The Influence of Debt Administration on Nigerian Economic Development (2014-2023)

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Abstract. This research examines how debt administration practices affected Nigeria's economic development during the decade spanning 2014-2023. The investigation examines the relationships between four key financial indicators—foreign borrowing, internal debt, currency valuation rates, and lending rates—and their combined impact on actual gross domestic product. Employing a retrospective research methodology with information collected from twelve industrial sectors listed on Nigeria's Exchange Group, the study utilised standard linear regression techniques for data evaluation. The results demonstrated that all independent variables displayed negative coefficients (-0.1884, -0.0677, -0.2006, and -0.2341, respectively), indicating an inverse correlation with economic expansion. However, these relationships lacked statistical significance at the conventional 0.05 threshold (p-values: 0.424, 0.634, 0.388, and 0.149). Nevertheless, the collective F-statistic value of 4.39 confirms that debt administration practices have a significant influence on Nigeria's overall economic performance. The research concludes that current Nigerian debt management strategies have hurt economic growth and recommends directing borrowed resources toward productive enterprises, emphasising infrastructure improvement, carefully controlling external credit acquisition, regularly assessing debt composition, and enhancing transparency in financial obligation management to foster sustainable economic development.

Keywords: Debt Administration; Economic Development; Foreign Borrowing; Internal Debt; Currency Valuation; Lending Rates.

INTRODUCTION

Accelerating economic development remains a critical priority for governments in developing countries. This ongoing process continues because governments need to finance public services that enhance social welfare and stimulate economic expansion. To bridge disparities between planned expenditures and anticipated revenues within fiscal periods, governments fre-

quently adopt debt financing strategies [1]. For borrowed funds to contribute productively without hindering economic progress, effective debt administration becomes essential.

Debt administration encompasses structured repayment planning established through formal processes or individual initiatives. As noted by the author [1], debt originates from disparities between domestic savings, investment requirements, and export earnings, which typically increase over time. As these gaps widen and financial obligations accumulate, interest expenses also grow, forcing countries to secure additional loans to maintain consistent import flows and refinance maturing debt commitments.

In Nigeria, there exists a clear desire for enhanced economic activity and improvement across major productive sectors amid deteriorating conditions. This situation necessitates decisive action from government authorities to address various financial challenges, particularly the management of outstanding debt levels. The establishment of a specialised Debt Management Office in 2001 represented a response to this challenge, although its operations have not yet delivered the expected advantages.

By 1991, Nigeria's foreign debt had reached $33.4 billion and continued climbing due to overwhelming debt servicing requirements and political leaders' persistent pursuit of loans for questionable projects [2]. Before the debt forgiveness arrangement, Nigeria was obligated to allocate approximately $4.9 billion annually toward debt servicing [3], making it nearly impossible to achieve currency stability and meaningful economic growth under such a substantial financial burden.

While borrowing for investment and infrastructure enhancement deserves support, excessive borrowing without robust strategic policies and investment planning lacks justification. Public borrowing impacts economic performance depending on its purpose, management mechanisms, and the ratio of debt to GDP. Research suggests developing nations should maintain debt-to-GDP ratios below 88.2% to avoid adverse effects on economic expansion [4].

Substantial public debt creates uncertainty and pressure, leading to economic stagnation, negatively influencing financial markets, and diminishing both productive investment opportunities and employment [1]. By 2012, accumulated debt through successive governments reached approximately 4 trillion naira [5], significantly affecting economic performance and citizens' living standards.

Developing countries, such as Nigeria, typically seek external financing to achieve macroeconomic objectives, including sustainable growth, reducing unemployment, addressing savings-investment gaps, implementing specific projects, or supporting deficit budgets. However, the burden of debt stock and servicing payments has prevented Nigeria from undertaking larger domestic investments that could enhance development [6].

Against this background, this study examines how debt administration practices influence economic development in Nigeria, with a specific focus on the relationships between foreign borrowing, internal debt, currency valuation rates, lending rates, and actual gross domestic product.

Research Questions:

a) How does foreign borrowing impact Nigeria's actual gross domestic output?

в) To what extent does internal debt influence Nigeria's actual gross domestic output?

c) How significantly does currency valuation affect Nigeria's actual gross domestic output?

d) What impact do lending rates have on Nigeria's actual gross domestic output?

Hypotheses

H_1: Foreign borrowing has no significant impact on Nigeria's actual gross domestic output.

H_2: Internal debt has no significant effect on Nigeria's actual gross domestic output.

H_3: Currency valuation has no significant impact on Nigeria's actual gross domestic output.

H_4: Lending rates have no significant effect on Nigeria's actual gross domestic output.

The Debt Burden Theory, as proposed by the author [7], provides theoretical grounding for understanding the relationship between financial obligations and economic expansion. This theory suggests that when a nation's debt level exceeds its repayment capacity, investor confidence declines, triggering capital outflow and reduced investment. Consequently, economic growth becomes constrained as potential investors antici-

pate increased future taxation to service excessive debt.

The Investment Displacement Theory also explains how government borrowing from domestic markets can reduce available credit for private-sector investment, thereby impeding economic growth. When governments extensively borrow from internal sources, interest rates typically increase, making credit more expensive for private businesses and reducing overall investment levels.

METHOD

This investigation employed a retrospective research design. The study population comprised all twelve industrial sectors listed on the Nigerian Exchange Group as of December 31, 2023: Agriculture, Construction/Real Estate, Consumer Goods, Financial Services, Healthcare, Industrial Goods, Information and Communication Technology, Natural Resources, Oil and Gas, Services, Utilities, and Conglomerates.

Researchers gathered secondary data over a ten-year timeframe (2014–2023). They obtained information regarding foreign and internal debt from the records of the Debt Management Office. At the same time, data concerning actual Gross Domestic Product (RGDP), lending rates, and currency valuation were sourced from the Nigerian Exchange Group.

The study adopted the following regression model:

$$RGDP = \alpha_0 + \alpha_1 ED + \alpha_2 DD + \alpha_3 ER + \alpha_4 IR + \varepsilon \quad (1)$$

where RGDP – Actual Gross Domestic Product (dependent variable); ED – Foreign Borrowing; DD – Internal Debt; ER – Currency Valuation Rate; IR – Lending Rate; ε = Error Term.

The researchers applied a logarithmic transformation to all independent variables to address scaling issues since the dependent variable is calculated as a ratio. Analysis was conducted using STATA 13.0 statistical software, with hypotheses tested using standard linear regression estimation techniques.

RESULTS AND DISCUSSION

Table 1 presents descriptive statistics for the study variables.

Table 1 – Descriptive Statistics of Study Variables [8]

Variable	Obs	Mean	Std. Dev.	Min	Max
RGDP	37	0.4490207	0.4671599	0.043896	1.669613
ED	37	3.833943	1.336357	0	6.1417
DD	37	0.3056872	0.487996	0	1.80618
ER	37	2.216089	0.548263	0	2.840733
IR	37	1.927439	0.7665727	0	2.912222

The mean actual gross domestic product (RGDP) was 0.4490 with a standard deviation of 0.4672, indicating considerable variation in Nigeria's economic performance during the review period. The maximum RGDP value reached 1.6696.

Foreign borrowing (ED) averaged 3.8339 with a standard deviation of 1.3364 and a maximum value of 6.1417, reflecting substantial fluctuations in Nigeria's external borrowing patterns. The mean values for internal debt (DD), currency valuation rate (ER), and lending rate (IR) were 0.3057, 2.2161, and 1.9274, respectively, with their standard deviations further confirming considerable variations in these variables throughout the study period.

These significant variations across all variables enable meaningful analysis of the relationship between debt administration and economic development in Nigeria.

Table 2 – Correlation Matrix of Variables [8]

Variable	RGDP	ED	DD	ER	IR
RGDP	1.0000				
ED	0.5017	1.0000			
DD	-0.1879	-0.1325	1.0000		
ER	0.4068	0.7554	-0.0233	1.0000	
IR	0.4345	0.3432	-0.1335	0.6099	1.0000

The correlation analysis revealed that foreign direct investment (FDI), currency valuation rate (CVR), and lending rate (LR) demonstrated positive correlations with actual gross domestic product (GDP). At the same time, internal debt (DD) exhibited a negative correlation. The correlation coefficients between ED and ER (0.7554) and between ER and IR (0.6099) suggest potential multicollinearity, which was addressed during regression analysis.

The regression results in Table 3 display negative coefficients for all independent variables (foreign borrowing, internal debt, currency valuation rate, and lending rate), indicating that increases in these variables correspond with decreases in actual gross domestic product.

Table 3 – Standard Linear Regression Results [8]

Variable	Coefficient	Std. Error	t-value	p-value	Confidence Interval
ED	-0.1883727	0.0797041	-0.36	0.424	-0.0260209, 3.507246
DD	-0.0677255	0.1409477	-0.48	0.634	-0.3548265, 0.2193755
ER	-0.2006435	0.2292262	-0.88	0.388	-0.667562, 0.266275
IR	-0.2341084	0.1144014	-0.05	0.149	-0.0010804, 0.4671364
_cons	-0.2590725	0.2797828	-0.93	0.361	-0.8289713, 0.3108263
F-statistic	4.39				

The overall F-statistic of 4.39 suggests that debt administration has made a significant contribution to Nigeria's economic performance, although individual variables demonstrate varying levels of significance.

Hypothesis Testing

Hypothesis 1: Impact of Foreign Borrowing on Economic Development.

Table 4 – Hypothesis Test Result for Foreign Borrowing

Variable	Coefficient	Std. Error	t-value	p-value	Decision
ED	-0.1883727	0.0797041	-0.36	0.424	Accept H_0

H_0: Foreign borrowing has no significant impact on Nigeria's actual gross domestic output.

With a p-value of 0.424, which exceeds the 0.05 significance threshold, we fail to reject the null hypothesis, indicating that foreign borrowing has no statistically significant impact on Nigeria's actual gross domestic product. The negative coefficient (-0.1883727) suggests that increases in foreign borrowing correspond with decreases in RGDP, although this relationship lacks statistical significance. This finding aligns with studies by authors [9, 10], who also identified negative relationships between foreign borrowing and economic growth in Nigeria. The results suggest that the government has not effectively channelled externally borrowed funds into productive sectors that would stimulate economic growth.

Hypothesis 2: Effect of Internal Debt on Economic Development.

Table 5 – Hypothesis Test Result for Internal Debt

Variable	Coefficient	Std. Error	t-value	p-value	Decision
DD	-0.0677255	0.1409477	-0.48	0.634	Accept H_0

H_0: Internal debt has no significant effect on Nigeria's actual gross domestic output.

The p-value of 0.634 exceeds the 0.05 significance level, resulting in the acceptance of the null hypothesis. This result suggests that internal debt does not have a significant impact on Nigeria's actual gross domestic product. The negative coefficient (-0.0677255) indicates an inverse relationship between internal debt and real GDP, although it is not statistically significant. This finding corroborates Obadan and Uga's (2017) research, which attributed the negative relationship to the investment displacement effect, where government borrowing from domestic markets reduces available credit for private-sector investment. The result suggests that Nigeria's internal borrowing strategy may need to be restructured to ensure that funds contribute more effectively to economic development.

Hypothesis 3: Impact of Currency Valuation on Economic Development.

Table 6 – Hypothesis Test Result for Currency Valuation Rate

Variable	Coefficient	Std. Error	t-value	p-value	Decision
ER	-0.2006435	0.2292262	-0.88	0.388	Accept H_0

H_0: Currency valuation has no significant impact on Nigeria's actual gross domestic output.

With a p-value of 0.388, which exceeds the 0.05 significance threshold, we fail to reject the null hypothesis that currency valuation has no significant impact on Nigeria's actual gross domestic product. The negative coefficient (-0.2006435) suggests that currency depreciation (i.e., increases in exchange rate values) corresponds with decreases in real GDP (RGDP), although this relationship lacks statistical significance. This finding indicates that currency fluctuations during the study period had no significant impact on Nigeria's economic performance. The result carries

substantial implications for monetary policy, implying that exchange rate management alone may prove insufficient to stimulate economic growth without complementary fiscal and structural policies.

Hypothesis 4: Effect of Lending Rate on Economic Development.

Table 7 – Hypothesis Test Result for Lending Rate

Variable	Coefficient	Std. Error	t-value	p-value	Decision
IR	-0.2341084	0.1144014	-0.05	0.149	Accept H_0

H_0: Lending rates have no significant effect on Nigeria's actual gross domestic output.

The p-value of 0.149 exceeds the 0.05 significance level, leading to acceptance of the null hypothesis. This result indicates that lending rates do not have a significant impact on Nigeria's actual gross domestic product. The negative coefficient (-0.2341084) suggests an inverse relationship between lending rates and RGDP, although it is not statistically significant. This finding aligns with studies by authors [11, 12] but contradicts those by authors [13]. The results suggest that interest rate adjustments during the study period may not have effectively stimulated economic growth, possibly due to structural inefficiencies in the financial system or other economic factors that mitigated the expected impact of monetary policy.

CONCLUSIONS

This study examined the impact of debt management on Nigeria's economic development from 2014 to 2023. While borrowing for investment and infrastructure development represents economically rational behaviour, the findings reveal that debt management practices have hurt Nigeria's economic growth. Foreign borrowing, internal debt, currency valuation rates, and lending rates all demonstrated negative relationships with actual gross domestic output, although these relationships lacked statistical significance at the conventional 0.05 threshold.

The overall F-statistic of 4.39 indicates that debt administration has a significant influence on economic performance in Nigeria, highlighting the importance of effective financial obligation management strategies in the country's economic planning and development agenda.

Based on the findings, this study recommends:

Productive Investment of Borrowed Resources: The government should allocate borrowed funds directly to productive enterprises and infrastructure projects that yield clear economic returns. This approach would help transition from consumption-oriented borrowing to investment-oriented borrowing.

Infrastructure Development Priority: The government should prioritise substantial investments in infrastructure development to stimulate economic activities and enhance overall economic growth in Nigeria.

Foreign Borrowing Supervision: The acquisition of external credit by both private and public organisations should be carefully monitored by the Debt Management Office, given the negative (though not significant) relationship between foreign borrowing and economic development.

Regular Assessment of Debt Composition: The structure of internal debt should undergo regular evaluation to prevent complications associated with accumulating debt service obligations.

Debt Sustainability Evaluation: Policymakers should regularly analyse debt sustainability to ensure that Nigeria's debt levels remain within manageable thresholds that do not impede economic growth.

Revenue Source Diversification: The government should intensify efforts to diversify revenue sources, thereby reducing its dependence on borrowing for financing development projects.

Transparent Financial Obligation Management: Enhanced transparency in debt administration practices would improve public confidence and attract more productive investments to the economy.

REFERENCES

1. Chris-Ejiogu, U. G., Odinakachi, N. C., & Kalu, A. S. (2019). The Effect Of External Debt On The Economic Growth Of Nigeria 2000-2018. *EPH - International Journal of Business & Management Science, 5*(4), 1–10. doi: 10.53555/eijbms.v5i4.90

2. Aluko, F., & Arowolo, D. (2010). Foreign aid, the Third World's debt crisis and the implication for economic development: The Nigerian experience. *African Journal of Political Science and International Relations, 4*(4), 120-127.

3. Ezeabasili, V. N., Isu, H. O., & Mojekwu, J. N. (2011). Nigeria's External Debt and Economic Growth: An error Correction approach. *International Journal of Business and Management, 6*(5) doi: 10.5539/ijbm.v6n5p156

4. Aguguom, T. A. (2020). Cash Flow Optimality and Investment Returns: Investors Expectations in Listed Manufacturing Firms in Nigeria. *Asian Journal of Economics Business and Accounting*, 39–50. doi: 10.9734/ajeba/2020/v16i430247

5. Central Bank of Nigeria. (2012). *Statistical Bulletin*. Retrieved from https://www.cbn.gov.ng/out/2013/sd/2012%20statistical%20bulletin%20contents%20and%20narratives_finalweb.pdf

6. Kolawole, K. D., Seyingbo, O. A., Adejare, R. B., Olofinlad, S. O., & Haliru, A. N. (2024). Public Debt, Debt Servicing and Economic Growth in Nigeria. *Development Management, 23*(4), 76–83. doi: 10.57111/devt/4.2024.76

7. Krugman, P. (1988). Financing vs. forgiving a debt overhang. *Journal of Development Economics, 29*(3), 253–268. doi: 10.1016/0304-3878(88)90044-2

8. ACSPRI (2023). Data Analysis Using Stata: Online. Retrieved from https://www.acspri.org.au/winter-program-2023/data-analysis-using-stata-online

9. Ohiomu, S. (2020). External Debt and Economic Growth Nexus: Empirical Evidence from Nigeria. *The American Economist, 65*(2), 330–343. doi: 10.1177/0569434520914862

10. Matandare. M. A., & Tito, J. (2018). Public Debt and Economic Growth Nexus in Zimbabwe. *Journal of Economics and Sustainable Development, 9*(2).

11. Edeigba, J. (2020). History of Nigerian Accounting Practice: progress and contemporary issues. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3726767

12. Haytham, N. (2017). The Impact of Sovereign Debt on Growth: An Empirical Study on GIIPS versus JUUSD Countries. *European Research Studies Journal, 20*(2a), 607–633. doi: 10.35808/ersj/662

13. Werigbelegha, A. P., & Peter, E. G. (2018). Domestic Debt and the Performance of Nigerian Economy (1990-2018): Investigating the Nexus. *International Journal of Development and Economic Sustainability, 7*(1), 1-8.