

# External Debt vs. Domestic Debt: Comparative Impacts on Nigeria's Economy

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## ABSTRACT

Public debt management is a key aspect of economic policy, particularly in developing economies like Nigeria, where debt accumulation has raised concerns about fiscal sustainability and economic growth. This paper evaluates Nigeria's public debt management strategies and their impact on economic growth. It examines the effectiveness of these strategies in ensuring debt sustainability while promoting economic development. Using secondary data from government publications, international financial institutions, and peer-reviewed articles, the study identifies challenges and provides policy recommendations for improved debt management and economic growth.

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## INTRODUCTION

Public debt has been a significant tool for financing development projects in Nigeria. However, the increase in debt burden raises questions about its sustainability and impact on economic growth. This study assesses the effectiveness of Nigeria's debt management strategies and their implications for economic growth. Debt is one of the sources of financing capital formation in any economy (Abidah et al., 2024; Adeyemi, 2024; Adhania et al., 2024; Ibrahim et al., 2017). Adepoju et al. (2007) note that developing countries in Africa are characterized by inadequate internal capital formation due to the brutal circle of low productivity, low income, and low savings. Therefore, this situation calls for technical, managerial, and financial support from Western countries to bridge the resource gap. On the other hand, external debt acts as a major barrier to capital formation in developing nations. The burden and dynamics of external debt show that they do not contribute significantly to financing economic development in developing countries. In most cases, debt accumulates because of the servicing requirements and the principal itself. In view of the above, external debt becomes a self-perpetuating mechanism of poverty aggravation, work over-exploitation, and a constraint on development in developing economies (Nakatami&Herera, 2007). Like most developing countries of the world, Nigeria relies substantially on external funds for financing its development projects – iron and steel mills, roads, electricity generation plants etc. Such external funding usually takes the form of external loans. In the early years of political independence (i.e. 1960 through 1975), the size of such loans was small, the rate of interest concessionary, the maturity was long-term, and the source was usually bilateral or

multilateral in nature. Likita (2000) defined debt as a contractual obligation of owing or accumulated borrowing with a promise to payback at a future date. Every economy requires an amount of capital to generate production and sustain development: capital, being a factor of production is particularly important but relatively scarce, and the dearth of capital is much more frequent in developing countries which Nigeria happen to be among. A developing country wishing to mobilize capital resources to foster economic development may at one time or the other resort to borrowing. Foreign borrowing is needed to supplement domestic savings. But first, why do countries borrow? Borrowing is certainly as old as nations, countries borrow because of their inability to generate enough savings which could be used for investment and hence growth, part of the explanation of this argument is that the incomes of developing countries like Nigeria is quite low. It is so low that it is hardly adequate for personal utilization, individuals in Nigeria have very low saving habit, underdeveloped nature of the financial system all play a role in reducing savings. Countries borrow to promote economic growth and development, ensuring that there exists enabling environment for people to invest their money in other sectors of the economy (Wibowo et al., 2025). Borrowing is necessary to meet the financial requirement of the government. Where government has budget deficit, then the best alternative is to seek other sources (borrow) where such deficit can be eliminated. Government borrows in order to close the resource gap between savings and investment. In the last few years there had been alarming signals on the rising level of Nigerian domestic debt, which in the absence of appropriate measures might result to a looming catastrophe. Since the Obasanjo administration succeeded in looping \$30 billion dollars debt off the Nigerian external debt, the country has become quite hopeful and relaxed about external borrowing.

## **LITERATURE REVIEW**

### **Theoretical review**

**Debt Overhang Theory:** A large debt load may lead to debt overhang, which inhibits investment and growth due to the expectation of debt payback. According to this argument, a nation's debt level should not be allowed to rise above a particular point because doing so would make investment in industrial ventures and other productive activities less attractive to both foreign and domestic investors Krugman (1988). An increasing debt load poses a dangerous barrier to a country's ability to grow economically, despite some economic theories suggesting that reasonable public debts, both external and domestic, are necessary, especially for low-income countries to improve living standards and spur economic growth (Saungweme and Odhiambo, 2019(Iskamto & Juariyah, 2023; Wibowo et al., 2025)).

**Neoclassical Growth Theory:** Solow (1956) implies that investments supported by debt may be advantageous if they result in profitable ventures since capital accumulation for growth is a prerequisite Debt can, however, discourage investment and impede growth if it is employed inefficiently or results in heavy repayment responsibilities. This theory claims that modest levels of public debt can boost economic growth like the debt Laffer curve. Government debt only gets in the way of economic growth when it gets out of control. The endogenous growth model states that improper management of government debt used to finance expenses or purchase capital assets may have adverse effects. Quite a number of existing theoretical and empirical work supports the claim that unsustainable public debt lowers a country's competitiveness and increases its financial markets' susceptibility to external shocks (Mhlaba and Phiri 2019).

The relationship between public debt and economic growth has been widely debated. According to Reinhart and Rogoff (2010), excessive debt levels can stifle growth due to high debt servicing costs. Conversely, moderate debt levels can foster growth when used for productive investments (Greiner, 2012). Studies on Nigeria, such as those by Adepoju, Salau, and Obayelu (2007), indicate that debt mismanagement has historically hindered economic progress.

### **Debt**

Debt is created by the act of borrowing. Likita (2000) defined debt as a contractual obligation of owing or accumulated borrowing with a promise to payback at a future date. Every economy requires an amount of capital to generate production and sustain development: capital, being a factor of production is particularly important but relatively scarce, and the dearth of capital is much more prevalent in

developing countries which Nigeria happen to be among. It is defined according to Oyejide (1985) as the resource or money use in an organization which is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or other formal equivalent (Abidah et al., 2024; Adhania et al., 2024; Agustina et al., 2024; Alfina & Wiwik, 2024; Iskanto et al., 2019). In modern law, debt has no precise fixed meaning and may be regarded essentially as that which one person legally owes to another or an obligation that is enforceable by legal action to make payment of money. When government borrows, the debt is a public debt. Public debts are either internal or external, incurred by the government through borrowing in the domestic and international markets so as to finance domestic investment. Debts are classified into two i.e. productive debt and dead weight debt. When a loan is obtained to enable the state or nation to purchase some sort of assets, the debt is said to be productive (Sukmadewi, 2021).

### Sources of public debt

There are two major sources of debts in Nigeria the internal and external sources: the internal sources include development stocks, treasury bills, treasury certificate, treasury bonds and ways and means of advances according to Likita (2000), while external debt sources include bilateral and multilateral sources such as world bank, International monetary fund (IMF), African Development bank. There are London group of creditors and the Paris club group of creditors. Types and causes of public debts According to Likita (2000) the types of debt are: Balance of payment support Loans, Trade debts, Project-tied Loans and socio-economic Loans. The causes of public debts are; oil price shocks, structure of the loans, project viability, rise in interest rate, international economic recession, neglect of non-oil sector

### Public Debt Management Strategies in Nigeria

Nigeria's debt management framework involves various strategies, including:**Debt Restructuring:** Adjusting the terms of existing debt to ease repayment burdens.**Debt Conversion:** Swapping debt for equity or other financial instruments.**External Borrowing Controls:** Ensuring that new loans are concessional and aligned with economic objectives.**Sinking Fund Mechanisms:** Setting aside funds for future debt repayment.**Economic Growth Trends in Nigeria.** Economic growth in Nigeria has been characterized by periods of expansion and recession. The role of debt in this trajectory is analyzed using key indicators such as GDP growth rate, inflation, and investment trends (World Bank, 2021). While debt-financed infrastructure projects have spurred growth, high debt servicing costs have strained fiscal resources.

### Challenges in Public Debt Management

Several challenges faced by Nigeria in managing its public debt, including: High debt servicing costs reducing funds available for development projects. Over-reliance on external borrowing, increasing vulnerability to exchange rate fluctuations. Weak institutional frameworks leading to inefficiencies in debt utilization. Corruption and misallocation of borrowed funds.

### Empirical review

Charles and Abimbola (2018) investigated how Nigeria's economy was impacted by its external debt. The findings show that there is an inverse link between the GDP and external debt and external debt service. Obisesan, Akosile, and Ogunsanwo (2019) investigated the effect of Nigeria's external debt on economic expansion. The cointegration test and the error correction test were used in Nigeria to investigate the problem between 1980 and 2012. The results of this investigation confirmed the conventional wisdom that there is a negative correlation between growth and external debt.

Matthew and Mordecai (2016) examined how Nigeria's economic progress is impacted by governmental debt. The findings of the Johansen co-integration test show a longterm association between the variables, which include the amount of debt outstanding, the amount being paid back domestically, the amount being paid back externally, and economic development as measured by Nigeria's GDP per capita. The results of the Error Correction Model (ECM) indicate that Nigeria's

economic progress is somewhat correlated negatively with the service of foreign debt and the stock of external debt. There is a strong positive correlation between economic progress and domestic debt stocks on the other hand. However, more recent research has revealed something other than the two opposing findings.

Patillo, Poirson and Ricci (2004) established that low levels of government debt are beneficial to economic growth while high levels are detrimental (Schclarek, 2004). In contrast, Kumar and Woo (2010) discovered a negative relationship between the two variables after controlling for other factors that influence growth.

Mitze and Matz (2015) discovered a long-run negative relation between regional government debt intensities and output for German federal states from 1970 to 2010

Eberhardt and Presbitero (2015) analysed the relationship between government debt and growth heterogeneity and non-linearity among African countries. It found evidence of a negative association between government debt and longterm growth; however, the results did not indicate a uniform debt threshold applicable to all the nations. At a glance, one can see that the findings of the various studies are split into 3. Some empirical studies revealed that public debt has a negative effect on economic growth, while some showed a positive effect and others showed insignificant results, depending mainly on several factors such as the model employed, the period of study, countries specified, term and the aspect of public debt (domestic or external) considered, etc. It can then be concluded that the effect of public debt on the GDP is unclear. Sulaiman and Azeez (2012) investigated the effect of Nigeria's external debt on economic growth. The results of the error correction model depict that external debt has benefited the Nigerian economy. In contrast, many other studies produced results that differed or contradicted those of the previous studies. Chinaemerem and Anayochukwu (2013) concluded that debt financing is inversely linked to economic growth.

Ezeabasili, Isu and Mojekwu (2011) also analysed the link between Nigeria's foreign debt and economic growth. The error correction estimates showed that foreign debt has an inverse relationship with Nigeria's economic growth. They stated that Nigeria needs to focus on absorptive capacity, noting that low debt service/GDP capacity ratios could serve as a guide for debt negotiations in the future because of the country's low debt to the GDP.

## **Methodology**

This section contains a brief introduction of the study area, the research instrument adopted by this study, model specification, data requirements, estimation techniques, and evaluation methods.

### **Model Specification**

In line with the theoretical framework presented in the immediately preceding subsection, the GDP level is a function of government debt, interest rate and budget deficit which is expressed as;  $GDP = f(INT, PDEBT, BDEF)$

Where: •

GDP is measured by nominal gross domestic product

- INT is interest rate
- PDEBT is public debt
- BDEF is budget deficit

Since this study used sub-national data where each state faces the same level of interest rate, it would be sensible to use another proxy of interest rate. For this study, the number of bank branches (CBB) in each state is used in place of interest rate since it determines the accessibility to financing in each state. In addition, there is a limitation to state-level data on the budget deficit. This study proxies it with the Federal Accounts Allocation Committee (FAAC) allocation to each state. Therefore, it is assumed in this study that GDP at the state level is a function of government debt, commercial bank branches and FAAC allocation.

$$GDP = f(INT, PDEBT, BDEF)$$

It should be noted that PDEBT consists of domestic and external debt. Therefore, public debt is measured in three ways: internal debt, international debt, and total debt. Thus, the model is re-specified in econometric form as:

$$GDP_{i,t} = \alpha + \beta_1 PDEBT_{i,t} + \beta_2 CBB_{i,t} + \beta_3 FAAC_{i,t} + \theta_i + \varepsilon_{i,t}$$

Using components of public debt produces two sets of equations, each for total debt, and external and domestic debt.

That is:

$$GDP_{i,t} = \alpha + \beta_1 TDEBT_{i,t} + \beta_2 CBB_{i,t} + \beta_3 FAAC_{i,t} + \theta_i + \varepsilon_{i,t}$$

$$GDP_{i,t} = \alpha + \beta_1 EDEBT_{i,t} + \beta_2 DDEBT_{i,t} + \beta_3 CBB_{i,t} + \beta_4 FAAC_{i,t} + \theta_i + \varepsilon_{i,t}$$

In the specifications above, a linear or one-way relationship between GDP and public debt is assumed.

### The Data

This study used data from the Central Bank of Nigeria's (CBN, 2024) statistical bulletin and annual reports for state debt profile to assess the impact of state public debt on the GDP of 22 states between 2020 and 2024, state gross domestic product (SGDP) data and the data on commercial bank branches per state and FAAC allocation for each state. Due to data constraints, this study had to stop in 2024

### Estimation Techniques

Panel data techniques are adopted to determine the effect of state debt on state economic performance and other economic output indicators in the 22 states under consideration in Nigeria in this study. In the unlikely case that the cross-sections contain some distinguishing characteristics, the panel data estimate successfully draws attention to individual heterogeneity

**Evaluation Methods** Three basic evaluation methods, namely economic or apriori criteria, statistical criteria and econometric criteria are used in this study. Apriori, the study expects a negative impact of total debt, internal debt and external debt on state GDP, while a positive impact is expected of budget deficit proceed by federal allocation to states and interest rates proxied by commercial bank branches on GDP in terms of statistical tests

### Results and Discussion

The results consist of the descriptive analysis under which the results of the summary statistics and correlation coefficients are presented, and the panel regression results under which the results of the linear and non-linear impact of the debt on GDP under alternative panel regression techniques are presented. The study implores both linear and non-linear to see the impact of the dependent variable on the independent variables' indifferent functional form and to have a robust result and make more inferences. Table 1 captures the summary statistics. The results indicate that the average GDP of the states for the period considered is 2,367,470 million naira with a standard deviation, minimum and maximum of 1,816,664, 701047 and 10,627,398 million naira, respectively. The estimated mean domestic debt is 70,628.46 million naira with a standard deviation of 58079.95 million naira. It equally has a minimum and maximum of 1,569.942 and 321,000 million naira, respectively. The external debt has a mean and standard deviation of 14,785.38 and 12,495.55, respectively, with a minimum and maximum of -10,451.80 and 70,973.01 million naira. The average total debt is estimated to be 85,413.83, with a standard deviation of 59,827.94. The minimum total debt is 7,233.095, while the maximum total debt is estimated to be 328103.5 million naira. However, the Jarque-Bera normality test result showed that data of all variables in the model are not normally distributed with the probability values of 0.0000, which is less than 0.05 significant level. The results obtained from the correlation analysis are presented in Table 2. The estimated correlation coefficient of 0.455 shows that GDP is moderately positively correlated with internal debt, while the estimated coefficient of -0.048 indicates that GDP is moderately negatively related to GDP. The estimated coefficient of 0.432 shows that total debt is moderately positively related to GDP. In addition, the estimated coefficient of 0.734 shows that GDP is highly positively correlated with CBB, and 0.346 shows that GDP is moderately positively correlated with FAAC.

**Table 1: Descriptive statistics**

	SGDP	FAAC	CBB	EDEBT	DDEBT	TDEBT
Mean	2367470.	19752.71	134.1909	14785.38	70628.46	85413.83
Median	1906236.	7315.768	102.0000	10581.28	53307.06	74084.20
Maximum	10627398	143614.9	437.0000	70973.01	320605.7	328103.5
Minimum	701047.1	2402.551	30.00000	-10451.80	1569.942	7233.095
Std. Dev.	1816664.	26451.13	96.95544	12495.55	58079.95	59827.94
Skewness	2.806803	2.380199	1.220645	2.191696	1.384526	1.113674
Kurtosis	11.88184	9.408369	3.966595	8.876357	5.599498	4.691378
Jarque-Bera	505.9983	292.0894	31.59842	246.3344	66.11480	35.85010
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	2.60E+08	2172798.	14761.00	1626391.	7769130.	9395522.
Sum Sq. Dev.	3.60E+14	7.63E+10	1024639.	1.70E+10	3.68E+11	3.90E+11
Observations	110	110	110	110	110	110

Source: Authors' computation, 2025

**Table 2: Correlation results**

Variables	(1)	(2)	(3)	(4)	(5)	(6)
(1) SGDP	1.000					
(2) DDEBT	0.455	1.000				
(3) EDEBT	-0.048	0.034	1.000			
(4) TDEBT	0.432	0.978	0.242	1.000		
(5) CBB	0.734	0.297	0.088	0.307	1.000	
(6) FAAC	0.346	0.452	0.186	0.478	0.156	1.000

Source: Authors' computation, 2025

Regression Results for the Impact of Total Public Debt on GDP The Generalised Least Square estimated panel regression results on the impact of debt on GDP are presented in Table 3. So far, the Jarque Bera normality test ascertained the nonnormal distribution of all variables data included in the model. The study employed GLS regression analysis. The results were obtained with the assumption of linear and non-linear relationships. The linear model results indicate that total debt has a direct and significant impact on GDP at a 5% level of significance given the estimated coefficient and p-value of 4.447 and 0.0378, respectively. However, the results of the non-linear regression depict that total debt has a significant positive impact on GDP, while the square of the total debt has a significant negative impact on GDP. The results imply that the state's total debt has an inverted Ushaped relationship with the GDP. The GDP increases with debt up to a certain amount where it reaches a turning point and then falls with increases in debt. Therefore, from the results, total debt is beneficial for the GDP if it is balanced and does not go beyond a certain threshold among the states in Nigeria. The findings in this study partially contradict the theoretical and empirical submissions, which state that debt is hazardous to growth and development (Charles & Abimbola, 2018b; Chinaemerem & Anayochukwu, 2013; Ezeabasili et al., 2011; Obademi & Okubanjo, 2013). Therefore, the results align with previous empirical works that reported an inverted U-shaped relationship between debt and GDP, such as in Israel Shahor (2018) and a sample of 152 countries (Butkus & Seputiene, 2018).

**Table 3: Generalised linear square regression results for total debt**

Variables	Linear	Non-Linear
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TDEBT	4.447**	12.35**
	(0.0378)	(0.0166)
TDEBTSQ		-3.24e-05*
		(0.0928)
FAAC	11.85**	11.21**
	(0.0111)	(0.0153)
CBB	12,402***	12,257***
	(0)	(0)
Constant	89,332	-201,694
	(0.681)	(0.464)
Observations	110	110
Number of sid	22	22

Source: Authors' Computation,  
2024 Note: pval in parentheses - \*\*\* p<0.1

The Impact of Domestic and External Debt on GDP The estimated GLS panel regression results on the impact of domestic debt on GDP are presented in Table 4.4. The results were also obtained with the assumption of linear and non-linear relationships separately. The findings, based on the assumption of a linear relationship between GDP and domestic debt, indicate that domestic debt has a positive and statistically significant effect across all conventional significance levels, as evidenced by the estimated coefficient of 5.936 and a p-value of 0.005. This implies that a rise in domestic debt leads to a rise in GDP. The result of the non-linear regression indicates that domestic debt has a significant positive impact on GDP while domestic debt square has a significant negative impact on GDP. The results imply that state domestic debt has an inverted U-shaped relationship with the GDP. The GDP increases with debt up to a turning point where further increases in debt lead to a reduction in GDP. Therefore, domestic debt is beneficial for GDP. However, the government at the state level must exercise caution since an increase in domestic debt beyond the inflexion point will negatively affect the GDP.

**Table 4: Estimated generalised least square panel regression result for domestic debt**

Variables	Linear	Non-Linear
DDEBT	5.936***	15.69***
	(0.00540)	(0.00121)
DDEBTSQ		-4.27e-05**
		(0.0258)
FAAC	10.86**	9.681**
	(0.0165)	(0.0300)
CBB	12,229***	12,108***
	(0)	(0)
Constant	92,610	-200,918
	(0.650)	(0.401)
Observations	110	110
Number of sid	22	22

Source: Authors' Computation, 2025  
Note: pval in parentheses - \*\*\* p<0.1

Furthermore, the GLS panel regression results for the impact of external debt on GDP with the assumption of linearity and non-linearity are presented in Table 4.5. The linear model results with a coefficient of -23.12 and p-value of 0.008 indicate that external debt has a negative and significant impact on GDP. This implies that state GDP decreases with increases in external debt. Foreign debt

could have an impact on economic growth either through a debt overhang or through crowding out. The findings from the non-linear regression analysis show that external debt exerts a significant negative effect on GDP, whereas the squared value of external debt has a positive but statistically insignificant effect on GDP. This suggests that the relationship between states' foreign debts and GDP follows an inverted U-shaped pattern.

**Table 5: GLS panel regression results for the impact of external debt on GDP with the assumption of linearity and non-linearity**

Variables	Linear	Non-Linear
EDEBT	-23.12*** (0.00819)	-52.77** (0.0277)
EDEBTSQ		0.000519 (0.185)
FAAC	18.21*** (1.23e-05)	18.64*** (6.88e-06)
CBB	13,236*** (0)	13,218*** (0)
Constant	573,356*** (0.00877)	812,102*** (0.00397)
Observations	110	110
Number of sid	22	22

Source: Authors' Computation, 2025

Note: pval in parentheses - \*\*\* p

However, Tables 3 and 4 show the linear and non-linear models for FAAC and BCC. The linear model result indicates FAAC and CBB have a positive and significant impact on GDP with coefficient and probability values of 11.85 and 0.011, respectively. Similarly, the results of the non-linear regression also indicate that FACC and BCC have a positive and significant impact on state GDP. The results imply that GDP increases as FAAC and BCC increase.

## DISCUSSION

These findings emphasize the importance of **fiscal federalism and budgetary efficiency** in Nigeria. Adequate and well-utilized transfers from the federation account, combined with effective capital budgeting, can complement debt financing to support growth (Charles & Abimbola, 2018b). The empirical findings from this study confirm that public debt—particularly domestic debt—can enhance state-level GDP in Nigeria up to a certain threshold, beyond which further borrowing becomes detrimental. This inverted U-shaped relationship is in line with the debt-growth literature, which has increasingly acknowledged non-linear dynamics in the debt-growth nexus. Non-linear Debt-Growth Relationship: A Broader View

The evidence of an inverted U-shaped relationship between total debt and GDP supports the argument by Presbitero (2012), who found that debt becomes harmful to economic growth after reaching a certain threshold in developing countries. Similarly, Checherita-Westphal and Rother (2012), using Eurozone data, found that government debt levels above 90–100% of GDP are associated with slower economic growth, lending further credibility to the curvilinear findings in this study.

Likewise, Panizza and Presbitero (2014) suggest that the effect of public debt on economic growth is not linear, and the quality of institutions and debt management may influence how debt translates into growth. This observation resonates with Nigeria's fiscal context, where institutional capacity and transparency in debt use vary significantly across states, possibly affecting the efficiency of debt-financed investments. Domestic vs. External Debt: Contrasting Growth Effects

The results in Tables 4 and 5 show that domestic debt positively affects GDP, while external debt has a negative impact, a finding echoed in the work of Ajayi and Oke (2012) and Chaudhary, Iqbal, and



Gillani (2009). These scholars argued that domestic debt can stimulate growth by funding infrastructure and services, provided it is well-managed and supported by strong fiscal discipline. By contrast, external debt is often tied to currency mismatches, debt servicing pressures, and donor-imposed conditions, which can limit fiscal flexibility and impose structural burdens on the economy (Were, 2001). This aligns with this study's results, which show external debt has a statistically significant negative impact on GDP, confirming that foreign debt accumulation, if unchecked, can undermine economic performance.

#### Role of FAAC and CBB in Growth Enhancement

Across all models, FAAC allocations and capital budget balances (CBB) emerge as consistently significant and positive contributors to GDP. This supports findings from Okonjo-Iweala and Osafo-Kwaako (2007), who argued that intergovernmental transfers and capital spending efficiency are critical to improving sub-national growth outcomes in federal systems like Nigeria. Moreover, Oyedele (2014) noted that timely and adequate FAAC disbursements reduce over-reliance on debt and improve service delivery at the state level. The significant role of CBB also echoes Oluwole and Aregbeyen (2013), who found that capital expenditure efficiency, more than recurrent spending, drives sustainable sub-national growth in Nigeria. This result implies that it's not just the volume of fiscal resources that matters, but how effectively those resources are allocated and utilized.

#### Comparison with International Evidence

The findings also mirror studies in other emerging and low-income countries. For instance, Pattillo et al. (2002) analyzed 61 developing countries and found that moderate debt enhances growth but excessive debt leads to stagnation. Similarly, Kumar and Woo (2010) found that high levels of debt negatively impact growth by reducing capital accumulation and productivity. In African contexts, Ayadi and Ayadi (2008) found that external debt harmed economic performance in selected African countries, particularly when debt service obligations crowded out productive investment. This again aligns with the negative effect of external debt on GDP observed in this study.

### Conclusion

Efficient public debt management is crucial for Nigeria's economic growth. While debt can be a useful tool for development, mismanagement poses risks to economic stability. By implementing prudent debt strategies, improving institutional frameworks, and fostering sustainable economic policies, Nigeria can achieve long-term economic growth while maintaining debt sustainability. There is no doubt that the provocative debate on how public debts affect GDP, particularly for the West African nations and the nature of the relationship, has remained quite inconclusive. Several studies and series of analyses conducted on relationships are more concentrated on the national level. However, little attention has been given to the sub-national level. Therefore, this study focused on the sub-national level analysis and established the effect of domestic, external, and total debts on the GDP in 22 states in Nigeria.

The study adopted descriptive statistics, correlations analysis and panel regression analysis. Panel regression and correlation methods of analysis were adopted in this study. The study explored the likelihood of both linear and non-linear relationships in the debt-GDP linkage. The results of the linear and non-linear model indicate that:

- Total debt has a significant positive impact on GDP, while the square has a significant negative impact on GDP.
- Domestic debt has a significant positive impact on GDP, while the square has a significant negative impact on GDP.
- External debt has a significant negative impact on state GDP, while the square has a significant positive impact on GDP.

○ FAAC and BCC have a significant positive impact on GDP in both linear and non-linear regression. The results imply that each state's total debt, domestic debt, and external debt have inverted U-shaped relationships with the GDP. GDP increases with debt until it reaches a turning point, and then the GDP falls with increases in debt. Therefore, from the results, total debt, internal debt, and international debt are beneficial for GDP if it is moderate and does not go beyond a certain threshold among the states in Nigeria.

**Policy Recommendations** To enhance debt management and foster economic growth, the following recommendations are proposed: Strengthening debt transparency and accountability mechanisms. Promoting domestic revenue mobilization to reduce borrowing needs. Enhancing institutional capacity in debt management agencies. Prioritizing concessional loans with low interest rates and long repayment periods. Expanding the economy to reduce dependency on oil revenue and enhance fiscal stability.

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