## Impact of External Debt on the Growth of the Nigerian Economy

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#### Abstract

External debt is a very important area in any country for boosting the economic activities. It is contradictory whether external debt stimulates economic growth or hinders growth. Some researchers found positive relationship, some negative and some no significant relationship between external debt and economic growth for different economic conditions. This study examined the impact of external debt on the growth of the Nigeria economy, using time series data from 1980 – 2013. The objectives of the study were to ascertain the relationship between short-term eternal debt and the performance of the Nigerian economy and to ascertain the effect of medium and long-term external debt on the growth of the Nigerian economy. To achieve the above objectives, the study employed the ordinary least squares (OLS) to obtain estimates of the parameters of economic relationship from statistical observations. The quantitative results based on this method showed that short-term external debt has a negative impact on the growth of the Nigerian economy. Furthermore, the result showed the existence of a negative and inverse relationship between medium and long-term debt and economic growth in Nigeria. Based on the findings, it was recommended that since external debts are meant to boost the economic growth and development of the debtor country and improve the standard of living of the citizenry, the Nigerian government should always consider the debts as means to long-run development, not just for solving short-run problems, as this will affect the amount of resources to be generated to pay back the debts at maturity. The negative impact of medium and long-term external debt on economic growth in Nigeria calls for appropriate policy actions to be taken to reverse this trend. There is need for the Nigerian government to probe the reasons behind the non-contribution of external debt to GDP growth of the country so as to unveil the bottlenecks and correct them. Finally, government should ensure economic and political stability in order to enjoy the benefits of short-term external debt, medium and long-term external debt and make the debt burden minimal

**Keywords:** External debt, Debt management, Debt overhang, Debt Management, Fiscal deficit, Debt forgiveness, Economic growth.

## Introduction

No country or government is an island on its own. For any government to perform efficiently or effectively, it would require aid and one major source of aid is foreign borrowing or external debt. As observed by Sulaiman and Azeez (2012), the motive behind external debt is due to the fact that countries especially the developing one, lack sufficient internal resources, and this calls for the need for foreign aid. Hence, the reason for external debt in developing countries like Nigeria is to fulfill lack of saving-investment gap.

The developing countries faced with current account deficit were encouraged to borrow from developed countries as well as the international community to boost their economic growth. Gohar, Bhulto and Butt (2012) recommended that countries take debt from external sources when faced with the problem of low income with budget deficit and low investments.

In addition, Soludo (2003) asserted that countries borrow for either macroeconomic reason or to finance the transition balance of payments deficits aimed at boosting growth and reduce poverty. External debt is a major source of public receipts. The accumulation of external debt should not signify slow economic growth. It is a country's inability to meet it debt obligation compounded by the lack of information on the nature, structure and magnitude that makes external borrowing a burden. When debt reaches a certain level, it begins to have adverse effect. Debt servicing becomes a huge burden and countries find themselves on the wrong side of the debt-laffer curve, with debt crowding out investment and growth. The debt service burden has militated against Nigeria's rapid economic growth and worsened the social problems (Audu, 2004).

As observed by Omoleye, Sharma, Ngussam and Ezeonu (2006), Nigerian is the largest debtor nation in the sub-sahara Africa. The genesis of Nigeria's external debt can be traced to 1958 when 28 million US dollars was contracted from the World Bank for railway construction. The need for external debt was on the low side in Nigeria between 1958 and 1977 because of the oil boom. However, due to fall in oil prices in 1978 which exerted a negative influence on government finances, it became imperative to borrow to correct balance of payment difficulties and finance projects. The spate of borrowing increase thereafter with the entry of the state government into external loan contractual obligation. In 1986, Nigeria had to adopt a World Bank/International Monetary Fund (IMF) sponsored structural adjustment programme (SAP), with a view to revamping the economy, making the country better able to service her debt (Ayade and Ayadi, 2008).

The increasing government fiscal deficit driven by the higher level of external debt serving is a major threat to growth of the nation economy. The resultant effect of large accumulation of debt exposes the country to high debt burden. Nigeria is about the richest on the continent of Africa, yet due to the numerous macro-economic problems, such as inflation, unemployment, sole dependency on crude oil as a major source of revenue, corruption and mounting external debt and debt service payment, majority of her citizen fall below the poverty line (Sulaman and Azeez, 2012). The implication of external borrowing on a developing economy like Nigeria depend on a large extent on the nature and structure of the external borrowing. According to Onoh, (2007), many factors determine the structure and level of a country's external debt. These include the balance of payments position, the external reserve level, outstanding debt and the ability of the public and private sectors of the economy to generate revenue from domestic sources. Over time, Nigeria have been having difficult time during the debt-service payments period. This is so because Nigeria government embarks upon project with high foreign exchange cost-content, which are externally financed and foreign receipts from exports is always inadequate for the repayment of the debt when due. As a convention, a country is expected to have made adequate provision for future foreign exchange earnings to be able to settle the debt obligations when due if such a country borrows foreign exchange to satisfy present needs (Onoh, 2007).

The impact external debt exerts on any economy depend whether the debt is short term, medium or long term. Short term debts, which are mainly trade debts are incurred more by the private sector and owed to the London Club of creditors. As noted by Onoh (2007), about 75 percent of Nigeria's total external debts outstanding were mostly short-term debts contracted from private sources. These loans matured quickly since there are short-term in nature and service payments continued to be in default resulting into a very huge debt beyond Nigeria's capacity to respond. The inability of Nigeria to obey the debt obligations forces the short-term debt creditors to shut off new lines of credit for Nigeria. As a result, many industries were shut

down since it was impossible to keep the industries running either for lack of spare parts or raw materials (Onoh, 2007).

Over the years in Nigeria, a sizeable chunk of the nation hard earned revenue (foreign earning) has been channeled to debt servicing which has caused some setback in the nation's economy. The magnitude of external debt and it's associated adverse effect has become a concern to the government. Despite the government continuous effort on managing external debt, by embarking on several measures yet there exist some unresolved issues. Therefore, this study thoroughly and empirically examined the impact of external debt on the growth of the Nigerian economy and arrived at a logical conclusion.

#### **Statement of the Problem**

The huge amount of external debt and debt service payment of Sub-Sahara African countries and Nigeria in particular has prevented the countries from embarking on larger volume of domestic investment, which could have enhanced growth and development. External debt became a burden to developing nations like Nigeria because contracted loans were not optimally deployed therefore returns on investments were not adequate to meet maturing obligations, and did not leave a favourable balance to support domestic economic growth.

Foreign borrowing has a positive impact on investment and growth of a country up to a threshold level, but external debt service can potentially affect the growth. External debts are important determinants of economic performance of a country. Developing countries like Nigeria take the foreign debts for many purposes such as to fill the gap of budget deficit or balance of payment deficit due to low investment. Since independence, Nigeria has received several foreign debts in order to spur economic growth. But the heavy external debt burden has resulted in creating a great hindrance in the economic growth of the country due to high interest payments on the external debt and heavy public expenditures.

Over 75 percent of total Nigeria external debts outstanding were mostly short-term external debts contracted from private sources. Consequently, the loans matured quickly because of its nature and service payment always in default resulting to huge debt beyond Nigeria's capacity to respond. Thus, the Nigeria economy have not performed well despite the huge public debt.

Nevertheless, a country is supposed to examine its demand for foreign capital in relation to the types of programmes and projects the country intend to undertake. Also, the lending nation should be able to take cognizance of the ability of the borrowing country to pay back the loan at maturity, taking into account the programmes and projects of the borrowing country. After reconciling their differences, both countries can therefore work out a number of modalities to ensure the proper used of the borrowed funds. If these funds are properly utilized, it would enable the debtor country to have access to foreign markets and this would go a long way in mobilizing both human and material resources for the country.

## **Objectives of this Study**

The major objective of this study was to examine the impact of external debt on the growth of the Nigerian economy.

The specific objectives of this study include:

- (i) To ascertain the relationship between short-term external debt and the performance of the Nigerian economy.
- (ii) To ascertain the effect of medium and long-term external debt on the growth of the Nigerian economy.

#### **Research Hypotheses**

In testing the relationship between external debt and the growth of the Nigerian economy, the following hypotheses were formulated:

- **(i) Ho:** There is no significant relationship between short-term external debt and the performance of the Nigerian economy.
- (ii) Ho: There is no significant relationship between medium and long-term external debt and the growth of the Nigeria economy.

The remainder of the paper is organized into four sections. Following section, one is section two which deals with the literature review and theoretical framework, section three handles the research methodology. Section four shall present the empirical data for analyses and testing and finally, in section five the entire findings in the research process shall be summarized, conclusions drawn which will then lead us to making appropriate recommendations.

## Literature Review and Theoretical Framework Theoretical Framework

The study discussed theories such as the debt overhang theory, system correction theory, threshold school of thought, and liquidity constrained thesis.

## **The Debt Over-Hang Theory**

This theory provides a new dimension to the problem of debt. The debt over-hang theory state that if the country's debt rises beyond the ability to pay as at when due, the output of the debtor country would be affected negatively. According to debt overhang theory, high debt stock encourages future payment of foreign tax, promoting capital flight and lowering the incentives to save and invest. (Nyong, 2005).

According to Pattillo, Poirson, and Ricci (2002), the debt overhang thesis implies that "large debt stocks would lower growth through the channel of reduced investment". In Nigeria for instance, our huge external debt profile has contributed in no little measure to depriving other sectors of the economy, such as agriculture, health care services, and education to be financed accordingly. This is because the level of financial resources that would have been channeled to these sdectors, are rather ploughed into servicing our external and domestic debts owned largely to pressure from our creditor nations, as well as international bodies (Paris club, IMF and World Bank). It maintains that debt accumulation stimulates debt initially, while previous debt accumulation impact negatively on growth. The indirect effect works through liquidity constraint when debt servicing lowers the amount of foreign exchange available for investment, thereby affecting economic growth negatively. Furthermore, the implication of the debt overhang thesis is that government will not have sufficient funds to implement vital reform programmes like trade liberalization and fiscal restraint. Thus, the debt overhang thesis does not only affect the volume of investment in the country but, also create "a poorer macroeconomic environment, which is literally to affect the efficiency or quality of investment." The macroeconomic policy environment affects growth through poorly designed allocated and executed projects, thereby lowering the productivity of capital. It is a known fact that large debt stock also creates expectations that debt services goes along with tax payment as a result of inflation, which may limit viable investment.

However, if debt overhang thesis is correct, then debt may have non-linear effects on growth operating through the volume of investment and the efficiency and productivity of investment. Using endogenous growth model, it has been shown that capital accumulation through debt is the main force driving growth. While the growth may increase in the early

stages as the nation borrows and invest, growth decreases in the later level as debt rises rapidly as more funds are channeled to debt servicing (Nyong, 2005).

#### **System Correction Theory**

The system correction theory states that the international economic and financial systems are unsustainable and that the debt crisis is a crisis of global solvency as opposed to localized liquidity problem. It insists that no one set of actors is to be blamed for the debt crisis. Events occur in a manner which is difficult to predict or control particularly by when longstanding systems of economic regulations begins to breakdown.

Therefore, government should intervene to fine-tune the economy by increased spending thrown fiscal and monetary policy measures, by providing the legal and property-right regimes necessary for the capitalist economy to thrive. The system correction theory is a partial Keynesian approach to addressing the debt crisis.

The proponents of system correction theory include Sachs (1989), Diaz Alejandro (1984), Griffith Sunkel (1986), the world Bank (1989). According to Sachs and Sunkel, the debt crisis arises from a combination of wrong policy actions from debtors countries (i.e economic mismanagement), macroeconomic shocks in the world economy, and unrestrained band lending between 1979 and 1981. Domestic economic mismanagement refers to overvalued exchange rate which promoted and stimulated capital flight, moderate budget deficits, and inward-looking trade policies, as well as trade controls which discriminates against export (ie agricultural exports). In Nigeria and in Latin America, some public agencies and governments were borrowing publicly to support private assets abroad.

The solution lies in achieving faster economic growth in the world economy, development of financial instruments to enhance local processes of debt forgiveness and debt write-downs, granting concession interest rates to debtor countries and tapping of interest rates. It maintains that previous debt crisis had always ended in some debt forgiveness. It suggest limiting debt service payments to a fixed proportion of export earnings and creation of world development fund with special drawing right (SDR) amounting to \$10-12 billion per month for the next three years. It suggests structural adjustment in debtor countries but maintains that both creditors and debtors need to adjust, implying that there must be equitable sharing of the burden of adjustment. It insists that measures to deal with the debt crisis should be broad-based and pragmatic. The pragmatic approach is limiting state intervention coupled with structural transformation of the economy to promote savings. Saving is considered to be the key determinant of economic development in terms of local processes in capital formation. It submits that debtor's countries cannot meet their debt obligations unless there is more access to the industrial countries' markets.

#### **Threshold School of Thought**

Threshold school of thought is largely concern with the problem of external debt, with focus on the nonlinear relationship between growth and debt. It tries to link debt and growth to the burden of capital flight, believing that when debt is high growth rate drops. This school of thought, state that the reduction in growth rate is as a result of high tax effect on capital needed to pay back the debt. This metamorphoses to reduce rate of returns on capital, reduce investment and, of course reduce growth. It stresses that low debt policy have higher growth rate and reduce poverty incidence for the opposite reason. The regime believes that much borrowed funds should be invested wisely for productivity advantage,

This contention implies that foreign capital inflows complement domestic savings and investment. The issue is that, such foreign capital inflows assist in financing the shortfall of saving over investment, in the current account. By the time funds are channeled accordingly

for productive interest, which will contribute to the country's growth and enhance future foreign earnings through sustained export of products from the investment to enable the country redeem the loan, then, no problem with this school of thought.

#### **Liquidity Constrained Theory**

According to Nyong (2005), liquidity constrained theory states that external debt is negatively correlated with growth since those resources to service the debt lowers the amount needed for investment in productive sectors. Hence, both the debt overhang thesis and liquidity constrained thesis portends a serious negative implication of debt on growth. A debtor country will likely experience credit shortage, which is the same thing as experiencing high interest rates which discourage investment. Investment can be worsen by astronomical rise in interest rate and high level of inflation thereby dampening macroeconomic environment.

From the foregoing and the analysis of the competing theories, we realize that while one set of theory predict a negative effect between debt and growth, another set of theory predict a positive relationship. The practical experiences of most severely indebted poor countries; e.g. Nigeria is greatly consistent with these theoretical postulations. External borrowings in many indebted nations were meant to be channeled to domestic investment resulting from trade stocks, but owing to bad policies and continuous emphasis on loan, despite the fact that most of the investments do not really contribute to the growth of the economy.

## **Review of Empirical Literature**

Empirically, several attempts have been made to examine the impact of external debt on economic growth, debt overhang and crowding out effects particularly through the use of ordinary least square. Most of the test showed that several variables were negatively related to investment or growth based on the direction of the study. For example, in the work of Borengztein (1990), when private debt was used instead of the entire debt to measure the effect of debt overhang in Philippines, it was discovered that debt overhang has a negative impact on private investment. Iyoha (1996), also had a related result concerning sub-sahara African countries. He summaries by saying that large debt stock lowers investment through crowding out effect and debt overhang.

Moreso, Cohen (1993) carried out a study on the relationship between the debt of underdeveloped nations and their investment in the 1980s, and the result indicated that the amount of debt was not up to the level of affecting investment in underdeveloped countries in the 1980s. He concluded that debt servicing crowded out investment.

Elbdawi, Ndulu and Ndung (1996) used cross-sectional regression for ninety-nine undeveloped countries to affirm the effect of debt overhang on economic growth. The countries span from SSA, Middle East and Asia. It was discovered that high debt burden in SSA arise through three direct channels. They include previous debt accumulation which has to do with debt overhang debt service ratio and the present debt inflows, which is a ratio of GDP and should be able to enhance growth. They discovered that large debt stock has resulted to persistent budgets deficit due to fiscal distress.

The work of Sikod (2001), also showed that debt overhang and crowding out effects affect private and public investment respectively. Degete (1992) also supported the conception through a mere simulation analysis.

In the work of Oke and Sulaiman (2012), on the impact of external debt on the volume of investment and economic growth in Nigeria from 1980 to 2008 adopting debt cum-growth model together with investment model, while the econometrics techniques of analysis adopted was the multiple regression techniques of data analysis. The result indicated that external debt has positive effect on both economic growth and investment in Nigeria.

According to Sanusi (1988), Nigeria's debt crisis was as a result of the lack appropriate fiscal and monetary policy objectives of the government. According to him, these policies affect the domestic economic negatively. And these have led to several macroeconomic problems such as distortion in relative price, increase domestic inflation, encouragement of capital flight, and encouragement of import and discouragement of productive investment for export.

According to Onah (1994), debt burden depresses investment and discourage growth as a result of inadequate liquid funds. And when this funds is not sufficient, it would be difficult to cater for consumption, investment and external transfer to pay the existing debt.

In the work of Essien (1998) on the impact of foreign debt on economic growth, the result shows that external finance does not really contribute to economic growth in Nigeria. It was recommended that government should ensure proper debt management measures. And this can be achieved through adequate feasibility study of projects that would be financed through external source.

According to Fajana (1993), it is not bad to borrow, but the reason for debt crisis is as a result of lack of proper management of borrowed funds. He went further to say that a country cannot completely stay away from borrowing because it helps in bridging the gap between underdeveloped and developed nations, especially when investments are undertaken in productive projects with rate of return greater than the borrowed funds. According to him, external debt has to be properly managed, and prudently utilized to serve as an engine of growth.

According to Kasidi and Said (2013) on the impact of external debt on economic growth of Tanzania for the period 1990-2010 employing time series data on external debt and economic performance. The result showed that total external debt stock had a positive effect on GDP. Further examination of result showed that medium- and long-term external debt had a negative impact on GDP. In the work of Ajayi and Oke (2012), on the effect of external debt on economic growth and development of Nigeria, employing regression analysis of OLS on secondary data sourced from CBN statistical bulletin, economic and financial review, and business times. Explanatory variables such as debt service payment, external reserves and interest rate was were regressed against GDP, and the result showed that there exist a significant and negative relationship between GDP and the selected explanatory variables. It was recommended that debt services obligation should not be allowed to rise beyond foreign exchange earnings, and also the loan contracted should be invested in productive venture, which will generate the required returns for debt repayment.

According to Muhter (2004), debt servicing has direct negative impact on economic growth. He posited that debt serving encroaches on the needed resources for socio-economic development and poverty reduction. This also contributed to negative net resources flow. Iyoha (1999), in his economic analysis of the effect of external debt on economic growth in sub-Sahara African countries (SSA) found empirical support for the negative effect of debt overhang. The analysis showed that sub-Sahara Africa's external debt stock and debt services payments depresses investment and lower the rate of economic growth. Ayadi and Ayadi (2008) examined the impact of the huge external debt, with its servicing requirements on economic growth of the Nigerian and South African economies. They employed the neoclassical growth model which incorporates external debt, debt indicators and some macroeconomic variables were employed and analyzed using the ordinary least square (OLS) and generalized least square (GLS) methods. Their findings revealed negative impact of debt and its servicing requirement on the economic growth of Nigeria and South Africa.

## Research Methodology Research Design

A research design is a plan that specifies the best approach for gathering and analyzing the data (Etuk 2010). The aim of the study was to look at the impact of external debt on the growth of the Nigerian economy. Since the aim of the study was to explain the behaviour of the economy in relation to external debt variables, the exploratory design was adopted. This was to help the study ascertain from already established situations whether it was external debt variables that exert greater influence on the growth of the Nigerian economy. The study also employed the ordinary least squares (OLS) econometric technique in its empirical analysis of the impact of external debt on growth of the Nigerian economy.

#### Sources of Data and Method of Data Collection

For the purpose of the estimation of the model, data were generated from secondary sources, especially, CBN statistical bulletins, CBN statement of accounts and annual report, economic and financial review on various issues and DMO. The method used in the collection of data was desk survey. The data collected from the various publications shall be summarized and tabulated.

#### **Model Specification**

To assess the impact of external debt on the growth of the Nigerian economy, the study formulated a model of debt and growth using econometric method. Also, the models unveil the explanatory variables and how they affect the growth of the Nigerian economy.

The econometric model is specified below;

GDP = F(STD, MLD) ......(1)

Where:

GDP = Gross Domestic Product, as a measure of economic growth in Nigeria.

STD = Short-term external debt in Nigeria

MLD = Medium and long-term external debt in Nigeria

F = Functional notation

In a more explicit and econometric form, equation 1 can be stated as;

 $GDP = a_0 + a_1 STD + a_2 MLD + \mu ... (2)$ 

Where:

 $a_0$  to  $a_2$  are parameter estimates,  $\mu$  is the stochastic error term.

#### **Estimation Techniques**

The numerical estimate of the coefficients of the model was obtained by Ordinary Least Squares (OLS) method for obvious reasons (Koutsoyiannis, 1977). Firstly, the parameter estimates obtained by Ordinary Least Squares (OLS) have some optimal properties. Secondly, the computational procedure of OLS is fairly simple as compared with other econometric techniques and the data requirements are not excessive. Thirdly the ordinary least squares method has been used in a wide range of econometric relationship with fairly satisfactory results. Fourthly, the mechanics of least squares are simple to understand. Fifthly, OLS is an essential component of most other econometric techniques (Koutsoyiannis, 1977).

Basically, ordinary least squares require that its parameters be chosen in a way as to minimize the sum of the squares of the deviations of the observation from it. Put differently, the method seeks the minimization of the sum of the squares of the deviations of the actual observations from the line (Koutsoyiannis, 1977).

Based on our estimation techniques, we assumed that the error terms of the equations satisfy usual stochastic assumption of zero mean, constant variance and zero covariance, and that, the error term is independent of the endogenous variables of the whole structural model. In addition, we assume further that the explanatory variables of the model is not perfectly multicollinear, that it is properly aggregated, that our model is correctly specified, and that the sample size of thirty-four (34) years is large enough.

# **Analysis and Discussion of Finding Analysis of Results**

The result of the regression of various expression of component of external debt on economic growth is presented below for analysis. The estimation techniques has been Ordinary Least Square (OLS) method.

The statistical measures used in testing the statistical significance of the parameters of the model of the t-statistics, the coefficient of determination  $(R^2)$ , the adjusted  $R^2$ , the F-statistics as well as the Durbin-Watson statistic. The t-status is used to decide the statistical reliability of each parameter estimate is the model. The  $R^2$  measures the goodness of fit of the regression equation, that is, it gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variables. The adjusts  $R^2$  is better as it adjusts for increasing  $R^2$  when a new explanatory variable is added to the model. The F-statistic is specifically used to test for the overall significance of the estimated model. It tests the existence of a significance linear relationship between the independent variables taken together with the dependent variable. A summary of the regression results is presented in the table below:

**TABLE 4.1**Regression result on the impact of external debt on the growth of the Nigerian economy. Method of estimation is Ordinary Least Square (OLS)

Variable	Coefficient	Std. Error	t.stat	Prob.
С	28707798	5402152	5.314141	0.000
MLD	-797.5224	205.662	-3.87751	0.006
STD	-1064.5224	711.4408	-1.495891	0.1455

$\mathbb{R}^2$	=	0.573808
Adjusted R2	=	0.530623
F-statistic	=	18.655855
Durbin-Watson Stat	=	0.174379

Table 4.2 is the empirical results for ordinal least square modeling of the impact of external debt on the growth of the Nigerian economy. From the results depicted in table 4.2 above, the descriptive statistics (R², F-statistic) are significance as they are within the acceptable bounds. Specifically, the adjusted coefficient of multiple determination (R²) is 0.5306. This indicates that about 53 percent of the observed changes in the dependent variable, that is GDP as proxy for economic growth in Nigeria was explained by the independent variables, that short-term external debt, medium- and long-term external debt. The remaining 47 percent not accounted for by the model was therefore represented in the stochastic error term, hence, the model fits the data well.

The joint test of significant of all parameter estimates was conducted using the F-statistic. The result indicated that the high value of the adjusted R<sup>2</sup> did not occur by chance, since its overall statistical significance of the model as measured by the F-statistical value was high. The calculated F-statistic value of 18.655 was greater than the tabulated or critical F-value of 3.39 of fire percent level of significance. This indicates that the estimate of the

equation was statically significant at five percent level. The test for statistical reliability of each parameter estimate was perform using the conventional students' t-test. The test result showed that one explanatory variable (MLD) was statistically significant at 5% level of significance. This is so because the calculated t-value of 3.877 was higher than the tabulated t-value of 1.697 at five percent level of significance. This means that the variable (MLD) is statistically reliable in explaining short-run variations in economic growth in Nigeria.

Still from the regression result in table 4.2, the sign of the regression constant is positive, implying that there is a positive relationship between the constant term and economic growth in Nigeria. Thus, if all the explanatory variables are fixed, GDP will still accelerate by 28707798. In line with our economic thinking, the external debt has the wrong sign. It has a negative coefficient evidencing that a limit increase in medium- and long-term external debt will lead to decline in economic growth all things being equal. Also, the coefficient of short-term external debt of -1064.238 indicates that a unit increase in this variable will lead to a decrease in GDP growth. From the result obtained, the D-W value of 0.174379 do not fall in the shaded region, representing the region of no autocorrelation. Thus, it can be concluded that there is autocorrelation among the variables in the model. Hence, the model cannot be employed for policy formulation in the Nigeria economy in the short-run.

## **Test of Hypotheses**

## Hypotheses one

**H<sub>0</sub>:** There is no significant relationship between short-term external debt and the performance of the Nigerian economy.

**H**<sub>1</sub>: There is a significance relationship between short-term external debt and the performance of the Nigerian economy.

## Hypotheses two

**H<sub>o</sub>:** There is no significant relationship between medium and long-term external debt and the growth of the Nigerian economy.

**H**<sub>1</sub>: There is a significance relationship between medium and long-term external debt and the growth of the Nigerian economy.

The F-statistics was used to test for the overall significance of the model. The following information was useful.

Therefore, the calculated F-statistical is 18.655 and the tabulated F-statistic is 3.39 at five percent level of significance.

Decision rule

Reject Ho: if calculated F-statistics < table F-value.

From our regression results, calculated F-statistic = 18.655 and the table F-statistic = 3.39.

Based on the above results, the null hypothesis is rejected and the alternative hypothesis accepted since the calculated F-statistic is greater than the table F-statistic at five percent level of significance. Thus, it could be concluded that external debt plays a significant role on the growth of the Nigerian economy.

#### **Discussion of Findings**

The analysis of results shows that there is significant impact of external debt on the growth of the Nigeria economy. This seems to support the empirical assertion by Kasidi and said (2013) on a study of impact of external debt on economic growth in Tanzania. However, the coefficient of both the short-term debt and long and medium debt are negative. The negative relationship between the short-term external debt and economic growth in Nigeria could be attributed to the fact that short-term debts, which are mainly trade debts matured quickly. Nigeria government always default in the service payment resulting to huge accumulation of the debt beyond the capacity of the government to handle. Hence, the short-term creditors decline giving more short-term loans leading to the closure of many industries in Nigeria depend on this transaction for spare parts and raw materials supplies. This result to decline in economic activities and growth.

The result equally revealed a negative and inverse relationship between medium- and long-term external debts and economic growth in Nigeria. This result is supported with the assertion of Ajayi and Oke (2012). They found an inverse relationship between long term external debt and economic growth and development in their study. The medium- and long-term loans contracted by various governments were meant to be invested in specific revenue yielding projects, but a good proportion of the funds were not so applied. Hence, funds that could have been invested or used to provide basic infrastructure that could boast the level of economic activities, is now channeled to debt servicing with negative consequences on the economy.

## **Summary of Findings and Recommendations Summary and Conclusion of Findings**

This study examined the impact of external debt on the growth of the Nigerian economy, discussing the external debt burden and the measures undertaken by the federal government to curb it. It also observed that the magnitude of short-term external debt, medium-and long-term external debt played a key role to the functioning of the economy especially since the eruption of the oil crisis in 1981. However, huge accumulation of trade arrears from 1982 and external debt crisis had been traced to the fall in the prices of crude oil, collapse in commodity prices and the prolonged weakening of the world market since 1981, with the attendant decrease in foreign exchange earnings and pressure on the balance of payment.

Nigeria debt problem can be linked to both exogenous and endogenous factors such as the nature of the economy, economics policies, depending on oil, indiscriminate foreign exchange receipt. From the results obtained, it was obvious that the external debt components captured in the model all have negative and significant impact on economic growth in Nigeria. Short-term external debt had negative and significant impact on economic growth in Nigeria. This is because, the loans matured quickly, hence, government inability to generate the required returns to pay back the loans at maturity. The result also showed that medium and long-term debt exerted negative and significant impact on the Nigeria economy. This result may be attributed to government failure to channel this fund to productive activities to promote economic growth in Nigeria. Therefore, there is need for Nigeria to ensure proper efficiency in the use of external debt facilities.

#### Recommendations

Based on the findings of this study, the following recommendations were made

1. The Nigerian government should always consider the debts as means to long-run development not just for solving short-run problems as this will affect the amount of resources to be generated to pay back the debt at maturity.

- 2. Appropriate policy actions should be taken to reverse negative effect of external debt by investing the contracted debt in revenue yielding projects so as to generate the required returns to pay back the debt at maturity.
- **3.** Government should probe the reasons behind the non-contribution of external debt to GDP growth of the country to unveil the bottlenecks and correct them.
- **4.** Finally, government should ensure economic and political stability in order to enjoy the benefits of short-term external debts, medium and long-term external debt and make the debt burden minimal.

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