

EXTERNAL DEBT AND ECONOMIC DEVELOPMENT: POLICY IMPLICATIONS AND POVERTY REDUCTION IN NIGERIA

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ABSTRACT

The study examined the impact of external debt on economic development and the policy implications for poverty reduction. It utilized secondary data from Nigeria statistical bulletins, IMF's International Financial Statistics, World Bank's International Debt Statistics and national accounts data. Based on the findings of the study, the Null hypotheses H_{01} and H_{02} were rejected at 5 % level of significance. This implied existence of a relationship between external debt and economic development on the one hand and the existence of long run relationship between external debt and economic development on the other. This study concluded that the resultant effects of external debt on economic development in Nigeria are negative and significant. The implication is that debt is a burden and should be traded with caution. External borrowings if elected should be channelled towards productive investments that will generate returns that are sufficient enough to offset the debt when due. Given the rural poor direct access to productive assets like land, water rights, inputs, policies related to debt should take cognizance of this and implemented accordingly. This will lead to output growth and enhance income distribution which will in turn reduce poverty.

Keywords: External debt, policy, poverty development.

INTRODUCTION

External debt describes the financial obligation that ties one party (debtor country) to another (lender country). It usually refers to incurred debt that is payable in currencies other than that of the debtor country. When a country obtains a loan from abroad, it means that the country can import from abroad goods and services equivalent to the value of the loan without at the same time having to export anything for exchange. When capital and interest have to be repaid, the same country will have to get the burden of exporting goods and service without receiving any imports in exchange.

There have been several attempts to empirically assess the effect of external debt on economic growth. Most of the empirical studies include a fairly standard set of domestic, debt, policy and other exogenous explanatory variables. The majority find one or more debt variables to be significantly and negatively correlated with investment or growth (depending on the focus of the study). For instance, Elbadawi *et al.* (1996) in a research work on "Debt overhang and economic growth in Sub-Saharan Africa" discovered that the debt burden indicators also affect growth indirectly through their impact on public sector expenditures. As economic conditions worsen, governments find themselves with fewer resources and public expenditure is cut. Part of this expenditure destined for social programs has severe effects on the level of poverty. Clements *et al.* (2003) examined the channels through which external debt affects growth in low income countries. Their results suggest that the substantial

reduction in the stock of external debt projected for highly indebted poor countries (HIPC) would directly increase per capita income growth by about 1 % point per annum. This implies that reductions in external debt service could also provide an indirect boost to growth through their effects on public investment thereby reducing poverty.

According to Were (2001) heavy external debt does not necessarily imply a slow economic growth. It is a country's inability to meet its debt obligations compounded by the lack of information on the nature, structure and magnitude of the external debt that hampers economic growth. Countries may have heavy external debt along with relatively higher level of exports that can help them to sustain their level of external debt. But external debt, if not well-managed, imposes higher risk to the economic development.

External debt inhibits the overall economic progress of any country if the indebted country is unable to meet her debt obligations when due. Developing economies typically have limited sources to fetch revenues. In most developing countries agriculture remains the only investment ventures of external debts. The returns to agriculture are usually low when compared to that from industries. So, if they fail to utilize their debt productively in industrial sector, mobilize investment and create new employment opportunities; they will eventually get stuck up with the dilemma of lower revenue base which will affect their spending capacity, thereby leading to higher debt servicing (Erhieyovwe and Onovwoakpoma, 2013). Inability to service debt on time not only makes it harder for the developing countries to get aid at concessional rates with less conditions from the donor agencies but it also reduces the chances of being able to obtain more loans in the future. This has implications for poverty reductions strategy particularly in Nigeria. According to World Bank (1990) the external indebtedness of African countries is an obstacle to the restoration of the conditions needed for growth including reduction in poverty level.

Nigeria remains one of the most impoverished countries in the world, despite substantial revenues to the government from over 50 years export of petroleum resources. Indeed Nigerians have become poorer and social infrastructure in the country is in a state of decay. On the other hand, as revenues from oil production increased, Nigeria's attractiveness to predatory external creditors led to major borrowing by successive governments with the resultant huge external debt burden on the country (Romanus, 2014). Over time all manner of loans were collected from private and multilateral creditors by the federal and state governments. This highlights Nigeria's previous slide into external indebtedness and serves to support the call for re-examination of a debt burden capable of hindering the opportunities for growth and development. The study of this nature is very pertinent as it will serve as one of the basis for creating acute awareness on the impact of poor debt and external reserve management practices in Nigeria. It shall contribute to policy formulation towards forestalling the sky-rocketing debt crisis currently experienced in Nigeria thereby achieving a robust economic growth and poverty reduction.

PROBLEM STATEMENT

Sustainable economic development is of predominant concern for all economies, particularly for the developing economies which commonly face burgeoning fiscal deficits mainly driven by higher levels of external debt, particularly external debt servicing and widening current account deficits. Since 1970, Nigeria has borrowed large amounts, often at highly concessional interest rates with the hope to put the country on a faster route to development through higher investment, faster growth and poverty reduction. However, in spite of these

loans, the expected level of development is not achieved and poverty situations remain the unchanged or even worse. Continued rise in Nigeria's debt profile has created what is called "external debt profile". Meeting debt servicing obligations is likely to reduce the capacity to improve the welfare of the citizens with economic implications. The debt burden of a country necessarily creates a number of constraints on its macroeconomic indicators such as persistent fiscal deficits, lowered output growth, trade imbalance, reduced national savings etc. According to Iyoha (1999), empirical studies in sub-Saharan Africa show that "per capital income declined at an average annual rate of 2.2%; per capita private consumption fell by 14.8%; export volume was stagnant while import volume plummeted at an average - annual rate of 4.3%; and the terms of trade fell by 9.17% in the early 1990s. Oke and Sulaiman (2012) also examined the impact of external debt on the level of economic growth and the volume of investment in Nigeria and found that the current external debt ratio of GDP stimulates growth in the short term, but the Private Investment which is measure of real and tangible development shows a decline. However little or no effort has been made to examine the long run impact of debt particularly on poverty reduction and their policy implications in Nigeria.

Research Questions

The pertinent questions are:

1. What are the effects of Nigeria's external debt on economic development?
2. Is there a long-run relationship between external debt, and economic development?

Objectives of the Study

1. to determine the effect of external debt on economic development;
2. to examine the long-run relationship between external debt and economic development;

Statement of Hypotheses

Based on the specific objectives of the study, the following null hypotheses will be tested:

H₀₁: External debt has no significant effect on economic development.

H₀₂: There is no long run relationship among external debt and economic development

LITERATURE REVIEW

Theoretical Framework

The debt overhang theory and the liquidity constraint theory (also known as crowding-out effect) are the theories that were used to explain the linkages between external debt and economic growth. This is because the channels through which indebtedness affects growth are identified as: past debt accumulation, which captures the debt overhang and therefore deters growth; and debt service ratio to capture the crowding out effects. Debt service payments reduce export earnings and other resources and therefore retard growth.

The debt overhang theory is based on the premise that if debt will exceed the country's repayment ability with some probability in the future, expected cost of debt servicing is likely to be an increasing function of the country's output level. Thus, some of the returns from investing in the domestic economy are effectively "taxed away by existing foreign creditors and investment by domestic and new foreign investors is discouraged" (Claessens *et. al.*

1996). Under such circumstances, the debtors' country shares only partially increase in output and exports because a fraction of that increase will be used to service the external debt. Debt overhang theory also implies that debt reduction would lead to increased investment and repayment capacity and as a result, the portion of the debt outstanding becomes more likely to be repaid. When this effect is strong, the debtor is said to be on the "wrong side" of the debt laffer curve. The Debt laffer curve refers to the relationship between the amount of debt repayment and the size of the debt. However, the idea of debt laffer curve also implies that there is a limit at which debt accumulation stimulates growth (Elbadawi, *etal* 1996). In reference to an aid laffer curve, Lensink and White (1999) argue that there is a threshold at which more aid is detrimental to growth. Greene and Khan (1990) assert that foreign direct investment is now negligible in heavily indebted countries and future prospects are worse. Fiscal deficits have led to rampant inflation thus, undermining savings incentive and more reliance on foreign funds. The scope of debt overhang is much wider that effect of debt do not only affect investment in physical capital but any activity that involves incurring cost up-front for the sake of increased output in the future. Such activities include investment in human capital (in terms of education and health) and in technology acquisition whose effect on growth may even be stronger over time. How a debt overhang discourages private investment depends on how the government is expected to raise the resources needed to finance external debt service and whether private and public investment are complementary. For example, if a government resorts to inflation tax or to a capital levy, private investment is likely to be discouraged.

In crowding - out effect, a reduction in the current debt service will lead to an increase in current investment for any given level of future indebtedness (Cohen, 1993). If a greater portion of export revenue is used to service external debt, very little is available for investment and growth. Claessens, *etal* (1996) argue that where foreign assistance is related to the debt and debt service of heavily indebted countries, the effect of debt overhang on economic performance is a more complex question. However, the liquidity constraint is captured as a 'crowding out' effect, by which the requirement to service debt reduces funds available for investment and growth. A reduction in the current debt service should, therefore, lead to an increase in current investment for any given level of future indebtedness (Cohen, 1993).

2.2 Review of Related Empirical Studies on External Debt

Debts 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 reproductive e.g. Money borrowed for acquiring factories, electricity refineries etc. However, debt undertaken to finance wars and expenses on current expenditures are dead weight debts (Ajayi and Oke, 2012). Ajayi and Oke (2012) investigated the effect of external debt burden on economic growth and development of Nigeria revealed that external debt burden had an adverse effect on the nation's income and per capita income of the nation. They observed that the magnitude of the external debt outstanding mounted pressure on the economy since the eruption of the oil crisis in 1981 due to the 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.

Sulaiman and Azeez (2012) examine the effect of external debt on the economic growth of Nigeria using econometric techniques of Ordinary Least Square (OLS), Augmented Dickey-Fuller (ADF) Unit Root test, Johansen Co-integration test and Error Correction Method (ECM) and found that external debt has contributed positively to the Nigerian economy.

Onyekwelu *etal* (2014) showed that there is a positive and significant relationship between the size of External Debts and Gross Domestic Product (GDP), Capital Expenditure, External Reserves and Exports. However, the Analysis of Variance (ANOVA) reveals a negative correlation between External Debts and the variables studied. Onyekwelu, *etal* (2014) attributed this anomaly to mismanagement of credit facilities, unfavourable loan terms characterized by capitalization/compounding of interests, weak economic base, poorly coordinated statistics on loans and overdependence on foreign aids among others. Osuji and Ozurumba (2013) investigated the impact of external debt financing on economic growth in Nigeria with data covering 1969 to 2011. The vector error correction (VEC) model estimate shows that London debt financing possessed positive impact on economic growth while Paris debt, Multilateral and Promissory note were negatively related to economic growth in Nigeria.

Ezeabasili, *etal.* (2011) investigated the relationship between Nigeria's external debt and economic growth between 1975 and 2006 applying econometric analyses. The result of the error correction estimates revealed that external debt has negative relationship with economic growth in Nigeria. They stated that Nigeria must be concerned about the absorptive capacity noting that consideration about low debt to GDP, low debt service/GDP capacity ratios should guide future debt negotiations.

However, Cohen's (1993) results on the correlation between developing countries (LDCs) debt and investment in the 1980s showed that the level of stock of debt does not appear to have much power to explain the slowdown of investment in developing countries during the 1980s. It is the actual flows of net transfers that matter. He found that the actual service of debt 'crowded out' investment. Boyce and Ndikumana (2002) noted that the inability of many SSA countries to meet their social needs and escape from debt is, to a large extent, a result of the fact that the borrowed funds have not been used productively. Instead of financing domestic investment or consumption, a substantial fraction of the borrowed funds was captured by African political elites and channelled abroad in the form of capital flight, they revealed. They argued that in order to prevent diversion of borrowed fund through capital flight, there is need for greater accountability on the creditor side as well as the establishment of mechanisms of transparency and accountability in the debtor countries' own decision-making processes with regard to foreign borrowing and the management of borrowed funds.

Were (2001) noted that Sub Sahara Africa countries were plagued by their heavy external debt burden. He argued that the debt crisis, compounded by massive poverty and structural weaknesses of most of the economies of these countries made the attainment of rapid and sustainable growth and development difficult. It then became widely accepted that the heavily-indebted countries require debt relief initiatives beyond mere rescheduling to have a turn-around in their economic performance and fight against poverty.

External Debt in Nigeria: Evolution and Trends

External borrowing by Nigeria started towards the end of British colonial rule in the country. The first of such borrowing was the 1958 World Bank loan which was used to finance the Nigerian Railways Extension to Borno. This loan was US\$250 million and because not much borrowing took place in that decade, public charges were relatively small, averaging N3.2 million per annum and representing 2 per cent of GDP (Obadan, 2004).

In the 1960s when shortage of foreign exchange became one of the bottlenecks to Nigeria's economic growth, external borrowing became imperative for the country. During this era, Nigeria borrowed sparingly and cautiously too. The reasons are varied. Immediately Nigeria attained independence in 1960, some laws guarding external borrowings were enacted. The Promissory Notes Ordinance and the External Loans Act were enacted respectively in 1960 and 1962. External Loans Act required that external loans be used for development Programmes and for lending to regional governments. The 1962 Act was amended in 1965 to broaden the end use of external loans. During this period, debt servicing was never a problem, hovering around 2% of exports. This cautious attitude prevailed throughout the 1960s and most of the 1970s (Umoren, 2001).

However, these legal frameworks failed to deter successive governments, whether military or civilian from abusing the external borrowing process. The country's external debt was N82.4 million, N435.2 million and N488.8 million as at 1960, 1965 and 1970 respectively. During these years, the values of exports were N337.4 million, N536.5 million and N885.4 million respectively. The external debt figures increased slightly to N349.9 million in 1975 when late General Muritala Mohammed took over the mantle of leadership (Fasipe, 1989). Between 1975 and 1976, loans were taken in relatively small amounts and were largely to supplement domestic resources for the provision of infrastructural facilities and agricultural projects. Thus, as stated earlier, in 1970, Nigeria's external debt stock was less than one billion dollars. By the second half of the 1980s, the debt profile had deteriorated seriously due to indiscriminate acquisition of short-term loans and trade arrears with little regard to the efficient management of the ensuing debt and its servicing. That resulted in mounting arrears and unmanageable growth of the debt stock relative to avoidable resources stock, which was about US\$9 billion in 1980, grew to nearly US\$19 billion by 1985. Correspondingly, the debt stock as a percentage of total export earnings and GNP rose to uncomfortable levels of 151% and 24% respectively. In that year, the debt service payment due was a little above US\$4 billion, which was about 33% of the total export earnings (Okonjo, 2001). However, the actual debt service payment for the year was about US\$1.5 billion, in the early 1990s, total debt stock to export ratio hovered around 250 – 300%.

As figures (from the World Bank's Global Development Finance, 2002) shows between 1998-2000, the country's key indebtedness ratios averaged as follows:

- i. Total debt stock to export of goods and services - 203%
- ii. Present value of debt service to export of goods and services - 112%
- iii. Total debt stock to gross national income - 105%
- iv. Present value of debt service to gross national income - 84%
- v. Total debt service paid to exports of goods and services - 6%

The key ratios of Nigeria's unbearable debt burden until the Paris Club exit deal of 2005 place the country among these heavily indebted poor countries as categorized by the World Bank. These are the countries for which the present value of debt service to Gross National Income (GNI) exceeds 220%, the debt stock as percentage of total export and the Gross National Product (GNP) was 149% and 83% respectively (Arikawe, 2003).

In the same period, state governments joined the bandwagon of external borrowings, without recourse to the laws guarding external borrowings. The loans kept growing at a rate higher than the value of Nigeria's exports. In 1986, the World Bank made a \$452million trade policy and export development loan commitments.

In 1988, the external debt stood at N149, 410.00 million (\$29,282.00 million). In 1989, it was N240, 329.6 million (\$31,424.00 million). The figure stood at N298, 614.3 million (\$33,179.0 million) in 1990. At the end of December 1991, external debt stood at N325, 496.4 million (\$33,364.5 million) and in 1992, it stood at \$27,564.8 million (CBN, 1993). In 1994 and 1995, the debt stock stood at \$29,429 million and \$32,585 million respectively (CBN, 1995). By December 31, 1996, Nigeria's external debt stock amounted to \$26,060 billion. That year, General Sani Abacha regime claimed to have serviced the nation's external debt at \$2 billion (Offiong and Oriakhi, 2002). In 1997 and 1998, the stock of Nigeria's external debt stood at US\$27,087.8 million and US\$28,773.3 million respectively.

In terms of creditor categorization, the external debt stock in 2005 comprised US\$15,412.40 million or 75.26 per cent owed to the Paris Club, US\$2,512.19 million or 12.27 percent owed to multilateral institutions, US\$1,441.79 million or 7.04 per cent owed to the London Club, US\$649.80 million or 3.17 percent owed to the Promissory Note holders and US\$461.79 million or 2.26 percent owed to non-Paris Club Creditors (DMO, 2003). By December 31, 2005, Nigeria's external debt as stated earlier stood at US\$20,477.97 million as against US\$35,944.66 million in December 2004, indicating a decrease of US\$15,466.69 as a result of the implementation of the first and second phases of the Paris Club debt by 33 per cent after regularization of arrears. In recent times, External Debt in Nigeria averaged 13027.758USD Million from 2008 until 2014, reaching an all-time high of 26858.199USD Million in 2014 (World Bank, 2014).

METHODOLOGY

Study Area

The study area is Nigeria. Nigeria is a federal constitutional republic in West Africa, bordering Benin in the west, Chad and Cameroon in the east, and Niger in the north. Its coast in the south lies on the Gulf of Guinea in the Atlantic Ocean. Nigeria is often referred to as the "Giant of Africa", owing to its large population and economy. With approximately 184 million inhabitants, Nigeria is the most populous country in Africa and the seventh most populous country in the world. It comprises 36 states and the Federal Capital Territory, where the capital, Abuja is located.

Method of Data Collection

Secondary data were used for the analysis and data were collected from secondary sources which include statistical bulletins and other published data that are relevant to the study. The data, particularly the IMF's International Financial Statistics and data files as well as the World Bank's International Debt Statistics and national accounts data, were accessed through the internet.

Model Specification

$$GNIPC_t = f(\text{TEXD}_t, \text{TDS}_{t-1}, \text{XPOT}_{t-1}, \text{FDI}_t, \text{INFCPI}_t) \dots\dots\dots (i)$$

Where:

GNIPC- Gross National Income Per Capita, TEXD -Total External debt; TDS - Total Debt Service, XPOT – Export, FDI - Foreign Direct Investments, INFCPI – Inflation
t represents the various time periods.

Equation (i) expresses the economic development - indexed by GNIPC (i.e. Gross National Income Per Capita) explicitly as a function of Total External Debt, Total Debt Service, Export, Foreign Direct Investments and Inflation.

Mathematically,

$$GNIPC_t = \beta_0 + \beta_1 \text{TEXD}_t + \beta_2 \text{TDS}_{t-1} + \beta_3 \text{XPOT}_{t-1} + \beta_4 \text{FDI}_t + \beta_5 \text{INFCPI}_t \dots \dots \dots \text{ (ii)}$$

In order to take cognizant of all other factors that determine economic development apart from the predictor variables stated above, the random error term was introduced to account for the unexplained variations in the Dependent Variable. Thus, the new equation was stated as:

$$GNIPC_t = \beta_0 + \beta_1 \text{TEXD}_t + \beta_2 \text{TDS}_{t-1} + \beta_3 \text{XPOT}_{t-1} + \beta_4 \text{FDI}_t + \beta_5 \text{INFCPI}_t + \mu_t \dots \dots \dots \text{ (iii)}$$

μ is the stochastic element, a real random term which explains the variation in the regressand not explained by the regressors while $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are the parameter coefficients.

Data Analysis Techniques

In order to empirically analyze the effect of external debt on economic development, the Gross National Income Per Capita was used as an index for economic development; export, foreign direct investment and Inflation (measured by the Consumer Price Index) were also taken into consideration. Specifically, Regression Analysis was done to achieve objective 1 and to test the corresponding Null Hypotheses H_{01} , Cointegration Test was used to achieve objective 2 and to test the corresponding Null Hypothesis H_{02} . Prior to conducting the Cointegration Test, a Unit Root test was conducted to test for the stationarity of the data of various variables which is a necessary condition for conducting Cointegration test particularly when dealing with time series data.

Unit-Root Test

In empirical research on time series data particularly when one of the aims of the research is to test for long run relationship, it is necessary to conduct a Unit Root test which shows the stationarity or non-stationarity nature of the data. There are many tests that have been developed to test for stationarity. These include the Dickey Fuller test, Augmented Dickey-Fuller test, Phillips-Perron test and Kwiatkowski Phillips Schmidt Shin (KPSS) test. Among all, the Augmented Dickey-Fuller test, denoted conventionally as ADF is widely regarded as the most efficient test for integration and it is at present the most widely used in practice.

Thus, the ADF test was used to test the following hypothesis:

H_0 : the data has a unit root (that is, non-stationary) against

H_1 : the data has no unit root (that is, stationary).

If the data for each variable turn out to contain unit roots it implies they are non-stationary. Stationarity could, however, be achieved by first differencing of the levels if the series are integrated of order one i.e. $I(1)$.

Economic 'A Priori' Criteria

This evaluation is guided by economic theory to ascertain if the parameter estimate conforms to expectation. Economic development (GNI per capita) is expected to have a negative relationship with Total external debt (TEXD), Total Debt Service (TDS) and Inflation (INFCPI) and a positive relationship with export (XPOT) and Foreign Direct Investment (FDI). That is, $\beta_1, \beta_2, \beta_5 < 0$ and $\beta_3, \beta_4 > 0$.

More comprehensively, since the $\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are the rates of change in the GNI per capita as a result of one unit change in TEXD, TDS, XPOT, FDI and INFCPI respectively. Mathematically,

$$\frac{\partial RGDP}{\partial TEXD} < 0$$

$$\frac{\partial RGDP}{\partial TDS} < 0$$

$$\frac{\partial RGDP}{\partial XPOT} > 0$$

$$\frac{\partial RGDP}{\partial FDI} > 0$$

$$\frac{\partial RGDP}{\partial INFCPI} < 0$$

Cointegration Test

This test reveals the existence of a long run relationship among variables (Gujarati, 1995). The Johansen Cointegration Method was adopted in this study to test for the existence of long-run relationship among the variables.

RESULTS AND DISCUSSION

Effects of External Debt on Economic Development

Sequel to the regression analysis result (Table 1), the estimated model is:

$$GNIPC_t = 240.130748656 - 1.5779637218e-08*TEXD_t - 6.97449774311e-08*TDS_{t-1} + 2.72331196923e-08*XPOT_{t-1} + 8.42167695017e-08*FDI_t - 2.08266085975*INFCPI_t$$

The regression result shows that all the sign of the predictor variables conform to the *a priori* criteria. The negative sign of the coefficient of total external debt (TEXD) and total debt service (TDS) shows that external debt has an adverse effect on the nation's GNI per capita. By implication, a unit increase in Total External debt and Total Debt Service leads to a decrease in GNI per capita by approximately US\$1.58billion and US\$6.97billion respectively and vice versa. Thus, external debt has an adverse effect on economic development. Although it has been claimed that the debt payments have neither been neither the fundamental cause of Africa's low growth nor the cause of the difficulties in servicing debts (Ajayi, 1991). This results proved otherwise. This is in consistency with the findings of Ajayi and Oke (2012) and Ezeabasili, *et. al.* (2011). According to them the external debt problem is acute for a number of reasons. The size of the debt relative to the size of the economy is high and it is likely that private investment will be reduced or completely lacking. Debt servicing payments form a significant proportion of the annual export earnings. Borensztein (1990) found that debt overhang had an adverse effect on private investment in Phillipines. The effect was strongest when private debt rather than total debt was used as a measure of the debt overhang. Iyoha (1999) found similar results for SSA countries. He concluded that heavy debt burden acts to reduce investment through both the debt overhang and the 'crowding out' effect. Elbadawi *et al.*, (1996) also confirmed a debt overhang effect on economic growth. They found that debt accumulation deters growth while debt stock spurs growth. Their results also showed that the debt burden has led to fiscal distress as manifested by severely compressed budgets. It appears that debt is more of a burden than good when viewed holistically given

other factors that are not captured empirically. This resulted from the fact that the rural poor who have direct access to productive assets like land, water rights are often assumed to be insignificant component by debt planners. This situation is compounded by poor economic policies, bad management and unfavourable loan terms, making it extremely difficult to service the mounting external debt obligations.

Significance of relationship between External Debt and Economic Development

From the regression results (table 1); the computed t -statistic for the parameter estimate β_1 is greater than the tabulated t -value of 2.05 which shows that β_1 is significant. Thus, the Null Hypothesis H_{01} was rejected at 5 % level of significance. This implies that external debt has a significant effect on economic development. The co-efficient of determination of .89 implies that the external debt (TEXD) and other control variables account for 89 percent variation in Economic development (indicated by GNI per Capita) while the remaining 11 percent is accounted for by the stochastic variable.

Table 1: Multiple Regression Analysis

Dependent Variable: GNIPC

Method: Least Squares

Date: 11/12/16 Time: 10:16

Sample (adjusted): 1982 2015

Included observations: 33 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	240.1307	313.9185	0.764946	0.4509
TEXD	-1.58E-08	7.28E-09	-2.168656	0.0391
TDS(-1)	-6.97E-08	3.43E-08	-2.034917	0.0518
XPOT(-1)	2.72E-08	3.07E-09	8.862477	0.0000
FDI	8.42E-08	3.14E-08	2.678031	0.0124
INFCPI	-2.082661	3.205208	-0.649774	0.5213
R-squared	0.892176	Mean dependent var	792.1212	
Adjusted R-squared	0.872208	S.D. dependent var	829.3362	
S.E. of regression	296.4707	Akaike info criterion	14.38474	
Sum squared resid	2373161.	Schwarz criterion	14.65683	
Log likelihood	-231.3482	Hannan-Quinn criter.	14.47629	
F-statistic	44.68154	Durbin-Watson stat	2.178289	
Prob(F-statistic)	0.000000			

Source: Author's Data Analysis (2016)

Long Run Relationship between External Debt and Economic Development

Testing for a long run relationship among variables in a model requires that all the data of such variables are stationary and must be of the same order of integration (Gujarati, 1995). The Augmented Dickey Fuller (ADF) test was used to test for the stationarity of the data for Economic Development (GNIPC) and Total External Debt (TEXD). Both GNIPC and TEXD were not stationary at first difference but both became stationary at the Second difference. This is because at first level of difference, the absolute values of the computed ADF test

Statistics were less than the absolute value of the tabulated ADF Critical Values of the variables at 5% level of significance. But at the second difference of TEXTD and GNIPC, the absolute values of the computed ADF test Statistic were greater than the absolute values of the tabulated ADF Critical Values of the variables at 5% level of significance (see Table 2). Thus, total External Debt (TEXTD) and Gross National Income per Capita (GNIPC) were integrated of order two i.e. $I(2)$.

When variables become stationary at the same order of integration, then there is a possibility of cointegration among them i.e. existence of a long-run relationship (Gujarati, 1995). To establish the existence (or otherwise) of a long-run relationship among the variables, a cointegration test was conducted using Johansen Cointegration approach.

From Table 3, the trace statistic, Max-eigenvalue and MacKinnon-Haug-Michelis (1999) *p-values*, reveal that there is one cointegrating equation. This is because the *p-value at *none* was less than the 0.05 level of significance. Therefore, the Null hypothesis H_0 was rejected at 5 per cent. This implies that there is a long-run relationship between economic development and external debt. Foreign reserves holdings of less developed countries has depleted over the years largely due to the inability of most of these countries to service or pay their debt when due. This implies that the quantum of foreign reserve at the disposal of any indebted nation is one of the indicators of her debt servicing and payment capacity. For instance, Frenkel and Jovanovic (1981) cited foreign debt payment as one of the major rationales for a country's demand for foreign reserves. As earlier mentioned, from debt overhang theory, if debt exceeds the country's repayment ability in the future, expected cost of debt servicing is likely to be an increasing function of the country's output level. Thus, some of the returns from investing in the domestic economy are effectively "taxed away by existing foreign creditors and investment by domestic and new foreign investors is discouraged" (Claessens, *etal* 1996). Under such circumstances, the debtors' country shares only partially increase in output and exports because a fraction of that increase is used to service the external debt.

Table 2: Augmented Dickey Fuller Test for Stationarity

Null Hypothesis: D(GNIPC,2) has a unit root

Exogenous: None

Lag Length: 4 (Automatic - based on AIC, maxlag=8)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.954630	0.0053
Test critical values: 1% level	-2.685718	
5% level	-1.959071	
10% level	-1.607456	

Null Hypothesis: D(TEXTD,2) has a unit root

Exogenous: None

Lag Length: 8 (Automatic - based on AIC, maxlag=8)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.018780	0.0003

Test critical values: 1% level	-2.664853
5% level	-1.955681
10% level	-1.608793

*MacKinnon (1996) one-sided p-values.

Source: Author's Data Analysis (2016)

Table 3: Johansen Cointegration Test

Date: 11/12/16 Time: 13:33

Sample (adjusted): 1983 2015

Included observations: 30 after adjustments

Trend assumption: Linear deterministic trend

Series: GNIPC TEXTD

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.414010	16.52794	15.49471	0.0348
At most 1	0.016344	0.494373	3.841466	0.4820

Trace test indicates 1 cointegrating eqn (s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.414010	16.03357	14.26460	0.0260
At most 1	0.016344	0.494373	3.841466	0.4820

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'S11*b=I):

GNIPC	TEXTD
0.002013	1.26E-10
0.001271	-6.88E-11

Unrestricted Adjustment Coefficients (alpha):

D(GNIPC)	-3.901667	20.04220
D(TEXTD)	-4.28E+09	1.63E+08

1	Cointegrating Log	
Equation(s):	likelihood	-907.0501

Normalized cointegrating coefficients (standard error in parentheses)

GNIPC	TEXD
1.000000	6.26E-08
	(1.5E-08)

Adjustment coefficients (standard error in parentheses)

D(GNIPC)	-0.007854
	(0.06192)
D(TEXD)	-8606281.
	(2070378)

Source: Author's Data Analysis (2016)

Kanue, *etal.* (2014) findings showed that in the short run, while multilateral and miscellaneous sources of external debt had positive significant relationships with economic development, promissory notes maintained a significant negative relationship. In the long run only the lagged value of GDP was found to be positively significant. In other words, there is no significant long run relationship between external debts and the level of economic development in Nigeria. Other sources of external debt that were hitherto significant in the short run, turned out to be insignificant in the long run.

CONCLUSION

This study concludes that the resultant effects of external debt on economic development in Nigeria are negative and significant. The negative sign of the coefficient of external debt shows that external debt has a negative impact on economic development of Nigeria. This implies that the continuous accumulation of debt service arrears coupled with worsening inability to meet maturing obligations as oil prices dropped is big issue. This situation is compounded by poor economic policies, bad management and unfavourable loan terms, making it extremely difficult to service the mounting external debt obligations. This may be largely due to the fact that Rural dwellers that need to be empowered economically through provision of loans with low interest rate that will reduce poverty through application of improved technology are hardly envisage at the time of acquiring debts. And the resultant debt burden meant that substantial amount of oil revenues were expended on annual servicing of accumulated external debts. The implication is that debt is a burden and should be traded with caution. Also, policy directive should gear towards rural development so that external debt could have meaningful impact on aggregate basis on the masses. It is recommended that the government should ensure that external borrowings are channelled to the various productive investments that will generate returns that are sufficient enough to offset the debt when due. Given the rural poor direct access to productive assets like land, water rights, inputs, policies related to debt should take cognizance of this and implemented accordingly. This will lead to output growth and enhance income distribution which will in turn reduce poverty

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