“Assessing the impact of debt overhang on public investment and economic growth in Nigeria”

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ASSESSING THE IMPACT OF DEBT OVERHANG ON PUBLIC INVESTMENT AND ECONOMIC GROWTH IN NIGERIA

Abstract

This study assesses the impact of debt overhang on Nigeria's public investment and economic growth. The paper utilized the Autoregressive Distributed Lag (ARDL) with annual time-series data from 1981 to 2024 and Myers' debt overhang, fiscal sustainability, and crowding-out effect theories. Public investment growth and economic growth rate were dependent variables, while debt overhang was independent. The control variables included interest rate, exchange rate, and inflation rate. The two models demonstrated a long-term cointegration connection. The results demonstrate a paradox which has practical implications because debt overhang produces statistically significant effects which show opposite results through its impact on both dependent variables.. Specifically, a unit increase in debt overhang is associated with a 0.744-unit increase in public investment ($\beta = 0.744$, $p < 0.05$) and a 0.153-unit decrease in economic growth ($\beta = -0.153$, $p < 0.05$). The findings support the efficiency trap hypothesis by determining that debt accumulation leads to increased investment but does not produce matching economic growth due to inefficient resource allocation in debt financing. In the short run, debt overhang negatively affects both variables, with the error correction term confirming rapid adjustment to equilibrium. Therefore, Nigeria is operating in an "efficiency trap." The debt used to finance investment does not translate into economic growth due to poor project selection, resource misallocation, and inefficient project implementation. The null hypotheses for both models were of no significant effect and were rejected. We recommend that policymakers prioritize project appraisal methods and ensure that borrowed funds are directed toward quality investments.

Keywords debt overhang, economic growth, fiscal policy, public investment

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INTRODUCTION

Debt and investment are factors that determine the economic health of a country, sector, or business. The relationship between debt and investment is complex and unpredictable in Nigeria, the largest country in Africa and one of the largest economies in the region. The size of a country's debt has become so critical that it now undermines investment opportunities and development objectives. Borrowing, which used to be regarded as a vital instrument to bridge fiscal deficits and finance infrastructure, is sometimes viewed as a burden that tends to strangle the growth it was supposed to promote. This situation has caused disagreement among economists, policymakers, and international observers (Lopez-Claros, 2025).

The debt overhang concept emerged in the late 1980s based on the belief that organizations that lack sufficient future income will not repay their debts, resulting in creditors receiving most of the investment returns from upcoming projects (Ogonegbu & Kagwaini, 2025). The Nigerian economy possesses extensive natural resource wealth, which exists together with ongoing fiscal deficits, increasing national debt,

and limited oil resource development. The country has valuable oil deposits and mineral resources, yet it has failed to achieve continuous economic development through resource utilization.

Nigeria uses its natural resource income to fund its spending needs, but this practice leads the country to continually borrow money. Nigeria's public debt reached ₦ 149.39 trillion (about USD 97 billion) on March 31, 2025(Debt Management Office (2025) which is more than double the amount recorded less than ten years earlier. This extensive borrowing has not translated into commensurate economic growth; the economy expanded by only 3.13% in the first quarter of 2025 (National Bureau of Statistics, 2025). The major problem is that Nigeria's debt service obligations have risen rapidly since 2019, leaving the country with no available fiscal resources. A country has been spending 30%, 40%, and 50% of its federally generated revenue to service debt consecutively for five years, and this problem has not abated.

1. LITERATURE REVIEW

Danaj and Reçi (2024) define public investment as expenditure that increases physical capital, both tangible investments (e.g., infrastructure and equipment) and intangible investments (e.g., intellectual property). It plays a crucial role in economic growth and in the resolution of social issues. Ivashko (2023) defines public investment as the amount of money spent by federal, state, and local governments on infrastructure with a useful life of over one year. The financing of this investment is provided through various sources, including budgets, borrowed funds, and user fees. Therefore, we can conclude that public investment is the use of government resources to establish, develop, and sustain public infrastructure and services. It is financed through government revenue from taxes and oil, as well as through internal or external borrowing. Projects that are needed for the common good but unlikely to be profitable in the short term are the subject of public investment.

Abbasova et al. (2023) define economic growth as the process of increasing national output, enabling a country to produce more and higher-quality goods and services. The impact of this development on the quality of life is enormous and provides additional development opportunities. Ahamba et al. (2026) showed that economic growth is reflected in an increase in real GDP, which benefits both the nation's economy and citizens' quality of life. Amanullah and Robertus (2023) described economic growth as the process that enables an economy to expand its production capacity. This manifests as higher Gross Regional Domestic Product (GRDP) values within a particular area. Therefore, economic growth is the increment in the output of goods and services in an economy over a given time and is normally quantified by the growth in the Gross Domestic Product (GDP) or the Gross National Product (GNP). It pays attention to quantitative shifts in the economy, including production levels and the rate of economic growth. GDP growth rate, per capita income, industrial production, exports, and infrastructure development are key indicators of economic growth.

We use three theories to explain how debt and investment interact with economic growth. The study's principal theory is the debt overhang theory. It was introduced as a corporate finance concept in 1977 and demonstrates that companies become unable to make new investments when their debt levels reach higher thresholds. The core premise asserts that future profits will be used to settle current debt obligations, which results in investors receiving no benefits from valuable new projects, since creditors will receive all profits, thus interrupting capital accumulation. Krugman (1988) used this principle to demonstrate that extensive external debt obligations create a fundamental barrier to domestic investment since foreign creditors will take all returns. The theory demonstrates how increased Nigerian debt levels cause detrimental effects on both public and private investment activities throughout the nation.

The fiscal sustainability theory (Bohn, 1998) examines how governments can sustain their current spending, tax collection, and debt-borrowing practices without financial failure. Nigeria employs this framework because its government spends all its revenue on debt payments, which prevents the nation from financing necessary capital projects. A government must implement fis-

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cal corrections through tax increases and spending cuts after it reaches unsustainable debt levels, which will result in economic uncertainty that disrupts the nation's long-term development plans.

The crowding-out effect theory (Barro, 1974) explains that government deficit financing leads to increased borrowing, which raises domestic interest rates and increases borrowing costs for private-sector businesses. High public debt levels create two opposing effects, which restrict public investment growth by redirecting revenue and increasing private investment costs through higher capital expenses, thus hindering overall economic growth.

The existing empirical research on how debt affects investment and economic growth shows complex relationships between the two sectors, producing different results across developing nations. A study conducted in multiple countries and regions by Joy and Panda (2020) found that countries that used their resources to pay public debt saw their public investment decrease over the long term. The BRICS countries face economic decline because their debt service obligations prevent them from investing in new capital projects and building essential infrastructure (Joy & Panda, 2020). Research on Central and Eastern European countries found that government capital spending patterns are procyclical, while rising debt levels force governments to reduce capital expenditures during economic contractions (Randjelovic, 2021). The relationship reaches its peak during economic distress; Novelli and Barcia (2021) found that governments lose their ability to make countercyclical investments when their debt levels reach critical levels, due to a need to focus on solvency, leading to the postponement of long-term growth.

The existing literature on Nigeria demonstrates that debt overhang poses substantial obstacles to economic growth. Researchers have discovered, using cointegration and error-correction models, that a negative relationship exists between debt overhang and economic growth in the long run, so careful debt management and diversification of revenue sources are essential (Oluwatomiwa et al., 2021; Ebhotemhen & Victor, 2024). Certain studies demonstrate that Nigeria's capital expenditure faces major constraints because of its high debt service obligations and budget deficits (Chukwu et al., 2021; Ameji et al., 2024), yet paradoxical situations now exist. The external debt overhang reduces total investment, and there is a threshold at which substantial debt relief or restructuring is required to enable significant investment and economic expansion (Ebhotemhen & Hezekiah, 2024). Debt-financed public investment causes an efficiency trap situation since it establishes a situation where rising adverse impacts on economic growth do not force a stop to public investment. The investment quality and efficiency of public investment must be evaluated because its quantity does not determine its value.

Public debt impacts economic growth through direct mechanisms, which institutional and macroeconomic factors in the literature establish as intermediary links. Operational success requires correct monetary and fiscal policy instrument alignment (Akinyede & Elumah, 2017). The success of debt-based investments relies on two key elements, which are absorptive capacity and governance structures. Irenosa et al. (2022) show that human capital development through educational and health investments decreases poverty, but economic growth requires social spending to achieve the same effect. Government investment returns result from project selection and implementation success, as well as the government's financial management system.

The existing evidence establishes that debt operates as a vital financial tool for developing nations, yet its effectiveness in Nigeria depends on three factors: institutional quality, macroeconomic stability, and the capacity to effectively use borrowed resources. The fundamental problem of debt arises when a nation fails to transform its debt obligations into productive assets that generate sustainable economic development. Thus, this study aims to investigate how debt overhang affects both public investment and economic growth. The theoretical framework and literature review led to the creation of the following hypotheses:

H_{01}: *Debt overhang does not significantly affect Nigeria's public investment activities.*

H_{02}: *Debt overhang does not significantly affect Nigeria's economic growth.*

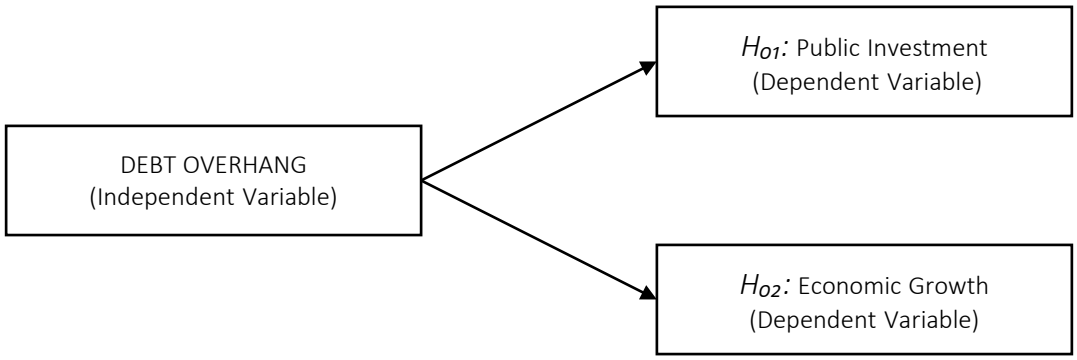

Figure 1. Conceptual framework

The conceptual framework (Figure 1) establishes debt overhang as the fundamental independent variable, while the two dependent variables are public investment and economic growth (GDP growth rate). Debt overhang is measured by the total debt service as a percentage of revenue. The model uses interest rates, exchange rates, and inflation as control variables to determine how debt overhang affects financial outcomes in relation to all macroeconomic indicators. The theoretical relationships are hypothesized as follows: debt service obligations divert revenue from capital expenditure, reducing public investment (crowding-out theory); high debt overhang creates anticipated future tax burdens that discourage investment and constrain aggregate economic growth (debt overhang theory).

2. METHODOLOGY

The study used an ex-post facto research design to investigate how debt overhang affects public investment and economic growth in Nigeria. The design was selected because it provided the best framework to achieve the study's research objectives. The Central Bank of Nigeria (CBN) statistical bulletins, statement of account, and annual reports served as data sources. The World Bank Indicator provided data on exchange rates, interest rates, and inflation rates. The period extended from 1981 to 2024, spanning 44 years.

2.1. Model specification

Three sets of variables entered the analytical model as dependent, independent, and control variables (Table 1). The dependent variables are public investment and economic growth. The independent variable is debt overhang, while the control variables are interest rate, exchange rate, and inflation rate. The models for the study are expressed as follows:

$$PIGR_t = \alpha + \beta_1 DOH_t + \beta_2 INT_t + \beta_3 EXCRG_t + \beta_4 INFR_t + \varepsilon_t, \quad (1)$$

$$EGR_t = \alpha + \beta_1 DOH_t + \beta_2 INT_t + \beta_3 EXCRG_t + \beta_4 INFR_t + \varepsilon_t, \quad (2)$$

Table 1. Summary of variables

Variables	Description	Proxy	Theoretical Link
Dependent ($PIGR_t$)	Public investment at time t	Capital expenditure	Public debt service may limit available funds for investment, thereby reducing public investment
Dependent (EGR_t)	Economic growth at time t	GDP growth rate	A high public debt service can restrict economic growth by diverting funds from productive investments
Independent (DOH_t)	Debt overhang at time t	Public debt service divided by federally collected revenue	Debt overhang limits resources available for public investment, negatively impacting both public investment and economic growth
Control (INT_t)	Interest rates at time t	Interest rate	Debt overhang may lead to higher interest rates, further constraining public investment and economic growth
Control ($EXCRG_t$)	Exchange rates at time t	Exchange rate	Debt overhang may affect exchange rate stability, impacting public investment and economic growth
Control ($INFR_t$)	Inflation rate at time t	Inflation rate	Debt overhang can lead to inflationary pressures, which may negatively influence public investment and economic growth

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where $PIGR_t$ represents the public investment growth rate at time *t*. EGR_t represents the economic growth rate at time *t*. DOH_t represents debt overhang at time *t*. INT_t represents the interest rate at time *t*. $EXCRG_t$ represents the exchange rate at time *t*. $INFR_t$ represents the inflation rate at time *t*. α (alpha): This is the intercept of the regression model. β_1, β_2, β_3, β_4: These are the coefficients for the independent variables. ε_t (epsilon): This is the error term (or residual) at time *t*.

3. RESULTS

Table 2 presents the variables that exhibit mixed integration orders. Variables such as PIGR, EXCRG, and INFR are stationary at level I(0), whereas DOH and INT are stationary only after first differencing, making them I(1). Because the variables are integrated of different orders, the Autoregressive Distributed Lag (ARDL) bounds testing approach is the most appropriate econometric technique. This model allows us to estimate long-run relationships without requiring that all variables be integrated of the same order.

The ARDL bounds test results (Table 3) show that the computed *F*-statistics for both public investment (13.8875) and economic growth (6.6247) exceed the upper bound critical values (I(1)) at all conventional significance levels (10%, 5%, 2.5%, and 1%). Since the *F*-statistics are consistently higher than the corresponding upper bounds, the null hypothesis of no long-run relationship is rejected in each case. This provides strong evidence of a long-run (cointegrating) relationship among the variables in both models, indicating that public investment and economic growth maintain stable long-term associations with their respective explanatory variables.

Table 3. ARDL bounds test

Significance Level	I(0) Bound	I(1) Bound	Decision
Public Investment			
F-Statistic	13.8875	–	–
10%	1.90	3.01	Reject H_0
5%	2.26	3.48	Reject H_0
2.5%	2.62	3.90	Reject H_0
1%	3.07	4.44	Reject H_0
Economic Growth			
F-Statistic	6.6247	–	–
10%	2.45	3.52	Reject H_0
5%	2.86	4.01	Reject H_0
2.5%	3.25	4.49	Reject H_0
1%	3.74	5.06	Reject H_0

Table 4 presents the long–run ARDL coefficient estimates for both the public investment and economic growth models. The study found a major paradox with practical implications: debt overhang (DOH) produced opposite effects on both dependent variables. The study found that each unit increase in debt overhang is associated with a 0.744–unit increase in public investment ($\beta = 0.744$, $p < 0.05$) and a 0.153–unit decrease in economic growth ($\beta = -0.153$, $p < 0.05$). The evidence supports the efficiency trap hypothesis by finding that debt accumulation leads to increased investment but does not produce matching economic growth because the governments use debt–financing resources inefficiently. The interest rate (INT) has negative effects on both outcomes, though these effects are statistically insignificant at conventional levels of significance. The coefficient for economic growth is –0.627, compared to 0.226 for public investment, indicating that borrowing costs affect economic growth more than they affect investment choices. Both models show mixed effects from the exchange rate (EXCRG), which contains no statistically significant results. Inflation (INFR) demonstrates a positive, margin-

Table 2. Unit root test results

Variable	ADF Statistic	5% Critical Value	pvalue	Decision	Order of Integration
PIGR	–2.7874	–1.9489	0.0064	Stationary	I(0)
EGR	–2.0225	–1.9489	0.0425	Stationary	I(0)
DOH	–2.3976	–3.5181	0.3756	Non-stationary	–
DOH	–5.7802	–3.5208	0.0001	Stationary	I(1)
INT	–2.5683	–2.9314	0.1073	Non-stationary	–
INT	–6.7480	–2.9332	0.0000	Stationary	I(1)
EXCRG	–5.8304	–2.9314	0.0000	Stationary	I(0)
INFR	–3.0573	–2.9314	0.0376	Stationary	I(0)

Table 4. Long-run findings (longrun ARDL estimates: Combined results)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Public Investment Model				
DOH	0.7443**	0.3295	2.2591	0.0319
INT	0.2262	0.4036	0.5606	0.5795
EXCRG	–0.0430	0.1486	–0.2892	0.7746
INFR	0.5423*	0.2841	1.9092	0.0665
DOH	0.7443**	0.3295	2.2591	0.0319
Economic Growth Model				
DOH	–0.1529**	0.0686	–2.2299	0.0368
INT	–0.6268	0.3976	–1.5766	0.1298
EXCRG	0.0596	0.0432	1.3787	0.1825
INFR	–0.0333	0.0808	–0.4124	0.6843

Notes: *** p < 0.01, ** p < 0.05, * p < 0.10.

ally significant effect on public investment (β = 0.542, $p < 0.10$), reflecting the nominal expansion of investment budgets during inflationary periods. We found that inflation creates negative economic effects, which we could not prove through statistical tests because inflation does not provide real economic growth benefits from increased investment. The evidence shows that Nigeria requires better investment efficiency improvements and project selection process enhancements instead of increasing its debt-based investment expenditures.

The error correction model (ECM) results presented in Table 5 show that both models achieve long-run equilibrium through their short-run dynamics and adjustment speeds. The error correction terms (ECT) are negative and highly significant in both specifications, confirming the validity of the cointegrating relationships established by the bounds tests. The public investment model shows an ECT coefficient of –1.325, which indicates that overshooting occurs as disequilibrium is corrected through an overcorrection process within less than 1 year. The economic growth model shows an ECT coefficient of –0.654, which indicates that 65.4% of long-run equilibrium deviations are corrected in one period, while full adjustment takes approximately 1.5 years. The models show different responses to debt overhang, which causes immediate economic growth losses through debt burden increases that reach high significance (β = –0.306, $p < 0.01$) because the debt burden immediately limits growth capacity. The public investment system experiences no instant response to debt overhang, but its investment operations suffer negative consequences after one period because

Table 5. Error correction model (ECM)

Variable	Coeff.	Std. err.	t-value	Prob.
Public Investment Model				
CointEq(–1)	–1.3253***	0.1488	–8.9083	0.0000
D(DOH)	–0.3696	0.5267	–0.7018	0.4886
D(DOH(–1))	–1.5273**	0.5597	–2.7290	0.0109
D(EXCRG)	0.0947	0.0622	1.5215	0.1394
D(EXCRG(–1))	–0.0193	0.0765	–0.2518	0.8030
D(EXCRG(–2))	0.2047**	0.0792	2.5857	0.0152
D(EXCRG(–3))	0.1339*	0.0667	2.0062	0.0546
Economic Growth Model				
CointEq(–1)	–0.6541***	0.1042	–6.2796	0.0000
D(DOH)	–0.3057***	0.0652	–4.6921	0.0001
D(INT)	0.2313	0.1428	1.6201	0.1201
D(INT(–2))	–0.4194**	0.1724	–2.4333	0.0240
D(EXCRG)	–0.0378***	0.0072	–5.2613	0.0000
D(EXCRG(–1))	–0.0741***	0.0122	–6.0693	0.0000
D(EXCRG(–2))	–0.0628***	0.0109	–5.7835	0.0000

Notes: *** p < 0.01, ** p < 0.05, * p < 0.10.

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Table 6. Hypotheses testing results

Hypotheses	Dependent Variable	Long-Run Coefficient	P-Value	Effect Direction	Significance	Null Hypotheses	Verdict
1	Public Investment	+0.744	0.0319	Positive	5% level	H_0: No significant effect	Rejected ✗
2	Economic growth	−0.153	0.0368	Negative	5% level	H_0: No significant effect	Rejected ✗

of its delayed impact through the lagged effect (D(DOH(–1)) = –1.527, $p < 0.05$). The exchange rate produces competing short-term impacts: depreciation creates immediate, permanent damage to economic growth that continues throughout all lag structures (all significant at the 1% level), while public investment experiences positive, significant effects from previous exchange rate changes, indicating that currency depreciation leads to temporary increases in public investment value. The lagged interest rate effect creates a significant negative impact on economic growth (D(INT(–2)) = –0.419, $p < 0.05$), and lagged inflation causes economic growth to decrease its effectiveness (D(INFR(–3)) = –0.092, $p < 0.05$). The short-run dynamics show that debt overhang enhances investment in various ways, but its impacts on economic growth in both the short and long term are permanent and adverse.

The Hypotheses testing results presented in Table 6 indicates that Debt overhang at 5% significance level shows strong impact on both public investment and economic growth in Nigeria. While it stimulates public investment in the long run, it simultaneously exerts a negative effect on economic growth. This suggest that there is inefficiencies in the allocation or productivity of debt-financed expenditures.

4. DISCUSSION

The study examined the relationship between debt overhang and two variables, which were public investment and economic growth in Nigeria, through the application of the ARDL bounds testing framework, which analyzed annual data from 1981 to 2024. The findings reveal intricate, contradictory patterns that provide essential insights into Nigeria's financial condition.

The ARDL bounds test indicated that both models exhibit a stable long-run cointegrating relationship, which confirmed the ARDL model as the correct choice for assessment. Long-run estimates show a significant difference because debt overhang positively affects public investment at 0.744 with a statistical significance level of 0.05, while it negatively impacts economic growth at –0.153 with the same statistical significance threshold. The result contradicts conventional debt overhang theory, which states that debt levels discourage investment because they reduce expected investor returns (Myers, 1977; Krugman, 1988).

The analysis shows that Nigeria is in a situation that can be described as an efficiency trap. Government capital expenditures continue because debt overhang creates pressure to spend borrowed funds, according to its positive relationship with public investment. The economic growth rate suffers negative consequences because investors are unable to achieve productive capacity through their investment efforts. The deviation from normal operations reveals structural challenges that stem from inadequate project selection processes, combined with restricted implementation abilities, poor resource distribution, and minimal capacity to absorb resources, which were recognized as key challenges by emerging economies (Ijirshar et al., 2023).

The finding contradicts earlier Nigerian research that established a negative relationship between debt levels and public investment (Chukwu et al., 2021; Julius & Uwakwe, 2022). It also differs from the results of Joy and Panda (2020) in the BRICS setting, where debt servicing levels limited capital formation. Rather, it has a closer analogy with the findings of Falade and Adeosun (2024), who found that in Nigeria, investments tend to fail to deliver growth dividends due to inefficiencies. The findings can also be interpreted as consistent with the theoretical forecasts provided by Kobayashi (2015), which suggest that overhang public debt, even under high fiscal spending, may lead to misallocation of resources and hinder productivity.

The only influential variable with a marginally significant positive effect on public investment was inflation (0.542, $p = 0.10$). This can be a manifestation of the nominal increase in investment budgets when prices are rising, rather than the actual increase in productive capacity. There were no significant long-run interest or exchange rates, suggesting that structural and institutional variables could outperform monetary variables in shaping long-term outcomes. This aligns with Ogunjimi (2019) and Omodero (2019), who reported that the cost of borrowing in Nigeria is usually smoothed in the long run due to the preeminence of fiscal policy and institutional defects.

Contrary to previous studies, such as Chukwu et al. (2021), the long-run relationship between debt overhang and public investment is positive, indicating that debt overhang crowds out capital expenditure in Nigeria. The difference can be attributed to varying time periods, model specification, or the inclusion of recent years (2020–2024), which saw a rapid acceleration in borrowing. The adverse long-run impact on growth, however, is in line with a large body of literature, such as Sulaiman and Azeez (2012), Ekperiware et al. (2022), and Ameji et al. (2024), who discovered that the public debt, in general, and its mismanagement, in particular, slows economic growth.

The results of the error correction model (ECM) indicate that the adjustment to equilibrium occurs quickly, and the public investment model overshoots (ECT = –1.325), whereas the economic growth model attains a slower but sound adjustment (ECT = –0.654). These are higher rates than those reported in the same studies (e.g., Oluwatomiwa et al., 2021), indicating that respondents in the Nigerian economy are quick to adjust to a lack of equilibrium, despite the possibility of overreacting in the investment sphere.

Debt overhang has a negative, significantly strong contemporaneous relationship with economic growth ($\beta = -0.306$, $p < 0.01$), consistent with the debt overhang theory, which predicts an immediate fiscal drag and crowding-out. The negative effect of public expenditure begins after a one-period delay, which results in a decrease in public investment. The budget process requires time to implement debt-servicing limitations, which delays their impact on capital expenditure restrictions.

Short-run results demonstrate that exchange rate depreciation creates permanent economic damage because it raises import prices, which leads to production interruptions. The research findings of Ebhotemhen and Victor (2024) and Williams et al. (2018) show that exchange rate fluctuations in Nigeria result in economic contraction. Government budgets experience positive effects from earlier exchange rate changes because they generate higher nominal valuation increases, which benefit public investment.

The short-run conclusion supports the crowding-out effect theory (Barro, 1974), which holds that an increase in government borrowing leads to higher interest rates and reduced private-sector access to credit, thereby slowing growth. The results of this study resemble the findings from Kuchler (2020) in Denmark, who found that high leverage led to low investment and post-crisis growth, and of Novelli and Barcia (2021), who discovered that high sovereign debt limits public investment during downturns.

The results demonstrate advanced proof of the debt overhang hypothesis. The study extends previous evidence by Myers (1977) and Krugman (1988), which showed how incentives reduce private investment through two different sectors because government sector investment requires assessment of investment quality and efficiency to determine growth results. The results also indicate the topicality of the fiscal sustainability theory (Bohn, 1998), as rising debt service obligations in Nigeria are becoming problematic for growth potential and long-term fiscal space.

The results indicate that the Nigerian debt-based plan for public investment cannot achieve economic growth due to profound inefficiencies in resource allocation and project implementation. The outcomes underscore the need to shift the focus from investment volume to quality. The accumulation of debt will keep growth at bay unless the structural inefficiencies that define the management of public investments are addressed, thus keeping the efficiency trap where it is.

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CONCLUSION

This paper evaluated the effects of debt overhang on public investment and Nigeria's economic growth during 1981–2024. The findings provide evidence of a paradoxical long-run relationship: debt overhang has a positive, statistically significant impact on government investment but a negative, statistically significant impact on economic growth. In the short term, debt overhang negatively affects both variables, and the error-correction factors indicate the speed of adjustment to equilibrium.

These results suggest that Nigeria is in an efficiency trap, where debt-funded investment is not driving economic growth due to inefficient project selection, resource misallocation, and poor execution. However, the accumulation of debt is not the problem at its heart; rather, the problem lies in the quality and productivity of government investment. One way this can be addressed is by emphasizing stringent project appraisal systems, reinforcing the public investment management system, and ensuring that borrowed funds are channeled to high-yielding, growth-generating ventures.

AUTHOR CONTRIBUTIONS

Conceptualization: Diekola I. Adewuyi, Oyınlola M. Akinyede.
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