Abstract- This study empirically examines the causal relationship between Public Expenditure and National Debt in Nigeria. Reviews were conducted extensively on various literatures and existing works regarding the effect of federal government expenditure and total external debt outstanding on the productivity and economic growth in the country. Consequently, model was specified following Solow’s growth model inspiration regarding granger causality test, with data on each variables ranging from 1981 to 2012. Augurmented dickey fuller was used for stationarity test. Public expenditure is financed majorly by domestic debt, while external debt is not significant in the development of infrastructural facilities. Consequently, based on the results obtained and interpreted, the null hypothesis (H₀) is rejected. Thus, from the foregoing, we conclude that public expenditure granger cause domestic debt and Nigeria as a nation borrowed to finance their recurrent expenditure, though with high level of corruption and misappropriation of public funds and poor administration has impeded the growth of the sector but with inadequate investment on infrastructural facilities that can boost the revenue generated in order to balanced or surplus budget in the economy. In order to achieve meaningful development, the government expenditure must be wisely spent in other to make the country more productive. Most especially expenditure on infrastructural facilities should be increased in other to attract foreign investors and not to waste the money on heavy debt servicing annually.

I. INTRODUCTION

External debt is one of the sources of financing capital formation in any economy. Adepoju et al. (2007) note that developing countries in Africa are characterized by inadequate internal capital formation due to the vicious circle of low productivity, low income, and low savings. Therefore, this situation calls for technical, managerial, and financial support from Western countries to bridge the resource gap. On the other hand, external debt acts as a major constraint to capital formation in developing nations. The burden and dynamics of external debt show that they do not contribute significantly to financing economic development in developing countries. In most cases, debt accumulates because of the servicing requirements and the principal itself. In view of the above, external debt becomes a self-perpetuating mechanism of poverty aggravation, work over-exploitation, and a constraint on development in developing economies (Nakatami & Herera, 2007). Like most developing countries of the world, Nigeria relies substantially on external funds for financing its development projects – iron and steel mills, roads, electricity generation plants etc. Such external funding usually takes the form of external loans. In the early years of political independence (i.e. 1960 through 1975), the size of such loans was small, the rate of interest concessionary, the maturity was long-term, and the source was usually bilateral or multilateral in nature. For instance, Nigeria’s external debt in 1960 was about $150 million; however, beginning in the year 1978, the situation changed. Nigeria, at the lure of the international financial centers, started to borrow huge sums from private sources at floating rates and with shorter-term maturities. The 1978 “jumbo loan” alone was estimated at some US $1 billion. By 1982, the value of Nigeria’s external indebtedness was US $18.631 billion, which represented over 160% of Nigeria’s gross domestic product (GDP) for that year. The situation precipitated a debt-crisis that progressively worsened over time. By 1986, Nigeria had to adopt a World Bank/International Monetary Fund (IMF) sponsored Structural Adjustment Program (SAP), with a view to revamping the economy and making the country better-able to service her debt. According to Ayadi (1999) and Ayadi et al. (2003), external debt burden had dramatically limited developing countries’ participation in the world economy and the attendant debt servicing obligations continue to manifest as an impediment to economic growth and development. Debt burden has led to a limited accumulation of capital (depletion of international reserves) and a limited application of flexible financing policies to consolidate small and medium-sized firms. This indirectly affects employment, literacy, and poverty. It is the objective of every sovereign nation to improve the standard of living of its citizenry and promote economic growth and development of the country. Due to the scarcity of resources and the law of comparative advantage, countries depend on each other to foster economic growth and achieve sustainable economic development (Adepoju, Salau & Obayelu, 2007). The necessity for governments to borrow in order to finance a deficit budget has led to the development of external debt (Osinubi & Olaleru, 2006; Obadan, 2004b). External debt is one of methods through which countries finance their deficits and carry out economic projects that are capable of increasing peoples’ standard of living and promote sustainable...
economic development. It is an important resource needed to support sustainable economic growth (Audu, 2004). By definition, external debt refers to the portion of a country's debt that was borrowed from foreign lenders including commercial banks, governments or international financial institutions (Arnone, Bandiera & Presbitero, 2005; Ajayi & Khan, 2000). These loans, including interest, must usually be paid in the currency in which the loan was made. In order to earn the needed currency, the borrowing country may sell and export goods to the lender’s country (Obadan, 2004a). With the achievement of political stability in Nigeria since 1999, substantial level of the country’s debt stock was cancelled and/or relieved. The effort of Nigerian government to negotiate for debt cancellation and relief has dropped the external debt stock by a significant proportion (Omotoye et al, 2006). There is widespread recognition in the international community that excessive foreign indebtedness of many developing countries remains a major impediment to their growth and stability (Audu, 2004; Mutasa, 2003). Developing countries like Nigeria have contracted large amount of external debts, often at highly concessional interest rates. Does Nigeria achieve more economic development in terms of GDP per capita, life expectancy at birth, literacy rate, and reduction of poverty level and unemployment rate when more external debt are borrowed?

To this extent, Suleiman (2009) observes that the size of Government and its impact on economic growth has emerged as a major fiscal management issue facing economies in transition. He notes that previous research focused predominantly on size of Government in industrialized countries, but given the openness of most Developing Countries (DCs), trade dependency, the vulnerability to external shocks, and volatility of finances, the role and size of Government become germane to adjustment and stabilization programmes. Mitchell (2005) has argued that a large and growing government is not conducive to better economic performance. For decades, public expenditures have been expanding in Nigeria, as in any other country of the world. Akpan (2005) opines that the observed growth in public spending appears to apply to most countries regardless of their level of economic development. This necessitates the need to determine whether the behaviour of Nigerian public expenditure and the economy can be hinged on the Wagner’s (1883) Law of Ever-increasing State Activity, or the Keynesian (1936) theory and Friedman (1978) or Peacock and Wiseman’s (1979) hypotheses. Over the years, increases in the finances of the Federal Government have led to a number of theoretical and empirical investigations of the sources of such increases. Researchers have particularly questioned whether increases in the size of the federal budget tend to be initiated by changes in expenditures followed by revenue adjustments or by the reverse sequence, or both (Baghestani and McNown, 1994; Akpan, 2005). Friedman (1978), for example, argues that governments adjust expenditures to the level of revenues, so that control of taxation is essential to limit growth in government. Alternatively, the spend-and-tax model posits that revenues will be adjusted to finance any politically chosen level of expenditures. A third perspective, reflecting the institutional separation of allocation and taxation functions of the federal government, hypothesizes the independent determination of revenues and expenditures. However, Suleiman (2009) observes that the fiscal volatility of the post-1979 period indicates a continued absence of coordination between expenditure and revenue decisions. He also opines that examining the empirical relationship between government revenues and expenditures is a crucial step in understanding the future path of the budget deficit. Abu and Abdullah (2010) observe that 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 like roads, communication, power, education and health. Besides, there is increasing need to provide both internal and external security for the people and the nation. Available CBN statistical data show that total government expenditure (capital and recurrent) continued to rise throughout the study period. For instance, while government capital expenditure on economic services, social and community services, and transfers increased from N15.5 million N14 million and N100.7 million respectively in 1970 to N809120.5 million, N120049.2 million and N211758.1 million respectively in 2009, recurrent expenditure on same services increased from N25.95 million, N43.55 million and N511.42 million respectively in 1970 to N340193.77 million, N346071.95 million and N622171.10 million respectively in 2009 (see CBN Statistical Bulletin, 2009). Government expenditures on these and other services or sectors would be expected to generate a corresponding growth trend in the economy. This necessitates the research interest for empirical quantitative measure of effect of government spending on growth of the economy.

II. STATEMENT OF THE PROBLEM

Securing external loan is inevitable for a government when the economy faces financial crisis. There is no iota of doubt that Nigeria, just as other developing countries, is facing serious debt crisis. It has therefore emphasized the use of external loans for financing public expenditure (National library 2006). It is generally expected that developing countries, facing a scarcity of capital, will acquire external debt to supplement domestic saving (pattillo,etal 2002; safdari; and meherizi 2011). According to global development finance (2009), “every country in the world aims at achieving economic growth and
development’. However this is only possible if a country has adequate resources. In developing countries especially those in sub Sahara African the resources to finance the optimal level of economic growth and development are in short supply. This plagued with problem of low domestic savings, low tax revenue, low productivity and meager foreign exchange earnings. Basically, for these reason, many developing counties yearning for economics growth inevitably resort to external financing to bridge the gap between their savings and investments. In the process of obtaining Finance from abroad, a country may consider several options: grants, foreign investment and loans (concessional and non-concessional ) in that order. However mix of these capital inflow in varying proportion could be obtained depending on the socio- economic and political situation in a country (World Bank 2009).

It is no exaggeration to claim that Nigeria’s huge external debt burden was one of the hard knots of the Structural Adjustment Programme (S.A.P) introduced in 1986 by the Babangida administration though Ogumnuyiwa (2011) argues that the period 1985 through 1993 when the country embarked on Structural Adjustment Programme (SAP) only coincided with a period when external debt was at its peak. The high level of debt service payment prevented the country from embarking on larger volume of domestic investment, which would have enhanced growth and development. With the recent debt forgiveness granted to Nigeria, one would expect the economic process of the country to be increased. However, given the number of years, since Nigeria had been independent and the substantial debt its had incurred, coupled with the existing institutions, one can claim that the entire spectrum of the economy has not been sufficiently active, especially when compared with the economy of similar or lesser aged developing countries. The main interest of this study then is to investigate the causal relationship between Public debts and public expenditure in Nigeria.

III. OIL REVENUES AND FISCAL STABILITY WORLD BANK OVERVIEW 2013

Baseline, high oil price, and low oil price scenarios are examined pertaining to Government oil revenues and their distribution through 2015. The baseline, high, and low scenarios have oil prices converging to 140, 170, and 50 dollars a barrel, respectively, by end-2015. It is assumed that oil output will follow the path projected in the Government’s Medium Term Fiscal Framework, the fuel subsidy will remain for a 97 naira petrol price, and cash calls will remain at a size equal to a fairly constant share of GDP. Annual GDP growth rates are projected in the range of 5-9%, depending on the particular scenario. The pace of inflation declines somewhat in the baseline and optimistic scenarios. Oil revenues as a share of GDP decline in all three scenarios. In the case of high oil prices, the US dollar value of oil revenues certainly increases, but the dollar value of Nigerian GDP grows even faster. This is due to a more rapid expansion of GDP than growth in oil and the real appreciation of the currency (significant inflation under a strong naira). Thus, unless Nigeria can realize major compensating increases in non-oil revenues, Government budgets may experience increasing pressures. The year 2012 was informative in this regard. These factors, combined with negative growth in the oil sector, already caused Government oil revenues to decline from 23.6% of GDP in 2011 to 19.7% in 2012.

Accumulating a sufficient fiscal reserve to protect the country against oil price volatility will continue to be a challenge. Simulations were run under the assumption that the distribution of oil revenues from the Federation Account to budgets and extra-budgetary funds will be limited to 3% real growth every year through 2015. In this case, even in a high oil price scenario, the ECA balance stands at roughly US$ 8 billion at the end of 2015, close to the same level as at the end of 2012. The limited degree of accumulation is due to two factors: (a) declining oil revenues as a share of GDP and, (b) a rising burden of fuel subsidy payments to finance the 97 naira petrol price under higher world oil (and thus petrol) prices. To accumulate a balance of US$ 15-18 billion in the baseline and high oil price scenarios, Nigeria would have to limit Federation Account distributions of oil revenues to zero real growth during these years. The opportunity cost of the fuel subsidy should increase. Under declining oil revenues as a share of GDP, the enforcement of the 97 naira petrol price through the fuel subsidy will account for an increasing share of Government resources. If these same simulations are performed without the fuel subsidy, Nigeria would be able to accumulate a sufficient reserve to protect the country already in 2013.

In the low oil price scenario, the cost of the fuel subsidy under an assumption of zero real growth in Federation Account distributions would exhaust the Excess Crude Account balance in one year. In the absence of the fuel subsidy, in the low price scenario, the current Excess Crude Account balance plus additional borrowing of US$ 6 billion would finance Federation Account allocations under a zero growth assumption through 2015.

The effective fiscal management of oil wealth in Nigeria (i.e. countercyclical fiscal policy) is related to issues in federalism. In Nigeria, the fiscal reserve is owned and managed not only by the Federal Government, but by the 36 Nigerian States as well. Thus, a national consensus is needed to support a strong institutional base for counter cyclical fiscal policy that is essential to Nigeria’s success and stability. A number of other key issues for development in Nigeria are also related to the particular nature of federalist relations.
IV. THEORETICAL LITERATURE REVIEW

According to Likita (2000), Government borrows in order to close the resource gap between savings and investment. The absence of adequate savings creates a difference between the actual level of required domestic savings for investment and actual investment. The low savings can be seen as a constraint to investment because the mechanism where savings translate itself into investment will not exist; therefore conscious effort must be made by the government to eliminate such gap. Adam Smith (1776) attributes external debt to three influences: first, the desire of the government official to spend, second, the unpopularity of increasing taxes, and thirdly, the willingness of capitalist to lend. In this way he sees the government debt as accompany of commercial or capitalist society. Adam Smith said that increasing deficits would in the long run probably ruin the great nation. That government borrowing encourages wastes during peace and leads to reckless waging of war. Debt results in higher taxes and inflation which rewards spending-tariffs and pushes savers. It weakens the productive capacity of the people and eventually weakens or destroys even the wealthy nation. In the opinion of Karlmax (1883) external debt results in the exploitation of labour which creates a class of laziness, and it results in the central banks who granted special privileges in return for lending to state. It encourages higher taxation and tax collectors in order to pay the national debt. Rudger Dombush and Stanley Fisher (1978) also pointed that, the national debt is a direct consequences of past deficit in the Federal budget. The national debt increases when there is a budget deficit and decreases when the economy experience budget surplus. They came up with the following equation for budget deficit: \( DF = (Go + R) - T = BUS \); where \( DF \) is budget deficit, \( Go \) is government spending on goods and services, \( T \) is spending on transfer, \( BUS \) is budget surplus, and \( (Go + R) \) is total government spending. The above theories reveal that the relationship between external debt and growth is negative. Debt is created by the act of borrowing. Likita (2000) defined debt as a contractual obligation of owing or accumulated borrowing with a promise to payback at a future date. Every economy requires an amount of capital to generate production and sustain development: capital, being a factor of production is particularly important but relatively scarce, and the dearth of capital is much more prevalent in developing countries which Nigeria happen to be among. It is defined according to Oyejide (1985) as the resource or money use in an organization which is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or other formal equivalent. In modern law, debt has no precise fixed meaning and may be regarded essentially as that which one person legally owes to another or an obligation that is enforceable by legal action to make payment of money. When government borrows, the debt is a public debt. Public debts are either internal or external, incurred by the government through borrowing in the domestic and international markets so as to finance domestic investment. Debts are classified into two i.e. productive debt and dead weight debt. When a loan is obtained to enable the state or nation to purchase some sort of assets, the debt is said to be productive e.g. money borrowed for acquiring factories, electricity, refineries etc. However, debt undertaken to finance wars and expenses on current expenditures are dead weight debts. When a country obtains a loan from abroad, it means that the country can import from abroad goods and services to the value of the loan without at the same time having to export anything for exchange. When capital and interest have to be repaid, the same country will have to get the burden of exporting goods and service without receiving any imports in exchange. Internal loans do not have the type of burden exchange of goods and services. These two types of debt, however, require that the borrowers’ future savings must cover the interest and principal payment (debt servicing). The early eighties was a disastrous period for Nigeria. Two events characterized external borrowing during this period. First there was an emergence of import oriented consumption pattern which made the federal and state governments to go into external borrowing. Second, funds realized from these loans were invested on unproductive ventures. Towards the end of 1970 the level of external debt of Nigeria increased rapidly and the services of the debt in terms of payment of interest and principal posed severe pressure on the balance of payments (BOP) of the country. Nigeria oil boom could rightly, be traced to the mid-seventies when there was crisis in the middle east which led to an increase demand and sale of Nigeria oil. This resulted in considerable foreign exchange earnings by the government. However, towards the close of the decade, the international oil market started experiencing a glut and the prices of oil fell drastically low. Some concerned Nigeria planners reasoned rationally that the economy was in total brink of collapse. To avoid economic problems like inflation, political and social crisis inherent in the period (1980-1985) the government of Shagari opened the gate way to external borrowing. Actually, the borrowing was done with the hope that there would be a turnaround in the international oil market perhaps in no distance future. It was equally, hoped that the borrowed external fund would be a turnaround in the purchasing domestic goods. However; the expected turn around did not materialize. Rather it came to a point that the amount borrowed (that is external debt) was greater than the national income. To pay the principal becomes a problem and the interest kept on compounding thus reaching a point where the international leaders
refused bluntly to lend to Nigeria. As if that was not enough the International Monetary Fund (IMF) stipulated stringent conditions under which they would grant Nigeria further loans. Nigeria in her desperate quest for money to finance economic growth accepted the foreign loan under those stringent conditions. But these conditions such as devaluation, amongst others hardly improved Nigeria’s ability to pay the loan and resulted to what could be termed as external debt crisis. In order to realize the objectives of the study the paper is divided into five sections. Section one is the introduction, section two is an overview of external debt and external debt management policies in Nigeria.

V. EMPIRICAL REVIEW OF THE RELEVANT LITERATURE

Isah Imam Paiko (2012) Carried out a study on “deficit financing and its implication on private sector investment: the Nigerian experience” and postulated that deficit financing is a recurrent decimal in Nigerian economy. Since independence, over 90% of Nigerians budgets are in deficit. Deficit financing seems to present a positive inflationary impact and a negative investment impact on developing economies particularly Nigeria. Usually when there is deficit, government finds ways of financing the deficit through borrowing from commercial banks or from non-banking public and through the issue of short-term bonds and monetary instruments. Prolonged deficit financing have an overall negative impact on the economy by crowding out private investment. Secondary data from CBN statistical bulletin, National Bureau of statistics bulletin and Econometric models were used in calculating the relative impact of deficit financing on private investment in Nigeria. The findings revealed a negative relationship between deficit financing and investment in the period under review i.e deficit financing in Nigeria crowds out private investment. He therefore recommends that government should redirect its fiscal policy that would favor the private investor by discouraging high government expenditure and maintaining low fiscal deficit. Also, to avoid crowding out effect, it is recommended that deficit be financed through the capital market. Folorunsho and Falade (2013) Undertook a study on ‘Relationship between Fiscal Deficit and Public Debt in Nigeria: an Error Correction Approach’ and postulated that there is a nexus between fiscal deficit and public debt in Nigeria. Public debt was disaggregated into domestic and external debt with a view to analyzing the causal relationship and relative effect of both categories of debt on fiscal deficit. Time series data were collected from Statistical Bulletins published by the Central Bank of Nigeria from 1970 to 2011. Except for inflation rate that was I(0), the unit root test results revealed stationarity of fiscal balance, public debt and its components, income, exchange rate and rate of interest series at their first difference; they are I(1) series. Pair-wise Granger causality results support bi-directional relationship between fiscal balance and public debt as well as its domestic component while causality run only from external debt to fiscal deficit. Johansen cointegration results also confirmed the existence of cointegrating relationships at 5 per cent level of significance. In addition, error correction estimates revealed that fiscal balance had significant positive relationship with debt in Nigeria in both the short and long run. The results showed that 1 per cent increase in public debt resulted in an increase of 1.85 per cent in fiscal deficit. In addition, 1 per cent increase in fiscal deficit resulted into 0.08 per cent increase in public debt. They further confirmed that domestic debt has greater impact on fiscal deficit than external debt. They then concluded that the Nigerian government should consider appropriate mix of domestic debt and external debt as a means of financing budget deficit. Ojong, Hycenth, and Effiong(2008) studied on ‘the effects of budget deficit financing on the development of the Nigerian economy’ and revealed that there exists a significant relationship between budget deficit financing and economic growth in Nigeria. An inverse relationship existed between GDP and unemployment in Nigeria, a direct relationship was observed between GDP and inflation in Nigeria. The findings also show that there existed a significant relationship between GDP and government expenditure and an inverse relationship was observed between government revenue and GDP. Six research hypotheses were formulated to evaluate the relationship between government budget deficit financing, unemployment, inflation, BOP, government financing, and government revenue as the independent variables and GDP as the dependent variable. Secondary data was collected from CBN statistical bulletin. Ordinary least square regression technique was used to estimate equations formulated for the study. They recommended that government should be accountable to the electorates by forestalling transparency in the preparation & implementation of budgets. Thus, a system of sound internal control mechanism should be put in place to facilitate early detection of fraud in the budgetary process. Those indicted in the process should equally be brought to book promptly by the law enforcement agencies like the Economic & Financial Crime Commission (EFCC), Independent Corrupt Practices Commission (ICPC), the police, etc. The significant figure showing deficit shows that most times, fiscal authorities’ under-estimate the cost of items in the budget. Excessive deficit spending is occasioned by inappropriate planning and evaluation caused by the inexperience of economic planners. Also, government attitude of lack of transparency could be a major cause. Hence, the government should exhibit a high degree of transparency in governance so as to bring to the barest minimum deficit financing.
Patience and Augustine (2008) conducted a study on deficit financing and its inflationary impact on developing economies putting the Nigerian economy in perspective and concluded that deficit financing seems to present a positive inflationary impact on developing economies particularly Nigeria. When there is a budget deficit, government finds ways of financing the deficit through borrowing from commercial and merchant banks or from the non-banking public and through the issue of short-term bonds and monetary instruments. The use of deficit financing for the pursuit of fiscal policies often leads to increased danger in an economy. They examined the extent to which deficit financing has affected the Gross Domestic product (GDP) of Nigeria, its impact on the continuous rise in prices of goods and services of the country as a measure of the consequences of extra budgetary spending and also reviewed the effectiveness of the strategic options adopted to eliminate the constant reoccurrence of deficit financing in Nigeria. The study made them to conclude that Nigeria should reduce and possibly avoid extra-budgetary spending in order to cut the crowding out effects of deficit funding as well as avert future debt crisis. Tajudeen (2012) conducted a study on ‘Public debt and economic growth in Nigeria: evidence of Granger casualty’ and concluded that public debt and economic growth have long run relationship, and they are positively related if the government is sincere with the loan obtained and use it for the development of the economy rather than channel the funds to their personal benefit. He examined the causal nexus between public debt and economic growth in Nigeria between 1970 and 2010 using a Vector Autoregressive (VAR). The variables used in the study were tested for stationarity using the Augmented Dickey Fuller and Philip Perron test. The result showed that the variables are stationary at first differencing. Co-integration test was also performed and the result revealed the presence of co-integration between public debt and economic growth. The co-integration results show that public debt and economic growth have long run relationship. The findings of the VAR model revealed that there is a bi-directional causality between public debt and economic growth in Nigeria. He recommended that Nigeria government should source for loans within the economy so that when the principal and interest on the loans are paying back, it will serve as a crowding-in effect which in turn further accelerates economic activities in the country. Omitogun and Aynila (2007) studied on ‘Fiscal policy and Nigerian Economic Growth, they examined empirically the contribution of fiscal policy in the achievement of sustainable economic growth in Nigeria. Using the Solow growth model estimated with the use of Ordinary Least Square method, they concluded that fiscal policy has not been effective in the area of promoting sustainable economic growth in Nigeria. Although, the finding seems invalidating the Keynesian postulation of the need for an active policy to stimulate economic activities, however, factors such as policy inconsistencies, high level of corruption, wasteful spending, poor policy implementation and lack of feedback mechanism for implemented policies evident in Nigeria which are indeed capable of hampering the effectiveness of fiscal policy have made it impossible to come up with such a conclusion. To put the Nigerian economy, therefore, along the path of sustainable growth and development, they recommended that government must put a stop to the incessant unproductive foreign borrowing, wasteful spending and uncontrolled money supply and embark upon specific policies aimed at achieving increased and sustainable productivity in all sectors of the economy. Iweala (2013) estimated that Nigeria needs N10.63 trillion ($67 billion) for road upgrades, bridge repairs, the energy sector, hospitals and schools. The Africa Infrastructure Country Diagnostic (AICD) Report for 2011 estimates that Nigeria requires sustained spending of $14.2 billion per annum over the next decade in order to address the infrastructure challenge. She adopted Private Finance Initiatives (PFI) and Public Private Partnerships (PPP) to meet the funding challenge. In Nigeria, PFI and PPP are relatively new models for public project finance and this throws up the ‘knowledge’ challenge. Although PFI/PPP structures are becoming increasingly popular in Nigeria, recent developments have shown that there is a dearth of knowledge and in-depth understanding of the various issues in these areas. It was believed that huge funding requirement for present and future infrastructural development in Nigeria indicates that traditional funding methods can no longer suffice as the traditional fund providers, i.e. different levels of Government, do not have such resources at their disposal. Aliyu (2010) studied on ‘Debt Management in Nigeria: Fiscal Responsibility and Public Debt’ and postulated that during the first half of the last decade, public finances in Nigeria deteriorated continuously, leading to a large and intractable fiscal imbalances and unsustainable national debt. The deterioration was the result of the combined effect of reform-induced losses in revenue (reductions in customs and excise duty rates), poor tax performance due to narrow tax base and low tax buoyancy, and government’s inability to contain current public spending. Both the Federal and State Governments contributed to the fiscal deterioration in Nigeria particularly with implementation of the public service wage increases in 1999 and 2000. These wage increases widened the deficits, especially at the State and Local Government levels. Persistent primary deficits led to a sharp accumulation of debts. In 2004, the total public debt stood at US$46,259.45million, the highest ever. During the period, Nigeria lost international credibility. Fiscal consolidation was required, not only to facilitate sustained long-term growth by minimizing the
crowding out of investment and allowing the removal of constraints imposed on the domestic financial system by government’s financial needs, but also to create the fiscal space for countercyclical fiscal policy and crisis related spending. The Fiscal Responsibility Act was put in place in 2007 to checkmate further deterioration of the fiscal imbalances including the mounting public debt. He recommended that limits should be set to consolidated debt of the Federal, State and Local Governments as provided under Section 42 of the Act, regulations should be made as provided under Section 55 of the Act for carrying into effect the provisions of the Act. In particular, it is important to set limits, constraints and time frames for achieving them with respect to public debt, debt servicing, borrowing and deficit. Also, there should be strengthening of sub-national fiscal responsibility by providing assistance in the drafting of their FRPs, incentives should be given to the States that are complying with debt and deficit targets, and finally, Federal agencies such as the CBN, Security and Exchange Commission (SEC), Ministry of Justice, Ministry of Finance, DMO, Office of the Accountant-General and the Nigerian Stock Exchange (NSE) should no longer process, approve or recognize public debt that does not comply with the provisions of the FRA. Akinbobola and Oladipo (2011) conducted a study on ‘Budget Deficit and Inflation in Nigeria: a causal relationship’ and focused on the nature and direction of causality among the two variables-budget deficit and inflation. This is with a view to providing empirical evidence on budget deficit operation in stimulating economic growth through inflation in Nigeria. Secondary data were used in this study. Data on inflation rate, exchange rate, Gross Domestic Product (GDP) and budget deficit were collected from statistical Bulletin and Annual Report and Statement of Account published by the Central Bank of Nigeria (CBN) and the International Financial Statistics (IFS) published by International Monetary Fund (IMF). Granger Causality pair wise test was conducted in determining the causal relationship among the variables. The result showed that there was no causal relationship from inflation to budget deficit (F = 0.9, P > 0.005), while the causal relationship from budget deficit to inflation was significant (F = 3.6, P< 0.05). This implies that a unidirectional causality from budget deficit to inflation exist in Nigeria. Furthermore, the result showed that budget deficit affects inflation directly and indirectly through fluctuations in exchange rate in the Nigerian economy. A model for the relationship between inflation and budget deficit in Nigeria was developed and estimated using Ordinary Least Squares (OLS) method. The model was estimated using the annual data covering the period from 1970 to 2013. The results showed that the budget deficit has a positive and statistically significant impact on inflation in Nigeria. This is because the statute books are replete with dormant rules and regulation. It notes that there exist a mild long-run equilibrium relationship between economic growth and fiscal policy variables in Nigeria. They recommend that for any meaningful progress towards fiscal prudence on the part of Government to occur, some powerful pro-stability stakeholders strong enough to challenge government fiscal recklessness will need to emerge. Onyeri (2012) studied on ‘Domestic Debt and the Growth of Nigerian Economy’ and investigated the relationship between domestic debt and economic growth in Nigeria. He adopted the Ordinary Least Squares Method (OLS), Error Correction and parsimonious models to analyze quarterly data between 1994 and 2008. His result shows that the domestic debt holding of government is far above a healthy threshold of 35 percent of bank deposit as the average over the period of study is 114.98 percent of bank deposit presenting evidence of crowding out of private investments. The study of course affirms that the level of debt has negative effect on economic growth. He recommended that government should maintain a debt- bank deposit ratio below 35 percent, resort to increase use of tax revenue to finance its projects and divest itself of all projects the private sector can handle while providing enabling environment for private sector investors such as tax holidays, subsidies, guarantees and most importantly improved infrastructure. Ezeabasili, Mojekwu, and Herbert (2012) conducted a study on ‘An Empirical Analysis of Fiscal Deficits and Inflation in Nigeria’ and studied the relationship between fiscal deficits and inflation. While their theory postulates that fiscal deficits lead to inflation, empirical research has been less conclusive about the relationship. They reexamined the issue in the context of a developing country, Nigeria, using data over 1970–2006, a period of persistent inflationary trends. They adopted a modeling approach that incorporates cointegration techniques and structural analysis. The results reveal a positive but insignificant relationship between inflation and fiscal deficits in Nigeria. We did not also find any strong evidence linking past levels of fiscal deficits with inflation in Nigeria during the period. Rather, we report a positive long run relationship between money supply and inflation in the Nigerian economy, suggesting that money supply is procyclical and tends to grow at a faster rate than inflation rate. Onyeiwu (2013) studied on ‘The Crowding out Effect of Budget Deficits on Private Investment in Nigeria’ and concluded that Budget Deficit has become a recurring decimal in the Nigeria’s economy. Nigeria’s budget has recorded up to thirty - nine years of fiscal deficit without really considering the impact it will have in the rate of investment among the private sector. The bone of the contention is on where we can get the money to cover the difference between expenditure and revenue. Will it be borrowed from external forces or will it be
raised internally through the increase in tax rate or the sale of fiscal instruments? It is in the light of this that he conducted the study. He depicted in the study, the crowding out effect of budget deficits on private investments in Nigeria’s economy. He evaluated private investment and budget deficits by adopting an analytical framework that employs the ordinary least squares (OLS) and Granger Causality test. The analysis confirms that budget deficits crowds out private investments and that private investments granger cause budget deficit with feedback. Following the findings, he recommended that stakeholders should reduce recurrent expenditure and increase its capital expenditure in order to encourage and make conducive environment for private investment to thrive which will ensure economic growth. The financing of budget deficits should be done through money creation, since over the years according to McConnell and Brue (2003), the expansionary effect of fiscal policy is greater when the budget deficit is financed through money creation rather than through borrowing. Wagner (1992) studied on “Who owns what and to whom, Public debt, Ricardian Equivalence, and Governmental Form” and postulated that the postwar literature on public debt has been concerned primarily with two related issues: (1) whether public debt allows the cost of government to be shifted forward onto future generations and (2) whether the creation of public debt involves a positive net wealth effect.

VI. THEORETICAL FRAMEWORK

This study employed a pairwise bivariate model to analyse the granger causality relationship between education and economic growth in Nigeria.

VII. GRANGER CAUSALITY TEST

Correlation does not necessarily imply causation in any meaningful sense of that word. The econometric graveyard is full of magnificent correlations, which are simply spurious or meaningless. Economists debate that correlations are less obviously meaningless. The Granger (1969) approach to the question of whether x causes y is to see how much of the current y can be explained by past values of y and then to see whether adding lagged values of x can improve the explanation. “X” is said to be Granger-caused by “Y” if it helps in the prediction of “X”, or equivalently if the coefficients on the lagged “X”s are statistically significant. Note that two-way causation is frequently the case; “X” Granger causes “Y” and “Y” Granger causes “X”. Eview runs bivariate regressions of the form:

\[ y_t = \alpha_0 + \alpha_1 y_{t-1} + \ldots + \alpha_l y_{t-l} + \beta_1 x_{t-1} + \ldots + \beta_l x_{t-l} + \epsilon_t \]

\[ x_t = \alpha_0 + \alpha_{1t} x_{t-1} + \ldots + \alpha_{lt} x_{t-l} + \beta_1 y_{t-1} + \ldots + \beta_l y_{t-l} + \mu_t \]

\[ \beta = \beta_2 = \ldots = \beta_l = 0 \]

Therefore the granger causality test was used to test the econometric relationship between variable under consideration. Null hypothesis state that X does not granger cause y while alternative hypothesis against it, Decision rule state that if the probability value is less than 0.5 reject H0; if otherwise do not reject.

\[ \text{TEXPEND}_{t, f} \rightarrow \text{TEXPEND}_{t, p} \rightarrow \text{TEXPEND}_{t, f} \rightarrow \text{RECUEXP}_{t, p} \rightarrow \text{RECUEXP}_{t, f} \]

VIII. DATA REQUIREMENTS AND SOURCES

This study uses data between 1980 and 2012 to estimate the model.

BUDGET (over-all budget planning that involves deficit and surplus price in million naira)

TPDDEBT (Total Public debt outstanding in millions of naira)

TEXPEND (Total Federal Government Expenditure in million naira)

TEXTD (Total External Debt Outstanding in million naira)

All the time series data are sourced from CBN statistical bulletin 2012.

IX. PRESENTATION OF DATA AND RESULT

4.1 Data Presentation

A time series data was used for this study which covers a period of thirty two (32) years (1981-2012). The data collected were of Total Public debt, Budget (deficit/Surplus), Total Federal Government Expenditure (Recurrent and Capital Expenditure) and Total External Debt Outstanding, Data used in this study were obtained from Central Bank of Nigeria statistical Bulletin 2012, CBN Annual Report and statement of Account and Federal Office of Statistics.

4.2 Analysis of Result and Discussions

Time series data were used for the analysis. Eview7.2 Windows econometric package was used to process the data obtained.

Empirical Analysis

Table 1 below presents the stationarity test of the time series data used in the empirical analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Statistical test with Intercept</th>
<th>Probability</th>
<th>Order of Integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPDDEBT</td>
<td>-5.67244</td>
<td>0.0000</td>
<td>1(1)</td>
</tr>
<tr>
<td>TEXEXP</td>
<td>-4.42425</td>
<td>0.0010</td>
<td>1(1)</td>
</tr>
<tr>
<td>CAPEXP</td>
<td>-6.22184</td>
<td>0.0002</td>
<td>1(1)</td>
</tr>
<tr>
<td>TED</td>
<td>-5.51644</td>
<td>0.0001</td>
<td>1(1)</td>
</tr>
<tr>
<td>BUDGET</td>
<td>-7.34252</td>
<td>0.0140</td>
<td>1(1)</td>
</tr>
</tbody>
</table>

*Stationary at 1 percent significant level.

The empirical evidence from many literatures has shown that most of the time series data are not stationary, this research work make of Augmented Dickey fuller Test due to short of fall of dickey fuller with problem of autocorrelation, with \( \Delta Y_t = \beta_1 ZY_t + \alpha_1 + \epsilon_t \) (Intercept Only). The null Hypothesis stated
that the times series variable is not stationary or got unit root. The test in the above table reveals that the entire variables are stationary in their first difference.

4.3 Presentation of Granger Causality Test
The granger causality test was used to test the econometric relationship between variable under consideration. Null hypothesis state that X does not granger cause y while alternative hypothesis against it. Decision rule state that if the probability value is less than 0.5 reject $H_0$ if otherwise do not reject.

(ii) To examine the causal relationship between total expenditure and National debt trend in Nigeria;

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXPEND does not Granger Cause TEXTD</td>
<td>30</td>
<td>0.24588</td>
<td>0.7839</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause TEXPEND</td>
<td></td>
<td>0.61636</td>
<td>0.5479</td>
</tr>
<tr>
<td>RECUEXP does not Granger Cause TEXTD</td>
<td>30</td>
<td>0.05919</td>
<td>0.9427</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause RECUEXP</td>
<td></td>
<td>0.02295</td>
<td>0.9676</td>
</tr>
<tr>
<td>CAEXP does not Granger Cause TEXTD</td>
<td>30</td>
<td>0.68136</td>
<td>0.5151</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause CAEXP</td>
<td></td>
<td>2.74769</td>
<td>0.0834</td>
</tr>
<tr>
<td>TPDEBT does not Granger Cause TEXPEND</td>
<td>30</td>
<td>0.83672</td>
<td>0.4449</td>
</tr>
<tr>
<td>TEXPEND does not Granger Cause TPDEBT</td>
<td></td>
<td>24.1999</td>
<td>1.E-06</td>
</tr>
<tr>
<td>TPDEBT does not Granger Cause RECUEXP</td>
<td>30</td>
<td>1.78008</td>
<td>0.1833</td>
</tr>
<tr>
<td>RECUEXP does not Granger Cause TPDEBT</td>
<td></td>
<td>21.3256</td>
<td>4.E-06</td>
</tr>
<tr>
<td>TPDEBT does not Granger Cause CAEXP</td>
<td>30</td>
<td>3.18834</td>
<td>0.0585</td>
</tr>
<tr>
<td>CAEXP does not Granger Cause TPDEBT</td>
<td></td>
<td>3.71053</td>
<td>0.0388</td>
</tr>
</tbody>
</table>

(ii) To examine the causal relationship between Budget Balance and debt incurred in Nigeria;

<table>
<thead>
<tr>
<th>Pairwise Granger Causality Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 07/24/14 Time: 09:54</td>
</tr>
<tr>
<td>Sample: 1961 2012</td>
</tr>
<tr>
<td>Lags: 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUDGET does not Granger Cause TEXTD</td>
<td>30</td>
<td>0.20398</td>
<td>0.8168</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause BUDGET</td>
<td></td>
<td>1.71424</td>
<td>0.2006</td>
</tr>
<tr>
<td>BUDGET does not Granger Cause TEXTD</td>
<td>30</td>
<td>4.97397</td>
<td>0.0152</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause BUDGET</td>
<td></td>
<td>7.57950</td>
<td>0.0027</td>
</tr>
<tr>
<td>RECUEXP does not Granger Cause BUDGET</td>
<td>30</td>
<td>15.0499</td>
<td>5.E-05</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause RECUEXP</td>
<td></td>
<td>1.85717</td>
<td>0.1742</td>
</tr>
<tr>
<td>CAEXP does not Granger Cause BUDGET</td>
<td>30</td>
<td>4.53636</td>
<td>0.0209</td>
</tr>
<tr>
<td>BUDGET does not Granger Cause CAEXP</td>
<td></td>
<td>4.67794</td>
<td>0.0180</td>
</tr>
<tr>
<td>TPDEBT does not Granger Cause BUDGET</td>
<td>30</td>
<td>12.2229</td>
<td>0.0002</td>
</tr>
<tr>
<td>TEXTD does not Granger Cause TPDEBT</td>
<td></td>
<td>2.76043</td>
<td>0.0826</td>
</tr>
</tbody>
</table>

From the result above it could be deduced that:
1. There is no pairwise granger causality relationship between total expenditure and total external debt.
2. There is no pairwise granger causality relationship between Budget and Total external debt.
3. There is no pairwise granger causality relationship between recurrent expenditure and total external debt.
4. There is no pairwise granger causality relationship between capital expenditure and Total external debt.
5. There is no pairwise granger causality relationship between capital expenditure and Total external debt.
6. There is a statistical granger causality relationship between Budget and Total expenditure. This implies that there is two way causality between budget and total expenditure, therefore budget granger cause total expenditure while total expenditure also granger cause budget surplus.
7. There is one way pairwise granger causality relationship between total domestic debt and total expenditure. This implies that total expenditure granger cause total domestic debt but total domestic debt does not granger cause total expenditure.
8. There is one way pairwise granger causality relationship between Budget and recurrent expenditure. This implies that budget surplus does not granger because recurrent expenditure but recurrent expenditure granger causes Budget.
9. There are two way pairwise granger causality relationships between Budget and capital expenditure. This implies that budget surplus granger because capital expenditure and also capital expenditure granger cause Budget.
10. There is one way pairwise granger causality relationship between Budget and total domestic debt. This implies that budget surplus does not granger because total domestic debt at 5% significant level but the total domestic debt granger causes Budget.
11. There is one way pairwise granger causality relationship between total domestic debt and recurrent expenditure. This implies that recurrent expenditure granger cause total domestic debt while total domestic debt does not granger cause recurrent expenditure at 5% significant level.
12. There is one way pairwise granger causality relationship between capital expenditure and total domestic debt. This implies that capital expenditure granger cause total domestic debt while total domestic debt does not granger cause capital expenditure at 5% significant level.

X. IMPLICATION OF THE RESULT

The Economic Implication of this result is that all domestic debt in the country is crucial to finance the budget deficit, while the external debt is less significant to government funding. The irony of it is that Nigeria borrow to fund recurrent expenditure which has been stated that 25% of it is for law makers sanusi lamido (2011). Furthermore, it was found that external debt does not cause capital expenditure.
which will fund the modern infrastructural facilities needed by Nigeria as a pull factor for foreign direct investment and the only of being industrialized. External debt does not have positive impact on the productivity of the nation but will rather impede the development of the nation. The result above corroborate the work of Iweala (2013) who estimated that Nigeria needs N10.63 trillion ($67 billion) for road upgrades, bridge repairs, the energy sector, hospitals and schools. The Africa Infrastructure Country Diagnostic (AICD) Report for 2011 estimates that Nigeria requires sustained spending of $14.2 billion per annum over the next decade in order to address the infrastructure challenge. She adopted Private Finance Initiatives (PFI) and Public Private Partnerships (PPP) to meet the funding challenge. In Nigeria, PFI and PPP are relatively new models for public project finance and this throws up the ‘knowledge’ challenge. It was believed that huge funding requirement for present and future infrastructural development in Nigeria indicates that traditional funding methods can no longer suffice as the traditional fund providers, i.e. different levels of Government, do not have such resources at their disposal. Also, Onyeiwu (2012) studied on ‘Domestic Debt and the Growth of Nigerian Economy’ and investigated the relationship between domestic debt and economic growth in Nigeria. He adopted the Ordinary Least Squares Method (OLS), Error Correction and parsimonious models to analyze quarterly data between 1994 and 2008. His result shows that the domestic debt holding of government is far above a healthy threshold of 35 percent of bank deposit as the average over the period of study is 114.98 percent of bank deposit presenting evidence of crowding out of private investments. The study of course affirms that the level of debt has negative effect on economic growth. He recommended that government should maintain a debt- bank deposit ratio below 35 percent, resort to increase use of tax revenue to finance its projects and divest itself of all projects the private sector can handle while providing enabling environment for private sector investors such as tax holidays, subsidies, guarantees and most importantly improved infrastructure.

**SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

**SUMMARY**

This study empirically examines the causal relationship between Public Expenditure and National Debt in Nigeria. Reviews were conducted extensively on various literatures and existing works regarding the effect of federal government expenditure and total external debt outstanding on the productivity and economic growth in the country. Consequently, model was specified following from Solow’s growth model inspiration regarding granger causality model, with data on each variables ranging from 1981 to 2012. The Variables were estimated using the Bivariate pairwise granger causality test with the use of Augmented dickey fuller for stationarity of the variables estimation method to derive the relative relationship that exist among the variable under consideration.

**CONCLUSIONS**

In this research work, we have empirically verified and discussed the effect of Total Federal Government Expenditure on National Debt on Economic Growth. The aim of the study was to ascertain the significant role of Total Expenditure and External Debt on the Nigerian economy. Three theoretical facts has emerged as the reason advanced for government external debt. The first is budget deficit financing the second is implementing monetary policy (buying and selling of treasury bills in the open market) and the third is developing the financial sector (supplying tradable financial instruments so as to deepen the financial market). But in Nigeria, several factors have been advanced towards explaining the changing on both external and domestic debt profit. Some of those factors are high budget deficit, low output level, increased government expenditure, high inflation rate and narrow revenue base. Our findings in this study suggest that the increasing domestic debt profile has affected the growth of the economy negatively. In this research work, we have empirically verified and discussed the causal relationship between public expenditure and National debt in Nigeria. The aim of the study was to ascertain the causal relationship between public expenditure and National debt in Nigeria. Generally, it is observed that public expenditure is financed majorly by domestic debt, while external debt is not significant in the development of infrastructural facilities. Consequently, based on the results obtained and interpreted in chapter four above, the null hypothesis (H0) will be rejected. Thus, from the foregoing, we can conclude that ‘public expenditure both capital and recurrent granger cause domestic debt and Nigeria as a nation borrowed to finance their recurrent expenditure, though with the level of corruption and misappropriation of public funds and poor administration has impeded the growth of the sector but with inadequate investment on infrastructural facilities that can boost the revenue generated in order to balanced or surplus budget in the economy.

**RECOMMENDATIONS**

In order to achieve meaningful development, the government expenditure must be wisely spent on both capital and recurrent expenditure in other to make the country more productive. Most especially expenditure on infrastructural facilities should be increased in
other to attract foreign investors and not to waste the money on heavy debt servicing annually. Based on the findings of this research work, it is inevitable to provide a set of policy recommendation that would be applicable to the Nigerian economy: - 
- Effort should be made by the government to settle the outstanding domestic debt. This will give room for proper conduct of monetary policy in the economy. 
- It will be healthy if the government should strives to finance budget deficit by improving on the present revenue base rather than resulting to external debt which will be attached by foreign aids that will make the county slave for many years. This can be achieved by improving its revenue sources and efficient pursuit of tax reforms. 
- The rise in domestic debt profile in Nigeria is attributed to government extra budgetary activities, which most often are not used for the intended project. 
- Commitment to budget should be encouraged for fiscal discipline on the part of the government and its agencies. 
- The government and the Debt Management Office (DMO) should drawn up guidelines to limit the growth of future external debt. In this regard, debts service ratio must not exceed 40 percent of allocation from the federation account. Effective mechanism should be put in place to ensure that any new borrowing is judiciously utilized to contribute to economic growth. 
- The place of corruption in public debt in Nigeria is central. Most often, borrowed fund are either misapplied or embezzled. In this regard, government effort at curbing corruption should be sustained. It is good news that the corruption perception index of Transparency International has shown positive improvement in Nigeria standing. This should be sustained.

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Causal Relationship Between Public Debts And Public Expenditure In Nigeria

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