International Journal of Social Sciences and Humanities Invention 12(05): 8569-8578, 2025
DOI: 10.18535/ijsshi/v12i05.01
ISSN: 2349-2031
https://valleyinternational.net/index.php/theijsshi

Impact Assessment of External Debt and Exchange Rate on Economic Growth in Nigeria.

ATAYI Abraham Vincent[1], Rahila Timothy Dantong[2], EVINEMI Elijah Adeiza[3], Edache Godwin Omoche[4], Aishatu Abdullahi[5], Hussaini Doguru[6]

[1,5]Department of Economics, Plateau State University Bokkos, Nigeria.

[2]Department of Political Science, Plateau State University Bokkos, Nigeria

[3]Department of Accounting, University of Nigeria, Nsukka, Nigeria.

[4]Faculty of Education, University of Pretoria. South Africa

[6]Department of Statistics, Central Bank of Nigeria.

Abstract:

The study examined the effect of external debt and exchange rate on economic growth in Nigeria. The study used Autoregressive Distributed Lag Model and Granger causality test. The results show that the coefficient of determination (R^2) the percentage of variations in the dependent variable that can be explained by the independent variables. The R^2 of 0.340003 or 34% showed that Economic development can be explained by changes in the explanatory variables as shown in the model and the remaining 66% is explained by the dummy variable. The F-statistic which measures the overall significance of the model indicated that it is significant at 5%. This is indicated by the F-statistics and its probability (3.348527 and 0.024437) respectively. We therefore conclude that there is a significant effect of External Debt and Exchange Rate on economic development in Nigeria. This study therefore recommends among other things that Government should make sure that all resources borrowed should be used for the purpose it was collected for and that any person found diverting the loan collected into his pocket for selfish interest should be prosecuted.

Keywords: External Debt, Exchange Rate, Economic Growth, Econometrics and Nigeria.

1. Introduction

Every nation in the world strives for economic development and expansion. This is only feasible, though, if a nation possesses sufficient resources. Because of poor productivity, low tax revenues, low domestic savings, and inadequate foreign exchange profits, emerging nations like Nigeria lack the resources necessary to support the ideal rate of economic expansion. In essence, because of these factors, many emerging nations, such as Nigeria, that aspire to economic expansion must unavoidably turn to outside funding in order to close the gap between their savings and investments. Sulaiman and Azeez (2012) suggested that no Government is an island on its own; it would require aid so as to act successfully and efficiently. External debt, sometimes known as overseas borrowing, is a significant source of aid.

Therefore, it is impossible to overstate the impact of external debt on a country's development. Similarly, debt is a source of funding capital production in any economy, according to Aminu et al. (2013). Nigeria's poor productivity, low income, low savings, and low productivity all contribute to the country's insufficient internal capital formation. In order to close the resource gap, western nations must provide technical, managerial, and financial assistance. However, external debt is a significant barrier to capital generation in emerging countries, such as Nigeria.

The burden and dynamics of external debt demonstrate that they do not significantly contribute to financing economic growth in Nigeria because, in most cases, debt accumulates due to principal and servicing requirements. Additionally, borrowing from outside sources is preferable to borrowing from domestic sources because interest rates charged by international financial institutions such as the International Monetary Fund (IMF) are roughly half of those charged in the domestic market. Whether or not external debt will benefit Nigeria depends on whether the borrowed funds are used for consumption or the productive sector of the economy.

The different revenue streams and budgeting techniques are the only things that keep governments functioning around the world. However, many governments were forced to borrow money both domestically and abroad due to their inability to meet the budget's expenditure components. borrowing bridges, the larger discrepancy between the government's intended spending and anticipated revenue, which is referred to as the budget deficit. In the literature, borrowing is referred to as debt, which denotes commitments or promises that must be kept as soon as possible.

In the meantime, the right to keep a specific amount of money and pay it back later is known as debt, but it is completely distinct from postponed payment for goods and services. various economic actors, including businesses, households, and the government, or simply the private and public sectors of the economy, may have various reasons for contacting debt.

Debt in the public sector can be divided into two categories: internal and external debt, which will be paid off in full by the next administration as soon as possible (CBN, 2018).

These are the government's monetary commitments that accrue interest upon redemption. According to Ugwu (2011) in Babatunde, Najeem, and Oluwaseun (2019), borrowing from abroad is required to boost the economy's productivity and revive its sluggish growth. It was further claimed that international loans, another name for foreign debt, are utilized to fund wars and address the unemployment issue. Two main causes of the debt problem are the government's responsibilities to fund capital projects and sufficient infrastructure for economic growth, which result in borrowing and the imbalance between income and expenses known as budget deficits.

The latter occurs when the government issues debt to internal or external investors in order to cover the shortfall. In many developing nations, including Nigeria, which is a lower-middle income country, the amount of public debt has increased recently. The management of public debt and its impact on economic growth have become important public finance concerns as a result of this, attracting the attention of numerous finance professionals. The size of Nigeria's foreign debt and the substantial sum needed to pay it off, as well as the discrepancies and misalignment in the exchange rate between the Naira and the dollar, have made the situation more pressing (DMO, 2020).

Since 1981, Nigeria's foreign debt has been steadily increasing, according to records. The N8.8 billion that was possessed in 1982, for example, increased to roughly N17.3 billion and N41.4 billion in 1985 and 1986, respectively. Due to federal government guarantees that the state government got to secure foreign loans, Nigeria's foreign debt surpassed N100 billion in 1987, substantially increasing the country's debt load (CBN, 2015). Between 1988 and 2000, the foreign debt has risen to N3 Trillion, surprisingly; the debt repudiation enjoyed from Paris Club reduced the Nigeria debt by 13% declining from N3 Trillion to N2.5trillion in 2005 and further reduces N451.46billion in the 2006 upwards (CBN,2018). However, in 2017, 2018, 2019 and 2020, the foreign debt has risen to N18, 376.99B, N7,759,229B, N9,022.42B and N12,705.62B respectively (DMO, 2020). In the meantime, poor exports and an excessive reliance on imports have made the exchange rate trend at this time not entirely advantageous. Exchange rate swings have been ascribed by certain economic growth academics to a variety of causes, mostly economic management aspects like high bills and low trades, as well as policy difficulties. However, the impact of massive foreign debt has received little attention. It is acknowledged that policymakers are quite concerned about the ongoing swings in the exchange rate, and efforts have been made to either equalize the purchasing power or lessen the fluctuations. The Naira's exchange rate with other developed currencies, like the dollar, pound, and other dollars, is declining, nonetheless. The monetary authorities claimed that the exchange rate fell from N2 to a dollar to N956 to $1 between 1981 and 2023.

African nations, and Nigeria in particular, were unable to undertake greater levels of internal investment that would have bolstered growth and development due to their massive external debt stock and debt servicing payments. Because contractual loans were not used efficiently, returns on investments were insufficient to satisfy maturing debts and did not leave a favorable balance to stimulate domestic economic growth, making external debt a burden for the majority of African nations.

2. Literature review

Since emerging nations' foreign debt has been rising consistently over time, it is critical to examine how external debt contributes to economic growth and development. External debt has been known to generate a lot of issues for emerging nations in addition to being a fervent growth promoter. The issue of foreign debt has come to light due to the rise in developing nations' debt with time, and both the local and international communities are now concerned about it. The necessity to continuously borrow money has led to a growing body of work among different economists. Since 1992, the World Bank has categorized Nigeria, along with the majority of other LDCs, as one of the most heavily indebted low-income nations (CBN, 2023).

External Debt

According to Udoka and Ogege (2012), debt is the amount of money used by an organization that was not provided by or otherwise owned by its owners. Packages of financial and technical requirements related to management that come from outside the nation and are intended to assist economic growth and development are referred to as external debt. These packages are repayable in foreign currency at a predetermined future period (Paul, 2017). They are the percentage of a nation's debt that comes from borrowing from foreign sources, such as governments, commercial banks, or international financial institutions. Both bilateral and multilateral borrowing are possible. When a nation borrows money from international institutions such as the London Paris Club, the International Monetary Fund (IMF), the International Bank for Reconstruction and Development (IBRD), sometimes known as the World Bank, and others, it is considered multilateral. However, bilateral (government-to-government) debt is what happens when a nation like Nigeria borrows from the US government (Ayadi, 2012).

Origin of Nigeria’s External Debt

Nigeria's external debt dates back to the years before independence, when the World Bank granted a loan of US$28 million for the construction of a railway in 1958. Because it was obtained on favorable terms—that is, with no interest or at a rate lower than the market—this debt did not provide a significant hardship. Following this time, there was comparatively little need for outside assistance until 1977–1978 when global oil prices declined, lowering the country's oil revenues. Nigeria had a plenty of oil revenues

prior to this time, particularly during the 1973–1976 oil boom. The discovery of crude oil in 1956 led to a gradual shift away from agriculture, which had been the main source of export revenue, jobs, etc., to almost complete reliance on oil as the foundation of the economy, making it a significant source of foreign exchange revenues. Following the decline in oil prices, the government had to finance projects and address balance of payment issues. As a result, the international capital market (ICM) made its first significant loan of US$1 billion in 1978, known as the JUMBO LOAN.

Nexus between External Debt and Exchange Rate

It is impossible to overstate the significance of foreign debt in government operations, notwithstanding its problems. It was mentioned that a lot of emerging nations have massive budget deficits, which are typified by poor revenue streams and steadily rising government spending. As a result, the government borrowed money both domestically and abroad to satisfy the demands of the growing population. The unfavorable outcome of employing fiscal and monetary policy to solve economic issues is that external borrowing is necessary to supply sufficient funds without raising taxes or creating inflationary pressure. However, the use of foreign debt has consequences, as economists consistently associate the massive foreign debt with the devaluation of the exchange rate (Kouladounm, 2018). Since the beginning of the evaluation of macroeconomic variables in developed economies, the relationship between foreign debt and exchange rates has been well-established. The money that lenders like developed governments and multinational banks or clubs make available to overseas borrowers is classified as foreign debt (Focus Economics, 2019). However, loans from other nations, such as China and Japan, come with a certain interest rate and require payment in the local currency.
In order to make the payment, this process necessitates the need for foreign currency, which puts pressure on the exchange rate. This is one another way that foreign debt affects changes in currency rates. Since many emerging countries adopt a floating exchange rate regime that reacts quickly to systemic shocks, this influence is immediate and easily conveyed. In the meantime, the borrower's nation must increase its exports of goods and services to the different participating nations in order to generate the foreign currency. This will also improve a currency's value relative to other foreign currencies.

Relationship between External Debt and GDP

In any economy, one way to finance capital formation is through external debt. for a business hoping to reach a specific growth target rate. Lack of foreign exchange or local savings may be a limitation for such a nation (Obadan, 2011). He maintained that the external sector gap or the domestic resource gap limits growth and that borrowing from outside sources is necessary to close the wider gap. Dual gap analyses emphasized that if foreign exchange is the primary constraint, foreign borrowing plays an additional role in supplemental foreign exchange, without which a portion of domestic savings may go unused because actual growth would be limited by the inability to import essential inputs. It is widely acknowledged in the international community that many developing nations' high foreign debt continues to be a significant barrier to their stability and progress.

THEORETICAL

Regarding the topic of external debt and economic growth, a number of theoretical contributions have been made. Since these theories form the foundation of this research project, they are pertinent to this study. Accordingly, the following hypotheses will be examined: The dual-gap hypothesis, the debt overhang theory, and the Keynesian theory

The Debt Overhang Theory

Krugman first proposed this theory in 1988. This hypothesis states that there is a chance that future debt may exceed the country's capacity to repay it, making the expected cost of debt servicing too high to permit additional internal and foreign investment. As a result, investments will continue to decline, which will slow economic development. The Debt Overhang Theory serves as the foundation for this work due to its applicability to the analysis of Nigeria's external debt, which as of 2018 was N7.7 trillion. This debt is deemed so concerning that failure to take immediate action could have disastrous consequences, as it could erode both present and future investments. Also, as opined by Murungi and Okiro (2018), servicing of debt expenses is likely to deter more internal and external investments.

Empirical Literature

Numerous empirical researches have been conducted on external indebtedness and other macroeconomic variables in both developed and developing nations. Nonetheless, a few chosen and pertinent empirical studies were evaluated in accordance with the study's goal. One such study is that of Aigbedion, Iyakwari, and Mairana, 2020, which looks at how Nigeria's public external debt affects the country's exchange rate. The Statistical Bulletin, which is released annually by the Central Bank of Nigeria (CBN) in December 2018, is the primary source of secondary data for this study. The study examined the influence and link between the economic factors using the analytical methods of Ordinary Least Squares (OLS) and Error Correction Model (ECM). Both the short-term and long-term outcomes verified that Nigeria's exchange rate is impacted by public foreign debt. All independent variables, with the exception of the Foreign Reserve in Nigeria (FRN) at the five percent significance level, were statistically significant in explaining volatility in the Nigerian exchange rate, according to the probability value in the short run. However, at the five percent significance level, the foreign reserve in Nigeria (FRN), debt service payment in Nigeria (DSPN), and external debt in Nigeria

(EXDTN) were statistically significant in the long run for explaining the fluctuation in the exchange rate in Nigeria (EXCHR). Therefore, the study suggests that in order to lower Nigeria's deficit budget and exchange rate, the government should strengthen the checks and balances on the distribution and use of public funds.

Babatunde, Najeem, and Oluwaseun (2022) examined the connection between Nigeria's exchange rate and foreign commerce over a 30-year span, from 1990 to 2019. The study used data from the 2020 edition of the CBN statistical bulletin as a secondary source. The exchange rate was regarded as a dependent variable, and foreign debt was strictly represented by multilateral debt, bilateral debt, and debt from Paris and London clubs. Multilateral debt, Paris Club debt, and London Club debt are the main debts that positively influence exchange rate fluctuations, whereas bilateral debt has a negative association, according to the analysis, which took into account stepwise regression and Vargranger. Additionally, the currency rate is significantly impacted by multilateral, bilateral, and London club debt, while Paris club debt has a little effect. The study's analysis of several models reveals that multilateral debt is still important across the board, although bilateral debt is no longer relevant in Model 4, and Paris Club debt is not significant in Models 4 and 5. The Granger causality test showed that while international debt affects exchange rates, exchange rates do not affect multilateral debt. The analysis came to the conclusion that there is a substantial correlation between foreign debt and the exchange rate. Therefore, the analysis suggests that in order to lower the Nigerian exchange rate, the government should maintain a favorable and controlled public external debt.

With a focus on the Nigerian economy, Olasode and Babatunde (2016) attempted to elucidate the tenuous connection between accrued capital and loans from outside sources and economic expansion. The Autoregressive Distributed Lag (ARDL) model was used to analyze the relationship between growth and external debt in Nigeria between 1984 and 2012. The research's ordinary least squares result validates the existence of a dual behavior, with the current year's external debts having a negative impact on the economy's performance while the lag one of external debts is positive.

Chukwu (2020) looked at how Nigeria's economic growth was affected by external debt between 1981 and 2020. Multiple regression was the foundation of the investigation. Real gross domestic product is the dependent variable, and the independent variables are the inflation rate, exchange rate, external debt, and domestic debt. The link between the independent and dependent variables was estimated using the Ordinary Least Square (OLS) technique. According to the analysis's findings, external debt has no discernible effect on Nigeria's economic expansion and is therefore a negligible factor in assessing that country's economic growth.

The outcome also demonstrates that Nigeria's economic growth and external debt are negatively correlated. Additionally, the Granger causality test result indicates that there is no causal connection between Nigeria's economic growth and external debt. According to the study's findings, an enabling environment should be established to encourage investment in the Nigerian economy and the cost of governance should be decreased to allow for the appropriate use of the monies available for development.

Using yearly data from 1980 to 2021, Imoagwu, Ezenekwe, and Nwogwugwu (2023) examined the effect of growing external debt on Nigeria's currency rate. The idea behind this study was to use data from the CBN statistical bulletin (2020), DMO (2020), and WDI (2021) to incorporate government spending and inflation rate into the conventional analysis of exchange rate volatility in Nigeria. The Autoregressive Distributed Lag (ARDL) technique, the stability and diagnostic tests, and the Augmented Dickey-Fuller (ADF) unit root test were used to examine the collected data. According to the early test analysis's findings, Nigeria's exchange rate is negatively but negligibly impacted by external debt.

Additionally, Nigeria's inflation rate is positively and significantly impacted by external debt. Given these results, the study came to the conclusion and suggested that the Nigerian government and/or Central Bank of Nigeria make sure that all borrowed funds are efficiently directed toward profitable projects that will generate returns in order to service the debts and pay them off at maturity. This puts short-term pressure on the foreign exchange market, which in turn causes exchange rate fluctuations and the depreciation of the naira in the nation.

Using unit root tests and the auto-regressive distributed lag (ARDL) model, Panagiotis (2018) empirically examined the relationship between public debt and the factors that influence economic growth in Greece, including government and private consumption, investment, trade openness, and population growth. The consumer price index was revealed by the unit root testing. According to the estimation results, the prime lending rate rises when the external debt stock is shocked. The findings showed that the effects of both domestic and foreign debt on output and the overall level of prices were negligible.

Alejandro and Ileana (2017) used Two-Stage Least Squares (2-SLS) to analyze the relationship between government debt and GDP in 16 Latin American economies, including Bolivia, Argentina, Chile, Brazil, Costa Rica, Colombia, Dominican Republic, Mexico, Honduras, Panama, Nicaragua, Peru, Paraguay, Venezuela, and Uruguay, for the years 1960–2015. The initial GDP per capita level, GDP per capita growth rate, gross government debt as a percentage of GDP, investment rate, which is represented by gross fixed capital formation as a percentage of GDP, and population growth rate are among the variables included in the analysis.

According to the findings, debt boosts GDP growth but eventually drops to nearly zero when public debt-to-GDP ratios fall between 64% and 71%. Before then, more debt stimulates growth.

Nigeria's economic development and public indebtedness from 1981 to 2017 were examined by Eze, Nweke, and Atuma (2019). Multiple regression analysis, the ARDL model, and the Chow Breakpoint test were used to analyze the data, which came from the Central Bank of Nigeria (CBN) statistical bulletin, volume 28, 2017 on GDP growth, public investment (LPUINV), external debt (LEXD), domestic debt (LDDs), total public debt (LTPUBT), government expenditure (LGEX), national savings (LNS), consumer price index (CPI), and interest rate (INR). The findings showed that whereas domestic debt has a negative and negligible influence

on GDP, overseas debt has a negative and large impact.

Similarly, national savings and the consumer price index have a positive but negligible effect on LGDP, whereas government spending has a positive and considerable impact on GDP. Additionally, the results demonstrated that whilst LDD has a positive but negligible effect on LPUINV, external debt has a negative and considerable impact. Furthermore, there was no indication of a substantial structural break between the variables in the results.

Jimo (2019) used the co-integration test and ordinary least square (OLS) multiple regression to examine the connection between Nigeria's currency rate changes and receipts of external public debt payments between 1981 and 2013. The variables analyzed were the exchange rate, external public debt servicing, and external debt receipts. The results indicated that these factors had both short-term and long-term positive correlations with changes in the value of the naira.

Okoye, Modebe, Erin, and Evbuomwan (2020) investigated how Nigeria's economic growth was impacted by external debt. The data was analyzed using the ordinary least squares approach. The generalized least squares approach improved the result's robustness. The findings demonstrated a strong positive relationship between economic growth and the explanatory factors—exchange rates, inflation rates, and external debt. However, there was a negative relationship found between gross fixed capital formation and economic growth. The conventional and generalized least squares regression estimates demonstrated that the exchange rate, inflation rate, and external debt all significantly boosted economic growth. Additionally, the data indicated that gross fixed capital development had a non-significantly negative impact on economic growth.

Festus and Saibu (2019) used time series data on external debt stock, real gross domestic product, trade openness, and gross fixed capital formation as a percentage of GDP, along with data on inflation and exchange rates, from 1981 to 2016 from the Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank indicators, to investigate the impact of external debt on economic growth in Nigeria using the Autoregressive Distributed Lag (ARDL) Model. The results demonstrated that Nigeria's external debt had a detrimental impact on its growth.

Shuffield, Adelajda, and Nyendu (2019) investigated the relationship between external debt and economic growth in a panel of 48 sub-Saharan African (SSA) countries during the years 1990–2017 using a two-step approach of Generalized Method of Moment (GMM) techniques. The results demonstrated that external debt had a statistically significant and negative effect on GDP growth at the same time. Nonetheless, GDP growth is stimulated by the first leg of external debt variables. It is implied that the external debt accrued over the preceding periods frees up funds for spending on growth-enhancing projects in the subsequent period. Moreover, they discovered no proof that debt and economic development had a non-linear relationship. Finally, they discovered that neither wealthy nor impoverished SSA nations are immune to the negative effects of external debt on GDP growth.

In their 2019 study, Obayori, Krokeyi, and Kakain empirically investigated the connection between Nigeria's economic development and external debt from 1980 to 2016. The CBN statistical bulletin and the debt management office fact book provided secondary sources of data for the study. The Generalized Method of Moments (GMM) was used as an analytical method to determine the stationarity of the variables while taking into account the Kwiatkowski, Phillips, Schemidt, and Shin (KPSS) unit root test. The GMM result showed a strong and positive correlation between Nigeria's economic growth and external debt.

Benigno (2019) looked at the currency rate and debt deleveraging. High debt deleveraging can cause a severe recession with serious repercussions on a global scale. During the adjustments, there may be significant changes in terms of trade, output, and consumption as well as fluctuations in the nominal exchange rate. From the standpoint of global wellbeing, all of these movements are ineffective and present intriguing trade-offs. Significant changes in the nominal exchange rate shouldn't always be necessary for the best response to global imbalances. When nations trade more freely, a global liquidity trap may be advantageous.

3. Methodology

The study made used of time series data from relevant data documenting agencies and departments. Measurable indicators (or their proxies in the case of non-measurable) of on economic development in Nigeria proxy by GDP growth and other indicators to include: external debt and exchange rate as a control variable. The data were obtained from Central Bank of Nigeria (CBN) Statistical Bulletin, National Bureau of Statistic (NBS) for Various Years, Debt Management Office and World Bank/World Development Indicators Database WB/WDI. Granger causality and Autoregressive Distributed Lag are the analytical techniques that were used to accomplish the research's objectives.

Model Specification

The relationship between the dependent variables and all other independent variables were expressed each in a single functional form, the model is specified as follows:

GDPG = f(EXTD, EXCR) 1

The model specification proposed for the study is as follows therefore:

$$GDPg = \theta + \beta_1 EXTD + \beta_2 EXCR + \varepsilon_t \quad 2$$

Where;

*GDPg_* = gross domestic product growth rate

EXTD = external debt

EXCR = exchange rate

ε_t= Residual, fulfills the usual (CLRM) assumptions about the error.

4. Results and Discussion

Unit root test

The universal assumption in testing economic model is that the variables be stationary, but is not generally true. Therefore, before estimating the model of the research, we shall check for the time series properties of the data. The unit root was tested using Augmented Dickey-Fuller test at 5% level of significance. The choice of lag length was lag (7) which were used uniformly for all variables. The result is shown in the table below:

Table 1: Summary of the Augmented Dickey-Fuller Test

Variables	ADF Statistics	5% Critical value	Probability	Order of integration	Remark
EXCR	**-3.679488**	**-2.963972**	**0.0098**	**1(1)**	**Stationary**
GDPg	**-3.625979**	**-2.960411**	**0.0109**	**1(0)**	**Stationary**
EXTD	**-3.101410**	**-2.963972**	**0.0372**	**1(1)**	**Stationary**

Sources: Authors computation using Eview 10

The table above shows the results of the unit root test. The decision rule state that if the Augmented Dickey Fuller statistics is > than the critical value at 5% then there is no unit root in the data, but its stationary. The result shows that Gross Domestic Growth Rate (GDPg) is stationary at level while EXTD and EXCR were stationary at 1st difference, hence the data is stationary. Data of this nature warrant the used of Autoregressive Distributed Lag Model (ARDL), since the data shows the mixture of a level and first difference when tested for the unit root.

Granger causality test

Granger causality is often used to predict whether one time series can predict the future value of the series. Although regression analysis deals with the dependence of one variable on the other, it does not imply causation. In other words, the existence of a relationship between variables does not prove causality or the direction of influence (Gujarati, 2004). The essence of employing causality analysis, using the granger causality test in this research work is to actually ascertain whether a causal relationship exists between Gross Domestic Product Growth Rate (GDPg), Exchange Rate (EXCR) and Monetary External Debt (EXTD). The F-statistics is used to reject or accept the null hypothesis of no causation between the variables when F-statistics is greater than 2 and less than 2 respectively. Or the probability value, the null hypothesis is rejected if p- value is less than 5% level of significance. Consider the table below to check for direction of influence between the variables in Nigeria for the period under study (i.e. from 1990 to 2021).

Table 2: Granger Causality Test Result

Pairwise Granger Causality Tests
Date: 06/04/25 Time: 22:06
Sample: 1990 2021
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LOGEXTD does not Granger Cause GDPG	30	0.05594	0.9457
GDPG does not Granger Cause LOGEXTD		0.98761	0.3865
EXCR does not Granger Cause GDPG	30	0.25261	0.7787
GDPG does not Granger Cause EXCR		0.58674	0.5636
EXCR does not Granger Cause LOGEXTD	30	2.65618	0.0900
LOGEXTD does not Granger Cause EXCR		0.53142	0.5943

Source: Author's computation using Eview 10

The result shows that there is no causality between the variables, which are all tested on the same lag. The outcome is presented in Table 2 above. The results suggest that there is no direction of causality between the Effect of External Debt and Exchange Rate on Economic Development in Nigeria. Also, the result showed that all the variables their probability is greater than 0.05 and that means they are not Granger causing each other. That is, no relationship exists between them.

Autoregressive Distributed Lag Model (ARDL) Result

The ARDL test according to Pesaran et al (2001) can be adopted for cointegration analysis irrespective of whether the regressors are purely 1(0), purely 1(1) or a mixture of 1(0) and 1(1). The unit root test shows that Gross Domestic Product Growth Rate (GDPg) is integrated of order zero while Exchange Rate (EXCR) and External Debt (EXTD) are integrated of order one hence the use of ARDL. The result is presented in the table below:

TABLE 3: showing the ARDL result

Dependent Variable: GDPG
Method: ARDL
Date: 06/04/25 Time: 21:56
Sample (adjusted): 1991 2021
Included observations: 31 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): EXCR LOGEXTD
Fixed regressors: C
Number of models evalulated: 100
Selected Model: ARDL(1, 1, 0)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
EXCR	-0.047332	0.032021	-1.478155	0.1514
EXCR(-1)	0.059825	0.034098	1.754481	0.0911
LOGEXTD	-7.26E-11	5.88E-11	-1.234610	0.2280
C	4.166123	2.002132	2.080844	0.0474

R-squared	0.340003	Mean dependent var	4.080323
Adjusted R-squared	0.238465	S.D. dependent var	3.842416
S.E. of regression	3.353122	Akaike info criterion	5.404351
Sum squared resid	292.3292	Schwarz criterion	5.635639
Log likelihood	-78.76744	Hannan-Quinn criter.	5.479745
F-statistic	3.348527	Durbin-Watson stat	1.684105
Prob(F-statistic)	0.024437		

*Note: p-values and any subsequent tests do not account for model selection.

The coefficient of the constant intercept β_0 is 4.166123 which show that if all the explanatory variables were held constant, the GDPg will be positively affected as 4166123, an increase in economic growth rate in the economy. In relation to our apriori expectation, it is expected that there should be a direct positive relationship between Gross Domestic Product growth rate and the independent variables (EXTD, and EXCR) in Nigeria. However, the coefficient of External Debt as a percentage of GDPg does not conformed to the apriori expectation of a positive relationship. The coefficient (β_1=-7.2611 P=0.2280) shows a negative and an insignificant relationship between External Debt and economic development in Nigeria. Its shows that a unit change in EXTD will lead to 726% decrease in economic development in Nigeria.

Consequently, the coefficient of Exchange Rate shows that it conformed to the apriori expectation of a negative relationship. This is proving by the coefficient of (β_2=-0.047332, P=0.1514). The result is negative and insignificant at 5%. This shows that a unit change in Exchange Rate will lead to a decrease in GDPg by 5% in the economy. There is a negative relationship between EXCR and economic development.

The coefficient of determination (R^2) showed the percentage of variations in the dependent variable that can be explained by the independent variables. The R^2 of 0.340003 or 34% showed that Economic development can be explained by changes in the explanatory variables as shown in the model and the remaining 66% is explained by the dummy variable. The F-statistic which measures the overall significance of the model indicated that it is significant at 5%. This is indicated by the F-statistics and its probability (3.348527 and 0.024437) respectively. We therefore conclude that there is a significant effect of External Debt and

Exchange Rate on economic development in Nigeria. The Durbin Watson statistics is approximately 2 which show that there is no serial correlation. This means that the value of the random term in any particular period is uncorrelated with its preceding values which indicate the absence of autocorrelation.

Discussion of Findings

Debt is one of the tools of economic development. Foreign debt can help a country to invest in infrastructure, education, health and other sectors of the economy that can boost its productivity, growth and living standard. Based on this result, the regression shows that a negative and an insignificant relationship existed between External Debt and Economic Development in Nigeria. Its shows that a unit change in EXTD will lead to 726% decrease in economic development in Nigeria at 5%. This could be as a result of the diversion of the loan collect into the pocket of few individual in the corridor of power. The loan that is collected is not used for the purpose it was collected for, this could result to the negative effect on the economy. This conforms to Chukwu (2020) who found out that a negative and insignificant relationship exists between External Debt and economic growth in Nigeria. It's also conform with Lucky and Godday (2019) who also found a negative and a significant relationship between EXTD and economic growth in Nigeria. The result further shows that there exists a negative and insignificant relationship between Exchange Rate and economic development in Nigeria. That a unit increase in exchange rate will lead to a 5% decrease in economic development. This conforms to the apriori expectation.

The regression result shows that there exist a positive and a significant relationship between external debt, exchange rate and economic development in Nigeria. This is indicated by the goodness of fit of 34% growth in GDP which is as a result of a change in the independent variables and 66% is by the dummy variables. The overall significance is measured by the value of the probability F-statistic which is 0.024437 and is less than 0.05 significant levels. We, therefore, reject the null hypothesis and conclude that there is a significant relationship of external debt and exchange rate on economic development in Nigeria.

5. Conclusion and Recommendations

Conclusion

The Effect of External Debt and Exchange Rate in enhancing economic development in Nigeria has been discussed in this study. The study showed that External Debt is important in the development of any economy if properly manages. Therefore, any nation that is in the process of development and resort to the use of borrowed resources should properly use it. Such will bring about development in a lesser time

Recommendations

Based on the result of this research study, the following recommendations were made:

Government should make sure that all resources borrowed should be use for the purpose it was collected for. Any person found diverting the loan collect into his pocket for selfish interest should be prosecuted. The government should subsidies industrial and farm inputs as such will help producers to produce goods at affordable prices thereby increasing the foreign exchange earnings of the country.

References

1. Adejumo, V. A; Adejumo, O. O. (2014). Prospects for achieving sustainable development through the millennium development goals in Nigeria. *Euro J of Sust Dev*;3(1):33-46.
2. Aigbedion, I. M; Iyakwari, A. D. B. & Mairana, I. A. (2020). Public External Debt and its Impact on Exchange Rate in Nigeria. *International Journal of Advanced Studies in Business Strategies and Management* 8(1) 25-39. IJASBSM p-ISSN: 2354-4236
3. Babatunde, B. O; Najeem, A. I. & Oluwaseun, K. T. (2022). Foreign Debts and Exchange Rate in Nigeria: *Journal of Governance Risk Management Compliance and Sustainability (JGRCS),* 2 (2), 1-14.
4. CBN (2014), Statistical Bulletin, Statistical Department, Central Bank of Nigeria, Garki, Abuja,Nigeria.
5. Central Bank of Nigeria (2015). Annual Statistical Bulletin. Abuja: CBN
6. Central Bank of Nigeria (2018). Annual Statistical Bulletin, 27. Retrieved from www.cbn.gov.ng
7. Central Bank of Nigeria (2019). Annual Statistical Bulletin. Abuja: CBN
8. Debt Management Office (2014). States and Federal Governments' External Debt Stock at 31st December 2014, Abuja. Nigeria
9. Debt Management Office (2018). Debt Management Office Annual Report. Retrieved from http://www.dmo.gov.ng
10. Debt Management Office (2020). Debt Management Office Annual Report. Retrieved from http://www.dmo.gov.ng
11. Danladi, J. D. & Uba, U. P. (2016). Does the volatility of exchange rate affect the economic performance of countries in the West African Monetary Zone? A case of Nigeria and Ghana, *British Journal of Economics, Management &Trade,* 11 (3) 1-10.
12. Eleje, E.O. and Emerole, G.A. (2010), "Development Financing for Growth: The Nigeria Experience". *Journal of Contemporary Issues in Development Finance and Entrepreneurship* 2(1).
13. Eravwoke, K.E and Oyovwi, D.O (2013). Academic Journal of Interdisciplinary studies published by *MCSER-CEMAS-Sapienza University of Rome*; 2, 43-153.

14. Ezeabasili V.N; Isu, H.O. and Mojekwu, J.N. (2011). "*Nigeria's External Debt and Economic Growth:* An error correction Approach.
15. Focus Economics (2019). External debt (% of GDP). Retrieved from https://www.focus-economics.com/economic-indicator/external-debt.
16. Fosu, AK (2010). The external debt servicing constraint and public-expenditure composition in sub-Saharan Africa. *African Development Review.* 22(3): 378-393
17. International Monetary Funds (2015). *Destabilizing Stability? Exchange Rate Arrangements and Foreign Currency Debt.* IMF Working Papers describe research
18. Kouladoum, J. C. (2018). External debts and real exchange rates in developing countries: evidence from Chad. Retrieved from https://mpra.ub.uni-muenchen.de/88440/
19. Kumar, A., Bhutto, N. A., Mangrio, K. A., & Kalhoro, M. R. (2019). Impact of external debt and exchange rate volatility on domestic consumption. New evidence from Pakistan. *Cogent Economics & Finance,* 7(1), 1-11
20. Imoagwu, C. P; Ezenekwe, U. R. & Nwogwugwu, U. C. (2023). Rising External Debt and Exchange Rate: Empirical Evidence from Nigeria. *International Journal of Advanced Economics,* 5(4), 90-106. DOI: 10.51594/ijae.v5i4.457
21. International Monetary Funds (2015). *Destabilizing Stability? Exchange Rate Arrangements and Foreign Currency Debt.* IMF Working Papers describe research
22. Latifa, K. (2014). *The impact of external debt and debt servicing on economic growth in Zimbabwe*, A published dissertation submitted to Faculty of Social Studies; Department of Economics of the University of Zimbabwe.
23. Lawal, I. A., Bibire, M. B., Adegbola, O. O., & Johnson, O. A. (2016). External debt and economic growth: Evidence from Nigeria. Acta Universitatis *Danubius. Œconomica*, 12(6).
24. Lena, M. P. (2016). Government debt – interest rate nexus in G7 countries over a long horizon. *Journal of Panoeconomicus*, 63(5), 603 – 625.
25. Mandizha, M. (2018). *An empirical investigation in to the impact of public debt on economic growth:* The case of Zimbabwe (1980-2014), URI: http://hdl.handle.net/10646/3537.
26. Melina, G., Yang, S. L. & Zanna, F. (2014). *Debt Sustainability, Public Investment, and Natural Resources in Developing Countries*: The DIGNAR Model.
27. Muhammad, J. I. & Naeem, U. K. (2015). Bank profitability, inflation and cost efficiency: A case of Pakistani banks. *International Journal of Business and Management Review*, 3(1), 41-53.
28. Muhammed, Z. N., Shaista, A. & Rakhshanda, A. (2016). External debt and external rate of interest: An empirical analysis of Pakistan. *Bulletin of Business and Economics (BBE), Research Foundation for Humanity (RFH),* 5(3), 116 – 125.
29. Murungi, S. M. & Okiro, K. (2018). Impact of government debt on economic growth in Kenya: A critical literature review. *European Scientific Journal,* 14(1), 240-257.
30. Naeem, A. (2015). Is public debt hindering economic growth of the Philippines? *International Journal of Social Economics*, 42(3), 202 – 221.
31. Nwanne, T. F. I. & Eze, O. R. (2015). Assessing the effect of external debt servicing and receipt on exchange rate in Nigeria. *International Journal of Economics and Finance*, 7(9), 278-286.
32. Obayori, J. B., Krokeyi, W. S., & Kakain, S. (2019). External debt and economic growth in Nigeria. *International Journal of Science and Management Studies (IJSMS),* 02(02), 1-6.
33. Ogbu, E. G; Obinabo, C. R. & Aneke, N. I. (2020). Effect of external debt burden on real GDP and exchange rate in Nigeria. *International Journal of Advanced Finance and Accounting*, 1(2) 52-70. ISSN 2765-8457
34. Ogwuche, P. (2019). An empirical analysis of the impact of external borrowing on economic performance of Nigeria. *International Monetary Fund (IMF) publication*.
35. Okoli, O. R. (2014). External debt crisis, debt relief and economic growth: Lessons from Nigeria. *European Journal of Business and Management,* 6 (33).
36. Okoye, L. U., Modebe, N. J., Erin, O. A. & Evbuomwan (2020) examined the effect of external debt on economic growth: Evidence from Nigeria. *Sustainable Economic Growth, Education Excellence, and Innovation Management through Vision* 2020, 4046-4058.Olanrewagu, M., Sule, A. & Abu, J. (2016). *Implications of external debt on the Nigerian economy:* Analysis of the dual gap theory. PDF iiste.org (260k).
37. Olugbenga, O. & Oluwole, O. (2017). Impact of external debt shocks on economic growth in Nigeria: a SVAR analysis. *Economic Change and Restructuring*, 52, 157-179.
38. Osundina, C. K., Osundina, J. A., Jayeoba, O. O. & Olayinka, I. M. (2016). Exchange rate volatility and banks performance: Evidence from Nigeria. *IIARD International Journal of Economics and Business Management,* 2(4), 1-11.
39. Otambo, T. D. (2016). *The effect of macro-economic variables on financial performance of commercial banking sector* in Kenya. An M.Sc. Project; University of Nairobi, Kenya.
40. 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.

41. Panagiotis, P. (2018). *The effect of government debt and other determinants on economic growth: The Greek Experience*, Department of Computer Science, School of Science, University of Thessaly, 35100 Lamia, Greece
42. Saheed, Z. S., Sani, I. E. & Idakwoji, B. O. (2016). Impact of public external debt on exchange rate in Nigeria, *International Finance & Banking*, 2(1).
43. Sayedi, S. (2013). Bank specific, industrial specific and macroeconomic determinants of banks' profitability in Nigeria. *Journal of Finance*, 2(1), 01-27.
44. Shuffield, S. A., Adelajda, M. & Nyendu, D. (2019). External debt and economic growth: Two step system GMM- evidence for Sub-Saharan African Countries. *International journal of Business, Economics and Management*, 6(1), 39 – 48.
45. Sulaiman, L. A. & Azeez, B. A. (2012). Effect of external debt on economic growth of Nigeria, *Journal of Economic and Sustainable Development*. 3 (8).
46. Uddin, K. M. K., Rahman, M. M. & Quaosar, G. M. (2014). Causality between exchange rate and economic growth in Bangladesh, *European Scientific Journal*, 10 (31), 11-26.
47. Ugwu, M. J. O. (2011). *Public finance in Nigeria: An integrated approach*. 3rd Edition, Abakaliki, Ugub's Printing and Publishing Co, 1-2. World Bank Statistics (WDI 2014).