EXTERNAL DEBT AND ECONOMIC GROWTH: THE NIGERIA EXPERIENCE

Dr. Udeh Sergius Nwannebuike, Ugwu James Ike and Dr. Onwuka Ifeanyi Onuka

1Department of Accounting & Finance, Godfrey Okoye University, Enugu State, Nigeria.
2Doctoral Student at Nnamdi Azikiwe University, Awka, Anambra State Nigeria and Lecturer at Department of Accounting & Finance, Godfrey Okoye University, Enugu State, Nigeria.
3Department of Accounting & Finance, Godfrey Okoye University, Enugu State, Nigeria.

ABSTRACT: This research work was aimed at ascertaining the impact of external debt on economic growth in Nigeria. Ex-post facto research design was adopted for the study. While data on Gross Domestic Product (GDP), External Debt Stock and External Debt Service Payment were obtained from World Bank International Debt Statistics, Exchange Rate data were collected from Central Bank of Nigeria Statistical Bulletin, 2013. The period of study was 1980-2013. Model was formulated and data were analyzed using Ordinary Least Square. Diagnostic tests were conducted using Augmented Dick Fuller Unit Root Test, Co-integration and Error Correction Model. The independent variable was GDP, while the explanatory variables were External Debt Stock, External Debt Service Payment and Exchange Rate. We discovered that External Debt had a positive relationship with Gross Domestic Product at short run, but a negative relationship at long run. Also, while External Debt Service Payment had negative relationship with Gross Domestic Product, Exchange Rate had a positive relationship with it. The paper concluded that exchange rate fluctuation had positive impact on the Nigerian economy while external debt stock and debt service payment had negative impact on the same economy. The study recommended amongst others, that Debt Management Office should set mechanism in motion to ensure that loans were utilized for purposes for which they were acquired as well as set a ceiling for borrowing for states and federal governments based on well-defined criteria.

KEYWORDS: External Debt, Gross Domestic Product, Exchange Rate, Debt Stock, External Debt Service Payment

INTRODUCTION

Human wants are insatiable and the means or resources available for the satisfaction of wants are limited in their supply (Olukunmi, 2007). In individual and national lives, the above assertion is true. To meet national wants amidst limited resources, nations might resort to borrowing. Borrowing creates debt. Debt is the aggregate of all claims against the government held by the private sector of the economy or by foreigners, whether interest bearing or not less, any claim held by the government against private sectors and foreigners (Oyejide, Soyede and Kayode, 1985). Shortfall in domestic savings to finance productive activities compels nations to borrow (Ezebasili, 2006 and Momodu, 2012).

Debt could be from within a nation’s boarder (Internal) or from outside (External). External debt may be defined as debt owed to non-residents repayable in terms of foreign currency, food or service (World Bank, 2004). The effect of external debt on investment and economic growth of a country has remained questionable for policy makers and academics alike. There has not
been consensus on the impact of external debt on economic growth. External debt may be used to stimulate the economy but whenever a nation accumulates substantial debt, a reasonable proportion of public expenditure and foreign exchange earnings will be absorbed by debt servicing and repayment with heavy opportunity costs (Albert, Brain and Palitha, 2005). Excessive external debt constitutes obstacle to sustainable economic growth and poverty reduction (Maghyere and Hashemite, 2003; Sanusi, 2003 and Berensmann, 2004).

Those who argue that external debt has positive effect on the economy do that from the stand point that external debt will increase capital inflow and when used for productive ventures, accelerates the pace of economic growth. The capital inflow may be associated with managerial know-how, technology, technical expertise as well as access to foreign market. The above is in agreement with the views of the Keynesian Theory of capital accumulation as a catalyst for economic growth. However, external debt may have negative impact on investment through debt overhang and credit-rationing problem (Eduardo, 1989).

Debt overhang phenomenon is where substantial resources are used for debt servicing such that it stifles economic growth. It becomes a tax on domestic production such that the amount spent hampers meaningful economic growth activities as it reduces resources available to government to implement growth oriented economic policies.

Credit rationing effect results when a country is unable to pay her debts. The authorities increase interest rates to narrow savings investment gap, thus affecting new investment, generating greater surplus for debt servicing and repayment. However, this may subsequently depress future growth prospects.

The divergent views in literature on the impact of external debt on the economy motivated this study. The study covered the period 1980-2013.

Statement of Problem

Nigeria like most highly indebted poor countries has low economic growth and low per capita income, with domestic savings insufficient to meet developmental and other national goals. Nigerian exports were primarily primary commodities with export earnings too small to finance imports which are mostly capital intensive (Manufactured) goods which are comparably more expensive (Siddique, Selvanathan and Selvanathan, 2015). Compounding the problem is Nigeria’s drift to mono economy with the discovery of oil. The oil sector generates about 95% of foreign exchange earnings and about 80 percent of budgetary revenue. The inability to diversify her revenue sources coupled with corruption and mismanagement compels Nigeria to have inadequate fund for growth and developmental projects such as roads, electricity pipe borne water and so on.

The quest for economic growth and development compelled Nigeria to acquire external debt. The first major external loan of US$28 million by Nigeria was acquired from World Bank in 1958 to finance railway construction. Ever since then, there has been accumulation of loans aimed at various development projects without obvious results as expected. As the amount of loans increased, Debt Management Office (DMO) was established in October, 2000. Prior to the establishment of DMO, Central Bank of Nigeria (CBN) was saddled with the responsibility of management of national debts. At moment, DMO in collaboration with CBN and Federal Ministry of Finance manage Nigeria’s debts.
The problems associated with debt and debt servicing prompted Sanusi (2003) to warn that rising Nigeria’s debt is an impediment to economic growth and development. Similar view was expressed by Campbell (2009) when he said that government debt can easily become a burden on the economy weakening its foundation, warning that the authorities should recognise that accumulating debt also means accumulating risks by increasing claims on unrealised future income.

A priori expectation was that external debt would bring about economic growth. Over emphasis on negative impact of debt will cause morbid fear of debt, resulting in debt avoidance when it would have stimulated the economy by bringing in the much needed capital for infrastructural development and investment.

From the foregoing, it is clear that there were divergent views on the impact of external debt on the economy, hence the need for policy makers to have good appreciation of its impact on the economy at various levels of debt accumulation to enable them make informed decisions. This is so, as there are periods/situations of which debt is desirable and necessary, while there are other times debts should be avoided.

**Objectives of the Study**

The main objective of the study is to determine whether external debt has significant relationship with economic growth in Nigerian. However, we specifically want to:

1. Ascertain the impact of external debt on Gross Domestic Product (GDP) in Nigeria.
2. Determine the effect of external debt servicing on Gross domestic Product in Nigeria.
3. Establish the impact of exchange rate on Gross Domestic Product in Nigeria.

**Research Hypotheses**

The study was guided by the following null hypotheses:

Ho External debt has no significant impact on Gross domestic product in Nigeria.
Ho External debt servicing has no significant effect on Gross Domestic Product in Nigeria
Ho Exchange rate has no significant impact on Gross Domestic Product in Nigeria.

**REVIEW OF RELATED LITERATURE**

Review of related literature is done under the following sub-headings: Conceptual Framework, Theoretical Framework, and Empirical Review.

**Conceptual Framework.**

Arnone, Bandiera and Presbitero(2005) described external debt as that part of a country’s debt that was borrowed from foreign lenders including commercial banks, governments or international financial institutions. External debt becomes necessary when domestic financial resources become inadequate to finance public goods that increase welfare and engender
economic growth. External debts are funds sourced from outside the nation’s boarder usually in foreign currency and are interest-bearing to finance specific project(s).

The effect of external debt on a nation’s economy has been a subject of controversy among academics. Some were of the view that external debt accelerates economic growth (Hameed, Ashraf and Chandhary, 2008). This view is in line with neoclassical model of economic growth—the Keynesian theory in which capital accumulation is viewed as a catalyst to economic growth. This was confirmed by the significant growth by the Asian Tigers- Malaysia, Singapore, Indonesia and Taiwan and South American country, Brazil. These nations were able to transform their economy using external debt (Momodu, 2012).

The proponents that external debt has negative impact on the economy stem from the fact that at certain level, debt accumulation becomes a burden and will no longer stimulate the economic growth (Elbadawi, Ndulu and Ndungu, 1996). Furthermore, the liquidity constraint referred to as ‘crowding out’ effect of debt, that is, the need to service debt reduces funds available for investment and growth. Debt servicing is like the proboscis of mosquito for sucking out blood from its victim.

The guiding rules to debt to be taken into account in debt management are, debt to GDP ratio, which global maximum ratio is 40%; total debt to total revenue ratio and debt to debt service ratio. Efficient debt management strategy should result in debt service ratio between 20-25% of GDP (Omoruyi, 1996).

Nigeria’s External Debt; Historical Perspectives


According to Debt Management Office, Nigeria’s external loan dates back before independence but remained small or insignificant till 1978. The oil boom of 1970-1973 shielded Nigeria. However, following recession in 1977/78, Nigeria raised the first US$ 1 Billion loan known as ‘Jumbo Loan’ from International Capital Market to finance infrastructural projects. Following oil boom of 1980’s, a notion of economic buoyancy was felt which heralded the consumption pattern favouring imported goods and relaxation of measures formerly put in place as a result of oil price decline. Indiscriminate importation, overvalued exchange rate regime, over invoicing of imports and under invoicing of exports compounded the problem.

In 1982, fall in oil price was greeted with massive external borrowing by federal and state governments from International Capital Market without any conscious effort to address the main problem in the economy. At that period, there were excess loanable funds in the western world known as Idle ‘Petro-dollar’. These were recycled in the form of loan with the pretext that they were assisting those countries achieve economic growth.

Nigeria’s external debt moved from US$ 0.763Billion in 1977 to US$ 5.09 in 1978 and US$ 8.855 in 1980 representing 73.96% between 1978 and 1980 (DMO). By 1985, external debt of Nigeria was US$19Billion. By December 2014, external debt stood at over US$34 Billion. This has continued to grow in that by 2005, president Obasanjo argued that Nigeria needed debt relief as it is clear that she cannot service and pay her debts. This was granted in 2006.
Debt has started accumulating again with debt as at June 2015, it stood at US$10.317 Billion (Debt Management Office).

**Theoretical Framework**

There exist many economic theories but the Keynesian theory of increasing government activity as catalyst to economic growth was deemed most appropriate. This is an economic theory named after a British Economist, John Maynard Keynes. The theory is based on the concept that in order for an economy to grow and be stable, active government intervention is required. The Keynesian Economists argue that private sector decisions sometimes lead to inefficiency macroeconomic outcomes. Therefore, monetary policy action by central bank and fiscal policy action by the government are required to direct the economy. These actions will bring about stability in output over the business cycles.

Keynes stated that during depression, a combination of two approaches must be applied viz: a reduction in interest rate (monetary policy), and government investment in infrastructure (fiscal policy). Both Keynesians and monetarists believe that both fiscal and monetary policies affect aggregate demand (Blinder, 2008). The monetary policy requires CBN to reduce interest rate to commercial banks and the commercial banks to do the same to their customers. Government investment in infrastructure injects fund into the economy by creating business opportunities, employment and demand. One of the sources of fund for infrastructural development is external borrowing during fiscal deficit.

This implies that Keynesian theory which views capital accumulation as a catalyst to economic growth is supportive of external loans as it injects fund into the economy to increase economic activity resulting in growth. It therefore supports a positive relationship between external debt and economic growth.

**Empirical Review**

A number of research works have been carried out reviewing the effect of external debt on the economy. Kasidi and Said (2013) investigated the impact of external debt an economic of growth in Tanzania using time series of 1990-2010. The study revealed that there is significant impact of the external debt and debt service on GDP growth. Whereas total external debt stock has a positive effect of about 0.36939, debt service payment has a negative effect of about 28.517. Atique and Malik (2012) examined the impact of domestic and external debt on the economic growth of Pakistan separately over a period of 1980-2010 using ordinary Least Square approach (OLS) to co-integration. The result showed significant inverse relationship in both, that is, inverse relationship between domestic debt and economic growth, and external debt and economic growth.

Pattillo, Helene and Luca (2004) investigated the channels through which external debt affects growth, especially whether debt affects growth through factor accumulation or total factor productivity growth. It also tested for the presence of non linearities in the effect of debt on the different source of growth. The study covered 61 developing countries over the period of 1996-1998. The result showed that negative impact of high debt on growth operates through a strong negative effect on physical capital accumulation and on total factor productive growth.

Amooteng and Amoako (1996) investigated the relationship between external debt and economic growth in 35 African countries. Granger causality test was applied. The result
showed a unidirectional and positive causal relationship between economic growth and debt servicing.

Sulaiman and Azeez (2012) studied the effect of external debt on the economic growth of Nigeria using gross domestic product as the endogenous variable measuring economic growth as a function of ratio of external debt to export, inflation and exchange rate proxy as the exogenous variable. Data were gathered covering 1970-2010. Analysis of date was done using the econometric technique of ordinary least square. The result showed that external debt has contributed positively to Nigeria economy. A similar research was done by Iya, Gabdo, and Aminu (2013) with the same result. Ogege and Ekpudu (2010) examined the impact of debt burden on the Nigerian economy using time series data from 1970-2007. Ordinary least square (OLS) was used to test the relationship between debt burden and growth of the Nigeria economy. The result showed a negative relationship between debt stock of internal and external; and gross domestic product, meaning that an increase in debt stock will lead to a reduction on the growth rate of Nigerian economy.

Similarly, Momodu (2012) examined the correlation between debt servicing and economic growth in Nigeria. The study sought to find a relationship between the Gross Domestic product (GDP) and Gross Fixed Capital Formation of Current Market Prices (GFCF) using Ordinary Least Square multiple regression method. The study revealed that debt payment to Nigerian creditors has significantly impacted on the GDP and GFCF. Furthermore, Ezeabasili, Isu, and Mojekwu, (2011) studied the relationship between Nigeria’s external debt and economic growth between 1975-2006, with an error correction approach. Error correction estimate revealed that external debt has negative relationship with economic growth in Nigeria.

In a similar study, Bamidele and Joseph (2013) examined the effect of financial crisis, external debt management on the economic growth of Nigeria using GDP as endogenous variable while exogenous variables measuring economic growth were Foreign Direct Investment, external debt, external reserve, inflating, and exchange rate proxies. Annual time series of 1980-2010 were used. OLS, Augmented Dickey Fuller (ADF) unit root tests and the Granger causality test were employed in analysis. The result showed a positive relationship between FDI and economic growth while inverse relationship existed between external debt and economic growth.

**METHODOLOGY**

Methodology for the study was discussed under the following sub-headings: Research design and Data collection, method of Data Analysis and Model specification.

**Research Design and Data Collection Method.**

The research design for this work is ex-post factor research design. It is a time series study. It covered various aspects of Nigeria’s external debt from 1980-2013. Secondary data were collected from Central Bank of Nigeria Statistical Bulletins 2013 and World Bank. Data were collected on Nigeria’s Gross Domestic Product, External debts, External debt servicing and Exchange rate for a period 1980 to 2013.

**Method of Data Analysis**
Data were analyzed using ordinary least square (OLS). Diagnostic test to ensure robustness of the work was done using Augmented Dickey Fuller (ADF) unit root test, co integration and error correction method.

**Model Specification**

Model was formulated using GDP as the independent variable while the explanatory variables were External Debts stock, External Debt Service Payment and Official Exchange Rate

Model was formulated as follows:

Mathematically; GDP = f (EDS, DSP, ExR)..........(1) To make the Mathematical expression estimable, it is transformed as equation(2) below:

GDP = $b_0 + b_1$EDS + $b_2$DSP + $b_3$ExR + $e_t$. ..........(2). Where;

$b_0$ = a constant  
$b_1$, $b_2$, $b_3$ = coefficient of the independent variables  
GDP = Gross Domestic Product  
EDS = External Debt Stock  
DSP = External Debt Service Payment  
ExR = Official Exchange Rate  
$e_t$ =the disturbance term or error term

**Data Presentation and Analysis**

In this section, the results of the ordinary least square (OLS) regression are presented. The analysis of the results involves subjecting the parameter estimates of the model to various theoretical (a priori) expectations, statistical first order test and econometric second order tests to determine their reliability or robustness. (See appendix 1 for details of data collected from 1980-2013).

**Analysis of Data using data**

Result of analysis of data using unit root test is shown in table 1 below

**Table 1 Result of Unit Root Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variable at level form</th>
<th>Variable at difference form</th>
<th>Order of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADF Stat.</td>
<td>Lag</td>
<td>5%</td>
</tr>
<tr>
<td>Lngdp</td>
<td>-0.994</td>
<td>1</td>
<td>-2.980</td>
</tr>
<tr>
<td>Ecm</td>
<td>-2.730</td>
<td>0</td>
<td>-1.950</td>
</tr>
</tbody>
</table>

*Source: Author’s computation, 2015.*
The result of the unit root test is presented as shown in table 1 above. The result indicates that all the variables used in the model have unit root problem when considered at their level forms, but turned stationary after their first difference. We ascertained this when we compared the augmented dickey fuller (ADF) statistics of each variable with their corresponding critical values. For all the variables used, their ADF statistics in their absolute terms were less than the corresponding critical values at 5 percent and 10 percent levels of significance. For instance, for the external debt and debt services, the absolute values of their ADF statistics are 2.223 and 2.525 respectively and are less than the absolute values of the corresponding critical ADF of 2.983 and 2.980 respectively. On the other hand, when the ADF statistics of the variables at their first difference were compared with that of the critical values, they were found to be higher at 5 percent and 10 percent. For instance, for external debt and debt services, the absolute values of the ADF statistics are 3.889 and 4.784 and they are greater than their critical values of 2.986 and 2.983 at 5 per cent level of significance.

However, despite that the variables are not stationary; there is still the tendency that the linear combination of the variables will be meaningful. In other words, we expect a long run equilibrium relationship between dependent and independent variables despite the presence of unit root. This was confirmed by subjecting the error term (ECM) to unit root test which is known as co-integration test. As shown in table 1 above, the error term has an absolute value of the ADF statistics of 2.730 which is greater than the absolute values of the critical ADF of 1.950 and 1.603 at 5 percent and 10 percent respectively. This therefore, implies that there exist a long-run equilibrium relationship between dependent and independent variables.

To show the explanatory power of the model and the reliability of the estimates in the long-run, statistical tests were also conducted and the results are displayed on table 2 below. External debt appeared not to be statistically significant at 5 per cent level but became significant when 10 per cent level of significance was used. For instance, at 5 per cent level, the t-statistics has absolute value of 1.98 which is less than the absolute critical value of 2.042. On the other hand, at 10 per cent, the absolute value of its critical t-value was 1.696 and it is less than its absolute value of 1.98. Furthermore, external debt services and exchange rate were both significant at 5 per cent. This is shown by the fact that their absolute t-values of 2.59 and 7.03 respectively are each greater than the critical t-value of 2.042. The $R^2$ value of 0.79 showed that fluctuation in external debt, external debt services and exchange rate accounted for at least 79% of the GDP within the period of study. The F-statistic also appeared to be significantly different from zero, indicating that all the independent variables in the model jointly influenced the dependent variable. This is because at 5 per cent, the absolute value of the F-statistics of 36.53 is greater than the critical f-value of 2.92.

For the short-run model as shown in table 2 below, the study revealed that only coefficient of two variables were statistically significant at 5 per cent level of significant. They were the coefficient of external debt and the first lag of the error term denoted by ECML1. The absolute t-statistics for external debt and ECML1 were 2.04 and 3.14 which are greater than their critical value of 2.048. On the other hand, debt services and exchange rate are not significantly different from zero because they had their absolute t-statistic less than the critical t-value. For instance, absolute t-statistic for external debt service and exchange rate were 0.47 and 1.20 respectively and the critical t-value was 0.048. The value of f-statistic showed the whole the independent variables joined together have significant impact on the economic growth as the F-statistic and its critical value were 2.70 and 2.70 respectively. However, the $R^2$ of about 0.28 per cent for
the short-run model was quite small and showed a poor fit. The result shows that independent variables only explained about 28 per cent of economic growth

**Table 2: Long-run impact of External Debt on the Nigerian Economy (lngdp)**

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>standard error</th>
<th>t-statistic</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lneds</td>
<td>-0.1838195*</td>
<td>0.0930698</td>
<td>-1.98</td>
<td>0.058</td>
</tr>
<tr>
<td>lnspi</td>
<td>-0.3053392**</td>
<td>0.1177625</td>
<td>-2.59</td>
<td>0.015</td>
</tr>
<tr>
<td>Exr</td>
<td>0.0108155**</td>
<td>0.0015388</td>
<td>7.03</td>
<td>0.000</td>
</tr>
<tr>
<td>Constant</td>
<td>34.86496**</td>
<td>3.082072</td>
<td>11.31</td>
<td></td>
</tr>
</tbody>
</table>

R²       | 0.7851
F(3,30) | 36.53

** means significance at 5% and * means significance at 10%

Source: Author’s computation, 2015.

The result depicted in table 2 above shows the long-run impact of external debt on the Nigerian economy using gross domestic product as proxy for economic growth. The result showed that in the long-run, external debt had a negative impact on the Nigerian economy. Following the theoretical explanation of the relationship between debt and economic growth as explained by Elmendorf and Mankiw (1999), the result above is in disagreement with a priori expectation. According to Elmendorf and Mankiw an increase in the public debt (budget deficit) reduces public savings. Given that a rise in the private savings in response to a fall in the public savings will not fully offset the fall in the public savings, there will be a fall in the national savings. A fall in national savings reduces domestic investment and capital stock, and hence output and income will fall. Thus in the long-run, debt hurts the growth of an economy. In essence, the result shows that one per cent increase in the external debt makes the GDP to go down by about 0.184 per cent in the long-run. An external debt service has been revealed to have a negative impact on the economy of Nigeria as well in the long-run. This is also in line with theory because debt service payment takes away government revenues meant for developmental purposes and this even makes debt services to hurt the economy more than the debt itself (Matiti, 2013). As shown in the table 2 above, one per cent increase in the external debt services reduces the GDP by about 0.31 per cent in the long-run. However, exchange rate according to the result in table 2 above has a positive influence on the Nigerian economy. The positive coefficient of exchange rate signals a rise in exchange rate which is expected to affect positively the growth of an economy. A rise in exchange rate, say a naira relative to other currencies means that naira has depreciated. This makes locally produced goods relatively cheap and foreign goods relatively dear, with consequent increase in demand for domestic goods. This increases export hence favours the growth of an economy. From the result, it is shown that the economy will grow by about 0.011 per cent for a percentage increase in the exchange rate. The result shows that debt services have the highest explanatory powers in relation to the magnitude of change in the economic growth. This therefore, confirms what (Matiti, 2013) said that debt services are more detrimental to economic growth than debt itself.
Table 3: Test on the Significance of each variable in the long-run model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>t-Value</th>
<th>Probability Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-run impact of External Debt on the Nigerian Economy (dlnGDP)</td>
<td>-0.761333</td>
<td>0.0372378*</td>
<td>0.50</td>
<td>0.640</td>
</tr>
<tr>
<td></td>
<td>-2.04</td>
<td></td>
<td></td>
<td>0.242</td>
</tr>
<tr>
<td></td>
<td>-0.336405</td>
<td>0.0712181</td>
<td>0.004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.47</td>
<td></td>
<td>0.097</td>
<td></td>
</tr>
<tr>
<td>dlnDSP</td>
<td>-0.0038599</td>
<td>0.0032294</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-1.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dEXR</td>
<td>-0.319498</td>
<td>0.1016934</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3.14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.0740758</td>
<td>0.0431957</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R² 0.2782
F(3,30) 2.20
* means significance at 5%

Source: Author’s computation, 2015.

The signs of the coefficients in the short are similar to that of the long run except that of the exchange rate which now takes a negative sign. A negative sign for the external debt implies that in the short-run, an increase in the external debt reduces economic growth. Given that external debt has a significant impact on economic growth, one percent increase in the external debt reduces economic growth by about 0.076 per cent. The negative signs for both exchange rate and external debt services are an indication that increase in any of them hurts the economy. Since none of them has significant statistical coefficient, the study concluded they are not relevant in explaining economic growth in the short-run.

The adjustment parameter, the coefficient of first lag of the error term (ECML1) which measures the long run equilibrium relationship between the dependent and independent variables, is significantly negative as required. It tells how quickly disequilibrium between dependent and independent variables is restored in the long run. The coefficient of 0.319 for the first lag of the error term indicates that approximately 32 per cent disequilibrium is corrected at each period. Thus, 32 per cent of the long-run disequilibrium between economic growth and debt occurs within year.

Discussion of Findings

The discussions of findings were done in line with objectives of the study.

Objective 1: To ascertain the impact of external debt on Gross Domestic Product in Nigeria.

The finding was that external debt has a positive significant relationship with economic growth in the short run and a negative relationship with economic growth in the long run. This means that in the short run, as debt increases, GDP increases while the reverse holds in the long run.
The a priori expectation is that debt would enhance economic growth in line with the postulate of Keynesian theory. The result was not so. Instead, debt had negative impact on economic growth. This was in line with the findings of Atique and Malik (2012), Patillo et al (2004), Ogege and Ekpudu (2010) and Ezeabasili et al (2011).

However, this was in contrast to the views of Amooteng and Anoako (1996), Iya et al (2013), Bamidele and Joseph (2013); and Sulaiman and Azeez (2012) who found that external debt have a positive relationship with economic growth. The positive correlation of debt and economic growth could be due to good debt utilization and management as seen in Asian Tigers – Malaysia, Singapore, Indonesia and Taiwan. (Momodu, 2012).

The negative relationship between external debt and economic growth might be due to the fact that even though debt provided the much needed fund, it might not have been used on productive ventures where the returns should be more than the interest payable. This may be due to poor policy formulation, misappropriation, embezzlement and other corrupt practices. The above view was echoed by Okoye and Ani (2004) when they stated that nations must avoid waste and inefficiency while they strive to ensure proper setting of social priorities. Too much stock of debt may result in debt overhang. Excessive debts servicing drains resources thus reducing funds available for development.

**Objective 2: To determine the effect of external debt servicing on Gross Domestic Product in Nigeria.**

It was found that debt service has negative relationship with GDP. This was in line with the result of most other researches as seen in the works of Kasidi and Said (2013), Amootang and Amoako (1996), Momodu (2012) and Ezeabaili et al (2011). This means that an increase in debts bring about reduction in the nations GDP. Debt servicing could be described as proboscis of a mosquito for sucking out blood from its victim. It is a tax on unearned income/resources. It is so in that a debtor nation has to service its debt with attendant depletion of resources which may result in debt overhang and uncertainty. Uncertainty occasioned by excessive large debt makes the macro environment (interest rate, exchange rate and inflation) unstable with disastrous economic consequences such as scarce investment, reduced access to international financial market and capital flight.

Debt overhang occurs when the accumulated debt crosses the threshold level of a country’s payment capacity. The expected default may cause the domestic and foreign investors to withdraw their money with negative effect on economic growth. The debt services crowd out public investment; it depletes government budget resources thus reducing fund available for productive investment (Elabdawi, Ndulu and Ndung’u, 1996). Despite the traditional neoclassical model, which may have explained the cause-effect relationship between debt and economic growth; it has been criticized for unrealistic assumption of perfect mobility of capital which in real world is known to be imperfect due to trade sanctions, embargoes, restrictions and political instability. It has been argued that the marginal productivity of capital should be higher than the world interest rate for developing countries for such country to benefit from external borrowing (Eaton, 1993).

Debt service therefore, negates economic growth through reduction in amount of available capital. One needs to recognize the fact that external debt only helps to exploit the potential of a country; it do does not enhance it. The only guide therefore is that return on spending should
exceed marginal cost of borrowing on the assumption that debt is paid (Indermit and Brain, 2005)

The above explanation and theory tend to support the finding as some developing countries have very low return from the loan following investment in non productive activities and corrupt practices.

**Objective 3: To establish the impact of exchange rate on Gross Domestic Products in Nigeria.**

The result showed that exchange rate had a positive relationship with GDP. This means that an increase in exchange rate brings about an increase in GDP. An increase in exchange rate (i.e. currency depreciation) encourages export, as foreign currency could easily be exchanged with less value to buy from that nation, but discourages import. By so doing, demand for locally produced goods increases. Following increase in demand, production increases and this may result in employment, and eventual increase in GDP. Similar views on the impact of positive relationship were expressed by Rodric (2006) and Obansa, Okoroafor, Aluko and Millicent (2013).

However, some studies found that exchange rate has negative impact on the economy. Such findings were in agreement with Arinze, Osang and Slottje (2000). Similar finding was made by Eme and Johnson (2012). Furthermore, Eme and Olugboyega (2012) found that there is no evidence of a strong direct relationship between changes in exchange rate and GDP growth. The above see the impact of exchange rate as insignificant on the economy. This finding might be due to some errors, as exchange rate usually exerts reasonable pressure positive or negative on the economy. Negative influence occurs mainly at extreme of exchange rate volatility where the value of the currency becomes so low that the investment is stifled while foreign raw material and sub-assemblies are so high that factories start closing down.

**CONCLUSION**

External debts are necessary to meet shortfall internal resources, and stimulate the economy. However, it must be properly utilized to avoid serious consequences. Borrowing is not the most important issue but the use to which the fund is deployed. This should be the most important thing agitating the mind of any good accountant and Economist whenever external debt is contemplated. It should be approached with caution, ensuring optimal utilization and higher return than the interest (cost of fund). To sum, exchange rate fluctuation has positive impact on the Nigerian economy while external debt stock and debt service payment have negative impacts on the same economy.

**RECOMMENDATIONS**

The study made the following recommendations, which are aimed at ensuring efficient utilization of external debts in Nigeria.

1. Debt Management Office (DMO) should set mechanisms in motion to ensure that loans are utilized for the purpose for which they were acquired. This could be achieved through proper monitoring of the use to which the funds are put.
2. DMO should set maximum limit of loans state and federal governments could be allowed to acquire based on certain stipulated criteria.

3. Government should aggressively pursue the process of diversification of the economy. This will result in buoyant and robust economy which will reduce the need for external debt to the barest minimum.

4. Anticorruption agencies like Economic and Financial Crimes Commission (EFCC), Independent Corrupt Practices and other Related Offences Commission (ICPC) and Code of Conduct Bureau should be made independent and the laws establishing them reviewed by government to make them more functional and efficient. This will reduce the incidences of misappropriation and embezzlement of funds from external debt.

Suggestion for Further Studies.

This includes:

2. The impact of External Debt Servicing on Capital Expenditure in Nigeria

REFERENCES


World Bank: World Bank International Debt Statistics
### APPENDIX 1

**Data on GDP, External Debt Stock, and Debt Service Payments in dollars and Exchange Rate (Naira to a dollar)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Eds($)</th>
<th>Dsp($)</th>
<th>Gdp($)</th>
<th>Exr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>8938206000</td>
<td>1150772000</td>
<td>64201788098</td>
<td>0.5464</td>
</tr>
<tr>
<td>1981</td>
<td>11445508000</td>
<td>1790651000</td>
<td>61076493507</td>
<td>0.61</td>
</tr>
<tr>
<td>1982</td>
<td>11992472000</td>
<td>2090346000</td>
<td>51397461686</td>
<td>0.6729</td>
</tr>
<tr>
<td>1983</td>
<td>17576994000</td>
<td>2565377000</td>
<td>35451565749</td>
<td>0.7241</td>
</tr>
<tr>
<td>1984</td>
<td>177833100000</td>
<td>4067500000</td>
<td>28500815242</td>
<td>0.7649</td>
</tr>
<tr>
<td>1985</td>
<td>186553800000</td>
<td>2565377000</td>
<td>28873977228</td>
<td>0.8939</td>
</tr>
<tr>
<td>1986</td>
<td>222157760000</td>
<td>2090346000</td>
<td>20721499308</td>
<td>2.0206</td>
</tr>
<tr>
<td>1987</td>
<td>290248880000</td>
<td>1106408000</td>
<td>24093203445</td>
<td>4.0179</td>
</tr>
<tr>
<td>1988</td>
<td>296242100000</td>
<td>2565377000</td>
<td>23275161397</td>
<td>4.5367</td>
</tr>
<tr>
<td>1989</td>
<td>334389240000</td>
<td>2090346000</td>
<td>24231168859</td>
<td>7.3916</td>
</tr>
<tr>
<td>1990</td>
<td>335272050000</td>
<td>2090346000</td>
<td>27392886873</td>
<td>9.9095</td>
</tr>
<tr>
<td>1991</td>
<td>290187140000</td>
<td>2090346000</td>
<td>29300921687</td>
<td>17.2984</td>
</tr>
<tr>
<td>1992</td>
<td>301219990000</td>
<td>2090346000</td>
<td>27392886873</td>
<td>22.0511</td>
</tr>
<tr>
<td>1993</td>
<td>307356230000</td>
<td>2090346000</td>
<td>28546958641</td>
<td>21.8861</td>
</tr>
<tr>
<td>1994</td>
<td>330922860000</td>
<td>2090346000</td>
<td>30757075595</td>
<td>21.8861</td>
</tr>
<tr>
<td>1995</td>
<td>340944420000</td>
<td>2090346000</td>
<td>34987951376</td>
<td>21.8861</td>
</tr>
<tr>
<td>1996</td>
<td>314147510000</td>
<td>2090346000</td>
<td>35870795137</td>
<td>21.8861</td>
</tr>
<tr>
<td>1997</td>
<td>284675410000</td>
<td>2090346000</td>
<td>35822342618</td>
<td>21.8861</td>
</tr>
<tr>
<td>1998</td>
<td>303137110000</td>
<td>2090346000</td>
<td>32004613750</td>
<td>21.8861</td>
</tr>
<tr>
<td>1999</td>
<td>293680250000</td>
<td>2090346000</td>
<td>35870792988</td>
<td>21.8861</td>
</tr>
<tr>
<td>2000</td>
<td>315818040000</td>
<td>2090346000</td>
<td>46385996027</td>
<td>21.8861</td>
</tr>
<tr>
<td>2001</td>
<td>300317420000</td>
<td>2090346000</td>
<td>44138014092</td>
<td>21.8861</td>
</tr>
<tr>
<td>2002</td>
<td>299182320000</td>
<td>2090346000</td>
<td>59116868250</td>
<td>21.8861</td>
</tr>
<tr>
<td>2003</td>
<td>341366590000</td>
<td>2090346000</td>
<td>67655840108</td>
<td>21.8861</td>
</tr>
<tr>
<td>2004</td>
<td>366983580000</td>
<td>2090346000</td>
<td>87845403978</td>
<td>21.8861</td>
</tr>
<tr>
<td>2005</td>
<td>204759270000</td>
<td>2090346000</td>
<td>111248000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2006</td>
<td>396427500000</td>
<td>2090346000</td>
<td>145430000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2007</td>
<td>374792900000</td>
<td>2090346000</td>
<td>166451000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2008</td>
<td>404277200000</td>
<td>2090346000</td>
<td>208065000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2009</td>
<td>676504200000</td>
<td>2090346000</td>
<td>169481000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2010</td>
<td>720678100000</td>
<td>2090346000</td>
<td>369062000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2011</td>
<td>896279900000</td>
<td>2090346000</td>
<td>411744000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2012</td>
<td>100589080000</td>
<td>2090346000</td>
<td>462979000000</td>
<td>21.8861</td>
</tr>
<tr>
<td>2013</td>
<td>137919370000</td>
<td>2090346000</td>
<td>521803000000</td>
<td>21.8861</td>
</tr>
</tbody>
</table>