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# Public Debt And Economic Growth In Nigeria: An Empirical Investigation

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**ABSTRACT**
This study examined the impact of public debt on economic growth in Nigeria. Specifically, the study evaluates the impact of treasury debt, external debt, and domestic debt on the GDP at market price of Nigeria spanning 1998 to 2023. The expost facto research design was adopted for this study. Time series data were obtained from the Central Bank of Nigeria (CBN) and Debt Management Office (DMO). To test for stationarity of the time series data, the Augmented Dickey Fuller unit root test (ADF) was carried out for all the variables and the results were confirmed using the Philips Perron Unit root test. The study applied the Autoregressive Distributed Lagged model. Findings of the study revealed that treasury debt has an insignificant effect on GPD with p-value of 0.496, domestic debt has insignificant effect on GDP with p-value of 0.515 and external debt has insignificant effect on GDP with p-value of 0.576. The implications of these findings are that the more the government borrows externally and internally to finance capital projects, the more the economy will grow ceteris paribus. The Study therefore recommended that; borrowed funds should be adequately utilised for productive and profitable projects in Nigeria.
**Keywords:** Treasury bill debt, External debt, Domestic debt, Economic growth, GDP

## 1.0 INTRODUCTION

An essential part of a country's economic structure, public debt is used to fund budget deficits, development initiatives, and government spending. Because of the government's need to fund social services, infrastructure development, and economic reforms in the face of revenue shortages, public debt in Nigeria has persisted (Osmond & Okechukwu, 2024). Both external and internal debt, originating from organizations like the World Bank, the International Monetary Fund (IMF), and global bond markets, make up the nation's debt profile. While financing profitable initiatives through borrowing can boost economic growth, taking on too much debt has serious concerns, such as increased debt servicing costs, inflationary pressures, and a reduction in available funds for necessities (Olaoye & Alabadan, 2024).

Numerous macroeconomic factors, such as the amount of public debt, have an impact on economic growth, which is commonly gauged by the rise in GDP. Economists continue to disagree about the connection between public debt and economic expansion. Some ideas contend that by funding capital projects that increase productivity, moderate debt levels can promote growth. However, excessive debt buildup can impede growth by increasing fiscal deficits, raising borrowing costs, and taking resources away from productive sectors, especially if it is not managed well (Okeke et al., 2022). In recent years, Nigeria's economy has been characterized by high unemployment, high inflation, poor growth, and volatile exchange rates. The nation is subject to external shocks due to its high reliance on oil earnings, which causes changes in government revenue and a rise in borrowing requirements (IMF, 2023). The government has implemented a number of debt management techniques, such as fiscal consolidation, debt restructuring, and revenue source diversification. Concerns over Nigeria's debt sustainability and its effects on long-term economic stability, however, continue to exist (Onyele et al., 2023).

**Statement of the Problem**

A thorough examination of the connection between debt accumulation and macroeconomic stability is required due to the growing worry over Nigeria's expanding public debt and its effects on economic growth. Nigeria continues to face high unemployment, chronic inflation, weak economic growth, and waning investor confidence despite government attempts to borrow money to fund development (Otovwe, 2023). The rising expense of debt servicing is one of the main issues linked to Nigeria's growing state debt. Nigeria spent more than 90% of its 2023 income on debt repayment, according to the Budget Office of the Federation (2023), leaving little money for infrastructure, education, and health care. This has sparked worries about the nation's capacity to finance long-term development and the sustainability of its debt. If a large portion of national revenue is allocated to repaying debt, the government may struggle to implement policies that drive economic growth and improve living standards (Adeyemi & Ogundipe, 2023).

Furthermore, a rising proportion of external debt in Nigeria's public debt structure exposes the nation to external shocks and currency rate risks. Although the goal of public debt is to support capital projects that spur economic growth, issues have been highlighted regarding the improper handling and distribution of borrowed cash (Siddiqui, 2019). The efficiency of debt-financed investments has been weakened by instances of corruption, project abandonment, and a lack of budgetary restraint. Nigeria has thus found it difficult to generate the anticipated economic benefits from its borrowing, which raises the possibility of a debt crisis even more. Additionally, borrowing too much can crowd out investment in the private sector. Several studies have been carried out on the impact of public and economic growth in Nigeria (Sulaiman & Azeez, 2012; Ndubuisi, 2017; Odubuasi et al., 2018; and Ugwuanyi et al., 2021) and they found the relationship between public debt and economic growth to be positive. However, Udeh et al. (2016), Okon and Monday (2017), and Onyele and Nwadike (2021) established a negative relationship. With these mixed findings, there seems to be a gap in literature. Therefore, this present research aimed to fill this gap through an empirical investigation into the impact of public debt on economic growth in Nigeria. Specifically, the objectives of the study are to:

i. Examine the effect of treasury bill debt on GDP at current market prices in Nigeria,
ii. Determine the effect of external debt on GDP at current market prices in Nigeria,
iii. Ascertain the effect of domestic debt on GDP at current market prices in Nigeria,

This study addressed the core issues of the research by answering the following key research questions:

i. What is the effect of treasury bill debt on GDP at current market prices in Nigeria?
ii. What is the effect of external debt on GDP at current market prices in Nigeria?
iii. What is the influence of domestic debt on GDP at current market prices in Nigeria?

For this study, the following null hypotheses were formulated and tested.

**$H_{O1}$**: Treasury bill debt does not significantly influence GDP at current market prices in Nigeria.

**$H_{O2}$:** External debt does not significantly influence GDP at current market prices in Nigeria.

**$H_{O3}$:** Domestic debt does not significantly influence GDP at current market prices in Nigeria.

The scope of the study covered the impact of public debt on economic growth in Nigeria over a period of twenty-six years ranging from 1998-2023. The indicators such as treasury bill debt, external debt, domestic debt was examined for the period to determine their correlation with economic growth in Nigeria. The focus would be based on the data obtained at the Central bank of Nigeria (CBN) Statistical Bulletin and Debt Management Office (DMO).

This study contributes to the existing literature on how public debts can be a catalyst to reduce the economic growth in Nigeria if not proper managed. This study would therefore be one of very few studies that, investigated the significant difference between the effects of treasury bill, domestics and external debt on economic growth in Nigeria. It will therefore add to the body of knowledge in academic literature.

## LITERATURE REVIEW

### Conceptual Review

**Public Debt**: The total amount owed to lenders is a nation's public debt (Dairu, 2017). All of a nation's debt, whether domestic and foreign, is collectively referred to as public debt, or national debt. A nation's obligations to foreign institutions such as the IMF and AfDB are known as its external debts (Udoka & Lari 2011). The government's commitments to the country's residents are known as internal debts. The external component of public debt is counterproductive and results in a greater burden because paying the interest and principal amount requires transferring resources, whereas a nation's internal debt (borrowing) may not have a significant impact on its citizens because it involves a transfer of purchasing power from one group of citizens to another and is therefore productive (Joyade & Oni, 2016). Lawal and Muna (2017) as well as research of Joyade and Oni (2016), claim that sending resources to other nations is a regrettable and depressing way to raise money because interest payments alone can lower a nation's net income, which is ineffective, especially if the money is not used wisely.

**Treasury Bill Debt**: In Nigeria, the Central Bank of Nigeria (CBN) regularly auctions treasury bills to control the money supply and offer investment opportunities for individuals, banks, and institutional investors. Treasury bills are issued at a discount, meaning investors purchase them below face value and receive the full value at maturity, with the difference serving as their return (DMO, 2023) The term "treasury bill debt" refers to short-term government securities issued by a country's central bank to raise funds for financing fiscal deficits, managing liquidity, and controlling inflation (Menand & Younger, 2023). These instruments are regarded as risk-free because they are backed by the government's full faith and credit (Thotho et al., 2021). By offering a reliable source of short-term borrowing and lowering dependency on outside loans, they are essential to the management of public debt (Dey & Tareque, 2020). However, excessive issuance might discourage private investment by raising interest rates and result in expensive debt payment costs (Mohanty, 2019).

**External Debt**: The entire amount of money borrowed by a nation from foreign creditors, such as private companies, foreign governments, and international financial institutions, to fund infrastructure improvements, budget deficits, and economic growth is referred to as external debt (Chen, 2021). Excessive dependence on foreign loans can expose a nation to exchange rate risks, growing debt servicing costs, and macroeconomic instability, even as external borrowing might boost economic growth by financing capital-intensive projects (Ahmed et al., 2021). Excessive external debt loads frequently result in higher government debt servicing costs, which lowers funds available for infrastructure and social services (Igudia, 2022).

**Domestic Debt**: A government's total borrowing from private investors, local financial institutions, and the central bank to fund public spending and fiscal deficits is referred to as domestic debt (CBN, 2023). It is mostly raised using financial instruments like bonds, treasury bills, and development loans, which lessen dependency on borrowing from outside sources and offer a steady stream of funding (Prakash & Sethi, 2022). Because of ongoing budget deficits, falling oil income, and rising government spending, Nigeria's domestic debt has increased dramatically (Al-Rubaie & Ahmed, 2023).

**Economic Growth**: Nigeria's reliance on oil money, changes in the price of commodities globally, and structural issues like poor infrastructure and inconsistent policies have all influenced the country's economic progress (Nissanke, 2019). Excessive public debt has sparked worries about sustainability and its long-term effects on growth, even if government borrowing has been utilized to fund vital infrastructure and boost economic activity (Ahmed & Rahman, 2019). Furthermore, inclusive growth is hampered by prolonged unemployment and a lack of diversification beyond oil (Aluko et al., 2024). Policies that support industrialization, better governance, and private sector investment must be given top priority in Nigeria in order to increase economic resilience.

**GDP at Current Market Prices**: The entire monetary worth of all products and services produced within an economy, evaluated at current market values, including indirect taxes and excluding subsidies, is represented by the gross domestic product (GDP) at current market prices (Chanthawong et al., 2020). It is helpful for nominal comparisons across time and regions because it depicts economic activity without

accounting for inflation, but it is less suitable for evaluations of real economic success (IMF, 2023). Exchange rate instability, inflationary pressures, and reliance on oil revenue have caused fluctuations in GDP at current market prices (CBN, 2023). However, persistent economic growth is still hampered by structural issues such inadequate infrastructure, instability, and fiscal deficits (Yusuf & Mohd, 2022).

## THEORETICAL FRAMEWORK

**Debt Overhang Theory**: The debt overhang hypothesis is the preeminent idea in the literature on the possible detrimental impact of a high external debt burden on growth. With his theory of firm valuation in corporate finance and the impacts of debt-financing, Stewart C. Myers initially proposed the notion of debt overhang in 1977. According to the debt overhang theory, excessive borrowing results in high debt, debt traps, and a slowdown in economic growth. According to the debt overhang hypothesis, predicted debt servicing costs will deter additional domestic and international investment if there is a chance that the government debt may eventually exceed the country's capacity to repay it. Potential investors would be deterred on the grounds that they would be less eager to incur investment costs today in order to increase future output since governments would tax them more heavily the more production there is (Gordon & Cosimo, 2018). Studies have shown that when debt exceeds a certain threshold, economic growth declines due to the crowding-out effect on private sector investment (Reinhart & Rogoff, 2010). Nigeria's increasing debt profile, largely driven by external and domestic borrowing, reflects this dilemma, as the country struggles with declining revenue and high debt-servicing obligations (CBN, 2023). The Debt Overhang Theory highlights the importance of sustainable borrowing, emphasizing that governments must ensure debt is directed toward productive investments that generate future returns rather than creating a financial burden (Iyoha, 2021).

**Ricardian Equivalence Theory**: Based on Ricardo's earlier research, Barro (1974) established the Ricardian Equivalence Theory, which contends that since rational consumers plan for future tax rises and modify their spending accordingly, government borrowing has no effect on total economic development. This hypothesis holds that people understand that higher taxes will be required in the future to pay back the government's increased public debt to finance expenditures (Barro, 1974). The stimulative benefits of government borrowing on aggregate demand are thereby neutralized when people raise their savings to meet future tax obligations (Seater, 1993). According to this idea, fiscal deficits may not always result in increased investment or consumption in Nigeria, where public debt has been increasing, if people anticipate future tax increases, which would restrict economic growth (CBN, 2023). Since myopic consumer behavior, liquidity limitations, and inefficient capital markets frequently undermine the assumptions of Ricardian Equivalence, empirical research has questioned its application in developing economies (Elmendorf & Mankiw, 1999). However, the theory stresses the significance of prudent debt management, pointing out that excessive borrowing without commensurately profitable investments might not result in long-term financial gains (Iyoha, 2021).

## EMPIRICAL REVIEW

Ohiomu (2020) carried out a study on external debt and economic growth nexus: Empirical evidence from Nigeria. The aim was to examine the relationship between external debt and economic growth for policy analysis on public finance and public debt management. Data collected on the country's external debt and GDP growth rate were analyzed using root test and cointegration long run tests. The results showed that debt overhang variable and crowding out effect variable depress the level of investment affecting adversely, the economic growth of the country.

Ahuja and Pandit (2020) examined the nexus between public spending and out put growth using Italian data spanning from1861 to 2008 and the finding established a non-linear relationship between public spending and economic growth for Italy. Bibow (2020) investigated the nexus between public spending and output growth, the result upheld the conventional belief that large government size is detrimental to growth. The studies by Ali et al (2020) and Agbedahin (2019) revealed a strong positive correlation between government spending and economic growth.

Alagba and Idowu (2019) in a study examined the impact of public borrowing on Nigeria's economy for the period 2010- 2016. The result obtained from regression analysis showed that public debt (borrowing) has negative impact on the economic growth of the country as the GDP growth rate indicated no significant improvement within the period considered. Nbukwe and Kalu (2016) examined the relevance of public debt to economic growth in Nigeria. This is with a view to determining whether public debt has significantly impacted on the growth of the economy. Secondary data were sourced from the CBN, NBS and DMO on the nation's debt stock, GDP growth rate, employment and unemployment rates. The Generalized Least Square (GLS) regression method was employed on the panel model of analysis. Findings indicated that public borrowing has no significant impact on the growth of Nigeria's economy.

Ajayi and Edewusi (2014) carried out a study for empirical evidence on the impact of public debt on the growth of Nigerian economy. The study examined the influence and impact of public debt on infrastructural development and GDP growth rate for the period 2007-2013. Evidence from review indicated that the impact of public debt on infrastructural development and GDP growth rate was not significant as the GDP of the country during the period showed a Zigzag/inconsistent growth pattern.

Yusuf and Mohd (2021) studied the impact of public debt on economic development of Nigeria. The aim was to investigate the impact of public debt on economic growth in Nigeria. Using secondary sources, data were obtained from annual time series spanning 1986-2014. The study employed Augmented Dickey-fuller test and Johansen co-integration test. Results revealed the presence of a long-run relationship among the variables viz: External debt stock, domestic debt stock, external debt servicing, domestic debt stock servicing and economic growth proxied with GDP per capita income in Nigeria. The ECM result revealed that external debt stock and external debt servicing have significant negative relationship with economic growth in Nigeria. However, domestic debt servicing has a direct significant relationship with economic growth in the country.

Eke and Akujuobi (2021) in a study examined the effect of public debt on the growth of Nigeria's economy. Using trend analysis for the period 2000-2014, data obtained on public debt stock and GDP growth rate were analyzed using Ordinary Least Square (OLS) regression method. The result of the analysis indicated that the impact of public debt on the GDP growth rate did not follow a particular pattern or trend of growth.

Cordelia and Ogechi (2019) investigated the effect of foreign debt on the economic growth in Nigeria. Data for the study were obtained from the statistical bulletin of the WB and CBN for the period 1997-2017. The variables of the study were nominal GDP, foreign debt stock, foreign debt service, inflation rate and exchange rate. While the nominal GDP represents the dependent variable, foreign debt stock inflation rate, exchange rate and foreign debt servicing were the explanatory variables. Results of analysis using OLS indicated that foreign debt exerted a significant negative impact on economic growth of the country while foreign debt servicing showed a strong and significant positive impact on economic growth.

Ogege and Ekpudu (2010) conducted a study on the effects of debt burden on the Nigerian economy. The purpose was to ascertain the effect of debt burden on the growth of the country's economy. Data for the study were obtained from the Central Bank of Nigeria (CBN) statistical bulletin. Ordinary Least Square (OLS) statistical tool was employed to test the relationship between debt burden and growth of Nigerian economy. Findings showed that there is a negative relationship between debt stock and economic growth implying that increase in debt stock of the nation will lead to decrease in the growth rate.

Essien and Ndalo (2017) studied the impact of public debt burden in Nigeria. The aim was to examine the effects of government borrowing on the growth of the economy. Data on internal, external borrowing and GDP growth rate for five years (2014-2018) were obtained from the statistical bulletins of CBN, the National Bureau of statistics (NBS) and the Debt Management Office (DMO). The result of regression analysis revealed a negative impact of public debt on GDP growth rate.

## METHODOLOGY

The study adopted the positivist philosophy, because positivism philosophy emphasizes on learning through action and building content from experience and reflection. The philosophy presumes that the investigator and also the material of the study are independent and had no influence on one another. This study adopted ex post facto research design. Leavy (2022) explained that ex post facto research design is a design that is embarked on after the event has taken place, and the data are already in existence. Ex post facto research is a logical experimental investigation in which the researcher does not have uninterrupted manipulation of independent variables because their expressions have at present happened or because they are essentially not influenced.

This study was conducted on Central Bank of Nigeria (CBN) and Debt Management Office (DMO). These ministries were selected based on the fact that they published public financial reports that shown statistics data on public debts and economic growth in Nigeria. Data were sourced from Central Bank of Nigeria statistical bulletin and Debt Management Office (DMO) for the period of twenty-six years ranging from 1998-2023. The instrument possesses the desired data for the measurement of the variables in the study. The study used the Autoregressive Distributed Lag model (ARDL) models to establish the relationship between public debts and economic growth in Nigeria. ARDL is a least squares regression approach involving the lag of both the endogenous variable and exogenous variables. The model of the study shows:

### Model Specification

Following the review of literature and particularly the neo-classical growth model, which serves as a vehicle for economic growth of any country. The model of this study was stated as:

$GDP = f(TD, ED, DD)$.....(3.1)

$GDP = \beta_0 + \beta_1 TD_{t1} + \beta_2 ED_{t2} + \beta_3 DD_{t3}$ …….. (3.2)

Econometrically, it can be written thus:

$GDP_{it} = \beta_0 + \beta_1 TD_{t1} + \mu_{it}$ ……...……..….(3.3)

$GDP_{it} = \beta_0 + \beta_2 ED_{t2} + \mu_{it}$ ……...……..….(3.4)

$GDP_{it} = \beta_0 + \beta_3 DD_{t3} + \mu_{it}$ ……...……..….(3.5)

$GDP_{it} = \beta_0 + \beta_1 TD_{t1} + \beta_2 ED_{t2} + \beta_3 DD_{t3} + \mu_{it}$ ……...……. Main Model

Where:

GDP = Gross Domestic Product (Proxy as GDP at current market prices)

TD = Treasury Bill Debt

ED = External Debt

DD = Domestic Debt

$\mu$= Error term

$\beta_0$ = Constant

$\beta_1$, $\beta_2$, and $\beta_3$ = Slope coefficient

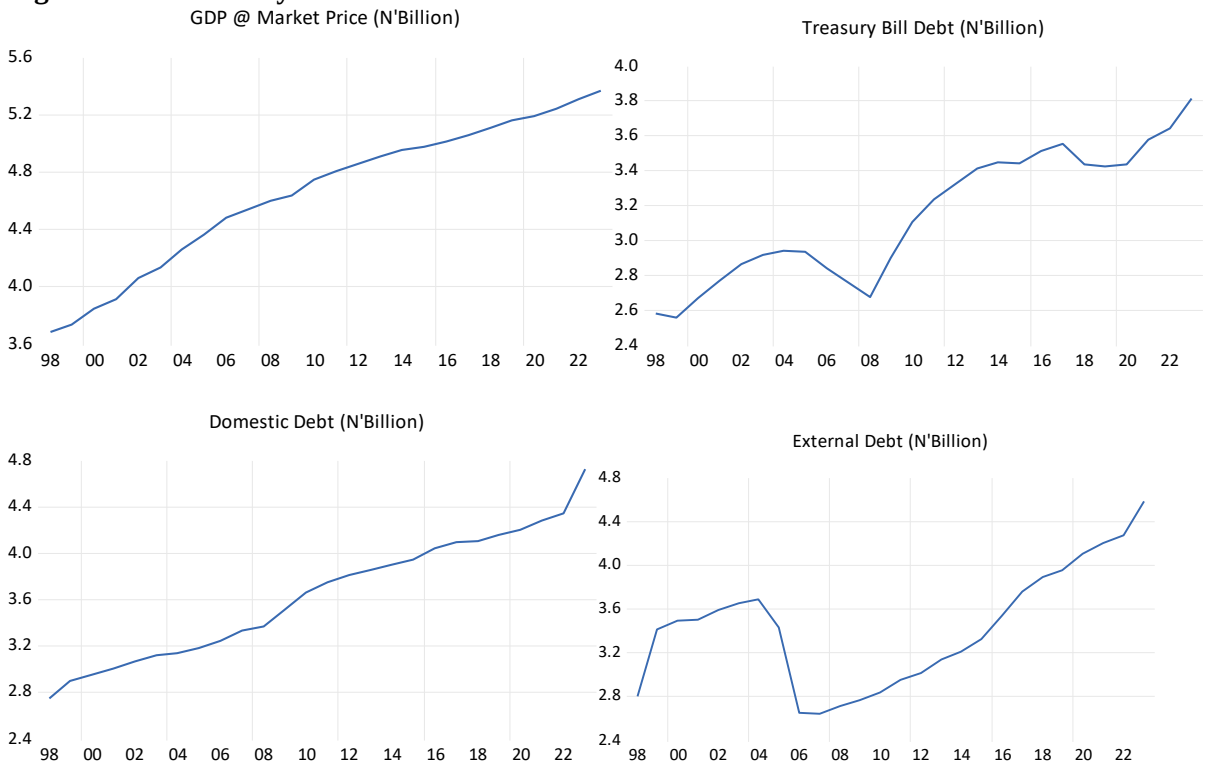
### Model Justification

Treasury bill debt should have been a subset of domestic debt due to its nature and type of debt. However, for this study, the following are the justifications for the separation of treasury bill and domestic debt to be standalone:

i. Treasury bill debt affects short-term liquidity and monetary policy, while domestic debt influences long-term fiscal sustainability and investment.
ii. Treasury bill debt is a tool for inflation control and interest rate management, whereas domestic debt impacts government spending, economic growth, and private sector investment.
iii. Excessive reliance on domestic debt by government can reduce credit availability for businesses, raising borrowing costs, while treasury bill debt primarily influences short-term money markets

## RESULTS AND DISCUSSION

**Figure 1: Trend Analysis for the Variables**




Source: Researcher Compilation from E-views output (2025)

From the Figure 1 above, it portrayed that over the 26-year period from 1998 to 2023, Nigeria's Gross Domestic Product (GDP) at Market Price exhibited a consistent upward trend, increasing from N3.68 billion in 1998 to N5.37 billion in 2023. This steady growth suggests an overall expansion of the economy, driven by various macroeconomic factors, including increased government spending, structural reforms, and the expansion of key sectors such as agriculture, oil and gas, and services. However, while GDP grew, the country also experienced an increase in public debt, indicating a reliance on both domestic and external borrowing to finance economic activities. This raises concerns regarding the sustainability of Nigeria's debt profile and its long-term impact on economic stability.

Treasury bill debt, which represents short-term government borrowing, fluctuated over the years but generally increased from N2.58 billion in 1998 to N3.81 billion in 2023. The rise in treasury bill debt suggests that the government increasingly relied on short-term instruments to manage liquidity and finance budget deficits. The increase in treasury bill issuance also reflects efforts to control inflation and manage monetary policy through open market operations. The fluctuations observed in certain years, such as a dip in 2006 and a resurgence post-2010, indicate shifts in government borrowing strategies, likely in response to changing economic conditions and fiscal policies.

External debt, which refers to borrowing from foreign creditors, initially increased from N2.80 billion in 1998 to N3.69 billion in 2004 before declining significantly to N2.65 billion in 2006. This sharp drop can be attributed to Nigeria's external debt relief initiative, particularly the 2005 Paris Club debt cancellation. However, external debt began to rise again, reaching N4.58 billion in 2023, suggesting renewed borrowing from international financial institutions. This increase in external debt raises concerns about

foreign exchange risks and debt sustainability, particularly in the face of fluctuating global economic conditions and exchange rate volatility.

Domestic debt, which includes borrowing from internal sources, increased consistently from N2.75 billion in 1998 to N4.73 billion in 2023. The steady rise suggests that the government has increasingly relied on domestic borrowing to finance its expenditures. While domestic debt reduces exposure to foreign exchange risks, excessive reliance on domestic borrowing can crowd out private sector investment, leading to higher interest rates and reduced economic growth potential. The upward trend in domestic debt highlights the need for a balanced debt strategy to ensure that borrowing is directed towards productive investments that yield economic benefits in the long run.

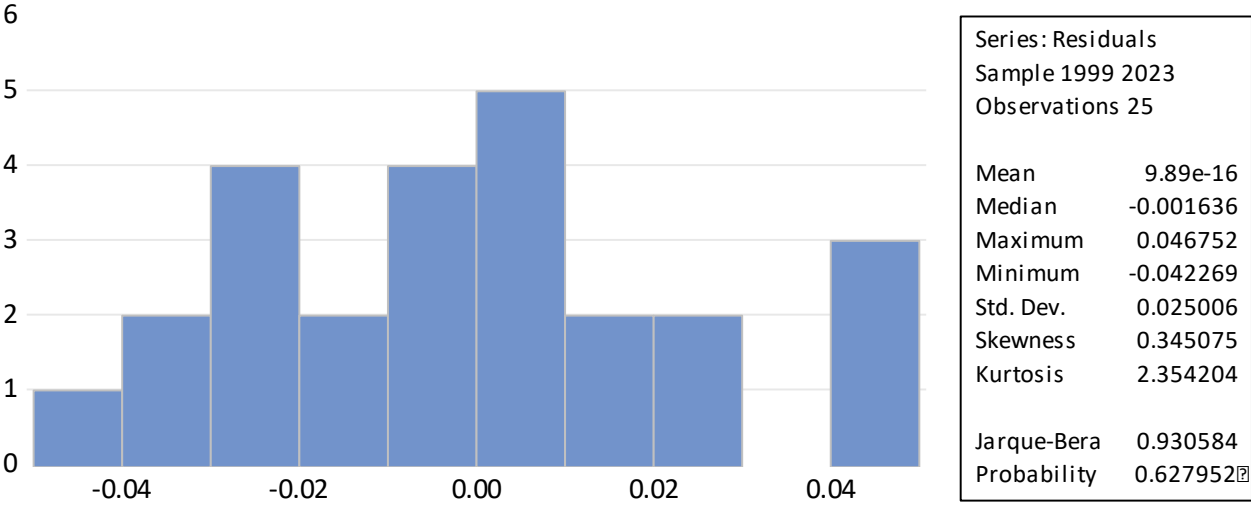
**Table 4.1: ADF Unit Root Test Results**

| | **ADF** | | **Philip Peron test (PP)** | | Order of Integration (ADF) | Order of Integration (PP) |
|---|---|---|---|---|---|---|
| Variables | Test Statistic | P-value | Test Statistic | P-value | | |
| GDP | -3.3738 | 0.0224 | -3.5402 | 0.0155 | I(1) | I(1) |
| TD | 2.8069 | 0.0721 | -2.8941 | 0.0608 | I(1) | I(1) |
| DD | -2.0352 | 0.2708 | -2.0352 | 0.2708 | I(1) | I(1) |
| ED | -3.7841 | 0.0090 | -3.7841 | 0.0090 | I(1) | I(1) |

Source: E-views (2025)

The stationarity test results in Table 4.1 using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests indicate that all variables of GDP, treasury bill debt (TD), domestic debt (DD), and external debt (ED) are integrated of order one, I(1). This means that the variables were non-stationary at level but became stationary after first differencing. The GDP variable has an ADF test statistic of -3.3738 with a p-value of 0.0224, and a PP test statistic of -3.5402 with a p-value of 0.0155, both significant at the 5% level, confirming stationarity at first difference. TD, however, has an ADF test statistic of 2.8069 and a PP test statistic of -2.8941, with p-values of 0.0721 and 0.0608, respectively, slightly above the 5% threshold, indicating weak evidence of stationarity but confirming integration at first order. DD is non-stationary at level, with identical ADF and PP test statistics of -2.0352 and a p-value of 0.2708 but becomes stationary at first difference. Similarly, ED is significant at first difference with an ADF and PP test statistic of -3.7841 and a p-value of 0.0090, confirming integration at I(1). These results suggest the variables can be used in cointegration analysis, supporting long-run equilibrium relationships.

**Figure 4.2 Histogram of Residuals**




Source: E-views (2025)

The residuals exhibit a mean close to zero (9.89e-16) and a low standard deviation (0.025), suggesting well-behaved errors. The skewness (0.3451) indicates slight right asymmetry, while kurtosis (2.35)

suggests a near-normal distribution. The Jarque-Bera test (0.9306, p = 0.628) confirms normality, as the p-value exceeds 0.05. Overall, the residuals appear normally distributed, supporting the validity of regression assumptions and indicating no severe misspecification issues.

**Table 4.2 ARDL Model**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.1793 | 0.1075 | 1.6682 | 0.1108 |
| Treasury Debt | 0.0371 | 0.0535 | 0.6939 | 0.4957 |
| Domestic Debt | -0.0514 | 0.0776 | -0.6633 | 0.5146 |
| External Debt | 0.0103 | 0.0181 | 0.5681 | 0.5762 |
| R-squared | 0.9973 | F-statistic | | 1852.0468 |
| Adjusted R-squared | 0.9967 | Prob(F-statistic) | | 0.0000 |

Dependent variable: GDP

Source: E-views output (2025)

The regression analysis in Table 4.2 examined the relationship between GDP and different types of debt (treasury debt, domestic debt, and external debt). The constant (C) coefficient is 0.1793, meaning that when all independent variables are zero, GDP would have a baseline value of 0.1793. However, its p-value (0.1108) suggests it is not statistically significant.

The treasury debt coefficient (0.0371) implies a positive relationship with GDP, meaning an increase in treasury debt is associated with an increase in GDP. However, the p-value (0.4957) shows that this relationship is not statistically significant. Similarly, Domestic debt has a negative coefficient (-0.0514), indicating an inverse relationship with GDP, but the p-value (0.5146) suggests it is not significant. External debt has a small positive coefficient (0.0103) but is also not significant (p-value = 0.5762).

The model has a very high R-squared value (0.9973), indicating that 99.73% of the variations in GDP are explained by the independent variables. The Adjusted R-squared (0.9967) confirms the model's strong explanatory power. The F-statistics (1852.0468, p-value = 0.0000) show that, collectively, the independent variables significantly influence gross domestic product (GDP).

**Summary of Findings**

$GDP_{it} = \beta_0 + \beta_1 TD_{t1} + \beta_2 ED_{t2} + \beta_3 DD_{t3} + \mu_{it}$ ……...……. Main Model

$GDP_{it} = 0.1793 + 0.0371TD + 0.0103ED - 0.0514DD + \mu_{it}$

From the findings in table 4.2 above, the p-value of treasury debt was 0.4957 which was greater than 5% level of significance. It was concluded that treasury debt has an insignificant effect on gross domestic product (GDP) at market price. However, the null hypothesis was accepted, meaning that treasury bill debt does not significantly influence GDP at current market prices in Nigeria.

Furthermore, the p-value of external debt was 0.5762, which was greater than 5% level of significance. It was concluded that external debt has an insignificant effect on gross domestic product (GDP) at market price. However, the null hypothesis was accepted, meaning that external debt does not significantly influence GDP at current market prices in Nigeria.

Finally, the p-value of domestic debt was 0.5762, which was greater than 5% level of significance. It was concluded that domestic debt has an insignificant effect on gross domestic products (GDP) at market price. However, the null hypothesis was accepted, meaning that domestic debt does not significantly influence GDP at current market prices in Nigeria.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The findings from this research led to the conclusion that public debt components, i.e treasury debt, external debt and domestic debts have insignificant impact on gross domestic products which is the proxy for economic growth in the long run. This by implication means that the more the government borrow externally and internally to finance capital projects, the more the economy will grow ceteris paribus. On

the other side, external debt, which is a burden on the economy, is positively impactful on gross domestic products, the proxy for economic growth. It means that the servicing of debts and interest payment on same mars economic growth in Nigeria. The study therefore accepted the three null hypotheses, stating that treasury debt, external debt, and domestic debt have significant impact on economic growth at 5% critical level.

**Recommendations**

Following the findings of this research, the following recommendations were made:

i. External sources of borrowing available to the public should be adequately utilized in growing capital projects in Nigeria that are profitable and capable of repaying debt service and interest that accrue on external debts without having to shift the burden on other revenue sources. In essence, this is to say that borrowing should only be encouraged for productive and profitable projects in Nigeria as well as determination of GDP- to-Debt ratio before borrowing.
ii. The government which is the biggest debtor to external creditors should seek debt forgiveness, especially debts that financed unprofitable ventures that cannot repay the servicing accrued on them as well as interest due. In addition, call for an investigation of debts that have been misappropriated and squandered so that such monies can be refunded to the public coffers.
iii. Domestic borrowing should be encouraged by the public to avoid the existence of idle unproductive monies outside the control of the financial system. To this end, the researcher recommends the spreading of more credit facilities to mop up higher powered money (money out of control of the financial system) from the economy. In addition, government should from time to time review upwards the issue of bonds to encourage people to lend more for the financing of viable projects with multiplier effects.

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