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Impact of External Debt on Economic Growth: Nigeria's Empirical Evidence (2002 – 2023)

Asielue, Peter Ikechukwu, PhD
Department of Banking and Finance, Delta State Polytechnic,
Ogwashi-Uku, Delta State, Nigeria.
Email: asielueikechukwupeter@gmail.com

ABSTRACT: It is common among developing countries like Nigeria that domestic sources of debt are insufficient for the required level of economic growth and development. As a result developing countries usually find themselves sourcing for funds from external source. Upon this premise, external debt is supposed to contribute positively to the growth of the economy. However, owing to excessive debt figures and misappropriation of debt, external debt servicing has often crowded out funds for productive investments. This study therefore, examined the impact of external debt on economic development in Nigeria from 2000 to 2023. In view of this, the study used gross domestic product as a measure of economic growth while external debt, external debt service and exchange rate were the independent variable. The data were sourced from Central Bank of Nigeria and analyzed using the Ordinary Least Square regression analysis and the Granger causality test. The findings of the study revealed that external debt has negative and significant effects on economic growth in Nigeria and that external debt service payments has negative but insignificant effects on economic growth in Nigeria while exchange rate has positive and significant effects on economic growth in Nigeria. The study recommended that the monetary authorities should limit the contraction of external debt to ensure that it does go beyond sustainability thresholds and that external debt should be channeled to productive sources to ensure that the servicing of these debts are sourced from funds generated from the use of external debt.

Keywords: External debt, external debt service, exchange rate, gross domestic product.

INTRODUCTION

Developing countries are known to be deficient in capital formation required for investment and infrastructural development. This often raises the need for governments of such economies to secure debt from internal sources. However, when internally-sourced loans become inadequate, such a country has to transcend its boundaries in search of debt finance. Such externally sought debt contracts

are usually referred to as external or foreign debt. The advent of Nigeria's rising external debt can be traced back to the oil crisis of the 1970s. The oil price shocks and excessive import reliance of that period instigated a rather unhealthy and chronic debt habit for the economy. Since then, according to the Central Bank of Nigeria (CBN, 2019), the nation had contracted a number of debt obligations from external sources, the pick of which were Paris Club of Creditors, London Club of Creditors and Multilateral Creditors. Prior to this occurrence, Nigeria had incurred some minor debts from World Bank in 1958 with a loan of US$28million dollars for railway construction and the Paris' Club debtor nations in 1964 from the Italian government, with a loan of US$13.1 million for the construction of the Niger dam.

The first major borrowing of US$1 billion known as the "Jumbo loan" was in 1978 from the International Capital Market (ICM) (Ideh & Uzonwanne, 2021). Since then, Nigeria's external debt continued to surge to very high levels until the year 2006 when Nigeria was relieved of 60% of debts owed to the Paris Club Creditors, during the Olusegun Obansanjo administration. However, succeeding governments resumed excessive borrowings with poor debt management which eclipsed the gain of the debt relief of 2006. The nation's total public debt increased by 4.52% in the first three months of the year 2017, according to the Debt Management Office (DMO) (2017). The public debt had increased from 21.73tn ($71bn) in December 2017 to 22.71m ($74.28bn) at the end of the first quarter of 2018 (Punch, 2018). Between the start of 2015 and December 2020, Nigeria's external debt profile has risen from $9.7 billion to $27 billion (Ideh & Uzonwanne, 2021). Servicing external debt has been a burden on Nigeria's total revenue generated. The principal payments were surged due to poor trade balances and deteriorating exchange rate. In Nigeria, debt servicing has jeopardized the country's economic growth and development. This weighs heavily on the economy, with consequences such as high inflation, unemployment, the majority of the population living under the poverty line and corruption (Olusegun, Oladipo, & Omotayo, 2021).

In bid to address problems associated with external debt in Nigeria, the Debt Management Office (DMO) was established in October, 2000 to work in collaboration with CBN and Federal Ministry of Finance to manage Nigeria's debts. Substantive success was recorded in 2005 during President

Olusegun Obasanjo's administration, when the Paris Club group of creditors agreed to cancel 60% (US$18 billion) of the US$30.85 billion owed to it by Nigeria. This debt relief freed the nation from the yearly US$2.3 billion (N345 billion) debt service burden, yet, these debts are still rising at the expense of the national income and revenue as Nigeria's public debt as at March 2018 is placed at N5.787trillion, reaching an all-time high of 29.59168 USD Million in the third quarter of 2018 before resting at $27billion in 2019 (Usim, 2018; Debt Management Office, 2019).According to Debt Management Office (2019), Nigeria's external debt stood at USD37.955 billion as at September, 2021. (Budgit, 2020).

While this seems to be a pointer that external debt and debt servicing have deteriorated economic development in Nigeria, empirical researches with statistical evidence have been unable to come to a consensus on subject matter. There seems to be division among empirical studies on the effect of external debt on economic growth and development. While some studies have found that external debt and debt servicing both have positive effect on economic growth (Olusegun et al., 2021), others found that external debt and debt service payments have a negative effect on growth (Onakoya & Ogunade, 2017; Ekor, Orekoya, Musa, & Damisah, 2021). Some studies even found that external debt positively affects growth while external debt servicing negatively affects growth (Ndubuisi, 2017; Odubuasi, Uzoka, & Anichebe, 2018) while some contrastingly found that external debt negatively affects growth while external debt servicing positively affects growth (Omodero & Alpheus, 2019). These conflicts in the past studies necessitated the interest of the researcher in seeking to ascertain further, the effect of external debt on economic growth in Nigeria so as to inform current policy actions.

LITERATURE REVIEW

Conceptual Clarifications

External debt is defined as that part of the total debt that is owed to lenders outside the country (Olusegun, Oladipo, & Omotayo, 2021). External debt is that portion of a country's debt that is acquired from foreign sources such as foreign corporations, government or financial institutions (Ideh & Uzonwannem, 2021). According to Ugwuanyi, Ugwuanyi, Efanga and Efanga (2020), external debt is defined as that fraction of money owed by a country which was borrowed from other countries, lenders such

as commercial banks, international financial institutions or government. Debt servicing can be defined as the regular payment of installments of loans taken by a country from domestic and external sources. An installment includes interest on debt and a part of the principal (Olusegun et al., 2021). According to Echekoba and Ananwude (2017) it can be seen as the cash that is required for a particular time period to cover the repayment of interest and principal on a debt. Ugwuanyi, Ugwuanyi, Efanga, & Efanga (2021) also defined debt service payments as the reimbursement in respect of mutually principal and interest.

Debt service is also defined as the payments required to be made in respect of both principal and interest for an existing loan (Omodero & Alpheaus, 2019). Exchange rate is the price at which the domestic currency is exchanged for a foreign currency. It is the rate at which one currency will be exchanged for another, that is, the value of a country’s currency in terms of another (Ekwunife, Nduka, & Ogini, 2022).An exchange rate is the rate at which one legal tender will be exchanged for another in finance (Nduka, Atueyi, Osakwe, & Mbanefo, 2021; Anyanwu, Ananwude, & Okoye, 2017). A right or suitable exchange rate have been one of the very significant factor in favor of economic increase in the economies of the majority of developed nations while usual fluctuations or improper exchange rate have been a foremost impediment to economic increase of many African countries of which Nigerian is all-encompassing (Obidike, Onyeka, & Nduka, 2022).

Economic growth has been defined as a sustained increase in an economy's real national income over a long period of time. In other words, economic growth means a rising trend of net national product at constant price (Logan, Okanya, Nduka, Manasseh, Ede, Onoh, Omeje, Ozioko, & Agu, 2021; Adigwe, Nwanna, & Ananwude, 2015). According to Monogbe, Akinpelumi, Achugbu, and Nduka (2016), the economic growth in general refers to a quantitative persistent increase in the country's per capita output or income accompanied by enlargement in its labour force, consumption, capital and volume of trade. Economic growth is related to the quantitative and sustained increase in the countries per capita output or income accompanied by expansion in its labor force, consumption level, capital and volume of trade (Ijirshar, Joseph. & Godoo, 2016). According to Ugwuanyi and Onyeka (2012) Gross Domestic Product (GDP) is the gauge

of economic performance because it measures something people incomes. They further note that an economy with a large output of goods and services can better satisfy the demands of households, firms and government.

Theoretical Framework

This study work is anchored on the Solow growth model. This model was developed by Solow in 1956. The Solow growth theory identifies growth as a function of capital, labour and technology. Using this model, the theory explained the need for external sources of finance especially for developing countries which are usually characterized by shortage of internal sources of capital. According to the Solow growth theory, when firms seek economic development, their government mobilizes funds sourced internally and if such funds prove insufficient, as is usually the case, they borrow capital from external sources. The Solow growth model categorizes the effect of external debt in two paths. Firstly, the effect of external debt on infrastructural development and secondly the effect of external debt service on investments and revenue. External debt is a major source of capital for developing economies to improve their economic conditions. Contracted debts are channeled towards the improvement of infrastructural facilities which ultimately lead to economic growth and development (Okoye, Modebe, Erin, & Evbuomwan, 2020). On the other hand, external debt servicing is an expenditure on revenue. Excessive external debt also reduce government infrastructure spending because the resources are being used to service the debt instead of being used wisely (Oladipo et al., 2020). Linking this theory to the present study it can be hypothesized that external debt would actually improve economic growth through infrastructural development. However, external debt service would eat up a large chunk of government revenue which would have been channeled to productive outlets and infrastructural development.

Empirical Studies

Ugwuanyi, Ugwuanyi, Efanga, and Efanga (2021) analyzed external debt management and economic development in Nigeria. The data employed in this study were collected from the CBN statistical bulletin annual report. The study employed Real Gross Domestic Product as the independent variable, while External Debt service, Balance of Payment, External Debt, and Exchange Rate were used as independent variables. The estimation technique employed in this study was

Ordinary least squares (OLS) multiple regression method. The findings of this study revealed that external debt management recorded a positive and significant impact on economic development in Nigeria over review period.

Odubuasi and Onuora (2021) empirically reviewed the effect of external debt on the economic growth of Nigeria and South Africa for the period covering 2002 to 2017. The study employed time series data collected from CBN statistical bulletin and CIA Factbook. Descriptive statistics and multiple linear regression of Ordinary Least Square (OLS) was applied in analyzing the data. The results show that external debt and external reserve have positive effect on economic growth of both Nigeria and South Africa nations. Whereas external debt service cost has negative effect on GDP of theboth nations of Sub Sahara Africa.

Ideh and Uzonwanne (2021) examined the impact of external debt on economic growth in Nigeria in the period, 1985 to 2019 by examining the causality between external debt stock and economic growth in Nigeria and identify the impact of external debt servicing on economic growth in Nigeria. The study made use of secondary data sourced from World Development Indicator 2019. Ordinary least square (OLS) technique was adopted for the regression analysis. The data were analyzed with the aid of e-view software (9th edition). The result showed that external debt has negative and insignificant impact on economic growth in Nigeria.

Ekor, Orekoya, Musa and Damisah (2021) examined the impact of foreign debt on economic growth in Nigeria. The study adopted the Auto Regressive Distributed Lag (ARDL) model in analyzing the data. The findings of the study showed that in the long run, external debt and the associated debt service payment have negative effects on the Nigerian economy.

Olusegun, Oladipo and Omotayo (2021) examined debt service and its impact on economic growth in Nigeria. The secondary data were obtained from the debt management office which covered the period of 30 years spanning from 1990-2020. Data collated were analyzed using both descriptive and covariance estimate method of analysis. The findings revealed among other things that there was presence of co-integration (long-run relationship) among economic growth and all the explanatory variables (exchange rate, inflation rate, external debt service and

internal debt service) which is a clear indication that working debt servicing has positive and significant impact on economic growth of the country both in short and long run.

Ring et al. (2021) examines the nexus between external debt and economic growth where institutional quality acts as a moderator. The samples for the study are divided into two groups consisting of low and high governance groups of countries. Findings report the importance of institutional quality as a moderator in the relationship between external debt and economic growth for both samples of study. The results confirm that, in high governance countries, external debt shows negative nexus and statistically significant result on economic growth and that Overall, external debt showed a negative and significant relationship with economic growth for all models from the samples of low governance countries.

Hameed, Sarwar, Adil, Batool and Hussain (2021) analyzed the short-run and as well as long-run effects of public debt on the economy of South Asian countries. For econometrically investigation, panel data has been used for the era of 1990-2019. For obtaining econometric outcomes, we applied the Fixed Effect Model and PMG/ Panel ARDL. The results revealed that public debt negatively affected the economic performance of these countries. This effect is adverse both in short as well as in long period.

Okoye, Modebe, Erin and Evbuomwan (2020) examined the effect of external debt on economic growth in Nigeria. Specifically, the study examines whether external borrowings and its major determinants like exchange rate, gross fixed capital formation and inflation rate have supported the growth of the Nigerian economy. The parameters of the model were estimated using the ordinary least squares method. The robustness of the result was enhanced using the generalized least squares technique. The result shows evidence of significant positive correlation between economic growth and the explanatory variables namely external debt, exchange rate and inflation rate. A negative correlation was however observed between economic growth and gross fixed capital formation. The regression estimates for both the ordinary and generalized least squares tests show significant positive impact of external debt, exchange rate and inflation rate on economic growth.

Olusegun, Olufemi and Olubunmi (2021) investigated the impact of external debt on

economic growth in Nigeria between 1981 and 2018 using Auto Regressive Distributed Lags(ARDL) and the Error Correction Mechanism (ECM) estimation technique. The study revealed that external debt and foreign direct investment positively affect economic growth. The error correction model coefficient which is -0.969 means that nearly 96.9 percent of any disequilibrium in economic growth is corrected by the external debt, domestic debt, foreign direct investment and government expenditure within one period (one year).

Oladipo et al. (2020) examined the impact of external debt in stimulating economic growth in Nigeria: mediating on the role of public sector financial management. The variables employed involves Gross Domestic Product (GDP) as endogenous variable while Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio(INFR), Debt Interest Service Ratio (ISR) and Exchange Ratio (EXR) as exogenous variables for the period of 1989-2019.Diagnostic tests were conducted using Auto Regressive Distributed Lag(ARDL), Augmented Dick Fuller (ADF) Unit Root Test, and Co-Integration model. The result revealed the presence of co-integration among the variables with clear indication that external debt has a significant and positive relationship with economic growth with strong emphasis on public sector financial management as mediating factor.

Getinet and Ersumo (2020) analyzed the impacts of public external debt on economic growth in Ethiopia with ARDL approach using a time series annual data from 1983-2018. The model considers annual GDP growth rate as a dependent variable. The debt variables including public external debt stock to GDP (PEDSGD), the ratio of debt service stock to GDP (DSSGD) and debt service stock to export (DSSEXP) and other macroeconomic variables such as trade openness(TRD), rate of inflation(INFL) and public expenditure to GDP ratio (NEXPGD) were the explanatory variables. The study used bound testing for co-integration in the long-run and ECM for short-run dynamics. The study showed long-run co-integration, while the speed with which the disequilibrium caused by lack of proper management of external fund in earlier years returns to long-term equilibrium is 60.96% in the current year as indicated by coefficient of error correction term.

Omodero and Alpheaus (2019) examined the effect of foreign debt on the economic growth of Nigeria. Data for the study are collected

from the World Bank and Central Bank of Nigeria Statistical Bulletin. The variables on which data are sourced include nominal gross domestic product, foreign debt stock, foreign debt servicing, inflation rate, and exchange rate. Nominal gross domestic product is the dependent variable while foreign debt stock and foreign debt servicing are the major explanatory variables. Inflation and exchange rates are used as the control variables. The scope of the study covers the period from 1997 to 2017 and data are analyzed using the ordinary least squares regression technique. The regression results indicate that foreign debt exerts a significant negative influence on economic growth while foreign debt servicing has a strong and significant positive impact on economic growth.

Agwu, Ohaegbu and Nnodim (2019) examined the impact of external debt on economic development of Nigeria. Ex-post facto research design was adopted for the study. While data on Gross Domestic Product (GDP), External Debt (EXDEBT), External Debt Service (EXDESERV) and exchange rate (EXCHARATE) were obtained from World Bank International Debt Statistics, Exchange Rate data were collected from Central Bank of Nigeria Statistical Bulletin, 2018. The study was analyzed using the statistical technique of multiple linear regressions to identify the impact of external debt on GDP for a period of five years the aid of SPSS version 22.0. The dependent variable was GDP, while the independent variables were External Debt, External Debt Service and Exchange Rate. It discovered that External Debt had a positive relationship with Gross Domestic Product, External Debt Service had negative relationship with Gross Domestic Product and Exchange Rate had a negative relationship with GDP.

Festus and Saibu (2019) examined the effect of external debt on economic growth in Nigeria. Time series data on external debt stock, real gross domestic product, trade openness, and gross fixed capital formation as a percentage of GDP as well as data on inflation and exchange rates were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank Indicators. The study set out to test for both the long run and short run relationship as well as presenting further evidences on the relationship between external debt and economic growth. The Autoregressive Distributed Lag (ARDL) Model was employed as a technique of estimation in the study and the results led a finding that the external debt contributes negatively to growth

in Nigeria based on data from 1981 through 2016.

Khanal (2019) examined the role of foreign debt, total trade and labor force in the economic growth of Nepal by employing Ordinary Least Square method of time series data. The study explores that there is a positive relationship between economic growth and total trade and labor force in Nepal. However, foreign debt has inverse relationship with economic growth.

Kharusi and Mbah (2018) investigated the relationship between government external borrowing and economic growth, prompted by continuous increases in Oman's external debt to finance its annual budget. Time series data for the period 1990~2015 were collected from the World Bank and the Central Bank of Oman. The study employed the Autoregressive Distributed Lag cointegration approach explain the error correction mechanism to ascertain the short-run dynamic nature of external debt and economic growth. Consistent with some existing empirical evidence, the study reveals a negative and significant influence of external debt on economic growth in Oman. Matuka and Asafo (2018) examined the impact of external debt on economic growth in Ghana using co-integration analysis and an error correction methodology. The study made use of annual time series data covering a period from 1970 to 2017. The findings indicated that external debt impacted positively on economic growth in Ghana, both in the long and short terms.

Onakoya and Ogunde (2017) examined the impact of external debt in bridging the gap resource required for economic growth in Nigeria. After preliminary evaluation of the data which indicated the non-normality of all the variables, the research deployed the Autoregressive Bounds testing method Distributed Lag (ARDL) method using the Ordinary Least Squares technique. Evidence of long run association was reported. The follow-up error correction mechanism found out that 45 present of disequilibrium errors are corrected after short run shock. External debt is negatively related to economic growth. On the average, one per cent increase in export will decrease the real GDP by 0.25 per cent in the long run. Although statistically significant at 1 per cent it did not fill savings and/or external finance gap. Furthermore, the pairwise granger causality test showed that external debt does not cause economic growth at 5% level of significance.

Paul (2017) analyzed the impact of external debt on economic growth of Nigeria. Data from 1985 to 2015 was analyzed using the ordinary least square regression, ADF unit root test, Johansen co-integration and error correction test. The study made use of variables such as GDP, external debt services, external debt stock, external reserve, and exchange rate. Findings from the study reveals that debt service payment has negative and insignificant impact on Nigeria's economic growth while external debt stock has positive and significant effect on Nigeria's growth index. The ADF unit root test shows that all the variables are not stationary at levels but at first difference. Johansen co-integration test shows long-run relationship between external debt and growth index (GDP). The causality test indicates unidirectional causality between external debt and GDP.

Udofia and Akpanah (2016) investigated the impact of external debt on economic growth in Nigeria. The issue was empirically examined using the co-integration test and the error correction test for Nigeria over the period 1980 to 2012 on variables like RGDP growth rate, stock of external debt lo GNI ratio, debt service to export earnings ratio, private investment to GDP ratio, primary school enrolment rate, inflation, real exchange rate, population, trade openness. Findings from this study supported the traditional view between external debt and growth. Also, the study found the non-existence of debt overhang problem for Nigeria.

Ugwuegbe, Okafor and Azino (2016) used annual time series data to investigate the effect of external borrowing and foreign aid on economic growth in Nigeria from 1980 to 2013. They used GDP as a parameter for economic growth and external debt, foreign aid, exchange rate regime and foreign reserve as the exogenous variables. Econometric techniques of Ordinary Least Square (OLS) multiple regression, Augmented Dickey Fuller (ADF), Johansen Co integration, Error Correction Method (ECM) were applied. The results showed that external debt has a positive and significant effect on economic growth, while foreign aid has positive and insignificant effect on economic growth in Nigeria.

METHODOLOGY

The selected research design for this study is the *ex-post facto* research design. The time series data used in this study were sourced from the Central Bank of Nigeria (CBN)

statistical bulletin from 2000 to 2023. The dependent variable selected for this study is economic growth represented by Gross Domestic Product (GDP). This variable represents the increase in output of goods and services produced in Nigeria over a given period of time. Gross domestic product is a widely used measure of economic development and is expressed in billions of Naira. The independent variables used in this study are external debt stock and external debt service. Finally, the control variable used in this study is exchange rate. This study adopts the Ordinary Least Square regression method and the Granger Causality test in analyzing the time series data. While the Ordinary Least Square method examines the relationship or prediction between the independent variable and the dependent variable, the Granger Causality test is used to examine the presence of causation (which translates as effect) between the dependent and independent variables.

The model used for this study is the adoption of the work of Agwu, Ohaegbu and Nnodim (2019). Therefore, this study expresses Gross Domestic Product (GDP) as a function of External Debt (EXD), External Debt Service (EXDS) and Exchange Rate (EXR) as thus:

$$GDP = f(EXD, EXDS, EXR) \quad 3.1$$

The functional model is converted to an econometric equation which accounts for econometric criteria used in analyzing the data as:

$$GDP = \alpha_0 + \alpha_1 EXD + \alpha_2 EXDS + \alpha_3 EXR + \mu_t \quad 3.2$$

Where; α_0 is the intercept; α_1, α_2, and α_3 are the regression coefficients; and μ_t is the stochastic error term. All the variables were all expressed in their logged forms in order to establish a uniform measurement,. The model of the study is therefore modified as thus;

$$LGDP = \alpha_0 + \alpha_1 LEXD + \alpha_2 LEXDS + \alpha_3 LEXR + \mu_t \quad 3.3$$

Where:
LGDP = Logged values of GDP
LEXD = Logged values of EXD
LEXDS = Logged values of EXDS
LEXR = Logged values of EXR

ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

Descriptive Statistics According to the descriptive statistics in table 4.1, the external debt in Nigeria averaged ₦3,370.52 billion annually, over the studied period with its minimum and maximum value at ₦438.89 billion and ₦12,705.62 billion respectively. The average annual payment for external debt

servicing amounted to ₦254.92billion. The statistics revealed that Nigeria's external debt servicing from 1986 to 2020 have amounted to a sum of ₦5,353.48 billion while a total debt of ₦70,711.92 billion have been contracted from external sources within the review period

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Table 4.1: Descriptive Statistics

	RGDP	EXD	EXDS	EXR
Mean	51427.52	3370.091	254.9274	179.0905
Median	54612.26	2695.072	180.7300	148.8127
Maximum	71387.83	12705.62	1172.720	381.0000
Minimum	23688.28	438.8909	45.95000	100.8016
Std. Dev.	16592.99	3231.987	293.2023	80.44385
Skewness	-0.289070	1.427612	1.997891	1.266671
Kurtosis	1.616491	4.545270	6.269256	3.254241
Jarque-Bera	1.967300	9.222641	23.32251	5.672155
Probability	0.373944	0.009939	0.000009	0.058655
Sum	1079978.	70771.92	5353.475	3760.901
Sum Sq. Dev.	5.51E+09	2.09E+08	1719352.	129424.2
Observations	23	23	23	23

Source: E-views 12.0 Descriptive Statistic Output, 2025

Ordinary Least Square Regression

The results shown in Table 4.2 reveals that external debt negatively (*B* = -0.162129) and significantly (p = 0.0003; < 0.05) predicts economic growth in Nigeria. This indicate that to a significant extent, it can be predicted that every percentage change in the value of external debt would cause the value of economic growth in Nigeria to change in the opposite direction by about 0.16%. Similarly, the results shown in table 4.3 reveals that external debt servicing negatively (*B* = -0.099882) and significantly (p = 0.0053; < 0.05) predicts economic growth in Nigeria. This indicates that to a significant extent, it can be predicted that every percentage change in the value of external debt servicing would cause the value of economic growth in Nigeria to change in the opposite direction by about 0.099%. On the other hand, the results shown in table 4.3 reveals that exchange rate positively (*B* = 1.032219) and significantly (p = 0.0000; < 0.05) predicts economic growth in Nigeria. By implication, it can be predicted to a significant extent, that every percentage change in the exchange rate would cause the value of economic growth in Nigeria to change in the same direction by about 1.03%. The result of the F-statistic procured by the OLS estimate is 55.494550. The probability(F-statistic) value of 0.0000 reveals that the overall relationship between the independent variables (external debt, external debt servicing and exchange rate) and the dependent variable, GDP is significant. The R-squared value of 0.907349 further reveals that about 90% of the changes in economic growth can be explained by the combined

trends in external debt, external debt servicing and exchange rate.

Table 4.2: Ordinary Least Square Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LEXD	-0.162129	0.036186	-4.480493	0.0003
LEXDS	-0.099882	0.031241	-3.197193	0.0053
LEXR	1.032219	0.087922	11.74011	0.0000
C	7.263738	0.372603	19.49458	0.0000
R-squared	0.907349	Mean dependent var		10.78984
Adjusted R-squared	0.890998	S.D. dependent var		0.364099
S.E. of regression	0.120209	Akaike info criterion		-1.229533
Sum squared resid	0.245652	Schwarz criterion		-1.030576
Log likelihood	16.91009	Hannan-Quinn criter.		-1.186354
F-statistic	55.49450	Durbin-Watson stat		1.033443
Prob (F-statistic)	0.000000			

Source: E-views 12.0 OLS Output, 2025

Granger Causality Test

Table 4.4 reveals that the p-value for external debt is 0.0121 which is less than 0.05. This indicates that the null hypothesis is rejected; LEXD Granger Causes LGDP. Likewise, the p-value for the second null hypothesis is 0.0114 which is also less than 0.05. This indicates that the second null hypothesis is also rejected: LGDP Granger Causes LEXD. This implies that bidirectional causality exists between LEXD and LGDP. The p-value for the external debt service is 0.3051 which is greater than 0.05. This indicates that the null hypothesis is accepted; LEXDS does not Granger Cause LGDP. Likewise, the p-value for the second null hypothesis is 0.7475 which is also greater than 0.05. This indicates that the second null hypothesis is also accepted: LGDP does not Granger Cause LEXDS. Therefore, no causality exists between LEXDS and LGDP. The p-value for the exchange rate is 0.0389 which is less than 0.05. This indicates that the null hypothesis is rejected; LEXR Granger Causes LGDP. On the other hand, the p-value for the second null hypothesis is 0.2948 which is greater than 0.05. This indicates that the second null hypothesis is accepted: LGDP does not Granger Cause LEXR. By implication, a unidirectional causality runs from LEXR to LGDP.

Table 4.3: Granger Causality Result

Null Hypothesis:	**Obs**	**F-Statistic**	**Prob.**	**Remarks**
LEXD does not Granger Cause LGDP	22	7.89154	0.0121	Causality
LGDP does not Granger Cause LEXD		8.05340	0.0114	Causality
LEXDS does not Granger Cause LGDP	22	1.11830	0.3051	No Causality

LGDP does not Granger Cause LEXDS		0.10707	0.7475	No Causality
LEXR does not Granger Cause LGDP	22	5.00740	0.0389	Causality
LGDP does not Granger Cause LEXR		1.16866	0.2948	No Causality

Source: E-views 12.0 Granger Causality Output, 2025

Discussion of Findings

It is common among developing countries like Nigeria that domestic sources of debt are insufficient for the required level of economic growth and development. As a result developing countries usually find themselves sourcing for funds from external source. Upon this premise, external debt is supposed to contribute positively to the growth of the economy. However, owing to excessive debt figures and misappropriation of debt, external debt servicing has often crowded out funds for productive investments. This study is therefore motivated to examine the effect of external debt on the economic growth of Nigeria. External debt is measured in terms of external debt stock, external debt service payments and exchange rate while economic growth is measured in terms of gross domestic product. Three hypotheses were therefore tested in this study. Using the Ordinary Least Square regression analysis and the Granger causality test to analyze the data, the findings revealed that external debt has negative effect on the economic growth of Nigeria. This finding negates the expectation of the study. It indicates that huge external debt figures have actually caused slow economic growth in Nigeria and to a

significant extent. This finding is similar to the study of Ideh and Uzonwanne (2021) who found that external debt has negative and insignificant impact on economic growth in Nigeria. Ring et al. (2021) also found that, external debt shows negative nexus and statistically significant result on economic growth. Despite the fact that external debt are procured for developmental projects on the long-run, excessive debts would hamper economic growth by deducting revenues generated by the government (Ekor, Orekoya, Musa, & Damisah, 2021). In line with the debt overhang theory, debt overhang" is considered a leading cause of distortion and slowing down of economic growth. Economic growth slows down because these countries lose their pull on private investors.

Similarly, in line with the expectation of the study, the findings of the study further revealed that external debt servicing also has negative but insignificant effect on the growth of the Nigerian economy in Nigeria. This

shows that external debt servicing to a marginal extent has also been responsible for the stunted growth of the Nigerian economy. This finding is in line with the finding of Odubuasi and Onuora (2021) who found that external debt service cost has negative effect on GDP. The debt overhang theory is further confirmed by the findings of this study as servicing of debts eats up so much of the indebted country's revenue to the extent that the potential of returning to growth paths is abridged. The findings of the study further revealed against a priori expectation of the study that exchange rate has a positive and significant effect on economic growth in Nigeria. This finding confirms the findings of the study of Okoye, Modebe, Erin, and Evbuomwan (2020) which revealed that exchange rate has significant and positive effect on economic growth in Nigeria. It follows that increase in the quotation of Naira to dollar has caused economic growth in Nigeria to improve. This indicates that exchange rate depreciation has positively affected the growth of the Nigerian economy. Exchange rate depreciation is hypothesized by several theories to encourage exports and discourage importation and this has led to improvement in the economic growth of Nigeria. In the light of this, Udofia and Akpanah (2016) also found that exchange rate has positive and significant effect on economic growth in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of external debt on economic growth in Nigeria from 2000 to 2023. Economic growth was measured using gross domestic product while external debt variables were made to include external debt stock, external debt service payments and exchange rate. The Ordinary Least Square regression analysis and the Granger causality test were used to analyze the data. In view of the findings of the study, the researcher therefore concludes that external debt has negative impact on the economic growth in Nigeria. Specifically, excessive exchange rate and external debt payments have cause impediments to external debt to a significant extent. However, exchange rate depreciation which is reflected in the increase of nominal quotation of the naira to dollar exchange, has positively affected the economic growth in Nigeria. By implication, further increase in the value of external debt would significantly cause economic repression in Nigeria. However, the depreciation in the exchange rate would further attract foreign investments, encourage

exports, discourage imports and spur economic growth.

The researcher is guided by the findings of the study to suggest that the monetary authorities should limit the contraction of external debt to ensure that it does go beyond sustainability thresholds. This would reduce the harsh effects of external debt on the Nigerian economy. External debt should be channeled to productive sources to ensure that the servicing of these debts is sourced from funds generated from the use of external debt. Exchange rate should be allowed to flow flexibly to reflect the true value of the naira. Attempts to unduly maintain the value of the naira should be discarded as overvalued currency has hampered the growth of the Nigerian economy.

REFERENCES

Adigwe, P. K., Nwanna, I. O. & Ananwude, A. C. (2015). Stock market development and economic growth in Nigeria: An empirical examination (1985-2014). *Journal of Policy and Development Studies, 9*(5), 134-154.

Anyanwu, F. A., Ananwude, A. C. & Okoye, N. T. (2017). Exchange rate policy and Nigeria's economic growth: A granger causality impact assessment. *International Journal of Applied Economics, Finance and Accounting, 1*(1), 1-13.

Agwu, C., Ohaegbu, K. & Nnodim, Z. (2019). Impact of external debt on economic development in Nigeria from 2014 to 2018. *World Journal of Innovative Research, 7*(4), 9-15.

BudgIT (2020). 2020 approved budget analysis. Retrieved from: https://www.yourbudgit.com

CBN (2019). Statistical Bulletin, Statistical Department, Central Bank of Nigeria, Garki, Abuja, Nigeria.

Echekoba, F. N. & Ananwude, A. C. (2017). Modelling the nexus between external debt burden and economic growth in Nigeria: The ARDL Methodology. *Open Access International Journal of Science and Engineering, 1*(2), 27-37.

Ekor, M., Orekoya, T., Musa, P. & Damisah, O. (2021). Does external debt impair economic growth in Nigeria? *Munich Personal RePEc Archive,* No. 107844.

Ekwunife, I. J., Nduka, A. J. & Ogini, P. (2022). Selected macroeconomic variables and capacity utilization in Nigeria. *Journal of Emerging Trends in Management Sciences and Entrepreneurship, 4*(1), 340-359.

Festus, E. & Saibu, O. (2019). Effect of external debt on Nigerian economy: Further evidence. MPRA Paper No. 92704.

Getinet, B. & Ersumo, F. (2020). The impact of public external debt on economic growth in Ethiopia: The ARDL approach to co-integration. *Journal of Economics and Sustainable Development, 11*(11), 12-24.

Hameed, M., Sarwar, G., Adil, S., Batool, H. & Hussain, I. (2021). Impact of public debt on economic growth: An empirical investigation from South Asian countries. *Humanities & Social Sciences Reviews, 9*(2), 173-184.

Ideh, T. & Uzonwanne, M. (2021). Impact of external debt on economic growth in Nigeria. *European Journal of Economic and Financial Research, 5*(2), 132-150.

Ijirshar, V. U., Joseph, I., & Godoo, M. (2016). The relationship between external debt and economic growth in Nigeria, *international Journal of Economics & Management Sciences, 4*(8), 1-14

Khanal, B. (2019). The role of foreign debt, total trade and labour force in economic growth: Evidence from Nepal. *Pragya Ratna, 1*(3), 15-20.

Kharusi, S. & Mbah, A. (2018). External debt and economic growth: The case of emerging economy. *Journal of Economic Integration, 33*(1), 1141-1157.

Logan, C. S. P., Okanya, O. C., Nduka, A. J., Manesseh, C. O., Ede, K. K., Onoh, C. F., Omeje, A. J., Ozioko, J. N., & Agu, S. V. (2021). Evaluating the economic growth implications of revenue generation in Nigeria. *The Seybold Report, 47*(10),1-24.

Matuka, A. & Asafo, S. S. (2018). External debt and economic growth in Ghana: A co-integration and a vector error correction analysis. Retrieved from: https://mpra.ub.uni_muenchen.de/904 631.

Monogbe, G. T., Omotayo, A. F., Achugbu, A, & Nduka, J. A. (2016). Cashless policy and financial development in Nigeria. *European Journal of Economic and Business, 1*(2), 10-21.

Ndubuisi, P. (2017). Analysis of the impact of external debt on economic growth in an emerging economy: Evidence from Nigeria. *International Association of African Researchers and Reviewers, 11*(4), 156 – 172.

Nduka, A. J., Atueyi, C., Osakwe, C. I. & Mbanefo, A. P. (2021). Effect of exchange rate policies on non-oil export in Nigeria. *Journal of Emerging Trends in Management Sciences and Entrepreneurship, 3*(1), 105-117.

Obidike, J., Onyeka, M. & Nduka, A. (2022). Effect of selected macroeconomic variables on the Nigerian economy 1987 – 2020. *International Journal of Business and Law Research, 10*(3), 84-96.

Odubuasi, A. & Onuora, J. (2021). External debt and economic growth in Sub-Saharan Africa. *Journal of Accounting, Business and Social Sciences, 1*(2), 44-52.

Odubuasi, A., Uzoka, U. & Anichebe, A.(2018). External debt and economic growth in Nigeria. *Journal of Accounting and Financial Management, 4*(6), 98-108.

Okoye, L., Modebe, N., Erin, O. & Evbuomwan, G. (2020). Effect of external debt on economic growth: Evidence from Nigeria. *Sustainable Economic Growth, Education*

Excellence, and Innovation Management, 2, 4046-4058.

Olusegun, E., Oladipo, O. & Omotayo, E. (2021). The impact of debt service in stimulating economic growth in Nigeria: Mediating on its role on public sector financial management. *ACTA UniversitatisDanubius, 17*(1), 315-329

Olusegun, A., Olufemi, E. & Olubunmi, E. (2020). The impact of external debt on economic growth in Nigeria. *International Journal of Scientific and Research Publications, 10*(4), 716-724.

Omodero, C. & Alpheus, O. (2019). The effect of foreign debt on the economic growth of Nigeria. *Management Dynamics in the Knowledge Economy, 7*(3), 291-306.

Onakoya, A. &Ogunde, A. (2017). External debt and Nigerian economic growth connection: Evidence from autoregressive distributed lag approach. *Journal of Economics and Development Studies, 5*(1), 66-78.

Paul, N. (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.

Ring, S., Muhammad, A., Osman. W., Hamdan, R., Hwang, J., Mohamad, A., Khairul, M. (2021). Impact of external debt on economic growth: The role of institutional quality. *International Journal of Academic Research in Economics and Management Science, 10*(3), 223-236.

Udoffia, D. T. &Akpanah, E.A. (2016). An assessment of the impact of external debt on economic growth of Nigeria. *International Journal of Social Sciences,* 10(1), 1-27.

Ugwuanyi, O., Ugwuanyi, W., Efanga, O. & Efanga, A. (2020). External debt management and economic development in Nigeria. *Geintec Innovation and Technologies, 11*(4), 5027-5044.

Ugwuegbe, S. U., Okafor, I. G. & Azino, C.A. (2016). Effect of external borrowing and foreign aid on economic growth in Nigeria *International Journal of Academic Research in Business and Social Sciences,* 6(4), 155-175.

Usim, U. (2018). FG borrows ₦410billion locally to fund 2018 budget. Retrieved from *The Sun* at: https://www.sunnewsonline.com