



Finance & Accounting Research Journal
P-ISSN: 2708-633X, E-ISSN: 2708-6348
Volume 5, Issue 1, P.No. 18-28, January 2023
DOI: 10.51594/farj.v5i1.436
Fair East Publishers
Journal Homepage: www.fepbl.com/index.php/farj



EXTERNAL DEBT AND AGRICULTURAL PRODUCTION IN NIGERIA

OSUJI, C.C.(Ph.D)¹, EHRIJAKPOR, A.E.O. (FCA, Ph.D)², & MGBEZE, J. C. (Ph.D Candidacy)³

^{1,2,3}Department of Banking and Finance,
Faculty of Management Sciences,
Delta State University, Abraka, Nigeria

*Corresponding Author: MGBEZE, J. C.
Corresponding Author Email: jcmgbeze@gmail.com

Article Received: 02-01-23

Accepted: 20-01-23

Published: 28-01-23

Licensing Details: Author retains the right of this article. The article is distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 License (<http://www.creativecommons.org/licences/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Journal open access page.

ABSTRACT

The motivation for this paper stems from the rising debt profile of Nigeria, especially the foreign component, and its implication on growth prospects. In that regards, the study sought to establish the linkages between external debt and growth in productivity, specifically focusing on the agricultural sector. The study thus analyzed the relationship between external debt and Nigeria's agricultural production from 2006 to 2021 using secondary data obtained from the Central Bank of Nigeria (CBN) statistical bulletin and the World Development Indicators (WDI). ADF unit root test and the (ARDL) bound testing approach to cointegration were utilized, to achieve the objectives of the study. The parameters displayed a long-term association in both the short and long - run, according to empirical results, which demonstrated that the variables were cointegrated. External debt stock (EDS) and agricultural production, as assessed by agriculture gross domestic product (AGDP), had a substantial positive association, indicating that EDS positively impacted agricultural growth and that higher EDS accelerated agricultural growth over time. To be precise, a rise in EDS of 1% produced an increase in AGDP of 0.14%. Euro bond stock and bilateral loans also revealed positive relationships while External Debt Service Payment and Multilateral loans revealed

negative relationships with AGDP. According to this research, the government must consider the strategy of diversifying its economy via agricultural output seriously. To lessen the cost and unfavorable effects of an excessive reliance on foreign exchange from oil and its price volatility, it is necessary to diversify the sources of external debt servicing, particularly in the non-oil sector including agriculture, mining, industry, and industrial production.

Keywords: Debt, Agriculture, Loans, Output, Nigeria.

INTRODUCTION

Debt is used to cause the settlement of expenditures, which will ultimately raise productivity and promote the economy's growth (Ayaji & Edewusi, 2020). When the revenue obtained by the government is inadequate to cover its expected expenditures, public debt, which includes both internal (domestic) and external obligations, is considered (Rahman, 2017). Worthy to note is that, public borrowings are unavoidably one of the most efficient means through the government finance public spending. However, if the government instructs the central bank to circulate more funds to the public in order to avoid the interest payments associated with public debts, the debt burden will surely reduce but debt still needs to be paid off and the result of such behaviour is high inflation rate (Idenyi, Igberi & Anoke, 2016).

Justifiably, the necessity to finance expanding government expenditure has been recognized as the cause of Nigeria's fast growth in debt stock (Charles, 2017). As such, debt accumulation can be as a result of bridging the gap between revenue and expenditure. Such funding avenues include savings-investment, foreign exchange, and the fiscal-constraint gap. The fiscal-constraint gap is associated with the idea of Charles (2017), where the accumulation of debt is to augment the revenue of the government for expenditure programmes.

The savings-investment gap argument for debt accumulation is linked to developing countries where there is inadequacy of investment capital to finance investment ideas. As such, borrowing is carried out to fill such gap. Meanwhile, the foreign exchange gap is based on the premise that: "export earnings are usually insufficient to generate enough foreign exchange to finance imports making overseas borrowing the indispensable means of gaining access to the technology that is vital for the expansion of the export sector that ultimately leads to rapid economic growth"(Tiruneh, 2016). Since no government is an island, it would normally require some form of external support to perform effectively, especially when export earnings are insufficient to generate enough foreign exchange – a usual case with developing nations like Nigeria. It is generally the case that developing countries facing a scarcity of capital require external loans to supplement domestic saving.

To meet national wants amidst limited resources, nations might resort to borrowing leading to external debt. Up until the point where substantial levels of external servicing debt set in and started to have an influence on growth as the focus shifted from funding private investment to debt repayment, external financing has a considerable impact on the economic growth of a country. At modest levels, debt, according to Pattilo, Poirson, and Ricci (2016), promotes agricultural production. But debt accumulation starts to hurt growth once it reaches a certain amount or threshold. Additionally, Fosu (2018) found that investment in the environmental, education, and health sectors decreases as debt service costs rise. This obscures the motive behind external borrowing, which is to boost growth and development, rather than to get

drowned in a pool of debt service payments which drains national resources due to high interest payments, thereby hindering growth. following oil discoverng in large quantity, in the years immediately before and after independence, agriculture was the backbone of the economy, contributing about 60 - 65% of GDP. Although its contribution had reduced to 20%, 21%, 36%, 24% and 21%, in 1980, 1990, 2000, 2010 and 2016, respectively, it is the single most important sector in Nigeria, and indeed in some other African countries, providing livelihoods for at least 53 percent of the economically-active labour force (Akpaeti, 2018).

Furthermore, there have been arguments on whether external debt is a veritable instrument for promoting agricultural growth in debtor nations. Empirical findings in this area have been mixed. This research, therefore, seeks to investigate the effect of external debt on agricultural growth in Nigeria. Consequently, this study examined the effect of External Debt Stock, External Debt Stock Payments, multilateral debt stock, Eurobond debt stock and bilateral debt stock to proxy foreign debt while agricultural production proportion of GDP, that is Agricultural GDP (AGP) is used as proxy for agricultural production.

REVIEW OF RELATED LITERATURE

Conceptual Review

The act of borrowing creates debt, and this debt may be domestic or external. The World Bank (2017) defines external debt as a debt owing to non-residents that can be repaid with foreign money, food, or services. The term "external debt" refers to the debt owed by one institution (the debtor country) to some other (lender country). It generally relates to debt that has been incurred and is due in a currency different from that of the debtor country.. Arnone, Bandiera and Presbitero (2016) describeThe portion of a nation's debt that is owing to international creditors, such as financial institutions, nations, or global financial institutions, is known as its external debt.

Debt crisis occurs when a country has accumulated a huge amount of debt such that it can no longer effectively manage the debt, leading to several crises in the domestic political economy (Adejuwon, 2016). Mimiko (2017) defines debt crisis as a situation whereby a nation is severely indebted to external sources and is unable to repay the principal debt. The Debt Management Office of Nigeria (DMO, 2012) highlighted the factors that led to Nigeria's external debt burden to include inefficient trade and exchange rate policies, adverse exchange rate movements, adverse interest rate movements, poor lending and improper debt management techniques, ineffective loan use, and amassing of late fees. The effect of external debt on a nation's economy has been a subject of controversy among academics; who are mostly of the view that external debt accelerates economic growth (Inyang & Effiong, 2020).

Agriculture also includes all forms of production, such as gardening, livestock raising, fishery, forestry, etc. It is described as the art, technology, and commerce of raising animals and crops for financial gain. Agriculture is the area of practical science that specializes with food production, preservation, conservation, refining, commercialization, promotion, etc. It can also be characterized as the ecological utilization of soil for production such as crops, livestock and fishery, by proper utilization of natural resources. The natural resources are soil, sunlight, air, water, temperature, etc.

The non-agricultural economic can rise through it with a number of ways, some directly including some indirectly, as agriculture output increases. Promoting agricultural growth of the rural economy may lead to sustainable increase in employment in rural areas, reducing regional income disparities, stemming pre-mature rural-urban migration, and ultimately, reducing poverty at its very source (Anríquez & Stamoulis, 2017). Agriculture is critical to achieving global poverty reduction targets and it is still the single most important productive sector in low income countries, often in terms of its share of gross domestic product. With 75% of the world's poor population in rural areas and most of them dependent on farming, agriculture must be part of the world economic growth, poverty reduction, and environmental sustainability strategy.

In countries where the share of agriculture in employment is large, broad-based growth in agricultural incomes is essential to stimulate growth in the economy. Hence, the ability of agriculture to generate overall GDP growth and its comparative advantage in reducing poverty will vary from country to country.

Theoretical Review

The growth-cum-debt theory was used to underpin this study. This theory was developed by Chenery and Strout (1966) and is rooted in the traditional neo-classical growth model. According to growth-cum-debt theory, external borrowing is used to tie the gap between domestic savings and investment. The theory assumes that with perfect capital mobility (which allows countries to borrow and lend), external borrowing contributes positively to economic growth. Under growth –cum- debt framework, it is postulated that debt was procured for investment purpose and that the investment will generate multiplier effect on economic growth (Nyong, 2005).

The fundamental claim is that a nation will be capable to service its debt as long as new debt increases throughout time spur significant economic development. The model states that “to maintain debt service capacity over time, the growth rate of output should equal or exceed the cost of borrowing, measured by the rate of interest” (Hjertholm, 1999). The model indicates that the debt plan will only succeed in the long run if there is enough economic growth to support it.

Empirical Review

Recently, Inyang and Effiong (2020) in their study investigated the possible influence which external debt can have on the growth of the Nigerian economy using annual data for the period 1981 to 2019. The study used the ARDL Bounds test approach to cointegration and the error correction model. Their findings revealed that debt burden posed a positive but insignificant effect on economic growth.

Adesola (2019) explored the link between weak economic growth and debt services in Nigeria, with a particular focus on the effects of debt payment to creditors on Nigerian economic growth. The study used time series data from 1981 to 2004 and the ordinary least squares regression approach. The empirical outcomes revealed that debt payments to other creditors and London Club creditors had a considerable negative impact on Nigeria's GDP and gross fixed capital formation.

Eze, Nweke, and Atuma (2019), explored the consequence of public debt on the Nigerian economy. Annual time series data spanning from 1981 to 2017 was collected from the CBN statistical bulletin and analysed using ARDL estimation technique and the Chow breakpoint

test. According to the study's findings, external debt had a negative and substantial influence on GDP in Nigeria, whilst domestic debt had a negative but minor influence on GDP. The research advised that the Nigerian government stop using external debt to pay its budget deficit and

Matandare and Tito (2018) examined Zimbabwe's state debt and economic development. The study made use of a quantitative research design. The World Development Indicators database was used to collect secondary time series data covering 36 years (1986-2016). The study's data were analysed inferentially. According to the study's findings, there is a negative significant association between external debt and economic development in Zimbabwe. The study also discovered that the exchange rate and inflation have strong negative correlations with economic development in Zimbabwe, whereas external debt has a strong positive link with economic growth.

Folorunso and Felix (2018) studied the influence of foreign borrowing on the growth of Nigeria and South Africa's economy. Analysis of the data from the two countries indicated that debt propelled the growth of output in Nigeria, but retarded such in South Africa. They based the reason for their findings on the repayment patterns of such debts. Within their study period, Nigeria was only repaying a minute chunk of her foreign debt while South Africa was repaying debt service ratio it assiduously. Further, it can be asserted that even though debt service likely has a positive effect on the growth of output in Nigeria, "the more serious the debt, the more likely it is to compress output growth.

Malik, Hayat, and Hayat (2017) investigated the relationship between foreign debt and economic growth in Pakistan from 1979 to 2012 using time series econometric techniques of the Ordinary Least Squares. The findings revealed that foreign debt has a negative and substantial relationship with economic growth.

Rais and Anwar (2017) looked at the consequences of external debt on the Pakistani economy from 1977 to 2015. This study used a straight forward Ordinary Least Squares regression methodology to discover that both domestic debt as a ratio of GDP and overseas debt as a ratio of GDP) have a negative relationship with growth. The report finds that because both forms of debt are not adequately managed and properly employed, they have a detrimental influence on the nation's economy. The study, on the other hand, suggests that favorable benefits may be obtained if debt is effectively managed and employed primarily in productive areas, while staying away from corrupt persons.

Ndubuisi (2017) used yearly time series data from 1985 to 2015 to assess the influence of external debt on Nigerian economic development. The data was evaluated with the ordinary least squares regression approach, the Johansen cointegration test, and the error correction method. The variables of interest used in the study were external debt stock and external debt servicing while exchange rate and external reserve were used as control variables. Gross domestic product was used as proxy for economic growth. The regression study revealed that debt servicing had a negative and minor influence on economic growth, whereas the foreign debt stock had a considerable positive influence on Nigeria's economic growth. GDP was significantly influenced by external reserves and exchange rates. As a result, the report advised that foreign debt be channeled toward infrastructure development.

Nasa (2017) investigated the sustainable amount of debt that is desired for economic growth by predicting the debt threshold using Hansen's endogenous threshold model and yearly

datasets from 1978 to 2008 for 56 nations. The study discovered a debt/GDP threshold ratio of 45%, showing that if the debt ratio hits this level, public debt becomes harmful to output growth. The author also demonstrated that the optimal amount of debt for growth, which debtors should strive for, was assessed to be 7%.

Using quarterly data, Omotosho, Bawa and Doguwa (2016) investigated the possibility of threshold effects in the link between public debt and economic development in Nigeria. Overall, they revealed empirical backing for a reversed U-shape link between different forms of public borrowing and economic growth. The model findings revealed a threshold level of 73.70 percent for total public borrowing as a proportion of GDP, while the anticipated inflexion points for foreign and domestic debts were respectively 49.4% and 30.9%.

Gap in Literature

Studies on the effect of public debt on economic growth have revealed conflicting results. This could be due to the period covered in the study, the country or region of study, the methodology used; as well as the aggregation of public debt. In this light, our study disaggregates public debt into external and internal debt and uses the external component and its various major components to ascertain the pattern in which this particular component and its major constituents affect economic growth via the agricultural sector.

METHODOLOGY

Research Design and Sources of Data

This research utilized secondary data obtained from Central Bank of Nigeria (CBN) statistical bulletin, World Development Indicators and World Bank data bases covering the period 2006 -2021, which formed the basis for analysis. To examine the impact of external debt on agricultural growth in Nigeria, external debt stock (EDS), external debt service payments (EDSP), Multilateral debt stock (MDS), Euro bond stock (EBS) and Bilateral debt stock (BDS); proxies for external debt, were the explanatory variables while agricultural production as percentage of GDP i.e. Agricultural GDP (AGDP) was the dependent/ explained variable. Since we are looking for a relationship that may have existed we adopted the ex-post facto (after-the-event) research and correlational design for a sample period of 16 (sixteen) years. The design is also aggregative as we did not study any specific sector but aggregative agricultural production and aggregative external debt figures for the country for the period. The study is restricted to the sample period of 16 years as break down of public debt servicing into domestic and foreign components was not found available for earlier years.

Analytical Tools

The technique for data analysis for the research is multiple regression analysis. This technique is preferred for the analysis because the research is empirical in nature and data for the study is time series which, in this case, consist of multiple independent variables. Given the nature of data it is further converted into natural log form to enable efficient estimation.

Method of Data Analysis

This study employed the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration proposed by Pesaran, Shin and Smith (2016) to estimate the relationship between external debt and agricultural growth. The ARDL approach offers some desirable statistical advantages over other co-integration techniques. While other cointegration techniques require all the variables to be integrated of the same order, ARDL test procedure provides valid results where the variables are integrated of different orders or are mutually

cointegrated, and provides very efficient and consistent estimates in small and large sample sizes (Pesaran, Shin & Smith, 2016). This approach, therefore, becomes relevant to this study as some series are I(0) while others are I(1)

Model Specification and Variable Measurements

To model the relationship between agricultural growth and external debt, a functional form model is constructed as:

$$AGDP = f(EDSt, EDSPt, MDSt, EBSt, BDSt) \dots\dots\dots(1)$$

Expressing the above equation in linear estimation form:

$$AGDP = \beta_0 + \beta_1 EDSt + \beta_2 EDSPt + \beta_3 MDSt + \beta_4 EBSt + \beta_5 BDSt + \mu_t \dots\dots\dots(2)$$

Where;

β_0 is the intercept

$\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are the coefficients of the explanatory variables and μ is the stochastic error term.

Following Katircioglu (2016), equation 2 was further converted into natural log form to enable efficient estimation as shown below.

$$\ln AGDP_t = \alpha + \beta_1 \ln EDSt + \beta_2 \ln EDSPt + \beta_3 \ln MDSt + \beta_4 \ln EBSt + \beta_5 \ln BDSt + \mu_t \dots\dots\dots(3)$$

Where: $\ln AGDP, \ln EDS, \ln EDSP, \ln MDS, \ln EBS$ and $\ln MDS$ represent the natural logs of the variables while μ stands for error term in the long term growth model.

Table 1

Variable Measurements

S/N	Variable	Nature of Variable	Measurement
1	Agricultural Production	Dependent	Contribution of the agric. sector to GDP
2	External Debt Stock	Independent	Annual external debt outstanding
3	External Debt Stock Payment	Independent	Total amount of debt service/ payment (interest + principal repayments)
4	Multilateral Debt Stock	Independent	All external debts contracted from multilateral finance institutions and outstanding in the country's debt record
5	Euro Bond Stock	Independent	All outstanding external debts contracted from the Eurobond market
	Bilateral Debt Stock	Independent	All outstanding external debts contracted by Nigeria and another country

Source: Researcher's Compilation (2022)

RESULTS AND DISCUSSIONS

Pre-estimation Test

Various pre-estimation tests considered are unit root test, Optimal Lag Selection Criteria and ARDL bounds test. Specifically, the study employed the Augmented Dickey Fuller test (ADF) unit root test to identify the order of integration of the variables under consideration. The result of the unit root test is presented in Table 1.

Table 2

Unit Root Test

Variable	Order of integration	Critical Values			ADF Statistics	Probability
		1%	5%	10%		
$\Delta(AGDP)$	I(2)	-4.286426	-3.828975	-3.362984	-4.817461	0.0000
$\Delta(EDS)$	I(2)	-4.057910	-3.119910	-2.701103	-4.723359	0.0477
$\Delta(EDSP)$	I(1)	-2.800080	-3.792272	-3.342253	-3.877930	0.2931
$\Delta(MDS)$	I(2)	-5.295384	-4.008157	-3.460791	-7.277384	0.0412
$\Delta(EDS)$	I(2)	-4.303492	-3.403313	-2.841819	-4.839490	0.0505
$\Delta(BDS)$	I(2)	-4.420595	-3.259808	-2.771129	-4.679194	0.0171

Source: Author's computation using E-views 9

1. Δ=Difference operator 2. I(d)=Number of times of integration 3. Level=10%, 5%, 1% levels of significance

Result of the unit root test shows that external debt service payment (EDSP) was integrated of order one i.e. I(1), whereas, other variables were stationary at second difference i.e. I(2). The mixture of order of integration among the series validates ARDL approach to co-integration as more appropriate to be applied for the study.

To test for co-integration, it is also paramount to determine the optimal lag. The lag is selected rightly such that the error terms in the equation are not serially correlated. Result of the optimal lag selection criteria indicated an optimal lag of 4 (Table 3).

Table 3
Optimal Lag Selection Criteria

Lag	Log L	LR	FPE	AIC	SC	HQ
0	13.32121	NA	0.052221	-0.116738	0.111006	-0.045445
1	14.34172	14.03165	0.039596	-0.656316	-0.414522	-0.591765*
2	14.5677	0.419666	0.029593	-0.641771	-0.334410	-0.535041
3	16.3347	2.110188	0.028208	-0.071289	-0.342600	-0.583222
4	16.4347	0.323121*	0.030850*	0.657173*	-0.250007	-0.520721

Optional Log Selection: Source: Author's computation using E-views 9

Note: * indicates log order selected by the criterion LR, FPE, AIC and the SC showed optimum log to be 4.

Table 4
Bound Test Cointegration Result

Model	F-Statistic	Lag	Level of Significance	Bound Test Critical Values(Constant Level)	
				I(1)	I(2)
F(lnAGDP, lnEDS, lnEDSP, lnMDS, lnEBS, lnBDS)	5.563201	4	10%	2.45	3.52
			5%	2.86	4.01
			2.5%	3.25	4.49
			1%	3.74	5.06

Table 3: Bound Test Cointegration Result

Source: Author's computation using E-views 9

Cointegration test result on table 2 above reveals that there exists long run relationships among the variables of study as the calculated F-statistics (5.563201) is greater than the upper bound critical value at all significance levels, thereby indicating that, we can safely reject the null hypothesis of no cointegration among AGDP, EDS, EDSP, MDS, EBS and BDS.

Regressed Regression and Discussions

Having found a long run relationship between our series, we estimated the long run model to obtain the long run coefficients whose results are presented on Table 5.

Table 5
ARDL Estimate

Regressand: AGDP

Method: ARDL

Dependent lags: 1 (Fixed)

Dynamic regressors (0 lag, fixed): EDS EDSP MDS EBS BDS

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
AGDP(-1)	0.822254	0.300684	2.734610	0.0052
EDS	0.143598	0.051355	2.796187	0.0390
EDSP	-0.092375	0.050014	1.846993	0.0685
MDS	-0.122184	0.045415	-2.690401	0.0446

EBS	0.082074	0.026123	-3.141826	0.0348
BDS	0.062482	0.087562	0.713582	0.1149
C	1.340246	2.700890	0.496224	0.6458
R-squared	0.898853	Mean dependent var		10.00818
Adjusted R-squared	0.697133	S.D. dependent var		0.307890
F-statistic	580.5687	Durbin-Watson stat		2.057658
Prob(F-statistic)	0.043408			

Source: E-Views 9.0

The Durbin Watson (DW) statistic is 2.057658, which is approximately 2, indicating that there is no presence of first order serial autocorrelation. The DW statistic test the strength of the model used for the analysis. With $DW = 2$ we conclude that the model used fit the data/analysis. Meanwhile, the R2 evidenced that the model has a high explanatory power while the Prob(F-statistic) value of 0.043408 implies that the model is highly statistically significant.

Individually, external debt stock (EDS) coefficient is positive and statistically significant at 5% level, indicating that (EDS) has significant positive impact on agricultural growth, that is a unit increase in EDS leads to 0.14 % increase in agricultural growth hence, higher EDS accelerates agricultural growth in the long run. External debt service payment (EDSP), on the other hand, has been found to have negative and insignificant impact on agricultural production in the long run, which implies that EDSP does not significantly determine agricultural growth in the long run. The results further indicate that multilateral debts stock (MDS) coefficient is negative and statistically significant at 5% indicating that MDS has significant negative impact on agricultural production; that is, a unit increase in MDS leads to 0.12% decrease in agricultural production, thus implying that an increase in MDS would lead to a slight decrease in agricultural growth in the long run. Also, the result indicates that Euro bond stock (EBS) has significant positive impact on agricultural production, that is a unit increase in EBS would lead to 0.08% increase in agricultural production which implies that as Euro bond stock increases agricultural production increases. Finally, Bilateral debt stock has a positive but insignificant relationship with agricultural production. By implication, multilateral finance institutions, in particular, have been found to be inappropriate sources of external funding for the growth of the Nigerian economy while Euro bonds and bilateral sources appear to have done better.

Furthermore, there is statistical significance among AGDP, EDS, EDSP, MDS, EBS and BDS since 89.89% of the analysis indicate model fit. On the other hand, up to 69.71% of the regressors explain the regressand (dependent/endogenous variable). This are going by the facts that R-squared is 0.898853 while Adjusted R-squared is 0.697133, thus only 30.29% of other variables, not captured in the model equation, explained the endogenous variable.

CONCLUSIONS AND RECOMMEDNATIONS

The study shows that the variables employed are key factors to consider in the growth of the Nigerian economy and suggests that external resources inflows are highly needed and necessary for the development due to the observed critical role they have played in many developing countries. The study made use of the autoregressive distributed lag model and found the data used free from spurious regression. Given the empirical result, there is no doubt that nations must borrow from one another in order to finance not only delays in expected incomes but also shortfalls in income. This helps ensure that needed investments

and production grow unabated. However, excess borrowings and wrong application of borrowed funds can mean debt overhang, over blown interests and bloated external debt payments, which begin to impact negatively on growth.

Agriculture has been in the minds of every successive Nigerian government but empirical evidence now reveals that its growth has been very slow and this may be due in part to the negative impact of external stock payments, large exposure of the Nigerian state to multilateral finance institutions and insignificant contributions of such debts to economic growth. Consequently, the paper submits:

- a. Via greater agricultural output and the development of other non-oil industries, the govt should initiate the strategy of diversifying the economy. In order to lessen the hardest hit and the detrimental effects of heavily dependent on foreign exchange from oil as well as the price fluctuations in its cost on Nigerians, it is necessary to widen the generator of external debt service, — particularly to the non-oil industries such as agriculture, mineral mining, industry, and industrial production.
- b. Though borrowing should be expected to generate a positive influence on the growth of the Nigerian economy, this can only be achieved through the investment of such loans in the real/ productive sector of the economy as debt servicing does negatively impact growth.
- c. Anti-corruption agencies like Economic and Financial Crimes Commission (EFCC), Independent Corrupt Practices and other Related Offences Commission (ICPC) and Code of Conduct Bureau should be strengthened and the laws establishing them reviewed by government to make them more functional and efficient. This will reduce the incidences of misappropriation and embezzlement of funds from external debt.
- d. There is need to study the various sources of external loan to properly appreciate the efficacy of the sources in assisting economies of developing nations
- e. Nigeria should go for a renegotiation of her external debt payments such that the payments would stop impacting negatively on growth but rather begin to relate positively with economic growth.

References

- Adejuwon, K.D., James K.S., & Soneye, O.A. (2016). Debt Burden and Nigerian Development. *Journal of Business and Organisational Development*, 2(1), 102-112.
- Adesola, W. A. (2017). Debt servicing and economic growth in Nigeria: An empirical investigation. *Global Journal of Social Sciences*, 8(2), 1-11.
- Ayaji, I. E., & Edewusi, D. G. (2020). Effect of public debt on economic growth of Nigeria: An empirical investigation. *International Journal of Business and Management Review*, 8(1), 18-38.
- Bacha, E. L. (2015). A Three-gap model of foreign transfers and the GDP growth in developing countries. *Journal of Development Economics*, 32, 279-296.
- Central Bank of Nigeria (2018). *Statistical Bulletin*. Vol 24. December.
- Charles, O. (2017). Domestic debt and the growth of Nigerian economy. *Research Journal of Finance and Accounting*, 3(5), 45-56.

- Folorunso, S., & Felix, O. (2018). The impact of external debt on economic growth: A comparative study of South Africa and Nigeria. *Journal of Sustainable Development in Africa*, 10(3), 1-10.
- Fosu A. K. (2018). *The External Debt-Servicing Constraint and Public-Expenditure Composition in Sub-Saharan Africa*. Retrieved on 12th January, 2022, from: http://www.uneca.org/sites/default/files/page_attachments/aec2009theexternaldebt-servicingconstraint.pdf
- Hameed, A., Ashraf, H., & Chandhary, M. A. (2008). External Debt and its Impact on Economic Business Growth in Pakistan. *International Research Journal of Finance and Economics*, 20, 132-140.
- Inyang, N., & Effiong, U. (2020). Nigeria's public external debt and economic growth: Reconsidering the empirics. *World Journal of Innovative Research (WJIR)*, 9(3), 13-20.
- Kumar, M. S., & Woo, J. (2017). Public debt and growth. IMF working paper, WP/10/174.
- Malik, S., Hayat, M. & Hayat, U. (2016). External debt and economic growth: Empirical evidence from Pakistan. *International Research Journal of Finance and Economics*, 44, 88-97.
- Nasa, B. (2019). Threshold effects in the debt-growth relationship. University of Leicester.
- Ndubuisi, P. (2017). Analysis of the impact of external debt on economic growth in an emerging economy: Evidence from Nigeria. *African Research Review*, 11(4), 156-173.
- Omotosho, B. S., Bawa, S., & Doguwa, S. I. (2016). Determining the optimal public debt threshold for Nigeria. *CBN Journal of Applied Statistics*, 07(2), 1-25
- Pattilo, C., Helen, P., & Luca, R (2016). What are the channels through which External Debt affects growth. International Monetary Fund (IMF) working paper, Africa, Asia and Pacific department. w.p/04/15
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2016). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16, 289-326.
- Rais, S., & Anwar, T. (2017). Public debt and economic growth in Pakistan: A time series analysis. *Academic Research International*, 2(1), 535-544.