Effect of External Debt on Economic Growth and Development of Nigeria

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Abstract
This study investigates the effect of the external debt burden on economic growth and development of Nigeria. It adopted regression analysis of OLS on secondary data sourced from CBN, Economical and Financial review, Business times, Financial Standard and relevant publication from Nigeria on variable like National Income, Debt Service Payment, External Reserves, Interest rate among others. The finding indicates that external debt burden had an adverse effect on the nation income and per capital income of the nation. High level of external debt led to devaluation of the nation currency, increase in retrenchment of workers, continuous industrial strike and poor educational system. This led to the economy of Nigeria getting depressed. Based on the finding the study suggests that debt service obligation should not be allowed to rise than foreign exchange earning and that the loan contracted should be invested in profitable venture, which will generate a reasonable amount of money for debt repayment.

Keywords: External Debt; Economic Growth; Extrnal Reserve; Interest Rate; National Income.

1. Introduction
The decade of the 1950s and 1960s are often described as “GOLDEN YEARS” for developing countries in most economic development literature because the rate of growth of these economics was not just high but was mostly internally generated. In these decades, the less developed countries (LDCs) increase their investment with less reliance on external resource on the contrary, most of the growth in the 1970s was “debt led” as the country maintain persistent currents account deficit, and borrow heavily from the international money and capital market to financial pay gaps. The debt burden of the nation can be traced back to the early 1980s.

In modern law, debt has no precisely fixed meaning and may be regarded essentially as that which one person legally own to another or an obligation that is enforceable by legal action to make payment of money. Soludo (2003), stated that countries borrow for two broad categories, macro-economics reason (higher investment higher consumption i.e. education and health or to finance transitory balance of payment deficit to lower nominal interest rates abroad lack of domestic long term credit or to circumvent hand budget constraint. Thus that economy indulges in debt to boost economic growth and reduce poverty and do not suffer from macro-economic instability polices that distort economic incentive or sizeable adverse shocks. As a result of this, growth is likely to increase and allow for timely debt payment. When the circle is maintained for a period of time growth will affect per capital positively which is a prerequisite for poverty reduction. The predictions are known to hold even in theories base on the more realistic assumption that countries may not be able to borrow freely because of the risk of debt denial.

Over the year, a sizeable chunk of the nation hand earned revenue (foreign earning) has been appended on debt servicing which as caused some setback in the nation’s economy. The title of this study pre-supposes that there are some effects of external debt on the Nigeria economy.
However, the Nigeria economy today has unprecedented debt crises. The magnitude of the debt and its associated adverse effect has become concern to the government. The issue of debt burden in Nigeria cannot be overemphasized. Debt burden is in fact a complex interrelated problem. Despite the government continuous effort on managing external debt, by embarking on several measures such as debt rescheduling, debt conversion, debt equity, debt forgiveness or cancellation, etc there exist yet a couple of unanswered questions that should be resolved which are:

i) Examine the causes of external debt to burden on the Nigeria economy?
ii) What impact does it have on the economy?
iii) Is debt burden on future generation?

**Research Question**

The following question will form the basis of this investigation.

i) What are the effect of external debt on economic growth of Nigeria i.e. impact of the huge, debt service payment on the various sectors and aspects of the country such as standard of living of the people, domestic employment level, imports level domestic saving and external payment?
ii) What are the natures, causes, consequence of Nigeria external debt?
iii) What are the pragmatic approach/measure used in reducing the debt burden in Nigeria
iv) How the external debt management has performs their responsibility in managing the external debt of Nigeria?
v) What are the recent developments in the debt management i.e debt relief initiative 2006

**Statement of the Hypothesis**

The two hypotheses stated in null form to be tested in this study are:

\[ H_0 = \text{External debt has no significant effect on Nigeria economic growth and development} \]

\[ H_0 = \text{Debt Service Payment, External reserve resource and interest rate has no significant effect on Nigeria economic growth and development} \]

The rejection of the null hypothesis means the acceptance of the alternative hypothesis.

Where:

\[ H_a = \text{Null Hypothesis} \]

**2. Literature Review**

Nigeria, like most other less developed countries (LOCS) has been classified by the World Bank among the severely indebted low income countries since 1992. The nation inability to meet all it debt service payment constitute one of the serious obstacles to the inflow of external resources into the economy. The accumulation of debt service arrears which is being compounded with penalty interest has not permitted reduction in the debt stock, despite the fact that government has been servicing it external debt annually.

Hence in this section efforts are made to review relevant literature on the topic in order to ascertain its relevance to the Nigeria situation.

**Conceptual Framework**

Eaton (1993) made simple distinction with the various stock and flows associated with debt. Regarding stocks a major distinction is made between disbursed and undisguised debt. Where as undisturbed debt is composed for mere commitment made by lenders and are, therefore, not accumulating interest, disbursed debt consists of commitment made by the lender that have been drawn on and have accumulated unpaid interest, putting differently, unpaid interest obligation are part of the disbursed debt. Thus, debt essentially refers to disbursed debt. When a government borrows, the debt is a public debt public either internal or external are debt incurred by the government through borrowing in the domestic and international market so as to finance domestic investment. Debt are classified into two i.e reproductive 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, and refineries etc however, debt undertaking to finance war and expenses on current expenditure are dead weight debt.
When a country obtains loan from abroad, it means that the country can import from abroad goods and services to the value of the loan without the sometime 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 services. These two types of debt, however require that the borrowers futures saving must cover the interest and principal payment (Debt Servicing). Therefore, debt finance investment need to be productive and well manage enough to earn a rate of return higher than the cost of debt servicing.

For the past two decades, Nigeria has borrowed large amount, often at highly concessional interest rates with the hope to put them on a faster route for development through higher investment, faster growth and poverty improvement but on the constant economic growth and poverty situation are staggering at the door admit excess debts albeit that was the initial intention.

**Theoretical Framework**

Various theories have been propounded by scholars in an attempt to explain the subject of external debt. The theory includes:

The dual gap analysis explained that development is a function of investment and that such investment which require domestic savings, is not sufficient to ensure that development take place. There must be the possibility of obtaining from abroad the amount that can be invested in any country is identical with the amount that is saved. Further more, if the domestic resources are to be supplemented from abroad, such as excess of import over export (i.e. M > E).

\[
I - S = M - E
\]

Hence, \( I - S = M - E \)

In national income accounting, an excess of investment over domestic saving is equivalent to excess surplus of import over export.

\[
\text{Income} = \text{consumption} + \text{import} + \text{savings}
\]

\[
\text{Output} = \text{consumption} + \text{export} + \text{investment}
\]

\[
\text{Income} = \text{output}
\]

Then Investment – Saving = Import – Export

This is the basis of dual gap analysis, assure that there is a country that requires saving and investment good import to achieve a particular rate of growth. If the available domestic saving fall short of the level necessary to achieve the target rate of growth, a savings investment gap is said to exist on a similar note, if the maximum import requirement needed to achieve the growth target are greater than the maximum possible level of export, then these is an export-import of origin exchange gap.

**Review of Empirical Studies**

Amaeteng and Amoako-Adu (2002) the empirical study declared that there is a unidirectional and positive casual relationship between foreign debt service and GDP growth after excluding exports revenue growth for Africa and South of Saharan countries during 1983-1990. (Afxention and Serletis, 2004(a)). These people argued that whether indebtedness impacts on the economic activity of developing countries. It is also argued that if foreign loan are converted into capital and other necessary inputs, development will occur. On the other hand, if borrowing countries misallocate resources or divert them to consumption, the economic development is negatively affected. This study employs the frame work of granger. In doing so, six measure of indebtedness were used as proxies for the multiple mechanisms. Arias (2002) showed a striking diversity of experience with growth episode and poverty changes. This became clear in the study carried out by him where it is seem that while some countries over some periods achieve a significant reduction in poverty as the economy grower others obtain much less appreciable progress. He then concluded that how growth reduces poverty depends on the pattern of growth as well as on the initial inequality of income and assets and its evolution over time.

Ocampo (2004) proclaimed that the external debt situation for number of low income countries, mostly in Africa has become extremely different. For there countries, even fill use of traditional mechanism of rescheduling and debt resection together with continued provision of confessional financing and purist of sound economic policies may not be sufficient to attain sustainable external debt levels within a reasonable period of time and without additional external support.
Despite the efforts made by countries themselves and the commitment made by the international communities; they are failing behind in their endeavour to achieve the “Millennium Development Goals”. Asley (2002) opined that high level of external debt in developing country negatively impact their trade capacities and performance. Debt overhang affects economic reforms and stable monetary policies, export promotion and a reduction in certain trade barrier that will make the economy more market friendly and this, enhances trade performance. Furthermore, debt decreases a government ability to invest in producing and marketing exports, building infrastructure, and establishing a skilled labour force.

Muhtar (2004) also stated that, the service of these debts have direct negative impact on economic development. He says “debt services encroaches on resources needed for socio economic development and poverty reduction. It also contributed to negative net resources flow”. Anyanwu et al (1997) was of the opinion that whole scale of white elephant development project in the country is the root cause of our external debt problems. He said instead of emphasis being placed on small rural development project so as to reverse the chaotic trend of urbanization and lessen the opportunity for corruption. According to Nweke (1990) a correct analysis of external debt in a third world country’s such as Nigeria must be replace in the content of the country’s forceful integration into the western structural and dominated world capitalist economy as a peripheral appendage that provide natural resources and cheap lab our for the industrialization process in the west include lucrative markets for surplus of the advanced country’s manufacturers and the advance countries get a very high cost of the manufactured product of the west.

In yet another study showing an in slight from cross-country regression analysis by Hasen (2001) on the impact of aid and external debt in growth and investment the regression result were suggestive of a series of interesting relationships. This then is to say as a result of the explanatory regression there is quite strong evidence of positive impact of aid both on the growth rate in GDP per capital and the investment rate. In Tanzania according to Oxfam (1998) experience illustrated that the effects of debt of beyond finance to impact on the lives of vulnerable household. Give the limited domestic revenue available to government in Tanzania, the claims of foreign creditor reached alarming proportion while public sector external debt absorbs over 40 percent of domestic revenues. Pattillo, Ricci and Poirson (2001), in their paper assessed the non-linear impact of external debt growth using a panel data of ninety three (93) countries over 1969-98 employing econometric methodologies. Their funding suggested the average impact of debt becomes negative at about 160-170 percent of export or 35-40 percent of gross domestic product (GDP).

Ojo (1989), was of the belief that it is no exaggeration to claim that Nigeria huge external debt is one of the hard knots of the Structural Adjustment Programme (SAP) introduce in 1986 to put the economy on a sustainable path of recovery. The corollary of this statement is that of only the high level of debt service payment could not reduce significantly, Nigeria would be in a position to finance larger volume of domestic investments, which would enhance growth and development, but more often than not, a debtor as only limited room to mange a debt crisis to advantage. Smyth and Hsing (1995) have tried to test the federal government debts impact on economic growth and examine if an optimal debt ratio exists that will maximize the economic growth. The author calculated the optimal debt ratio (DEBT/GDPT), which represents the maximum real GDP growth rate (38.4%). The DEBT/GDP ratio corresponding to the maximum GDP growth rate is 38.4 percent. Chowdr (1994) argued that, external debt burden leads to bad management in highly indebted countries such as exchange rate mismanagement. The expectation of currency devaluation leads to speculative capital flight. Devaluation also causes the currency cost of debt service obligations, deteriorates budget deficit and affect money supply and inflation.

3. Methodology

The whole of economy theory can be viewed as a collection of relation among variables. The subject economies focuses on the testing of the theoretical prepositions embodied in these relations and on the estimation of the variable involves. The relationships of economic theory which can be measured with one or another econometric technique are causal that is they are relationship in which some variables are causes of the variation in other variables. Therefore, this study adopts econometric method of analysis in determining the impact of external debt on economic growth and development in Nigeria and also whether estimation of the parameters has theoretical meaningful and statistically significant Margaret (2002) said designing a research project involves organizing the collection and analysis of data fulfill the purpose of the research and to provide the information, which is Sought
Research Methodology has been defined as the process of information, gathering analysis and interpreting data for the purpose of information it is the cure of the research study as it addresses extensive issue relating types and source of data used, method of estimation and evaluation model specification and limitation of Methodology.

**Model Specification**

All data collection for the purpose of the study were evaluated, cross checked compared and critically analyzed. The gauge the relationship between the external debt and growth of the Nigeria economy a simple open macro economic debt growth model was applied.

The functional relationship between the variable and proxies can be expressed as

\[ NI = f(DSP, EXTR, INTR) \]  

The model employed in the study includes the following.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + U \]  

That is, \( Y = \beta_0 + \beta_1 TDS + \beta_2 EXTR + \beta_3 INTR + U \)

Where:
- \( Y = \) National Income
- \( X_1 = \) Debt Services Payment
- \( X_2 = \) External Reserves
- \( X_3 = \) Interest Rate
- \( U = \) Stochastic error term
- \( \beta_1, \beta_2, \beta_3 = \) slope of the regression equation

**Method of Data Collection and Estimation Techniques**

Data collection involves any form of data gathering. This research work which is an operational analysis of external debt and its effect on economic growth and development in Nigeria depend mainly on secondary data which are time series data.

By secondary sourced data, we mean the statistical materials which are obtained from institutional records. The data collected will be tested and analyzed adopting the regression technique of ordinary least square method. Thus is a simple mathematical form, the relationship between the variables under consideration becomes.

\[ NI = \beta_0 + \beta_1 DSP + \beta_2 EXTR + \beta_3 INTR + U \]

Where variables and coefficients are as earlier described

Based on the theoretical underpinning the model, it is expected apriori that There is a positive relationship between External Reserve and National Income; There is positive relationship between Interest Rate and national Income and there is a positive relationship between National Income and Debt Services Payment.

**Data Analysis of Result**

This section provides an in-depth description on the empirical study of the relationship between external debt variable (debt service payment (DSP), External Reserves (EXTR), and Interest Rates (INTR) and the Nigeria Economic growth represented by (National Income [IN]). The sample results for the twenty-seven year (27yrs) will be presented, analysed and interpreted to show the relationships between the dependent variable and independent variables. An attempt is also made to accept or reject the validity of the hypothesis stated earlier in this study and to make generalized opinion on the relationship. Hence, this section contains the presentation of data, findings, implication of the findings.

**Data Presentation**

Table 1 in the appendix presents the data obtained on the variables to test the effect of external debt on economic growth and development of Nigeria. The regression results is presented in table 2 below.

**Presentation of Results**

The summary of regression results on NI on DSP, EXTR and INTR for the sample of the data presented in table 1 is presented below while the detailed is contained in the appendix.
Table 2. OLS Regression Results

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Constant</th>
<th>DSP</th>
<th>EXTR</th>
<th>INTR</th>
<th>R²</th>
<th>(Adj)R²</th>
<th>F</th>
<th>D.W</th>
</tr>
</thead>
<tbody>
<tr>
<td>NI</td>
<td>184813.6</td>
<td>(0.137058)</td>
<td>12.78853</td>
<td>(2.125746)</td>
<td>0.427080</td>
<td>(3.783125)</td>
<td>59023.00</td>
<td>(0.816244)</td>
</tr>
</tbody>
</table>

Source: Author’s Computation

NOTE: T^C Calculated is show in parenthesis in the table above

NI = F(DSP, EXTR, INTR)

NI = 184813.6 + 12.78853 DSP + 427080 EXTR + 59023.0 INTR

Std. Error = (1348430) (6.016018) (0.112891) (72310.45)

T^C = (0.137058) (2.125746) (3.783125) (0.816244)

R² = 0.518476; D.W = 0.920023; F. Stat = 8.255000; df = n – k = 27 – 4 = 23

Interpretation of Results

From the summary of the estimated results above the effect of external debt on Nigerian economy within the scope of the model formulated has been adequate tested. NI). The coefficient of the dependent variable i.e. National Income (NI) at zero level of the explanatory of all independent variable is given as 184813.6. This indicates a positive relationship between the constant parameter and National Income. Although the constant has no significant meaning in the model than reflecting the value of National Income when other explanatory variables are held constant. Also the result exerts a positive relationship between the external debt and National Income.

The coefficient of debt service payment (DSP) there is a positive relationship between the national Income and the debt service payment (DSP) at 49% increase in DSP will lead to 127.89% increase in NI. The relationship fails to conforms to the aprior expectation. Hence 1% rise in the DSP will bring about 12% increase in the National Income (NI). The coefficient of external reserve shows a positive relationship with the dependent variable national Income (NI) at 49% increase in EXTR will also lead to 4.2790 in National Income. This relationship conforms to the aprior expectation. A 1% rise in the EXTR is expected to bring about 42% increases in National Income.

The coefficient of interest rate (INTR) is directly relationship to the National Income (NI) at 49% increase in INTR will result in 59023% increase in National Income (NI). This relationship fails to conform with the aprior expectation. However, a unit rise in the INTR is expected to bring about 18% increase in National Income (NI). The coefficient of multiple determination (R²) is 0.52 i.e. 52%. This indicates that about 52% of the total systematic variations in the National Income is jointly explained by the variation in all the explanatory variables DSP, EXTR and INTR. The remaining 48% could be attributed to the stochastic error term not included in the model.

Findings

The analysis shows that, there exist positive relationship between the national Income and Debt Services Payment (DSP) and Positive relationship between National Income and External Reserve (EXTR) and Positive relationship between National Income and Interest Rate during the period under consideration. This conforms to the aprior expectation. A unit increase in Debt services Payment will give rises to the national income by 12.78853 while a unit increased in External reserves will gives rise to the national income by 0.427080. also a unit increase in interest rate will give rises to the national income by 59023.00.

In order to determine the goodness of the model and the coefficient do determination (R²) is considered. The R² is 0.518476 suggesting that about 52% variation in national income is explained by Debt Service Payment (DSP), External Reserves (EXTR) and Interest Rate (INTR), while 48% of variation is be accounted by unenclosed variable in the model. The empirical investigation shows that explanating variable i.e (DSP) Debt Service Payment, (EXTR) External Reserve and (INTR) Interest Rate are statistically significant.

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The above is also in line with Dual-gap analysis proposition which argued that development is a function of investment and that such investment which required domestic savings, is not sufficient to ensure that development take place. There must be the possibility of obtaining from abroad the amount that can be invested in any country is identical with the amount that is saved. This is the basis of dual gap analysis, assure that there is a country that require saving and investment good import to achieve a particular rate of growth. As a distinctive contribution to development theory, the dual gap analysis posits that it foreign exchange is the dominant constraints the foreign borrowing is the also made to supplement foreign exchange. This also in lien with the apriori expectation that the variable EXTR and National Income are positive.

Conclusively, the f-statistics further confirm that all the variable in our model sufficiently explain the effect of external debt on economic growth in Nigeria hence it accept the alternative hypothesis that is the external debt has significant effect on economic growth in Nigeria. The explanatory of the analysis highly regarded the value of the coefficient of determination of external debt is 52% and this is high enough to explain the variation in national income (NI). The alternative hypothesis (H1) external debt has significant effect on the Nigeria economic and development hold good. This seems to support the empirical assertion by Amaeteng & Amoako Adu (2002) that it is necessary to manage external debt in the best possible today to get the maximum. Therefore, form an overall view the implication of these finding is the external debt is an integral part/determinant of the effect on the Nigeria economic and development and there is need to put in place policy measure that will ensure proper debt management and efficiency in the use of debt facilities.

Summary and Conclusion

This study has discussed the external burden articulated the nearest put in please by government to ameliorate it and assessed the success so far achieved. It also observed that the magnitude of the external debt outstanding mirrors the impact of pressure under which the economy has been function especially since the eruption of the oil crisis in 1981. Beside rapid accumulation of trade arrears from 1982 the debt problem had been traced to the fall in the crude oil prices, collapse in commodity prices and the protracted softening of the world market since 1981 with the resultant decline in foreign exchange earnings and pressure on the balance of payment.

Nigeria debt crisis can be attributed to both exogenous and endogenous factors such as the nature of the economy, economic policies, depending on oil, swindling foreign exchange receipt, the origin of Nigeria external debt dated back to 1985. The external debt was low until it rose astronomically in 1978 due to Nigerian’s involvement in the international capital market. Debt service payments were within management limits unit 1982 by became unmanageable in 1983 because of the relative importance of private lending. All the indicators of the extent of the external debt burden showed the several of the problem. A high proportion of the debt service payment, a reflection of the high and indiscriminate increase interest rate problem worsened. During the SAP period. Given the heavy burden of external debt and declining trend in world oil prices, Nigerian has been facing a difficult balance of payment prospect in an encouraging growth rate and negative net foreign exchange flows.

The brain drain and other form of exploitation are much greater than the external debt contracted by the underdeveloped countries put together. Therefore, there is the need to struggle for the cancellation of the external debts of a country like Nigeria with the limited possibilities of paying them off without putting the burden on the suffering to heighten the burden debt servicing under the new condition the condition. Like most third world country problem of underdeveloped no poor most third world country can single handedly flight and win this battle which falls within the ongoing quest for a new international economic order. So, third world countries need to comes together on this singular difficulties and to present a strong and united front vis-vis western imperialism.

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