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# EFFECT OF PUBLIC EXTERNAL DEBT ON ECONOMIC DEVELOPMENT IN NIGERIA

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## ABSTRACT

*The study ascertained the effect of public external debt on economic development in Nigeria for the period of 1981 to 2023. The multiple regression technique of analysis was employed and the data for the variables such as nominal gross domestic product, total external debt, multilateral debt and bilateral debt were sourced from Central Bank of Nigeria Statistical Bulletin. The Johansen cointegration test revealed a long run relationship among the variables and the result of the multiple regression carried out however showed that total external debt has negative but significant impact on economic development, while multilateral debt has positive and significant effect on economic development. Similarly, bilateral debt has positive but insignificant effect on economic development. Based on the findings of the study, the study recommends that government should monitor and efficiently utilize the funds borrowed from external sources for capital projects, as this would accelerate the development of Nigeria economy.*

***Key words:*** *External debt, Multiple regression, Nigeria, Nominal GDP.*

## 1. INTRODUCTION

The nexus between external debt and economic development has been widely debated by scholars across the globe. While some argued that external debt can spur economic growth and development, some were of the opinion that external debt can retard growth. However, many nations resulted to borrowing from other countries in order to finance excess expenditures due to low revenue generation and the growth in population. According to Harrod and Domar (1948), countries borrow due to insufficient domestic savings. Borrowing, whether from external or internal sources is not bad in its entirety, but how it is utilized matters for economic growth and development. External debt is a critical indicator of a country's economic health and its ability to manage and repay its debt obligations. It is the portion of a country's debt that is borrowed from foreign creditors which must be paid back in the currency in which the money was borrowed (International Monetary Fund, 2021). Consequently, economic development can occur when the borrowed funds are used for developmental projects like provision of infrastructures that attracts investors to invest. This will help to

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generate employment opportunities, boost production, increase output and income levels, then the standard of living of people would be improved. This can only be possible if the funds are utilized efficiently (IMF, 2020).

Globally, countries are borrowing to finance higher investment or higher consumption and to circumvent hard budget constraint. These imply that countries borrow to boost economic growth and reduce poverty level in the economy. Historically, external debt has played a significant role in economic development as well as crises of many countries. During the late 20th century, many developing countries accumulated significant external debt, leading to debt crises in the 1980s and 1990s. Initiatives like the Heavily Indebted Poor Countries (HIPC) programme were however introduced to provide debt relief to the world's poorest nations (World Bank, 2021). As of recent, the total external debt stocks for low and middle income countries reached approximately $8 trillion in 2020 and $307 trillion in 2023. The increase has been driven primarily by developed countries such as United States, Japan, United Kingdom and France (World Economic Forum, 2023). In Africa, many countries in sub-Saharan region have seen a sharp increase in external debt, often exceeding 50% of gross domestic product (GDP). As of 2022, sub-Saharan Africa external debt stock was estimated at $726 billion (World Bank, 2023).

Due to the persistent budget deficit, negative balance of payment, low-income nations like Nigeria continue to struggle with one of the most significant difficulties of public debt and its servicing. In the case of Nigeria, total external debt has been increasing over the years. The total external stock was NGN2.33 billion in 1981, NGN698.84 billion in 2010 and NGN225,515.5 billion in 2023. The multilateral debt in 1981, 2010 and 2023 was NGN0.18 billion, NGN723.12 billion and NGN21,149.37 billion respectively. Also, in 1981, there was no bilateral debt. However, the bilateral debt amounted to NGN24.6 billion and NGN5,957.44 billion in 2010 and 2023 respectively. This shows continuous increase in Nigeria's debt accumulation over the years. Unfortunately, the huge debt accumulation has not resulted into significant growth and development in the country. This is evident as the nominal GDP has not drastically increased to propel growth and development. In 1981, the nominal GDP was NGN139.3 billion, while it was NGN55,469.4 billion in 2010 and NGN225,515.5 in 2023 (Central Bank of Nigeria, 2023). Consequently, the high debt servicing rate which takes larger proportion of revenue generated in Nigeria has hampered the growth and development of the economy as the borrowed funds are mostly used for recurrent expenditure. It is worthy to note that a country which borrows to consume can never develop. According to statistics from

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CBN (2023), debt servicing in 2021 was NGN1,245.95 while it increased to NGN1,151.64 billion in 2022.

Nigeria is still faced with lots of macroeconomic challenges such as high inflation, high unemployment rate, dilapidated infrastructures, low investments, volatile exchange rate amongst others. The fact that the interest and the principal amount of the loan borrowed will be paid back in foreign currency has caused more harm to the revenue generated as more than half of the revenue are used to service debt. The Nigerian government has also put measures in place to address the issues of debt overhang (CBN, 2023). These measures include, the adoption of Structural Adjustment Programme (SAP) of 1986, Nigeria's Debt Management Strategy (2020-2023) amongst others. However, despite the policy initiatives, Nigeria keeps accumulating external debt and the challenges it is meant to address still persist.

It is against the above backdrop that this study broadly aims at investigating the effect of public external debt on economic development in Nigeria. The specific objectives are;

i. to investigate the effect of total external debt stock on economic development in Nigeria.
ii. to ascertain whether or not multilateral debt has effect on economic development in Nigeria.
iii. to determine the effect of bilateral debt on economic development in Nigeria

The following hypotheses in their null form were therefore tested in line with the objectives of the study;

$H_{01}$: Total external debt stock has no significant effect on economic development in Nigeria.

$H_{02}$: Multilateral debt does not significantly affect the economic development in Nigeria.

$H_{03}$: Bilateral debt has no significant effect on economic development in Nigeria.

## 2.1 LITERATURE REVIEW

### 2.1.1 Public External Debt

According to the International Monetary Fund (IMF) (2023), public external debt is the portion of a country's debt borrowed from foreign creditors, including international financial institutions, foreign governments, and private sector lenders. This debt is typically used to finance government deficits and investment projects, and its management involves monitoring the sustainability and repayment capacity of the borrowing country. The World Bank's 2023 International Debt Report elaborates that public external debt encompasses all

financial obligations owed by a country's government to external lenders. It highlights that this debt includes loans and credits, and emphasizes the importance of transparent reporting and sustainable debt management practices to avoid debt crises (World Bank, 2023). Horn et al. (2023) from the International Debt Statistics database describe public external debt as debts incurred by the government, which are owed to non-residents and are payable in foreign currency, goods, or services. This definition underscores the need for accuracy in debt data reporting and the implications of hidden or unreported debts on economic stability

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### 2.1.2 Total External Debt Stock

Total external debt stock is defined by the World Bank (2023) as the total amount of public and publicly guaranteed debt, as well as private nonguaranteed long-term debt, short-term debt, and use of IMF credit. This comprehensive measure includes all debt obligations owed by a country to foreign creditors, encompassing both government and private sector liabilities. Similarly, according to the United Nations Conference on Trade and Development (UNCTAD) (2024), total external debt stock includes all external liabilities of a country that require repayment in foreign currency, goods, or services, emphasizing the importance of this measure in assessing a country's financial obligations to the rest of the world and its implications for economic stability and development.

### 2.1.3 Multilateral Debt

Multilateral debt, as defined by Ferrarini (2010), refers to financial obligations owed by countries to international financial institutions, such as the International Monetary Fund (IMF) and the World Bank, which provide loans and grants to support economic development and structural adjustments. According to Todaro and Smith (2015), multilateral debt involves borrowing from multiple international organizations that collectively work to facilitate economic growth and stability in developing nations. Stiglitz (2002) describes multilateral debt as the accumulated debt that nations owe to international organizations formed by multiple countries, aimed at fostering global economic cooperation and development.

### 2.1.4 Bilateral Debt

Bilateral debt, as defined by Clements, Bhattacharya, and Nguyen (2020), refers to loans or credits extended from one country directly to another, often through government agencies or state-owned banks, to finance projects and promote economic cooperation. According to Krugman and Wells (2018), bilateral debt involves a lending relationship between two

countries where one acts as the creditor and the other as the debtor, facilitating infrastructure and development projects. Ghosh, Ostry, and Qureshi (2019) describe bilateral debt as financial obligations between two sovereign states, typically part of broader diplomatic and trade agreements aimed at fostering mutual economic growth.

### 2.1.5 Economic Development

Economic development historically centered on overcoming deprivation, enabling communities to meet basic needs and improve overall well-being. However, it is increasingly about addressing insecurity amid frequent global and localized shocks (Carnegie Endowment for International Peace, 2023). Meanwhile, the UNCTAD (2023) highlights that economic development today must account for the critical role of environmental sustainability, technological advancements, and socio-economic inclusivity to ensure long-term prosperity and stability, particularly in regions like Africa with unique demographic and resource advantages.

#### 2.1.5.1 Gross Domestic Product

According to CBN (2017), economic growth is the monetary value of goods and services produced in an economy during a period of time irrespective of the nationality of the people who produced the goods and services. It is calculated without making deductions for depreciation. International Monetary Fund (2012) refers to economic growth as the increase in the market value of goods and services produced in an economy over a period of time. Gross domestic product which is a measure of economic growth is described by Todaro and Smith (2006) as a gradual process that improves the economy's potential for production over time, resulting in higher levels of national output and revenue.

## 2.2. Theoretical Framework

### 2.2.1 Dual gap theory

The Harrod-Domar growth model developed in 1948 is expanded upon in what is known as the dual gap model. According to the dual-gap hypothesis, the degree of domestic saving or the capacity to purchase imports is what limits the amount of investment and growth that may take place in a country. The level of domestic savings, on the other hand, is insufficient in emerging nations to cover the finance demands necessary to support economic expansion; this is where the savings gap comes from. Countries are forced to rely on sources of finance from the outside world if they hope to see economic expansion. However, the acquisition of

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external money is dependent on the link between savings at home, savings abroad, investment and economic expansion. This provides more evidence that nations with low levels of savings need to borrow money in order to expand their economies. The dual gap does not, however, explain at what point in time a government must cease borrowing money in order for it to stay viable. It just provides support for the viewpoint that a nation has to borrow money without going deeper into the dynamics involved, such as a nation's ability to repay its debt, its capacity to service its debt, or the potential effects on economic development. despite the criticism of the theory, it is adopted in this study as the theoretical framework. This is because it emphasized that the level of savings determines the investments in a country which would help to generate revenue that would be used to finance budget instead of borrowing from other sources. However, in Nigeria, the level of domestic savings is insufficient to cover the finance demands necessary to support economic expansion; this is where the savings gap comes from, and as such, the nation has to result into borrowing from other sources which put burden on the economy (Harrod & Domar, 1948).

### 2.3. Empirical Review

Onwere and Obademi (2023) used autoregressive distributed lag (ARDL) to examine the influence of external debt on Nigeria's economic growth using annual time series data from 1970 to 2021. The findings showed a positive but insignificant impact of external debt, external debt service, and the exchange rate on economic growth both in the short and long run. Eze and Ukwueni (2023) investigated the extent of the impact of external debt and domestic debt on economic growth in Nigeria from 1981 to 2021, using ARDL model. The results revealed negative but significant impact of external debt on economic growth, while domestic debt has insignificant negative impact.

Zafar and Zafar (2022) investigated the impact of Pakistan's external debt on the country's economic development by covering the period from 1980 to 2020. The ordinary least square method was used and the result showed that the overall debt as well as multilateral debt have a negative impact on the rate of GDP growth. Atique and Malik (2021) studied how national and external debt affected the expansion of Pakistan's economy. The study applied the OLS approach and it was revealed that domestic debt was adversely related to economic growth, while external debt was also found to have a negative impact on economic growth.

Edeminam, (2021) evaluated the influence of public debt on economic growth in Nigeria using yearly time series data from 1990 to 2019. The vector error correction mechanism was

used and the result showed that in the short run, the effect of public debt on economic growth was negative and insignificant, while the impact of the ratio of debt servicing to GDP was negative but significant.

Yusuf and Mohd (2021) investigated the effect of government debt on Nigeria's economic growth using ARDL to estimate annual time series data from 1980 to 2018. From the result of the study, it was found that in the long run, external debt has negative impact while in the short term, it was positive. Similarly, domestic debt has a significant positive impact on long-term growth while its short-term effect was negative. Peter, Olohungbebe and Okoye (2021) investigated the effect of debt burden on economic development for the period of 1980 to 2019. Findings from the ARDL model revealed that external debt has a positive and significant relationship with economic growth in the short and long run. On the other hand, domestic debt showed a significant negative effect on GDP.

Obisesan, Akosile, and Ogunsanwo (2019) evaluated the effect that Nigeria's external debt had on the country's overall economic development over the period of 1981 to 2017, using OLS estimation approach. According to the findings of the study, switching scale has a beneficial influence on economic growth in Nigeria, however foreign debt and external debt administration have a negative impact on economic growth. Abdullahi, and Bello (2018) employed ARDL to investigate the nexus between debt and growth for the period 1981 to 2026. From the findings of the study, it was revealed that external debt has negative relationship with economic growth in Nigeria.

Paul (2017) conducted research to study how the growth of Nigeria's economy is affected by the country's high level of external debt between 1985 and 2015. An ARDL method was utilized and the result showed that the stock of external debt has a positive and significant effect on the development of Nigeria's economy. Nwali and Nkwede (2016) empirically investigated the combine influence of the two components of public debt (internal and external public debt) burden on the growth of Nigerian economy for a period of 1961 to 2013. The study adopted vector error correction mechanism (VECM) as a method of analysis. The empirical results revealed that public debt has a negative impact on Nigerian economic growth.

Ijirshar, Fefa and Godoo, (2016) investigated the relationship between external debt and Nigeria's economy growth from 1981 to 2014. In order to evaluate the time series data, an ARDL was employed. The findings however showed that Nigeria's external debt has a

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negative influence on the economic growth both in the long and short run. Mbah, Umunna and Agu (2016) investigated the effect that Nigeria's foreign debt had on the country's economic development. The study was analyzed using a time series spanning from 1970 to 2013. An ARDL technique was employed to estimate the parameters of the model, and it was found that external debt has a considerable and detrimental effect on economic growth in Nigeria.

## 3. METHODOLOGY

This study used an ex-post research design to investigate the effect of public external debt on economic development in Nigeria. The study covered the period of 1981 to 2024 and the data for the variables which include nominal gross domestic product, total external debt stock, multilateral debt and bilateral debt were sourced from CBN Statistical Bulletin for various years. The dependent variable in this study is nominal GDP which is used as a proxy for economic development, while multilateral debt, total external debt and bilateral debt serve as the explanatory variables of the study. To estimate the parameters of this model, the multiple regression method was employed. This method is suitable for this study because it is simple to compute and also helps to know the relationship between the dependent and independent variables.

The multiple regression model is also amenable to ceteris paribus. Thus, the objectives of this study are achieved using the method. Similarly, in line with the model of Onwere and Obademi (2023), which used external debt, external debt service and exchange rate as variables which GDP depended on, this current study adapt the model of Onwere and Obademi (2023) and the model for this study is specified in its functional form as;

NGDP = f (TEXD, MULD, BILD) ……eqn 1.

Where,

NGDP = Nominal gross domestic product, proxy for economic development

TEXD = Total external debt

MULD = Multilateral Debt

BILD = Bilateral debt

The model can be specified in econometric form as;

$NGDP = \beta_0 + \beta_1 TEXD + \beta_2 MULD + \beta_3 BILD + \mu_t$……eqn 2.

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## 4. RESULT AND DISCUSSIONS

This section deals with the presentation and interpretation of results so as to achieve the objectives of the study.

### 4.1.1 Stationarity Test

Table 1:

Summary of the Phillips-Perron Unit Root Test

| Variables | PP Stats | Critical Value @5% | Order of Integration | Remarks |
|---|---|---|---|---|
| NGDP | -3.0823 | -2.9332 | I(1) | Stationary |
| TEXD | -6.1091 | -2.9332 | I(1) | Stationary |
| MULD | -5.9929 | -2.9332 | I(1) | Stationary |
| BILD | -5.8698 | -2.9332 | I(1) | Stationary |

Source: E-views 10 Output.

The Phillips-Perron unit root test for stationarity is presented in Table 1. From the result, nominal GDP, total external debt, multilateral debt and bilateral debt were all found to be stationary at 5 percent. This is because the PP statistics in absolute values are greater than the critical values at 5 percent for all the variables. As a result of this, the null hypothesis is accepted and it is concluded that the model is stationary.

### 4.1.2 Cointegration Test

Table 2: Summary of Johansen Cointegration Test

Unrestricted Cointegration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.796046 | 119.8790 | 47.85613 | 0.0000 |
| At most 1 * | 0.569676 | 53.10476 | 29.79707 | 0.0000 |
| At most 2 * | 0.277851 | 17.68960 | 15.49471 | 0.0230 |
| At most 3 * | 0.091225 | 4.017603 | 3.841466 | 0.0450 |

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

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| Hypothesized No. of CE(s) | Eigenvalue | Max-Eigen Statistic | 0.05 Critical Value | Prob.** |
|---|---|---|---|---|
| None * | 0.796046 | 66.77422 | 27.58434 | 0.0000 |
| At most 1 * | 0.569676 | 35.41515 | 21.13162 | 0.0003 |
| At most 2 | 0.277851 | 13.67200 | 14.26460 | 0.0619 |
| At most 3 * | 0.091225 | 4.017603 | 3.841466 | 0.0450 |

Source: E-views 10 Output.

The result of Johansen cointegration test presented in Table 2 reveals 4 cointegrating equations for trace statistic and 3 cointegrating equations for max-eigen statistic. For the cointegrating equations, the eigen values are greater than the critical values at 5 percent level of significance. This implies that long run cointegration exists among the variables, and as such the null hypothesis of no cointegration can be rejected.

**4.2 Test of Hypotheses**

Table 3: Summary of Multiple Regression Model

Dependent Variable: NGDP

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| TEXD | -0.678794 | 0.201538 | -3.368067 | 0.0017 |
| MULD | 0.276293 | 0.191524 | 6.663877 | 0.0000 |
| BILD | 0.030039 | 0.070440 | 0.426453 | 0.6721 |
| C | 2.924530 | 0.239750 | 12.19826 | 0.0000 |

| | | | |
|---|---|---|---|
| R-squared | 0.923776 | Mean dependent var | 3.909706 |
| Adjusted R-squared | 0.918059 | S.D. dependent var | 1.076114 |
| S.E. of regression | 0.308042 | Akaike info criterion | 0.569344 |
| Sum squared resid | 3.795586 | Schwarz criterion | 0.731543 |
| Log likelihood | -8.525576 | Hannan-Quinn criter. | 0.629496 |
| F-statistic | 161.5887 | Durbin-Watson stat | 1.454919 |
| Prob(F-statistic) | 0.000000 | | |

Source: E-views 10 Output.

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The multiple regression result presented in Table 3 showed that total debt stock has negative effect on economic development. The coefficient value of -0.678 implies that 1 percent increase in total external debt will reduce nominal GDP by 68%. This suggests that total external debt is not a growth enhancing factor. This is not unconnected from the fact that Nigeria as a country borrow to finance huge recurrent expenditure instead of financing capital projects that will attract investors to invest in the country. The variable conforms to the a priori expectation because the way in which borrowed fund is utilized is what matters. While the finding supports the findings of Eze and Ukwueni (2023) which found a negative but significant impact on economic growth, it negates the findings of Onwere and Obademi (2023).

On the other hand, multilateral debt (MULD) and bilateral debt (BILD) were found to show positive relationship with economic development in Nigeria. The coefficient values which are 0.276 for MULD and 0.030 for BILD. This indicates that on average, 1 percent increase in MULD and BILD will increase nominal GDP by 0.28% and 0.03% respectively. Although, multilateral debt contributes more to economic development than bilateral debt, it is however clear that both debts are growth enhancing. This is due to the fact that these funds are monitored and are effectively utilized for developmental projects. The findings conform to the a priori expectation because it is expected that borrowed funds should bring about growth and development in a country. The findings however not in tandem with the findings of Zafar and Zafar (2022) which established that multilateral debt retards economic growth. The F-statistic which shows the joint significance of the variables indicates that the variables are jointly and highly statistically significant since the F-stat value is 161.5887, with probability value of 0.000000.

The $R^2$ of 0.9238 which is the goodness of fit, implies that the variables have high explanatory power and this means that 92% variations in nominal GDP are explained by total external debt, multilateral debt and bilateral debt, while only 8 percent of the changes are accounted for by the error term. The Durbin-Watson statistic of 1.5 approximately tends to 2 than it tends to one. This suggests that the model is free from autocorrelation.

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### 4.2.1 Hypothesis One

$H_0$: Total external debt stock (TEXD) has no significant effect on economic development in Nigeria.

$H_1$: Total external debt stock has significant effect on economic development in Nigeria.

From Table 3 above, it could be deduced that the p value for TEXD was 0.0017 which is statistically significant at 5 percent since it is less than 0.05. The t-statistics value was -3.368067 implying a negative effect. Based on this significance, the null hypothesis which states that TEXD is not statistically significant was rejected. This means that Total external debt stock has statistically significant but negative effect on the economic development in Nigeria.

### 4.2.2 Hypothesis Two

$H_0$: Multilateral debt does not significantly affect the economic development in Nigeria.

$H_1$: Multilateral debt significantly affects the economic development in Nigeria.

The outcome of Table 3 above revealed that the multilateral debt recorded a p-value of 0.0000 which is less than 0.05, and t-statistics of 6.663877, implying a positive effect. Based on the decision rule that the variable is statistically significant if the p values are lower than 5 percent, the alternate hypothesis is accepted, and this means that multilateral debt has a positive and statistically significant effect on the economic development in Nigeria.

### 4.2.3 Hypothesis Three

$H_0$: Bilateral debt has no significant effect on economic development in Nigeria.

$H_1$: Bilateral debt has significant effect on economic development in Nigeria.

Table 3 above indicateds that the bilateral debt's p value of 0.6721 which is greater than 5 percent indicates that the effect of the variable is statistically insignificant. The t-statistics was 0.426453 implying a positive effect. As a result, the null hypothesis is accepted. This means that Bilateral debt has a positive but no significant effect on economic development in Nigeria.

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### 4.2.4 Post Estimation Tests

#### 4.2.4.1 Normality Test

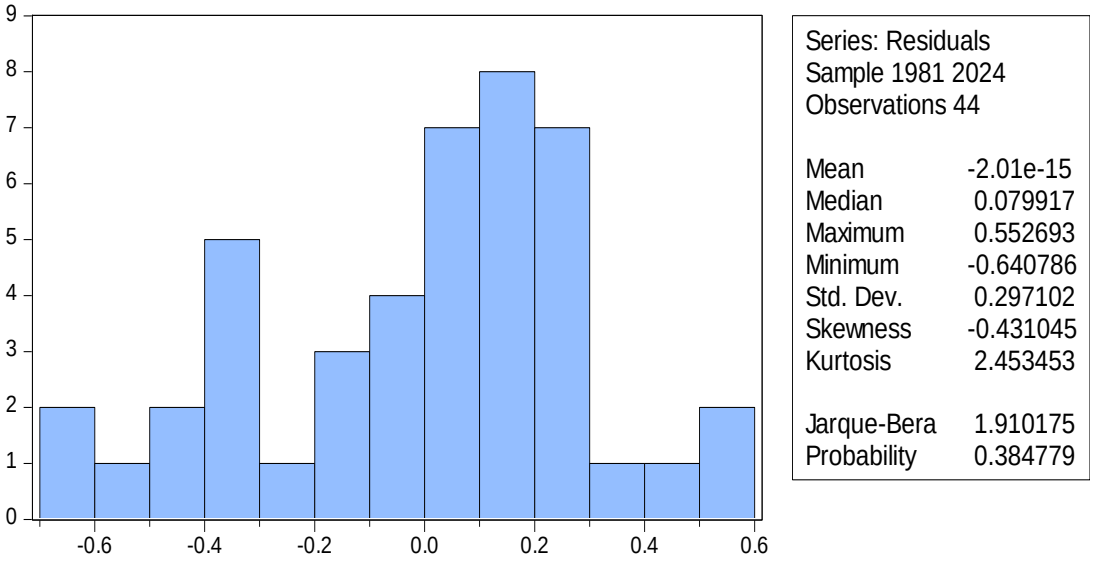


*Figure 1: Histogram Normality Test*

Source: Eviews 10 Output.

From the result in Figure 1, the probability value of Jarque-Bera is 0.38477 which is greater than 5 percent. The implication of this based on the rule of thumb is that the model is normally distributed. Thus, null hypothesis which states that the model is normally distributed is accepted.

### 4.2.5 Heteroscedasticity Test

Table 4:

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| | | | |
|---|---|---|---|
| F-statistic | 1.819941 | Prob. F(3,40) | 0.1590 |
| Obs*R-squared | 5.284495 | Prob. Chi-Square(3) | 0.1521 |
| Scaled explained SS | 3.173869 | Prob. Chi-Square(3) | 0.3656 |

Source: E-views 10 Output.

The Breusch-Pagan test was conducted for this study and the result is presented in Table 4. The decision rule for the acceptance of the null hypothesis ($H_0$) is that, if the p value of F-statistic is greater than 5 percent level of significance, the null hypothesis ($H_0$) can be accepted, otherwise reject $H_0$. From the result, the F-statistic of 1.8199 with the p value of 0.1590 is greater than the critical value at 5 percent level of significance. This suggests that

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the model is homoscedastic, that is, there is no heteroscedasticity in the model. Therefore, the null hypothesis which states that there is no heteroscedasticity in the residuals is accepted.

## CONCLUSION AND RECOMMENDATIONS

The study examined the effect of public external debt on economic development in Nigeria for the period of 1981 to 2024. The multiple regression technique of analysis was conducted to estimate the parameters of the model. Being a time series data, unit root test was done using Phillips-Perron unit root test and the findings showed that all the variables are stationary at first difference. The Johansen cointegration test conducted to check long run relationship showed that there is long run relationship among the variables. This implies that public external debt has long run relationship with economic growth in Nigeria. The result of the multiple regression analysis revealed that total external debt has negative impact on economic development. Conversely, multilateral and bilateral debts have positive relationship with economic growth in Nigeria. In conclusion, the findings posit that public external debt is significant to economic development. However, while disaggregating the component, multilateral and bilateral debts were found to have contributed to economic development during the period of the study. It has also been revealed that public external debt has high explanatory power and it is the stimulant to economic development as revealed by the goodness of fit.

In line with the findings of this study, the following suggestions are made;

a. Government to use total public external debt for capital projects that can attract investment instead of using the funds for consumption.
b. The multilateral debt should be sourced more and government should ensure that the fund is effectively monitored and utilized for the intended purpose of borrowing it, since it has high contributing positive effect on economic development.
c. Since bilateral debt also contribute positively but insignificantly to economic development, government should still borrow more of the funds and ensure it is judiciously utilized.

**REFERENCES**

Abdullahi, M. M., & Bello, A. (2018). Foreign debt and economic growth in Nigeria: An empirical investigation. *International Journal of Financial Research, 9*(4), 90-102.

Atique, R. & Malik, K. (2021). Impact of Domestic and External Debt on the Economic Growth of Pakistan. *World Applied Sciences Journal*, 20 (1): 120-129, DOI: 10.5829/idosi.wasj.2012.20.01.1621

Carnegie Endowment for International Peace. (2023). *Economic Development in an Era of Climate Change.* https://carnegieendowment.org

Central Bank of Nigeria (2017). *Economic report fourth quarter*. https://www.cbn.gov.ng.

Central Bank of Nigeria (2023). *Central Bank of Nigeria economic report: First quarter 2023.* https://www.cbn.gov.ng>RSDPDF-First-Quarter-2023-Economic-Report

Clements, B., Bhattacharya, R., & Nguyen, T. Q. (2020). *Public Debt: The Brazilian Experience*. Springer.

Edeminam, V. B., (2021). Mpact of Public Debt on Economic Growth in Nigeria (1990 to 2019)," *Advances in Economics and Business*, *9*(1), 1-10. DOI: 10.13189/aeb.2021.090101

Eze, T. C., & Ukwueni, N. O. (2023). Impact of Public Debts Accumulation on Economic Growth in Nigeria: Issues and Implications for Economic Recovery. *ABUAD Journal of Social and Management Sciences (AJSMS), 4*(1), 105-129. https://doi.org/10.53982/ajsms.2023.0401.07-j

Ferrarini, B. (2010). The International Financial Institutions and the Global Financial Crisis. *Journal of Globalization and Development, 1*(2), 1-20.

Ghosh, A. R., Ostry, J. D., & Qureshi, M. S. (2019). *Taming the Tide of Capital Flows: A Policy Guide*. MIT Press.

Harrod, R. F., & Domar, E. D. (1948). The Harrod-Domar model of economic growth. *Economic Journal, 58*(230), 467-485.

Horn, S., Reinhart, C. M., & Trebesch, C. (2023). *Public Debt Decompositions in Emerging Economies.* https://findevlab.org/public-debt-decompositions-in-emerging-economies

Ijirshar, V. U., Fefa, D. A., & Godoo, M. (2016). The relationship between external debt and economic growth in Nigeria. *International Journal of Economics and Finance, 8*(4), 1-15. https://doi.org/10.5539/ijef.v8n4p1

International Monetary Fund (2012). The effects of government spending under limited Capital mobility. IMF Working Paper. https://www.imf.org

International Monetary Fund (2020). Fiscal Monitor: Policies for the recovery. https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor

International Monetary Fund (2021). *Global debt reaches $226 trillion. IMF*. https://www.imf.org/en/News/Articles/2021/12/15/pr21408-global-debt-reaches-a-record-226-trillion

IMF. (2023). Public Debt | IMF Annual Report 2023. https://www.imf.org/-/media/Files/Publications/PP/2023/English/PPEA2023034.ashx

Krugman, P. R., & Wells, R. (2018). *Economics (5th ed.)*. Worth Publishers.

Mbah, S.A., Umunna, G., & Agu, O.C. (2016). Impact of external debt on economic growth in Nigeria: An ARDL bound testing approach. *Journal of Economics and Sustainable Development*, 7(10), 16-26.

Nwali, A. C., Nkwede, F. E. (2016). Aggregate public debt burden and the Growth of a fragile economy: The Nigerian experience. *IOSR Journal of Economics and Finance (IOSR-JEF), 7*(2), 46-57. https://doi.10.9790/5933-0702024657

Obisesan, O., Akosile, A., & Ogunsanwo, O. (2019). Foreign debt and economic growth: Evidence from Nigeria. *Journal of Economics and Sustainable Development, 10*(15), 85-96.

Onwere, H. I., & Obademi, O. E. (2023). The Impact of Debt Burden on the Economic Growth of Nigeria (1970- 2021). *Lagos Journal of Banking, Finance and Economic Issues, 4*(1), 106-224.

Paul, N. (2017). Analysis of the impact of external debt on economic growth in an emerging economy: Evidence from Nigeria. *International Multi-disciplinary Journal, Bahir Dar Ethiopia*,11(4).

Peter, D. O., Olohungbebe, S. A., Okoye, C. (2021). The Effect of Debt Burden on Economic Development in Nigeria. *American Journal of Humanities and Social Sciences American Journal of Humanities and Social Sciences Research (AJHSSR), 5*(5), 232- 241.

Stiglitz, J. E. (2002). *Globalization and Its Discontents*. W.W. Norton & Company.

Todaro, M. & Smith, S. C. (2006). Economic Development, Ninth edition, Pearson Addison-Wesley Printing Press.

Todaro, M. P., & Smith, S. C. (2015). *Economic Development (12th ed.)*. Pearson.

United Nations Conference on Trade and Development (2023). *Economic Development in Africa Report 2023. United Nations Conference on Trade and Development.* https://unctad.org

United Nations Conference on Trade and Development (2024). *Escalating debt challenges are inhibiting achievement of the SDGs.* https://sdgpulse.unctad.org

World Bank (2021). *International debt statistics 2021*. https://databank.worldbank.org/source/international-debt-statistics

World Bank (2023). *Global debt database.* Washington, D. C: World Bank.

World Bank. (2023). *International Debt Statistics.* https://www.worldbank.org

World Economic Forum (2023). *Global debt is at $307 trillion. Why does it matter?* https://www.weforum.org/agenda/2023/12/global-debt-2023

World Bank. (2023). International Debt Report 2023. https://openknowledge.worldbank.org/handle/10986/40670

Yusuf, A., & Mohd, S. (2021). The impact of government debt on economic growth in Nigeria. *Cogent Economics and Finance*, *9*, 1-19.

Zafar, R., & Zafar, M. M., (2022). Impact of External Debt on Economic Growth Rate: An Empirical Evidence from Pakistan. *Technium Social Sciences Journal*, 27, 445-4451. www.tecniumscience.com

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## APPENDIX

RAW DATA (Billions of Naira)

| YEARS | NGDP | TEXD | MULD | BILD |
|---|---|---|---|---|
| N'Billions | N'Billions | N'Billions | N'Billions | N'Billions |
| 1981 | 139.3 | 2.33 | 0.18 | 0 |
| 1982 | 149.1 | 8.82 | 0.53 | 0 |
| 1983 | 158.8 | 10.58 | 0.57 | 0 |
| 1984 | 165.9 | 14.81 | 1.27 | 0 |
| 1985 | 187.8 | 17.3 | 1.29 | 0 |
| 1986 | 198.1 | 41.45 | 4.67 | 0 |
| 1987 | 244.7 | 100.79 | 8.78 | 0 |
| 1988 | 315.6 | 133.96 | 9.99 | 0 |
| 1989 | 414.9 | 240.39 | 21.47 | 0 |
| 1990 | 494.6 | 298.61 | 34.61 | 0 |
| 1991 | 590.1 | 328.45 | 39.46 | 0 |
| 1992 | 906 | 544.26 | 89.27 | 0 |
| 1993 | 1257.2 | 633.14 | 81.46 | 0 |
| 1994 | 1768.8 | 648.81 | 97.06 | 0 |
| 1995 | 3100.2 | 716.87 | 97.04 | 0 |
| 1996 | 4086.1 | 617.87 | 102.63 | 0 |
| 1997 | 4418.7 | 595.93 | 96.2 | 0 |
| 1998 | 4805.2 | 633.02 | 93.21 | 0 |
| 1999 | 5482.4 | 2577.37 | 361.19 | 0 |
| 2000 | 7062.8 | 3097.38 | 397.04 | 0 |
| 2001 | 8234.5 | 3176.29 | 313.5 | 0 |
| 2002 | 11501.5 | 3932.88 | 375.7 | 0 |
| 2003 | 13557 | 4478.33 | 413.88 | 0 |
| 2004 | 18124.1 | 4890.27 | 384.25 | 0 |
| 2005 | 23121.9 | 2695.07 | 330.65 | 0 |
| 2006 | 30375.2 | 451.46 | 332.22 | 0 |
| 2007 | 34675.9 | 438.89 | 374.3 | 0 |
| 2008 | 39954.2 | 523.25 | 464.56 | 0 |
| 2009 | 43461.5 | 590.44 | 524.2 | 0 |
| 2010 | 55469.4 | 689.84 | 635.45 | 24.6 |

| | | | | |
|---|---|---|---|---|
| 2011 | 63713.4 | 896.85 | 723.12 | 71.8 |
| 2012 | 72599.6 | 1026.9 | 828.72 | 110.6 |
| 2013 | 81010 | 1387.33 | 986.84 | 161.3 |
| 2014 | 90137 | 1631.5 | 1,142.30 | 237.2 |
| 2015 | 95177.7 | 2111.51 | 1,489.41 | 326.6 |
| 2016 | 102575.4 | 3478.92 | 2,436.40 | 585.01 |
| 2017 | 114899.2 | 5787.51 | 3,133.88 | 725.83 |
| 2018 | 127736.8 | 7759.23 | 3,381.40 | 949.15 |
| 2019 | 144210.5 | 9022.42 | 4,127.28 | 1,254.26 |
| 2020 | 152324.1 | 2705.62 | 6,832.72 | 1,546.63 |
| 2021 | 173527.7 | 5855.23 | 7,704.86 | 1,844.43 |
| 2022 | 199336 | 8702.25 | 9,061.36 | 2,272.89 |
| 2023 | 225512.5 | 42,495.16 | 21,149.37 | 5,957.44 |