bring about nation's output and employment to desired levels (Jhingan, 2003). Fiscal policy may be discretionary or non-discretionary. The discretionary fiscal policy is "active" and it involves the conscious changes in government spending and taxes to create expansionary or contractionary effects. The non-discretionary fiscal policy is „passive" which relies on automatic built-in stabilizers to keep the economy on course. There is need for government to stabilize the economy, specifically by adjusting the level and allocations of taxes and expenditure. Federal taxation and spending policies are designed to level the business cycle and achieve full employment, price stability and sustained growth of the economy. Keynes opined that insufficient demand causes unemployment and excessive demand leads to inflation. It therefore, aims to stimulate demand and output in periods of business decline by increasing government purchases and cutting taxes, thereby releasing more disposable income into the spending stream, and to correct over expansion by reversing the process.

The Federal Government's policies on taxes and expenditure have a large impact on the economy. The theory of Keynes advocates the use of fiscal policy to offset imbalances in the economy. According to Keynes, a government should use fiscal policy to stimulate an economy slowed down by recession by through deficit, that is, by spending more than it collect from taxes. On the other hand, to slow down an economy that is threatened by inflationary pressures, there should be increase in taxes or cutting spending to create a budget surplus that would act as a drag on the economy. Stabilization policy requires that policy makers can determine feasible targets, have a reasonable knowledge of the workings of instrumental variables and can effectively control the instrumental variables, the targets of those variable for which the government seek desirable values.

2.1.2 Objectives of Fiscal Policy

Anyanwu and Oaikhenan (1995), clearly brought out the objectives of fiscal policy in Nigeria as follow: Generation of significant revenue for the government with which she can provide other services that benefit the entire society, diversification of revenue sources away from crude oil-based revenues, reduction in the tax burden on individuals and corporate bodies, maintenance of economic equilibrium, particularly to control inflationary pressures, accelerate economic growth, reduce Balance of Payments deficits, and generate increased employment, guaranteeing effective protection of domestic industries, promotion of self-reliance development, substantial progressive reduction and elimination of government budget deficit, integration of the internal sector of the economy into the economic mainstream, improving the effective control and efficiency in government fiscal operations, and hence promote transparency and accountability in the management of public finances. Coping with the twin problem of low productivity in agriculture and low capacity utilization in manufacturing, reduction of the heavy debt burden both external and internal loans, and minimization of existing inequalities in wealth, income and consumption standards which tend to undermine production efficiency, attain a sense of social justice and political stability.

2.1.3 Functions of Taxation in Relation to Economic Growth and Development

Taxation is a vital element in any country's economy: It is the source of funding for the important necessities such as education, health care, security and the million other things that are necessary to the safe running of a country. Traditionally, taxation in developing countries has two major purposes. First, tax concessions and similar fiscal incentives have been thought of as a means of stimulating private enterprises. Such concession and

incentives have typically been offered to foreign private investors to induce them to locate their enterprises in the less developed countries. The second purpose of taxation, the mobilisation of resources to finance public expenditure, is by far more important. Whatever the prevailing political or economic ideology of the less developed country, its economic and social progress depends largely on its government's ability to generate sufficient revenues to finance an expanding program of essential, non-revenue-yielding public services, health, education, transportation, legal and other institutions, poverty alleviation, and other components of the economy and social infrastructure, (Torado and Smith, 2009). Taxation influences key governance measures ranging from transparency, corruption, and more effective expenditures of revenues in the budget. Domestic resource mobilisation, in the form of progressive taxation can strengthen all of these areas and ultimately tackle the structural causes of poverty as well as the symptoms.

Musgrave and Musgrave (2004) noted that it is evident that the role of fiscal system plays a multi-fold role in the process of economic growth. These roles include: The level of taxation affects the level of public savings and thus the volume of resources available for capital formation; both the level and the structure of taxation affect the level of private saving; public investment is needed to provide infrastructure types of investment; a system of tax incentives and penalties may be designed to influence the efficiency of resource utilization; the distribution of tax burden (along with distribution of expenditure benefits) plays a large part in promoting an equitable distribution of the fruits of economic growth; the tax treatment of investment from abroad may affect the volume of capital inflow and rate of earnings there from and the pattern of taxation on imports and exports relative to that of domestic product will affect the foreign trade balance.

2.1.4 Fiscal Policy and Economic Growth in Nigeria

Many Less Developed Countries face problems of large fiscal deficit-public expenditures greatly in excess of public revenue-resulting from a combination of ambitious development programme and unexpected negative external shocks. With rising debt burdens, falling commodity prices, growing trade imbalances, and declining foreign private public investment inflows, a developing world government has little choice but to undergo several fiscal retrenchment. This meant cutting government expenditures (mostly on social services) and raising revenues through increased or more efficient tax collection (Todaro and Smith 2009). Efficient tax systems and expenditure pattern are crucial for the growth of the Nigerian economy. They contribute to financing the provision of public goods and contribute to state building and good governance. The need to address the difficulties associated with fiscal policy has led to several reforms. Reforms have been undertaken over the years on existing fiscal policy in order to achieve some improvement on economic stability, but it seems the reforms might not have been on the right path to achieve the desired goal, as a result, the impact of fiscal policy in Nigeria is relatively low. The poor performance of government policy in achieving economic stability in Nigeria stemmed largely from the lack of recognition on the part of policy makers of the structure of the economy vis-a-vis the interrelationships between government's fiscal activities and macroeconomic variables. Stabilization policy requires that policy makers can determine feasible targets, have a reasonable knowledge of the workings of instrumental variables and can effectively control the instrumental variables, the targets of those variables for which the government seek desirable values. Nigeria is a country that depends on mineral extraction, and it faces two challenges when formulating fiscal policy; in the long-run, the need to ensure that the fiscal stance is compatible with the sustainable use of oil and gas resources, and in the short run, the need to prevent the revenue volatility from spilling over into the budget.

Since 1970, both revenue and expenditure have been volatile while increasing over time. In periods with high oil prices, revenue and expenditure have increased sharply. The implications of such boom-burst fiscal policies include the transmission of oil volatility to the rest of the economy as well as disruptions to the stable provisions of government services. This has added to the failure over the years of public spending neither facilitating the diversification and growth of non-oil sector nor reducing poverty (Baungard, 2003). Nigeria often suffers high tax losses due to the structure of their economy, weak administrations, and inadequate tax policies. There have been a number of empirical studies on the relationship between fiscal policy and economic growth in Nigeria. For instance, Ogiogio (1996) noted that the economy does not have the productive capacity to support growth in the absence of new government investment. In particular, it was agreed that government expenditure was necessary for the maintenance of existing infrastructure and the implication of policies/projects in the economic and social sector of the economy. Okpanachi (2004), pointed out that the poor performance of government policies in achieving desired macroeconomic targets in Nigeria stemmed largely from the lack of recognition on the part of policy makers of the fiscal policy as an engine of economic growth in Nigeria. The need to address the difficulties associated with fiscal policy has led to several reforms. Reforms have been undertaken over the years on existing fiscal policy in order to achieve some improvement on economic stability, but it seems the reforms might not have been on the right path to achieve the desired goal, as a result, the impact of fiscal policy

in Nigeria is relatively low. The poor performance of government policy in achieving economic stability in Nigeria stemmed largely from the lack of recognition on the part of policy makers of the structure of the economy vis-a-vis the interrelationships between government's fiscal activities and macroeconomic variables. Stabilization policy requires that policy makers can determine feasible targets, have a reasonable knowledge of the workings of instrumental variables and can effectively control the instrumental variables, the targets of those variables for which the government seek desirable values. Nigeria is a country that depends on mineral extraction, and it faces two challenges when formulating fiscal policy; in the long-run, the need to ensure that the fiscal stance is compatible with the sustainable use of oil and gas resources, and in the short run, the need to prevent the revenue volatility from spilling over into the budget.

Okpanachi went further to conclude that there is the need to overhaul the entire process of budgetary formulation, implementation and control. At the present a lot of expenditures escape the actual budgeting process. Apart from the lack of transparency that this entails, it also tends to make the budget a neutral document which it ought not to. Extra budgetary expenditures should be reduced to minimum levels if they cannot be completely eliminated. Every form of expenditure needs to be channeled through the budget. In this regard, budget monitoring and evaluation capacity needs to be strengthened as well. Olaniyan (1997) pointed out that under ideal and perfectly competitive situations, economic policies for growth and stabilization should be employed in such a way as to equate the marginal productivity of government investment to that of private investment. This has to be so because the equilibrium situation in national income determination implies that resources employed in government investment activities should be a productive as in any alternative employment. However, Nigerian situation is far from ideal.

2.1.5 Fundamental Challenges of Fiscal Policy in Nigeria

Taxes are the most important source of government revenue in modern economies. It is at the heart of the "social contract" between a modern sovereign state and its citizens. In return for fulfilling duties such as "paying a fair share of taxes‟, citizens are provided with security, infrastructure and social services. But in Nigeria, there is no strong commitment by both government and the citizens to their mutual responsibilities, and so the ability of the tax structure to yield substantial revenue is significantly reduced. Some of these challenges include: Weak administrative capacity for tax collection, widespread corruption in tax collection, absence or dearth of public service benefits for previous tax payments which serve as a disincentive to continue tax payments, perceived mismanagement of public funds, pervasive tax avoidance and evasion, unfavourable attitudes towards paying tax, multiplicity of taxes and levies at the three tiers of government.

According to Usman (2008), the past failure of fiscal policy in Nigeria in contributing to growth, wealth creation and poverty reduction can better be analysed within a framework of a commonly known term "Natural Resource Curse‟. This depicts a situation where a country endowed with vast amount of resources fails to translate such wealth into meaningful economic growth and development. The failure of fiscal policy in Nigeria in the past to stimulate the economy from the volatility of oil revenue has led to undue real exchange rates appreciation with negative impact on the competitiveness of the economy, pro-cyclical fiscal policy with adverse impact on the quality of Government's expenditure, with detrimental effects on investment and growth. There has always been the problem of the quality of spending with inefficiency and leakages in both current and capital budgets and also the problem of ill-conceived projects, as Nigeria tends to pay three times the cost of first class projects but end up with the third-class ones. Nigeria has engaged in unproductive public spending over the years which has brought a decrease on the rate of growth in the economy. Unproductive public spending in Nigeria takes various forms, including expenditure on the wages and salaries of unproductive employees. Such resources can be deployed to more productive initiatives that would enhance increase productivity in the economy.

Overall macroeconomic stability has not been sustained and there has not been emphasis placed on productivity investment. Despite calls for increase government's expenditure due to higher oil revenue and the temptation to respond by increasing government expenditure to match the increased revenues, greater caution should be exercised. Greater emphasis needs to be placed on planning, with a view of saving part of the higher oil revenue in an "Oil Reserve Fund‟ to be used for properly formulated, designed and cost projects producing best values for money. Fiscal policy has not been effective in the area of promoting sustainable economic growth in Nigeria. Factors such as policy inconsistence, high level of corruption, wasteful spending, poor policy implementation and lack of feedback mechanism for implemented policies evident in Nigeria are capable of hampering the effectiveness of fiscal policy. To put the Nigeria economy along the path of sustainable growth and development the government must put a stop to the incessant unproductive wasteful spending and embark upon specific policies aimed at achieving increased and sustainable productivity in all sectors of the economy.

Empirically, several studies have supported the assertion of the existence of a relationship between fiscal policy and economic growth in several economies of the world following the Keynesian philosophy that pulled depressed economies out of depression during the great depression era. Empirical studies in some developing economies tell the same story. Cameroon (1998) examines the effects of fiscal policy on growth, which focus was on the relationship between public spending and growth through private investment. A derivative of Denison growth accounting model was used in the study to analyze the relationship between Cameroon's fiscal policy and economic growth. He used the ordinary least squares (OLS) technique in estimating the equation that link private investment and growth. The result of the study showed that expenditure especially on education and health crowd-in private investment. The impact of fiscal deficits on the prospect of economic growth is another phenomenon of interest to economists. The financing of fiscal deficits by reducing the available funds to private investors, that is, "crowding-out" is very likely to retard economic growth. On the contrary, it is also argued that public investment in spite of how it is financed as long as it builds infrastructure and provides support services creates a conducive climate for private investment and as a result improves the prospects of economic growth. It may, be necessary for us to add here that while we advocate for a private sector driven economy, we opine that government should raise funds to create the enabling environment for private investment though such fiscal policy may ostensibly crowd out some private investors.

From the foregoing, it is clear that if fiscal policy is used with circumspection and synchronized with other measures, it will likely smoothen out business cycles and lead to economic growth and stability. The continual inclusive opinions regarding the role of government in managing the economy using fiscal policy lies in two dominant theoretical perspectives. The first is the Keynesian view, which makes the case that governments can play a major role in determining the level of national income. The alternative is the Ricardian view, which argues that the level of aggregate demand is essentially neutral to government policy. The effectiveness of fiscal policy will therefore depend very much on which view of the world persists (Chamberlin and Yueh, 2006). The difference between the Keynesian and the Ricardian view of the world comes down to the type of consumption function that is used. In the Keynesian model, unsurprisingly the Keynesian consumption function is prominent. People decide how much to consume on the basis of their current disposable income, which is in turn influenced by fiscal policy. In the Ricardian view, the permanent income hypothesis is central. Consumers are forward - looking and base their decisions on a longer-run view of income. Households will only change consumption plans if they believe their permanent income has changed. If it is accepted that government must ultimately balance its books, all deficits must be offset by surpluses. In this case, permanent income, consumption, aggregate demand and the level of national income will all be neutral with respect to fiscal policy (Chamberlin and Yueh, 2006).

Theoretically, government expenditure is positively correlated with GDP (Anyanwu (1997), McConnell and Brue (2005) and Onoh (2007)). The underlying assumptions however are that: the economy is operating below the full equilibrium level and the expenditure is channeled to productive investments to increase output of goods and services, and to increase national income. As a result, increase (decrease) in government expenditure may lead to increase (decrease) in GDP. However, government expenditure should not be increased indefinitely to avoid inflationary pressures from setting in. The increase should continue only to the point of achieving full-employment level. Ekpo (1994) in Adeoye (2006) observed that in Nigeria (1960-1990) public spending on infrastructure crowded in private investment and thus spurs economic growth (though private investment was reported to be more efficient than public investment). According to Aregbeyen (2007), the studies of Devarajan et al (1996), Fuente's (1997), Amin (1998), Kneller et al (1999) and Bose et al (2003) indicate correlation between fiscal policy and economic growth. Devarajan et al (1996) found that productive government expenditure enhanced economic growth. Fuente's (1997) investigation of 21 OECD countries (1965-1995) showed that public expenditures sometimes tend to crowd-out private investment through reduction of disposable income and savings and may exert some negative "externality" effect on the level of productivity. In Cameroon, Amin (1998) also observed that public expenditure on infrastructure had enormous returns and thus enhanced growth.

Furthermore, the study conducted by Kneller et al (1999) confirmed the studies of Devarajan et al (1996) and Fuente (1997). Bose et al (2003) found that government capital/expenditures in GDP is positively and significantly correlated with economic growth but that the growth effect of current expenditure is insignificant. Aregbeyen's (2007) study of a panel of 40 African countries (including Nigeria) revealed that Government Capital and public investment expenditures were significantly positively associated with economic growth while current and consumption expenditures were negatively associated. The former category of expenditure was in less proportion of government total expenditure than the latter category. Aregbeyen (2007) believed that though government expenditures were necessary for economic growth, the quality of such expenditure is of more

important consideration. According to him the quality of government expenditures is the distribution of government expenditures between capital and consumption purposes on one hand and current and consumption purposes on the other hand. Despite several studies on fiscal policies, Adeoye (2006) still observed that "the debate on the usefulness of fiscal policy as a tool for promoting growth and development remains inconclusive, given the conflicting results of current research". He opined that while the studies of Lin and Liu (2000) indicated a net positive effect, others indicated a negative net effect. He also cited the studies of Ariyo (1993), Easterly and Rebelo (1993), Ekpo (1994), Japelli and Meana (1994) as being instructive. Ram (1986), using cross country regressions found that while growth in general is positively correlated with rate of change in total public expenditure, it is negatively correlated with the level of such expenditure. Again, Ram (1986) and Grossman (1988) reported positive relationships between government fiscal deficit and economic growth. Ekpo's (1994) study in Nigeria (1960-1992) revealed that public sector investment in infrastructure complements the private sector and implicitly spurs growth. Furthermore, a cross country study conducted by Jeppelli and Meana (1994) revealed that public expenditures on investment and consumption impacted differently on economic activity. Public investment was found to stimulate output thereby increasing government revenues (which, in turn, enhance government spending).

Also, the study of Lin and Liu (2000) on China's economy showed that fiscal decentralization significantly contributed to economic growth rate mainly through efficient resources allocation rather than by inducing additional investment. (This agrees with the hypothesis that fiscal decentralization can increase economic efficiency). Adeoye (2006) examined the effects of fiscal policy on growth of the Nigerian economy (1970-2002). The result showed that capital expenditure as a ratio of GDP (used as proxy for public investment) exerted a negative impact on output growth by having a crowding-out effect on private investment. Thus from the foregoing empirical studies it may be inferred that the relationship between fiscal policy and economic growth may be either negative or positive depending on varying prevailing economic factors in the economies in question. Olawunmi and Ayinla (2007), concluded in their study that, the achievement of sustainable economic growth through fiscal policy in Nigeria has remained a mirage. Despite the substantial increase in government expenditure over the years (1980-2004), the rate of economic growth has been very low and sluggish. Easterly and Schmidt-Hebbel (1993), studied ten developing countries and provided the evidence that fiscal deficits and growth are self-reinforcing and that good fiscal management preserves access to foreign lending and avoids the crowding out of private investment. However, the evidence by Gemmel (2001) from low income, medium and high income countries contradicts most of the earlier evidences on the impact of budget deficits on growth. The result revealed significantly negative effect of budget deficit on economic growth. Perotti's (2004) study of five OECD countries revealed that the effect of fiscal policy on GDP tends to be small, and the effects of government spending shocks and tax cuts on GDP and its components have become substantially weaker over time.

Mountford and Unilg (2005), stressed that the best fiscal policy to stimulate the economy is a deficit-financed tax cut and that the long-term costs of fiscal expansion through government spending is probably greater than the short-run gain. M'Amanja and Morrissey (2006) concludes that unproductive expenditure and non-distortionary tax revenue were found to be neutral to growth predicted by economic theory. However, contrary to expectations, productive expenditure has strong adverse effect on growth, while there was no evidence of distortionary effects on growth of distortionary taxes. On the other hand, government investment was found to be beneficial to growth. Again, the empirical work of Hsieh and Lai (1994) on seven industrialized countries suggests that the relationship between government spending and growth can vary significantly across time as well as across the major industrialized countries that presumably belong to the same growth club. For most of the countries under study, public spending is found to contribute, at best, a small proportion to the growth of an economy. Benos (2004) studied OECD countries and found that government spending on education, health and fuel-energy display a hump-shaped relationship with per capita growth and public expenditures on housing, community amenities, social security, social assistance, transport and communication are characterized by U-shaped relationship with growth. Also when the effect of public spending on education and social expenditures on growth is stronger, the poorer a country is, while the opposite is true for expenditure on health. Finally, the study found that budget surplus has a positive effect on growth.

2.6 Theoretical Framework

The Keynesian model states that expansion of government expenditure (expansionary fiscal policy) accelerates economic growth. Endogenous growth models do not assign any important role to government in the growth process, but Barro and Sala-Martin (1992); Easterly and Rebelo (1993) emphasized the importance of government policy (activity) in economic growth. They emphasized on the composition of public expenditure

rather than its level and in that vein felt that the productive government expenditure has an effect while the unproductive government expenditure has no effect. But the problem is to identify which government expenditure is unproductive before the spending. This implies that government expenditure and composition of government expenditures are important determinants of growth.

On the other hand, there seems to be a direct link between budget policy and growth, and this has primarily been associated with tax policy. The structure of taxation could have important implication for growth. The empirical evidence of the impact of various aspect of tax policy on growth has so far been mixed. Easterly and Rebelo (1993) point out that a major difficulty in isolating the impact of tax on growth arises because key non-tax variables such as public expenditure that are often not independent of tax policy can also affect growth. Arising from the above, the need to have a concise functional model to capture the impact of fiscal policy variables such as government expenditure, tax revenue and public debt on growth in an economy specifically Nigeria is tasking and worth undertaking. The explanations above form the basis for our model formulation in this study.

3.0 Research Methodology

To fully underscore the hypothesized relationships between fiscal policy and economic growth as set out in the literature review, this study adopts the Ordinary Least Squares (OLS) method. The need for this technique is that, it is used to estimate the parameters of a single-equation model. Besides, the estimator yields estimates that are best, linear, and unbiased estimators (BLUE) with the desirable properties of unbiasedness, consistency and efficiency. However, these properties are made possible after all the assumptions of the OLS method have been fulfilled.

3.1 Model Specification

The specification of the equation draws on the review of related literature and theoretical framework on fiscal policy and economic growth. In view of the above and particularly following the specification of the ordinary least squares (OLS), and the empirical variables in the study, our model shall contain gross domestic product (GDP), which represents economic growth as the dependent variable while federal government expenditure, federal government revenue, public debt, interest rate, and inflation, are the independent variables. All these variables are logged except interest rate and inflation to enable us have more robust results.

Specifically, the equation for estimation is of the following functional form:

GDP = f (FGE, FGR, PDT, INTR, INF)……………………..(3.1)

Equation (3.1) can be transformed into an econometric model as follows:

$$\ln GDP = \alpha_0 + \alpha_1 \ln FGE + \alpha_2 \ln FGR + \alpha_3 \ln PDT - \alpha_4 \ln INTR - \alpha_5 \ln INF + \mu \quad \text{....(3.2)}$$

Where:

GDP = Gross domestic product (Economic Growth)

FGE =Federal government expenditure,

FGR = Federal government revenue,
PDT = Public debt,
INTR = Interest rate,
INF = Inflation,
and μ= Error term.

α_0 = Intercept;

$\alpha_1 - \alpha_5$ = Coefficients of the independent variables as defined above

A priori Expectations: From equation (3.2) $\alpha_1, \alpha_2, \alpha_3 > 0$; and $\alpha_4, \alpha_5 < 0$.

4.0 Presentation and Analysis of Results

After estimation, the next important step in empirical econometrics is the interpretation of the regression results. This enables the researcher to assess how successful the estimation exercise was and hence, judge the usefulness

of the estimated coefficients for policy analysis. Therefore, this section looks at the presentation and analyses of estimated results and as well discusses the policy implication(s) of findings.

4.1 Analysis of Results

The dependent variable is the gross domestic product (GDP) and 24 observations used for estimation from 1990 to 2013. The result is shown in table 4.1 below.

Table 4.1: Regression Result

Variable	Coefficient	Std. Error	t- Statistic	Prob.
C	0.2642	0.5647	0.4678	0.6459
LNFGE	0.4834	0.1866	2.5904	0.0191
LNFGR	0.2559	0.1314	1.9471	0.0682
LNPDT	0.3939	0.1758	2.2411	0.0387
INTR	-0.0202	0.0099	-2.0450	0.0567
INF	0.0020	0.0025	0.8008	0.4343

R^2 =0.9910 , **Adjusted R-Squared** = 0.9884, **F-Statistic** =376.9585 , **DW** =1.9087

From table 4.1 above, we attempt to ascertain the joint impact of federal government expenditure (FGE), federal government revenue (FGR), public debt (PDT), interest rate (INTR) and inflation on gross domestic product (GDP). The result revealed that all the explanatory variables have the correct signs except inflation. Meaning that federal government expenditure, federal government revenue, public debt, and interest rate were in conformity with the a priori expectations while inflation was contrary as it has a positive sign instead of a negative one. Furthermore, the result revealed that the five independent variables in the equation explained about 99 percent (R^2 = 0.9910) of the systematic variation in the gross domestic product (GDP) during the period from 1990 to 2013. The F-statistic which looks at the overall significant of the model with 376.9585 was indeed very high at the one percent level of significance which portends that there was a significant linear relationship between the dependent variable and the explanatory variables used. This implies that overall, the model exhibited a high degree of goodness of fit. While the adjusted R- squared showed that the goodness of fit of the model was satisfactory – showing a very good explanatory power of the model.

The t-statistic of the coefficients of all the explanatory variables were statistically significant at both the five percent and ten percent levels of significance except inflation which was not significant even at the ten percent level. More specifically, federal government expenditure, federal government revenue, public debt, and interest rate were statistically significant at both the five and ten percent levels, while inflation was not significant at any of the levels. These results are in consonance with that of Kneller et al (1999), Bose et al (2003) and Aregbeyen (2007) respectively. Considering the Durbin Watson (DW) statistic which is the test for the presence or otherwise of autocorrelation, the first result showed the presence of serial correlation. To correct for the autocorrelation problem, the second estimation for auto-regression was carried out and the Durbin Watson (DW) statistic was 1.9087. With this result, the presence of first order serial correlation or autocorrelation was highly minimized. Therefore, we can make valid prediction(s) with the result.

Finally, the magnitude of the coefficients showed that a unit change in federal government expenditure will lead to about 48 percent increase in gross domestic product (GDP) while a unit change in federal government revenue will result to about 26 percent increase in gross domestic product. Similarly, a unit change in public debt will lead to about 39 percent increase in gross domestic product, and a unit change in interest rate will result in about 2 percent decrease in gross domestic product. While a unit change in inflation will lead to a zero percent increase in gross domestic product, meaning that, inflation contributed nothing to gross domestic product. In other words, inflation has a negative impact on the growth of the economy.

4.2 Policy Implications of Findings

The implications of positive impact of federal government expenditure and revenue was suppose to have been directed towards developmental/capital projects All these will have multiplier effects on the economy such as increase in aggregate demand, output, income and employment opportunities, which will stimulate economic

growth and enhance the standard of living of the people. But the reverse is the case since government has been known as bad managers of public funds or resources. Public debt also showed a positive impact on the economy which suggests that there is nothing wrong in borrowing, more so when revenue falls short of government expenditure. What is important is the prudent use of such resources which should be channeled into productive public investments that will enhance economic growth. The interest rate on public debt should be moderate as a high interest rate will create a burden on the government as well as the economy. A high debt burden resulting from high interest rate will deny the citizens the provision of basic social amenities and slow down economic growth.

5.0 Recommendations and Conclusion

To fully underscore the relationship between fiscal policy and economic growth as the major objective of the study vis-à-vis the empirical findings, we put forward the following policy recommendations:

1. Greater emphasis needs to be placed on planning with a view to saving part of the higher oil revenue in an "Oil Reserve Fund" to be used for properly formulated, designed and budgeted projects producing best values for money.

2. Policy makers need to understand precisely, the interrelationships between fiscal policy and economic growth in Nigeria. This is fundamental if fiscal policy will make the necessary impact on economic growth.

3. There should be prudent fiscal policy as this will prevent interest expenditure from rising to levels that squeeze out critical social spending and ensure that the stock of debt remains at levels consistent with a country's capacity to its debt. This will help the economy to grow and impact positively on the people.

4. There is the need for tax incentives in the development strategy. Tax and investment incentives have in recent times become an important tool in development strategy both for domestic investors and for attracting foreign direct investment (FDI).

5. It is further recommended that good fiscal policy measures should be undertaken alongside monetary policy, as both are re-enforcing and complementary.

6.0 Conclusion

In Nigeria, government expenditure has continued to rise due to the huge receipts from production and sales of crude oil, and the increased demand for public goods. Unfortunately, rising government expenditure has not translated to meaningful growth and development, as Nigeria ranks among the poorest countries in the world. In addition, many Nigerians have continued to wallow in abject poverty while so many live below the poverty line. This portends that the huge revenue generated from crude oil has not been judiciously utilized to positively impact on her citizens. Meaning that government has been a bad manager of public resources.

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APPENDIX

OLS ESTIMATION

Dependent Variable: LNGDP				
Method: Least Squares				
Date: 03/04/16 Time: 14:56				
Sample: 1990 2013				
Included observations: 23				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.264182	0.564736	0.467797	0.6459
LNFGE	0.483355	0.186592	2.590430	0.0191
LNFGR	0.255862	0.131409	1.947068	0.0682
LNPDT	0.393943	0.175777	2.241149	0.0387
INTR	-0.020210	0.009882	-2.045019	0.0567
INF	0.002021	0.002524	0.800763	0.4343
R-squared	0.991061	Mean dependent var		15.57710
Adjusted R-squared	0.988432	S.D. dependent var		1.572755
S.E. of regression	0.169157	Akaike info criterion		-0.496517
Sum squared resid	0.486441	Schwarz criterion		-0.200301
Log likelihood	11.70995	Hannan-Quinn criter.		-0.422020
F-statistic	376.9585	Durbin-Watson stat		1.908676
Prob(F-statistic)	0.000000			