External Debt and Nigeria's Economic Growth

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Abstract: The study examines the nature and effectiveness of external debt management in Nigeria, with emphases on how external debt and external debt servicing affect the economy. There is robust empirical evidence on the relationship between external debt and Economic growth in other countries while scanty evidences exist in Nigeria, hence this study is carried out to compliment prior Nigerian studies, using some different variables. Annual data having time series properties on external debt, external debt service, external reserve, exchange rate, foreign direct investment and economic growth proxy by changes in RGDP from 1981 to 2017, sourced from the statistical bulletin issued by the Central Bank of Nigeria (CBN) were analyzed, using both descriptive statistics and error correction model. The managers of the Nigerian economy, Debt management office, Ministry of finance and investors would find this study beneficial in resolving the challenges of Nigeria's growing debt profile. Analyses revealed that the effect of External Debt on Nigeria's economic growth is negative and insignificant in the short run while a significant negative effect was observed in the long run. Stimulated by our findings, we conclude that Nigeria has not begun to reap significantly, from efficient sourcing and effective utilization of external debt, as its influence on economic growth of the country in both short and long run period considered in this study is negative.

Keywords: External Reserves; Nigerian economy; Debt management; FDI; Public finance

JEL Classification: H63; E1; F63; O47.

Introduction

Managing the economy of a nation and meeting with budgeted expenditure can be very demanding and expensive. At times it may be impossible to raise such funds internally. Over the years, government of various nations have resorted to borrowing from external sources to finance projects and budgeted expenditure as well as regulate the economy. Countries all over the world are dependent and do not exist in isolation. Countries therefore depend on one another on social, political and economic grounds. When tax and other sources of government revenue fails to provide the needed revenue and government does not want to explore the option of

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printing more currency notes which could compromise the stability of the economy, then government may resort to borrowing to provide the needed infrastructure for the citizenry (Ogunmuyiwa, 2011). Ideally, countries borrow to enhance the growth of the economy and to improve the living conditions of the people (Dogan & Bilgili, 2014). But in many developing countries, It has been observed that borrowed funds most times are either channelled into private use, mismanaged or misappropriated leading to poor funding of infrastructure, huge debt servicing obligation, devaluation of the domestic currency, dwindling foreign reserves and decline in foreign exchange earnings (Shabbir, 2009; Ogunmuyiwa, 2011). Although both external public and domestic debt help to close the gap between the public sector's income and its expenditures, their impacts on the behavior of macroeconomic variables are different (Gollass, 1983).

External debt in Nigeria can be traced back to the pre-independence years. Although, the magnitude of the debt was relatively insignificant until 1978. These debts were basically soft loans, and they didn't constitute great burden on the Nigerian economy due to the lavish revenue inflows from oil, especially during the period 1973- 1976, when there was boom in oil prices. The drop in oil price and consequently, oil revenue in 1977/1978 gave rise to the first jumbo loan of more than US$ 1 billion from the international capital market (Shehu & Aliyu, 2013). The Debt Management Office (DMO) report of 2011, point that Nigeria's external debt stock prior to 1978 was not up to US$ 0.8 billion. But from 1978, the external debt stock started increasing rapidly, rising to US$ 8.855 billion in 1980. By 1985, it was almost US$ 19 billion. The Nigeria burden of indebtedness has worsened over the years due to her failure to meet her huge external debt service obligations. This has resulted in accumulation of arrears and an uncontrollable growth of the debt stock compared to Nigeria's repayment capacity

It is imperative to investigate the effect of external debt and its management on the Nigeria's economic growth. Although, various studies have looked at the effect external debt has on the Nigerian economy, diverse debateable findings has been the trend, as evident in Abubakah (2010); Ogunmuyiwa (2011); Ajayi and Oke (2012); Suleiman and Azeez (2012), while some findings revealed that external debt positively affect economic growth (Azeez, 2012; Shehu & Aliyu, 2013), others reveal an adverse effect of external debt on economic growth (Iyoha,1996; Ajayi & Oke, 2012; Audu, 2004). Ali (2012) asserts that external debt exert both positive and negative influence on developing economies. He concluded that external debt is beneficial when channelled towards investment oriented projects such as power and other key infrastructure which can attract investors, both local and foreign. It could become deleterious on the economy when it is used for consumption purposes whether private or public in nature, which neither generate returns nor stimulate investment. Ali (2012) assertion is suggestive that the management of external debt determines its effect on the economy. That is, the extent to which external debt

affects a country's external reserves, exchange rate, Foreign Direct Investments, economic growth and other macro-economic variables is determined by the quality of external debt management.

This study therefore seeks to study the effect of external debt on Nigerian economic growth, which will reveal the nature and effectiveness of external debt management in Nigeria. The study is also aimed at providing a reliable position for these conflicting findings.

Objectives of the Study

The broad objective is to examine the relationship between external debt and economic growth in Nigeria. Specifically, it sets out to:

i. verify the association between external debt and economic growth in Nigeria;

ii. ascertain the effect of external debt servicing on economic growth in Nigeria; and

iii. determine the direction of causality between external debt and economic growth in Nigeria.

Scope of the Study

This study is delimited to a time frame of thirty seven years (1981- 2017) which is considered adequate and not distant from current realities. The choice of this period is also prompted by Shehu and Ajayi (2013) assertion that the quantum of Nigeria's external debt was small until 1978 and prior to this period, external debt was not burdensome on the economy because they were obtained in soft terms.

2. Prior Studies

Were (2001) analyses the debt overhang problem in Kenya and made effort to find evidences revealing its effect on the economy using data having time series properties for the period 1970-1995. His findings reveals that economic growth is not deleteriously influenced by debt servicing. Although, it identified some crowding-out effect on private investment. In the work of Schclarek (2004), external debt was found to have and insignificant effect on the productivity level of factors. In the case of developing countries, it was found that higher growth rate usually accompanying lower external debt level and that public external debt propels the negative effect, rather than private external debt. Result also revealed that there exist no such link between public external debt and economic growth in developed economies.

Edo (2002) focused on Nigeria and Morocco in examining the external debt problem is Africa. Part of his submission was that external debt exert great influence on investment. He also found that fiscal expenditure, balance of payment and global

interest rate significantly account for debt accumulation in the sampled countries. He went further to suggest measures like privatization, sustained export promotion program as well as the restructuring and developing of capital markets as possible means of alleviating the above problems.

Abdelmawla and Mohammed (2005) look at the influence of external debt on the growth of Sudan economy for the period 1978-2002. Export promotion strategy was capture by the growth rate of real export earnings and inflation was used as a proxy to account for the impact of macroeconomic policy. He concludes that external debt and inflation determines economic growth, while real export has positive and significant impact on economic growth. Adepoju, Salau and Obayeju (2007) analyse some time series data for Nigeria over the period 1062-2006. After considering the behaviour of donor agencies over time stemimg from various bilateral and multilateral arrangement, they conclude that the build-up of external debt hinders economic growth in Nigeria. Focused on the flow of foreign aid in six pacific island countries over the period 188-2004, Jayaraman and Evans (2008), examine countries that have been privileged to get foreign aid till early 80s, but found it difficult attract higher aid inflow due to changes in political circumstances thereby leading then into a twin deficits situation. Investigating the influence, increased flow of foreign aid and external debt has on growth in these economies, a significant positive relationship was found to exist between external debt and economic wellbeing; but they observe a contrary relationship between higher fiscal deficit and the economy. Hameed, Ashraf and Chaudhary (2008) examine the dynamic effect of debt servicing, labour and capital stock on economic growth in Pakistan for the period 1070-2003. An inverse effect of external debt servicing on the productivity of labour and capital was observed, which depletes economic growth.

While investigating the short run causality between external debt and economic growth rate for twenty seven Caribbean and Latin American countries for the period 1970-2003, Butt (2009) observe granger causality in thirteen countries. Also Ali and Mshelia (2007) used a set of data on Nigerian debt and found among others; both negative and positive relations with GDP.

Ajao and Ogiemudia (2014) look at how foreign debt management influences economic growth in Nigeria. An OLS multi regression analytical method was adopted in examining the connection between external debt and economic development, for the period 1970-2009, while the error correction model was used in examining the long and short run dynamics. The empirical result revealed a significant relationship between external debt and economic growth in Nigeria. External debt stock contributed to Gross Domestic Product (GDP) in Nigeria, as debt servicing impacts GDP in Nigeria negative though in an insignificant amount.

Monogbe, (2016) examines the intergeneration consequences of external borrowing on the productivity of Nigeria economy for the period 1981 – 2014. Using co-

integration technique alongside the granger causality test, we test the study hypotheses and finds external debt exhibiting a positive and significant influence over the Nigeria economy, implying that the use of loans for financing infrastructural, production and manufacturing project will propel economic wellbeing thereby promoting economic growth. They recommends that when government should channel borrowed funds to certain sectors like agriculture, manufacturing, entrepreneur and production, which are likely to arouse economic growth.

Udoffia and Akpanah (2016) look at the influence external debt exert on the Nigeria economy. For the traditional view, economic growth respond negatively to external debt in the long run, while the Ricardian equivalence hypothesis emphasize neutrality in the influence of external borrowing to economic growth. In Nigeria, external debt has been incurred mainly on the consideration that it should be used for investment purposes. The issue was empirically examined using the cointegration test and the error correction test for Nigeria over the period 1980 to 2012. Their findings supported the traditional view between external debt and growth and found the non-existence of debt overhang problem for Nigeria. Their recommendations include increased financing of development activities in Nigeria.

From the review of extant literature, a lot has been done on external debt and economic growth but the control variables most times do not affect the external debt - economy relationship. Also mixed findings exist as the relationship between external debt and economic growth has been found to be positive in some cases and negative in other cases. This study intends to bridge these knowledge gaps by reconciling the conflicting findings and providing a reliable empirical position.

3. Methodology

Employing an ex-post-facto design, we collect secondary data on economic growth, external debt, external debt servicing, external reserves, Foreign Direct Investment and exchange rate from the CBN Statistical Bulletin (2017) and the Debt Management Office (DMO).

Theoretical Framework

In this study, the endogenous growth model is used as a theoretical footing for external debt induced economic growth hypothesis. The theory asserts that the magnitude of physical investment alone does not guarantee a country's growth in the long run, but the efficient utilization of these investments does. This has spurred the endogenous growth model to incorporate technical, organizational, human and managerial skills, innovations, technological progress, and accumulation of

knowledge in models explaining growth (Mankiw, Romer & Wei, 1992). The endogenous growth equation is given as:

$Yt = \beta_0 + \beta_{xt} + et$ (1)

Yt = the changes in economic growth at time t,

β_{xt} = foreign capital and other macro- economic variables at time t.

et = the disturbance term with zero mean and constant variance, and

β = the estimation parameter.

Model Specification

From equation two (2) above, the empirical model for this study will be a modification of Ajao and Ogiemudia (2014) stated as

$RGDP_t = \alpha_0 + \alpha_1 EDSEV_t + \alpha_2 EXDEBT_t + \alpha_3 INVTt_t + \varepsilon t$ (2)

This study therefore modify the above model in eq. (2) and it is stated as

$\Delta RGDP_t = \boldsymbol{f}$ (EXD, EXDS, EXRES, FDI, EXCR) (3)

We specify the long-run estimated equation as:

$RGDP_t = \alpha_0 + \beta_1 RGDP_t + \beta_2 EXD_t + \beta_3 EXDS_t + \beta_4 EXRES_t + \beta_5 FDI_t + \beta_6 EXCR_t + \varepsilon t$ (4)

Therefore the error correction model to be used in the study as short run equation is specified as:

$$\Delta RGDPt = \alpha 0 + \beta 1 \sum_{t=1}^{n} \Delta RGDPt\text{-}1 + \beta 2 \sum_{t=1}^{n} \Delta EXDt\text{-}1 + \beta 3 \sum_{t=1}^{n} \Delta EXDSt\text{-}1 + \beta 4 \sum_{t=1}^{n} \Delta EXREStt\text{-}1$$

$$+ \beta 5 \sum_{t=1}^{n} \Delta FDIt\text{-}1 + \beta 6 \sum_{t=1}^{n} \Delta EXCRt\text{-}1 + \beta 7 \sum_{t=1}^{n} + \partial 1 Ecm(-1) + \boldsymbol{\varepsilon t} \quad (5)$$

Where:

RGDP = Real Gross Domestic Product Per Capital

EXD= External debt

EXDS= External debt servicing

EXRES= External reserves

FDI = Foreign Direct Investment

EXCR = Exchange rate

α_0 = Constant (Intercept)

β1, β2 and β3, β4, β5, β6, β7 = Coefficients

ε_t = Error term

Δ = Change

$Ecm(-1)$ = error correction term

t = respective variables at time t

The Co-integration test is based on the Granger and Engel two stage co-integration approach.

Measurement of Variables

Dependent Variable

Real Gross Domestic Product (RGDP)

For Economic growth, we use Changes in Real Gross Domestic Product (RGDP). In line with (Levine 1998, Sanusi & Salleh, 2007).

Explanatory Variables

External debt (EXD)

External Debt is expressed as total external debt stock from external creditors. It is evident in the work of Abdulahi, Aliero and Abdulahi (2013). The relationship with economic growth is expected to show negative when it is large and not properly managed but positive when it is not large and is properly managed. It is sourced from CBN statistical bulletin and debt management office reports.

External debt servicing (EXDS)

This is captured by all foreign debt repayments including principal repayment. A negative relationship is expected and is sourced from CBN statistical bulletin and debt management office reports.

Foreign Direct Investment (FDI)

This is captured by total Foreign Direct Investment in Nigeria. A positive effect on economic growth is expected. Sourced from CBN statistical bulletin.

External reserves (EXRES)

This is captured by Nigeria external reserves. A positive relationship is expected and is sourced from CBN statistical bulletin

Exchange rate (EXCR)

The nominal exchange rate is adopted in this study as used by Akpan and Atan (2012). A positive effect with economic growth is expected and sourced from the CBN statistical bulletin.

4. Presentation of Empirical Results

Descriptive Statistics

We examine the distribution and other properties of variables using descriptive statistics. This ensures that our Error Correction Model (ECM) models capture the important features of the data and was found to be consistent with economic theory.

Table 1. Descriptive Statistics

	EXD	EXCR	EXRES	EXDS	FDI	RGDP
Mean	1104.227	65.21145	14874.42	170.8606	55286654	9865.282
Median	595.9000	21.88610	7222.200	64.40000	109972.5	4032.300
Maximum	4890.300	157.4994	53000.40	828.1000	1.19E+09	42396.80
Minimum	2.300000	0.610000	224.4000	1.000000	62478.20	94.30000
Std. Dev.	1382.051	62.68303	17114.59	214.9903	2.29E+08	13039.14
Skewness	1.518465	0.274811	1.097089	1.439369	4.283654	1.339491
Kurtosis	4.037481	1.270426	2.609809	4.386916	20.51488	3.514449
Jarque-Bera	14.16154	4.528575	6.829171	14.03967	522.7333	10.23221
Probability	0.000841	0.103904	0.032890	0.000894	0.000000	0.005999

Source: Extracted from E-view 7.0 Output, 2018)

From table 4.1 above, the variables are seen to be normally distributed. The table further reveals that all the variables are skewed positively to the right, thereby having a long right tail. The kurtosis statistics of (4.04), (4.39), (20.51) and (3.51) for EXD, EXDS, FDI and RGDP respectively, were very much apart and far from three (3) the scale for normal distribution. This implies the series of these variables have a peaked distribution which is relative to normal distribution. EXRES possess a normal distribution with the kurtosis value of 2.61 which can be approximated to 3.0 as bench mark for normal distribution. While EXCR possess a flat distribution which is relative to normal distribution. The Jarque-Bera test statistics and its corresponding probability values also support the existence of a normal distribution for variables.

Co-integration Results

Table 2. Engle and Granger Co-integration test

Variable	Level	Mackinnon Critical Values	Remark
RESID (ECM)	-4.879492	-3.653730*	Stationary
*stationary at 1% level of significance			

Source: Extracted from E-view 7.0 Output, 2018)

Since the series are integrated of the same order 1(2), the Engle and Granger two stage co-integration tests are carried out on the models. Using ADF test on the residual of the models, the results presented in table 4.2 reveals the presence of co-

integrating vector at one percent significant level. This implies a long run relationships between the variables in the models. This gives us the impetus to proceed and estimate the error correction model. The implication of this however is that the model then becomes a short run model, since the lagged component of the series was included.

Table 3. Parsimonious Error Correction Model (ECM) Results

Short run dependent variable: ΔRGDP Long run dependent variable: RGDP						
Variable	ECM Short Run Coefficient	t-Statistic	Prob.	Long Run Coefficient	t-Statistic	Prob.
C	-167.9922	-0.905002	0.3833	559.3787	1.254904	0.2203
EXD				-5.025786	-10.7035*	0.0000
EXCR				176.5742	9.4305*	0.0000
EXRES				-0.161295	-3.1473*	0.0040
EXDS				33.11976	9.3279*	0.0000
FDI				1.47E-06	0.7972	0.4323
DRGDP(-1)	1.298047	6.187066*	0.0000			
DEXCR	9.625135	0.683001	0.5076			
DEXCR(-1)	-5.307100	-0.245676	0.8101			
DEXCR(-2)	-8.384464	-0.431578	0.6737			
DEXD	-0.097528	-0.251160	0.8059			
DEXD(-1)	1.348058	2.026637***	0.0655			
DEXD(-2)	-0.973641	-1.752036	0.1053			
DEXDS	-0.266888	-0.066807	0.9478			
DEXDS(-1)	-8.201077	-1.615021	0.1323			
DEXDS(-2)	21.16206	6.147891*	0.0000			
DEXRES	-0.085803	-3.559798*	0.0039			
DEXRES(-1)	0.024895	0.541872	0.5978			
DEXRES(-2)	-0.043375	-1.349603	0.2021			
DFDI	-5.79E-06	-5.996451*	0.0001			
DFDI(-1)	-2.83E-06	-2.986333*	0.0114			
ECM(-1)	-0.430424	-2.949766*	0.0121			
R-squared	0.948734			0.946771		
Adjusted R-squared	0.913712			0.944321		
F-statistic	65.82132			402.7872		
Prob(F-statistic)	0.000000			0.000000		
Durbin - Watson Stat	2.437164			1.769206		
*NB: *, ** and *** represents significant at 1%, 5% and 10% respectively.*						

The parsimonious Error Correction Model (ECM) result shows that all the explanatory variables explain and account for about 99% of total systematic variation

in Economic Growth proxy by changes in RGDP, as indicated by the coefficient of determination R^2 value of 0.94 approximately. After adjusted for degree of freedom, the model still account for about 91% of total systematic changes in economic growth by all the explanatory variables taken together as indicated by the Adjusted R^2 value of approximately 0.913712. As only about 9% of these systematic changes in economic growth was not explained by the model, hence captured by the stochastic error term. This shows that the model has a good fit of the regression line.

The F-statistics value of 65.82 compares to its probability value is very high and it shows that all the explanatory variables are jointly significant at 1% level in explaining Economic growth (dependent variable). This implies that the model is statistically significant, depicting a significant relationship between all the independent variables and the dependent variable. On the basis of individual significance of the explanatory variables as indicated by the t-statistic, it was observed the explanatory variables passed the significance test at 1% and 10% respectively both in long and short run. The result shows that all the explanatory variables had various degrees of relationship with economic growth (DRGDP) although in different magnitude in the long and short run periods.

An over view of the ECM result further shows that the one period lag of the dependent variable (DRGDP (-1)) consider has a significant positive effect on current level of economic growth. The one and two period lag considered for DEXCR have a non-significant effect on the current period of the variable. The one and two period lag of DEXD has a significant negative effect on the current period DEEXD (except for the two period lag). The one and two period lag of DEXDS has a significant positive effect on the current period of DEXDS (except for the two period lag). In the same vein, the one and two period lag of external reserve (DEXRES) considered has a non-significant negative effect on the current period of external reserve. On Foreign Direct Investment (FDI), the one period lag considered has a significant negative effect on the current period of FDI.

The coefficient of the ECM (-0.4304) is significant at 1% level of significance when capered to its probability value and has the correct negative sign. This indicates a feedback of approximately 43% of the previous year's disequilibrium from the long run Economic growth elasticity. This suggests that any short run disequilibrium in the system will be adjusted in the long run at an approximate speed of 43%. The coefficient is relatively low and suggests that adjustment to equilibrium is reasonably low. Only about 43% of the adjustment to long run equilibrium is completed within the first period (year) after short run shock. The Durbin-Watson statistic value of 2.43 and 1.769 for ECM short run and OLS long run result is approximately 2.0; this means that the model may not have serial correlation. However, due to the presence of a lagged dependent variable on the right-hand side of the equation, the Durbin-

Watson statistic is not sufficient and appropriate as a test for serial correlation in this case. Hence we used the Breuch-Godfrey test.

We use the granger causality test to ascertain the direction of causality between explanatory variables and economic growth

Table 4. Causality Test

Null Hypothesis:	Obs	F-Statistic	Prob.	Decision	
DEXCR does not Granger Cause DRGDP	37	3.83153	0.0360	Reject	Unidirectional
DRGDP does not Granger Cause DEXCR		0.80711	0.4579	Accept	
DEXD does not Granger Cause DRGDP	37	0.02057	0.9797	Accept	None
DRGDP does not Granger Cause DEXD		0.50233	0.6113	Accept	
DEXDS does not Granger Cause DRGDP	37	6.12674	0.0071	Reject	Unidirectional
DRGDP does not Granger Cause DEXDS		1.93078	0.1669	Accept	
DEXRES does not Granger Cause DRGDP	37	3.09528	0.0637	Reject	Bidirectional
DRGDP does not Granger Cause DEXRES		6.42983	0.0058	Reject	
DFDI does not Granger Cause DRGDP	37	0.38707	0.6832	Accept	Unidirectional
DRGDP does not Granger Cause DFDI		2.84895	0.0776	Reject	

Source: Extracted from E-view 7.0 Output (2018)

Discussion of Findings and Policy Implications of Result

Our empirical analyses gave rise to a reasonable number of salient findings. Below are the findings as well as their implications for policy.

i. External Debt (EXD) has a non-significant negative effect on Nigeria's economic growth (DRGDP) in the short run and a significant negative effect on economic growth in the long run. This was supported by the causality result which did not find any causality relationship between external debt and economic growth (DRGDP). On the basis of hypothesis testing as indicated by the OLS t-statistics value of -10.70. Thus, we accept the alternate hypothesis (Hi), implying that external debt has significant effect on economic growth in Nigeria only in the long run, and the converse hold in the short run. This result corroborated the findings of Pottillo and Ricci (2001), Adepoju, Salau and Obayelu (2007), Ajao and Ogiemudia (2014) and partially disagreed with Cohen (1993) and Warner (1992) in the literature. The unexpected negative effect of external debt in the short and long run could be attributed to the fact that most of this funds borrowed was not used for the infrastructural development purpose for which it was meant for as a result of corruption.

ii. Our empirical results further reveal that in the short run, exchange rate (EXCR) has a non-significant positive influence on economic growth (DRGDP). But in the long run period, this effect remains positive but significant during the period under consideration. This finding is in conformity with the work of Akpan and Atan (2012), in the literature.

iii. External reserve (EXRES) has a significant and negative influence on Nigeria economic growth in both the short and long run. The alternate hypothesis (H1) is accepted which indicate that external reserve has significant effect on economic growth both in the short and long run in Nigeria during the period under review as indicated by the ECM and OLS t-statistics. This result concurs with the findings of Abdulazeez (2011) in the literature.

iv. In the short run, external debt service (EXDS) has a negative and insignificant influence on economic growth. In the long run, a significant positive influence on economic growth was observed. The alternate hypothesis (Hi) is accepted which means that EXDS has significant relationship with economic growth in Nigeria only in the long run during the period under review. This finding is in line with that of Shehu and Aliyu (2013) and partially agreed with Adesola (2009) and Erdal-Karagol (2003) in the literature.

v. Finally, our empirical result shows that Foreign Direct Investment (FDI) has significant negative influence on Nigeria's economic growth (DRGDP) in the short run but the influence in the long run was positive and insignificant. The finding corroborate with the submission of Adebisi and Oluwakayode (2011) but contrary to Zhang (2001) in the literature.

5. Recommendations

The following recommendations stem from our findings:

i) A more effective approach to negotiating for fixed interest payment with flexible amortization schemes should be embraced. Rescheduling should be based on multi-year rather than year by year.

ii) External finance should only be resorted to when other sources of finance are impracticable, and be channel towards areas of highest priority. In many countries today, the external debt burdens have ushered in series of economic problems.

iii) While drafting agreements on debt service repayment, periods should be long enough (10 years or more) before dividends can be repatriated for investment to mature.

iv) There should be strict adherence to channeling externally sourced funds (debts) to productive self-liquidating investment while adequate appraisal of projects to be financed with external loan is carried out.

v) Nigeria should strive to devote a reasonable portion of her foreign exchange earnings to debt servicing to ensure that she meets the requirements of creditors.

6. Conclusion

The study looks at the effect of external debt on Nigeria's economic growth from 1981 to 2017. From the analyses, we found a nexus between external debt and economic growth. While some explanatory variables exerted negative effect on economic growth, others exerted positive effect on growth in both short and long run. The effect of External Debt on economic growth was found to be negative and insignificant in the short run. In the long run, it was seen to exert a significant negative effect on economic growth. Stemming from our findings, one inference we can draw is that Nigeria has not begun to reap significantly from efficient sourcing and effective utilization of external debt, as its effect on economic growth in both short and long run during the period under consideration is negative and significant. The study further concludes that the various explanatory variables considered in this study are very important variables in determining economic growth in Nigeria.

This study is limited by the problem of inadequate and often unreliable statistics characterized with most secondary data in developing countries. Though some control variables like FDI, external reserve and exchange rate are included in the analyses; the R^2 suggests the existence of other factors that can influence economic growth outside these. Though these limitations exist, efforts were made to give available data good analyses so as to achieve the objectives of this research.

Further researches should consider other explanatory variables not captured by this study, and examine the influence of mediating variables like "infrastructural development" that transmits external debt to economic wellbeing.

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