



# Does External Debt Liability affect Economic Growth in Nigeria

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### ABSTRACT

*This study investigates the impact of external debt burden on economic growth in Nigeria spanning from 1981-2015. Time series data on external debt stock and debt service payments were used to capture external debt burden. The study set out to test for the relationship that exists between external debt and economic growth in Nigeria. It adopted the auto regressive distributed lag model to carry out analysis on secondary data sourced from the World Development Indicators, Central Bank Statistical Bulletin and relevant publication from Nigeria on variables like Gross Domestic Product, Debt Service Payment, External Debt Stock, Official exchange rate and Consumer Price Index. The techniques employed in the study include Augmented Dickey Fuller (ADF) test and Bounds Co-integration test. The finding indicates that external debt stock has a negative relationship with economic growth. Based on the findings, the study suggests that unnecessary loan seeking should be stopped and when contracted, it should be properly monitored and invested in productive ventures that can generate a reasonable amount for repayment and that debt service obligation should not be allowed to rise above the country's earnings.*

## 1. INTRODUCTION

All countries in the World aim at attaining sustainable development, but this is achievable when a country has adequate human and physical endowment (Berensmann, 2004; Maghyereh and Hashemite, 2003). In developing countries, especially those in sub-Saharan Africa, the capital to finance the optimal level of economic growth and development are in short supply which results to low domestic savings, low investment and slow economic growth. Similarly, from the fiscal stand point, domestic revenue (tax and public debts) has not been consistently large enough to stimulate the required level of investment in developing countries.

Studies have shown that most developing countries depend on primary commodity export, which is exposed to foreign demand or price shock, sometimes leading to meagre foreign exchange earnings. Due to these reasons, developing countries resort to external financing as the panacea to achieve its goals. In the process of obtaining finance from abroad, a country may consider several options: aids or grants, foreign investment and loans (concessional and non-concessional) in that order. It has been argued that the most serious problem confronting many developing countries, especially those of Sub-Saharan Africa is high external debt profile Siddique, Selvanathan and Selvanathan (2015). Africa's external debts are now widely acknowledged to be unsustainable and this has

led to the issue of intergenerational equity as the country decides to acquire more debt to finance her growth and development. Nigeria like most developing countries have also opted to external financing for her growth and development.

Nigeria's external debt rose to \$18.91 billion (N5.787 trillion) in 2017, while domestic debt rose to N15.937 trillion, bringing the total debt stock of the country to N21.725 trillion (\$70.92 billion), this represent about 15.3% of Gross Domestic Product, GDP.

The country's debt profile remains within the threshold of 56 per cent for countries in Nigeria's category. It must be noted that Nigeria has a low debt profile relative to some countries in the Sub-Saharan Africa. For instance, South Africa has the largest foreign debt within the region, about \$143 billion, countries such as Angola, Ethiopia, Kenya and Ghana tended to accumulate more public debt, \$37.7 billion, \$22.5 billion \$22.2 billion and \$21.2 billion respectively, than Nigeria in the Sub-Saharan Africa region. However, other countries in the region are doing better than Nigeria in terms of foreign debt accumulation, with the closest country to Nigeria being Tanzania, about \$15.9 billion and a low risk of debt distress.

Although relative to Gross Domestic Product (GDP), the country's debt level remains low by global standards, but it has high debt service cost. Further, there are signs that the pattern of borrowing in Nigeria may be out of control. For instance, Nigeria's debt- to- revenue ratio increased by 25 per cent between 2015 and 2016. The rising debt stock implies high vulnerability to risks in the future, which might not be sustainable.

The main lesson of the standard "growth with debt" literature is that a country should borrow abroad as long as the capital thus acquired produces a rate of return that is higher than the cost of the foreign borrowing. In that event, the borrowing country is increasing capacity and expanding output with the aid of foreign savings. The debt, if properly utilized, is expected to help the debtor country's economy by producing a multiplier effect which leads to increased employment, adequate infrastructural base, a larger export market, improved exchange rate and favourable terms of trade. But, this has never been the case in Nigeria where it has been misused and as such there is no adequate return to finance the debt. Apart from the fact that external debt had been badly expended in these countries, the increasing debt liability of the Nigerian economy over the years has led to a decrease in economic growth and the management of the debt by way of service payment, which is usually in foreign exchange, has also affected the macroeconomic performance. But despite the inability of the county to finance its debt; the country is still characterized by increasing external debt sourcing. There are broadly two theories that explain; debt overhang theory and liquidity constraints hypothesis. The former posits that the weight

of external debt on the country would retard the growth rate of the economic, while the liquidity constraints hypothesis argued against external debt on the ground that it crowd-out the private economy. Therefore, this study examines the relationship between external debt liability and economic growth in Nigeria. Specifically, the study determines the effects of external debt on the Gross Domestic Product and the impact of external debt servicing on Gross Domestic Product (GDP). Despite the increasing debt liability of the country, has there been any significant impact of external debt on the economic growth of Nigeria?

The rest of the paper is structured as follows; section 2 provides a stylised facts on the Nigerian debt profile. Section 3 contains a succinct review of the literature on the relationship between external debt liability and economic growth. Section 4 presents the methodology which comprises the empirical model specifications, estimation techniques data set and definition of variables. The results are presented and discussed in section 5. The final section concludes with implication for policy analysis.

## **2. Stylized facts on external debt in Nigeria**

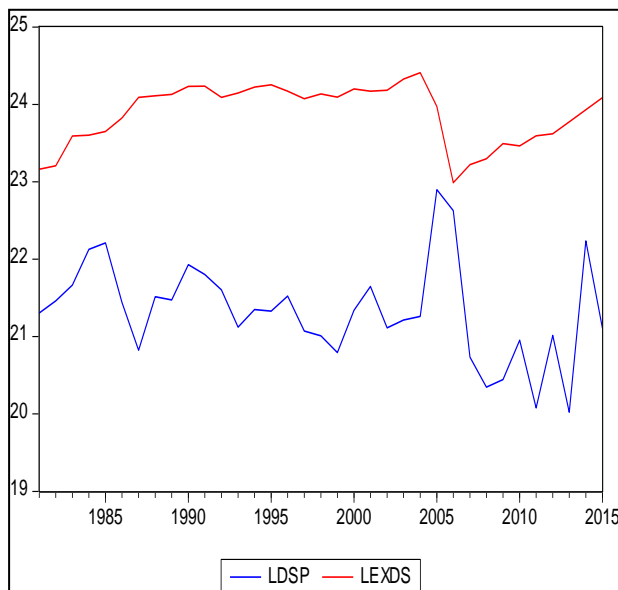
Prior to the \$18 billion debt cancellation granted to Nigeria in 2005 by the Paris Club, the country had external debt of close to \$40 billion with over \$30 billion of the amount being owed to Paris Club alone. The history of Nigeria's huge debts can hardly be separated from its decades of misrule and the continued recklessness of its rulers. Nigeria's debt stock in 1971 was \$1 billion. By 1991, it had risen to \$33.4 billion, and rather than decrease, it has been on the increase, particularly with the insurmountable regime of debt servicing and the insatiable desire of political leaders to obtain loans for the execution of dubious projects.

Before the debt cancellation deal, Nigeria was to pay a whooping sum of \$4.9 billion every year on debt servicing. It would have been impossible to achieve exchange rate stability or any meaningful growth under such indebtedness. The effect of the Paris Club debt cancellation was immediately observed in the sequential reduction of the exchange rate of Nigeria vis-à-vis the Dollar from 130.6 Naira in 2005 to 128.2 Naira in 2006, and then 120.9 in 2007 (CBN, 2008). Although the growth rate of the economy has been inconsistent in the post-debt relief period as it plunged from 6.5% in 2005 to 6% in 2006 and then increased to 6.5% in 2007 (CBN, 2016), it could have been worse if the debt had not been cancelled.

However, the benefits of the debt cancellation, which was expected to manifest after couple of years, was wiped up in 2009 by the global financial and economic crisis, which was precipitated in August 2007 by the collapse of the sub-prime lending market in the United States. The effect of the crisis on Nigeria's exchange rate was phenomenal as the Naira exchange rate vis-à-vis the Dollar rose astronomically from about N120/\$ in the last quarter of

2007 to more than N150/\$ (about 25% increase) in the third quarter of 2009 (CBN, 2016). This is attributable to the sharp drop in foreign earnings of Nigeria as a result of the persistent fall of crude oil price, which plunged from an all-time high of US\$147 per barrel in July 2007 to as low as US\$45 per barrel in December 2008 (CBN, 2016). Available statistics show that the external debt stock of Nigeria has been on the increase, the debt keeps rising yearly after the debt cancellation in 2005. The country's external debt stock has increased tremendously from \$9.6billion in 2006 to \$28.94billion in 2015. (World Bank (2016)). This is depicted graphically in the figure 1

**Figure 1: graphical illustration of external debt stock (LEXDS) and external debt servicing payment (LDSP) in Nigeria.**



From the foregoing, it is obvious that there has been high influx of external sourcing of funds in the country. Hence, it is necessary to examine the effect of external debt of the country on her economy.

### 3.Literature Review

Debt is created by act of borrowing. According to Oyejide, Soyede and Kayode (2004), it is the resource or money used in an organization that is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or other formal equivalent. External debt therefore refers to the resources of money in use in a country that is not generated internally and does not in any way come from local citizens whether corporate or individual. According to Adegite and Ayadi (2008), the Dual Gap theory is a better explanation for the reason why countries opt for external finance as opposed to domestic financing in financing the sustainable development. The theory

stipulates that developing countries are characterized by insufficient level of domestic savings to finance the needed investment to ensure economic development and since investment is a function of savings it is logical to require the use of complementary external goods and services.

On its relationship with the economy, the Neoclassical and the Endogenous growth models on one hand stipulates that there exists a positive relationship between external debt and economic growth. They emphasized that debt is one of the sources for financing capital formation, and financed through this means, it impacts positively on investment and promotes economic growth. On the other hand, other perspectives have risen that contradicts this view by mentioning external debt as one of the factors impeding economic growth. First, we can point to models where political economy considerations lead to over borrowing and poor growth often accompanied by capital flight, if the costs of high taxes to finance the debt are not internalized. (Allesina and Tabellini (1989), Tornell and Velasco(1992)). Second and most well known are the Debt Overhang theories. According to Krugman (1988), the Debt Overhang theory shows that if there is some likelihood that in the future debt will be larger than the country's repayment ability; expected debt-service costs will discourage further domestic and foreign investment because the expected rate of return from the productive investment projects will be very low to support the economy as the significant portion of any subsequent economic progress will accrue to the creditor country. This eventually will further reduce both domestic and foreign investments and hence downsizes economic growth (Krugman, 1988, Sachs, 1989a).

Another strand of thinking in the debt overhang literature is on the fiscal aspects of the debt problem. Large accumulated debt stocks may be likely to generate expectations that debt service will be financed with particularly distortionary types of taxation, such as the inflation tax, or with cuts in the productive public investment (Agenor and Montiel, 1996). We thus conclude that the transmission to growth is through the reduced efficiency of investment as well as lower investment levels.

A number of research works have been carried out reviewing the effect of external debt on the economy however, evidence of the relationship between external debt and economic growth is mixed. Nwannebuike, Ike and Onuka (2016) carried out a study on external debt and economic growth in Nigeria spanning from 1980-2013 using the Ordinary Least Square technique, Augmented Dickey Fuller unit root test, Cointegration and Error Correction Model and found that external debt stock had negative impact on the economy.

Sulaiman and Azeez (2012) carried out a study on the effect of external debt on the economic growth of Nigeria using annual time series data from 1970-2010. The study

employed the econometric techniques of Ordinary least squares (OLS), Augmented Dickey-Fuller unit root test, Johansen Co-integration test and Error Correction method and from the Cointegration test concluded the existence of a long-run relationship amongst the variables and findings from the Error Correction model revealed that external debt contributes positively to the growth of the Nigerian economy. A possible structural break test of how external debt and external debt servicing relating to economic growth in Nigeria (Ekperiwale and Oladeji (2012)) revealed that the 2005 external debt relief did result to structural break and this reduced the effect of debt burden in the economy. Ijirshar, Joseph and Godoo (2016) investigates the relationship between external debt and economic growth in Nigeria spanning from 1981-2014, concluded that there exists a significant and positive impact of external debt on economic growth. Adu, (2004) also examined the impact of external debt on the economic growth and public investment of Nigeria from 1970-2002. The findings show that Nigeria's debt service burden has had a significant adverse effect on the growth process and also affects public investment negatively. Another study by Ogunmuyiwa (2011) on external debt using time-series data from 1970-2007 concluded that it promotes economic growth in Nigeria. He employed econometric techniques such as Augmented Dickey-Fuller test, Granger causality test, Johansen co-integration test and Vector Error Correction Method (VECM). However, the results revealed that there is no causality between external debt and economic growth in Nigeria. Ayadi and Ayadi (2008) carried out a comparative study on the impact of external debt on the economic growth of Nigeria and South Africa. Employing the Neoclassical growth model which incorporates external debt, debt indicators, and some macroeconomic variables with the use of both Ordinary Least Square (OLS) and Generalized Least Square (GLS) techniques of estimation revealed that external debt and its servicing requirement has a negative impact on the economic growth of Nigeria. Clements, Bhattarcharya and Nguyen (2004) in their paper on External Debt, Public Investment, and Growth in Low-Income Countries show that a large foreign debt has adverse effects on economic growth and public investment and that external debt stock depress directly economic growth or development. Mbah, Umana and Osmond (2016) examine the impact of external debt on economic growth in Nigeria from 1970-2013 using an Autoregressive Distributed Lag (ARDL) approach also concluded that a long run relationship exists among the variables and that external debt impacts negatively on output and the existence of a Unidirectional causality among external debt and economic growth. Studies on other countries are also characterised by mixed findings such as the works of Faraji and Makame (2013) on the impact of external debt on the economic growth of Tanzania using time series data from 1990-2010 observed through the Johansen Cointegration test

that there is no long run relationship between external debt and GDP. However, there exists a significant impact of external debt and debt service on GDP with total external debt stock having a positive effect of about 0.36939 and debt service payment having a negative effect of about 28.517. Also, Safdari and Mehrizi, (2011) analyzed external debt and economic growth in Iran from 1974-2007 by observing the balance and long term relation of five variables; GDP, private investment, public investment, external debt and imports with the vector autoregressive model (VAR) technique of estimation concluded that external debt has a negative effect on GDP and private investment and public investment has a positive relationship with private investment. Ejigayehu (2013) using Panel data covering the period 1991-2010, analyzed the effect of external debt on the economic growth of eight selected heavily indebted African countries; Benin, Ethiopia, Mali, Madagascar, Mozambique, Senegal, Tanzania and Uganda through the debt overhang and debt crowding out effect with ratio of external debt to gross national income as a proxy for debt overhang and debt service export ratio as a proxy for debt crowding out. He carried out a cross-sectional regression model using Augmented Dickey Fuller tests, heteroskedasticity and ordinary regression. The results revealed that external debt affects economic growth through debt crowding out rather than debt overhang. Panizza and Presbitero (2012) report ambiguity in theoretical models. The claim that public debt have negative effect on long-term growth must be subjected to empirical investigation. Although several studies reported negative relationship between debt and economic growth, there is still no ground for a strong causal association flowing from debt to economic growth. Atique and Malik (2012) investigated the factors that influenced economic growth using domestic and foreign debt. The results reveal that there is an inverse relationship between economic growth and both types of debt. The findings further shows that external debt as greater negative influence on economic growth relative to domestic debt. In addition, (Shabbir, 2013) investigated the long-term relationship between external debt and economic growth in some low-income countries. The study reveals that increase in stock of foreign debt limits the fiscal space to service external debt liabilities, hence reduces gross capital formation and dampens economic growth rate. The results are consistent with the theories of debt overhang and the liquidity constraint hypothesis, and therefore, conclude that external debt does hamper economic growth, and the channel of influence is private investment.

Interestingly, the existing empirical studies, just like the theoretical views shows different views on the relationship between external debt and economic growth. While a strand of empirical literatures found a positive relationship, others found a negative relationship. Hence, this gives a justification for the re-examination of the subject matter. The study will include control variables to augment the standard growth model and also increase the scope of the study to include more recent data periods.

**4. Econometric methodology**

It is imperative to examine the behaviour of the series under investigation over time. This can be verified using the unit root test. Given that the study employs log-log specification, the unit root test is executed on the logged series. The Augmented Dickey-Fuller (ADF) statistics is reported.

**4.1 Model specification**

The ARDL cointegration technique developed by Pesaran and Shin (1999) and Pesaran, Shin and Smith (2001) was employed because the series are of different order of cointegration. The ARDL framework is stated as follows

$$\begin{aligned} \Delta(LRGDP_t) = & \alpha + \beta T + \phi_1 LRGDP_{t-1} \\ & + \phi_2 LEXDS_{t-1} + \phi_3 LDSP_{t-1} \\ & + \phi_4 LCPI_{t-1} + \phi_5 LEXR_{t-1} \\ & + \sum_{i=1}^p \delta_i \Delta LRGDP_{t-i} + \sum_{j=0}^{q_1} \alpha_j \Delta LEXDS_{t-j} \\ & + \sum_{k=0}^{q_2} \omega_k \Delta LDSP_{t-k} + \sum_{l=0}^{q_3} \pi_l \Delta LCPI_{t-l} \\ & + \sum_{m=0}^{q_4} \pi_l \Delta LEXR_{t-m} + \varepsilon_t \dots \dots \dots (1) \end{aligned}$$

Equation (1) is the test equation for the Bounds co-integration test. To express the long run components in error term, it reduces to;

$$\begin{aligned} \Delta(LRGDP_t) = & \gamma V_{t-1} + \sum_{i=1}^p \delta_i \Delta LRGDP_{t-i} \\ & + \sum_{j=0}^{q_1} \alpha_j \Delta LEXDS_{t-j} + \sum_{k=0}^{q_2} \omega_k \Delta LDSP_{t-k} \\ & + \sum_{l=0}^{q_3} \pi_l \Delta LCPI_{t-l} \\ & + \sum_{m=0}^{q_4} \pi_l \Delta LEXR_{t-m} + \varepsilon_t \dots \dots (2) \end{aligned}$$

Where  $V_{t-1}$ =error correction term;  $\gamma < 0$ ;  $p$  and  $q_1q_2q_3$  are lag length on dependent and independent variables respectively.  
 $\omega_k > 0, < 0; \alpha_j > 0; \pi_l > 0$

**4.1 Data**

The study uses data on external debt stock (EDS) and Real Gross Domestic Product (RGDP), Debt service payments (DSP), Consumer price index (CPI) as a proxy for inflation and Exchange rate (EXR). The data were obtained from the database of the World Bank database (WDI) spanning from 1981-2015.

**5. Empirical Results and Discussions**

**5.1.1 Descriptive Statistics**

The results of the summary of descriptive statistics of real gross domestic product (LRGDP), debt service payment (LDSP), external debt stock (LEXDS), exchange rate (LEXR) and consumer price index (LCPI) are shown in table 1 below. An observation of the table shows that given the acceptance/rejection criteria, all the variables are normally distributed since the probability values computed for Jacque Bera is greater than the conventional levels of statistical significance of 1%, 5% and 10%. The mean based coefficient of skewness and kurtosis are the statistics put together to check the normality of all the variables. Skewness also measures the direction and degree of symmetry and it shows that EXDS is negatively skewed while RGDP is positively skewed. The standard deviation enables the discovery of the most volatile variable. From the table it is observed that CPI has the highest standard deviation and hence the most volatile of all the variables.

*Table 1: Descriptive Statistics*

	LRGDP	LEXDS	LDSP	LCPI	LEXR
Mean	25.95	23.87	21.33	2.59	3.22
Median	25.72	24.08	21.33	3.27	3.09
Max.	26.86	24.41	22.89	5.10	5.26
Min.	25.34	22.9	20.02	-0.70	-0.48
Std. dev.	0.49	0.39	0.64	1.95	1.94
Skewness	0.66	-0.74	0.211	-0.42	-0.71

*Authors' computation from Eview*

**5.1.2 Unit root tests:**

While observing the trend of these variables, it is not sufficient to causally observe data trend and conclude that there is a long run relationship between the variables. This could lead to a spurious regression and that is not desirable. Thus, to test for stationarity the augmented dickey fuller test will be applied. The results of the unit root test are presented below and it shows a mixed order of integration.

**Table 2: Unit Root Test**

Variables	Level	First difference	I(d)
LRGDP	—	-3.4684**	I(1)
LDSP	-	—	I(0)
	4.468**		
EXR	—	-4.015***	I(1)
LCPI	—	-2.737*	I(1)
LEXDS	—	-4.603***	I(1)

Authors' computation from Eview

Note: I (d) imply order of integration

\*\*\*, \*\*, \* implies 1%, 5% and 10% level of significance respectively

### 5.1.3. Cointegration Test

Econometrically speaking, two variables will be co-integrated if they have a long run equilibrium relationship between them. This test is carried out in order to examine the long run relationship among the variables if any exists. By implication, testing for co-integration implies testing for probable existence of a long-run relationship in a model i.e. between the dependent and independent variables. As a result of the mixed order of integration (I (1) and I (0)) among the variables, the Bounds co-integration test is used and the result is presented in table 3 below.

**Table 3: co-integration Test for Nigeria**

ARDL Bounds Test

Test Statistic	Value	K
F-statistic	24.63	4
<b>Critical Value Bounds</b>		
Significance	I0 Bound	I1 Bound
5%	2.86	4.01
1%	3.74	5.06

\*\*\*, \*\*, \* implies 1%, 5% and 10% level of significance respectively.

Authors' computation from Eview

From the above, it is seen that the calculated F-statistic is greater than the Critical Value Bounds for the upper bound I (1), thus we conclude that there is cointegration, that is, there is long-run relationship between external debt stock, the impact of external debt servicing and economic growth in Nigeria. The results of the estimation of the short and long run dynamics are presented in Table 4 below.

**Table 4: Short run and long run dynamics**

Cointegrating Form				
Variable	Coeff.	Std.dev	t-Stat.	Pb.
GDP(-1)	-0.232	0.113	-2.047	0.10
(LEXDS)	0.396	0.054	7.394	0.00
EXD(-1)	0.750	0.174	4.301	0.00
EXD(-2)	-0.666	0.076	-8.791	0.00
EXDS(-4)	0.866	0.120	7.213	0.00
D(LDSP)	0.384	0.051	7.590	0.00
LDSP(-1)	0.400	0.049	8.228	0.00
DSP(-2)	-0.175	0.059	-2.972	0.00
DSP(-3)	-0.188	0.036	-5.244	0.00
DSP(-4)	0.076	0.023	3.331	0.00
LCPI(-3)	-0.675	0.251	-2.687	0.00
CPI(-4)	0.892	0.161	5.537	0.00
EXR(-1)	-0.021	0.029	-0.746	0.40
EXR(-2)	-0.317	0.042	-7.488	0.00
EXR(-3)	-0.070	0.047	-1.496	0.20
ERT(-1)	-1.312	0.204	-6.428	0.00
Long Run Coefficients				
Varia.	Coeff.	Std.dev	t-Stat.	Pb.
LEXD	-1.216	0.057	-21.310	0.000
LDSP	0.311	0.068	4.607	0.010
LCPI	-0.188	0.026	-7.184	0.002
LEXR	0.472	0.036	12.950	0.000

Authors' computation from Eview

The error correction term ERT doesn't correspond to a priori expectations of the error term, that is, negative and less than 1 in absolute term. Therefore, statistically, there is a sign of divergence and not convergence to equilibrium given disturbance in the model. Hence, while the co-integration test showed the probable existence of long run equilibrium relationship in the model, it is not significant. Thus, though a long run relationship may exist between external debt and economic growth, it is however not significant. Thus for the purpose of this study, the short run dynamic relationship is reported in table 5.

**Table 5: Short run estimates**

Dependent Variable: LRGDP

Variable	Coeff.	Std.dv	t-stat	Prob.
EXDS(-1)	-0.992	0.127	-7.794	0.002
LDSP(-1)	0.137	0.040	3.356	0.028
LCPI(-1)	-0.226	0.198	-1.142	0.317
LEXR(-1)	0.173	0.035	4.994	0.008

Authors' computation from Eview

The external debt stock shows a significant but negative relationship, that is movement in opposite direction and this indicates that as the country increases its external debt, the real gross domestic product falls and this is in line with the debt overhang theory that there exists a negative relationship between external debt and economic growth. This result is consistent with the findings of Nwannebuike, Ike and Onuka (2016) that external debt had a positive relationship with Gross Domestic Product at short run, but a negative relationship at long run. However, it was not in line with the findings of Ogunmuyiwa (2011) and Ijirshar, Joseph and Godoo (2016) that reported a significant and positive impact of external debt on economic growth. The debt service payment also shows a positive significant relationship. This implies that as the country pays off its debt, real gross domestic product also increases. That is as a country is able to pay off its debt, more capital is been channelled into productive sectors and less on debt servicing. Consumer price index used as proxy for inflation though not significant shows a negative relationship that is, as inflation increases, the real gross domestic product falls and vice versa and this is in line with economic theory. Exchange rate shows a significant positive relationship that is, as exchange rate increases that is depreciates, it leads to an increase in real gross domestic product. The ARDL is a linear regression model and therefore the underlying assumptions of CLRM have to be verified. These assumptions include linearity, homoscedasticity, serial correlation and normality among others. Diagnostic test to verify the underlying assumptions are in the table 6.

**Table 6: Diagnostic Test**

Test	F-stat	Prb.	R-sq	Prb.
<b>Linearity</b>	1.974	0.254		
<b>Breusch-Godfrey Test</b>	9.106	0.757	0.371	0.542
<b>Breusch-Pagan-Godfrey</b>	1.976	0.268	27.753	0.319
<b>Normality (Jarque Bera)</b>	0.388	0.823		

Authors' computation from Eview

The result shows that using the Breusch-Godfrey Serial Correlation LM Test there is no serial correlation among the residuals, using the Heteroskedasticity Test: Breusch-pagan-Godfrey there is no heteroskedasticity and the model is linear and the residuals are normally distributed.

## 6. Conclusion

In examining the relationship between external debt stock and economic growth in Nigeria, the results show the existence of a negative relationship between the stock of external debt and economic growth. However, this relationship exists only in the short run. This negative relationship may be attributed to the following reasons; the fact that these financial resources are not appropriately utilised and even when invested in the right projects, these projects are not properly monitored and when properly monitored, profits are spent on frivolities often times outside of the local economy.

In view of this, for policy analysis, the findings suggest that external debt should be discouraged. That is, unnecessary loan seeking should be stopped and if these loans must be contracted, it should be properly monitored and invested in profitable ventures which will generate a reasonable amount of money to repay debt and also boost economic growth and not spent on frivolities which make it impossible for debt to be repaid. External finance should be used only for projects of highest priority such as mineral resources, education and agricultural projects. Lastly, the government is advised to pay off its debts so as to ensure that as more income is generated in the country, it can be channeled to productive sectors and not for debt servicing.

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