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ASSESSING THE IMPACT OF INSTITUTIONAL QUALITY ON PUBLIC DEBT SUSTAINABILITY IN NIGERIA

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ABSTRACT

Nigeria's public debt crisis is marked by escalating debt levels, driven by ongoing budget deficits and a heavy dependence on borrowing to fund government expenditure. The resulting high debt servicing costs, compounded by revenue shortfalls and external economic shocks, pose substantial fiscal risks and limit investments in essential infrastructure and social development initiatives. Consequently, this study examines the threshold effects of rule of law and corruption on public debt sustainability in Nigeria, utilizing annual data from 1993 to 2022 and employing a threshold regression methodology for analysis. The study's results show that when corruption exceeds a certain level, it has a substantial positive effect on public debt, indicating that corruption worsens the nation's debt burden. Furthermore, the findings indicate that a more robust rule of law is linked to lower public debt levels, underscoring the crucial role of institutional quality in effective fiscal management Based on the study's findings, several recommendations are proposed to ensure sustainable fiscal management and good governance. These include: intensifying anti-corruption measures, strengthening the rule of law, enforcing fiscal discipline, expanding revenue sources, developing institutional capabilities, and engaging citizens through awareness and participation initiatives.

1.0 Introduction

Achieving sustainable economic growth and development necessitates substantial investment in social services and infrastructure, including education, healthcare, electricity, and other vital amenities. Governments at all levels require considerable funding to finance these public expenditures. Nevertheless, tax revenue, which in most cases, is the major source of income for many developing countries, frequently falls short of meeting expenditure requirements, leading to fiscal deficits (Abubakar and Yusuf, 2018). The idea that developing countries rely on public debt due to inadequate domestic savings is reinforced by Chenery and Strout's (1966) theory. They argued that domestic savings in these countries are insufficient to drive the capital formation necessary for economic growth, creating a need for external financing through public debt.

Public debt plays a crucial role in achieving economic growth and development, serving as a vital instrument for governments to finance strategic initiatives, bridge fiscal gaps, and respond to economic downturns (Easterly & Rebelo, 1993). Public debt, effectively managed, can facilitate the implementation of development projects, stimulate economic activity, and enhance public services, ultimately contributing to improved living standards and poverty reduction (Krugman, 1988). It enables

governments to have access to capital for invest in critical infrastructure, education, healthcare, and innovation, laying the groundwork for sustainable economic expansion and competitiveness (World Bank, 2019; Abdullahi et al., 2015).

Nigeria's public debt has remained a vital source of funding for the government to bridge fiscal gaps and finance developmental projects. However, the total public debt portfolio has experienced a sharp increase between 2015 and 2023, as revealed by the latest data from the country's Debt Management Office. The report shows a total debt stock of ₦97.34 trillion (approximately $108.23 billion) as of 2023, up from ₦12.06 trillion (approximately $61.4 billion) in 2015, representing a 707% increase over seven years. Specifically, this includes combined domestic and external borrowings by the Federal Government, the 36 states, and the Federal Capital Territory. In terms of composition, external debt accounted for ₦31.98 trillion (US$41.59 billion) or 36.38% of the total public debt while domestic debt represented 63.62% or ₦55.93 trillion (US$72.76 billion) (DMO, 2023).

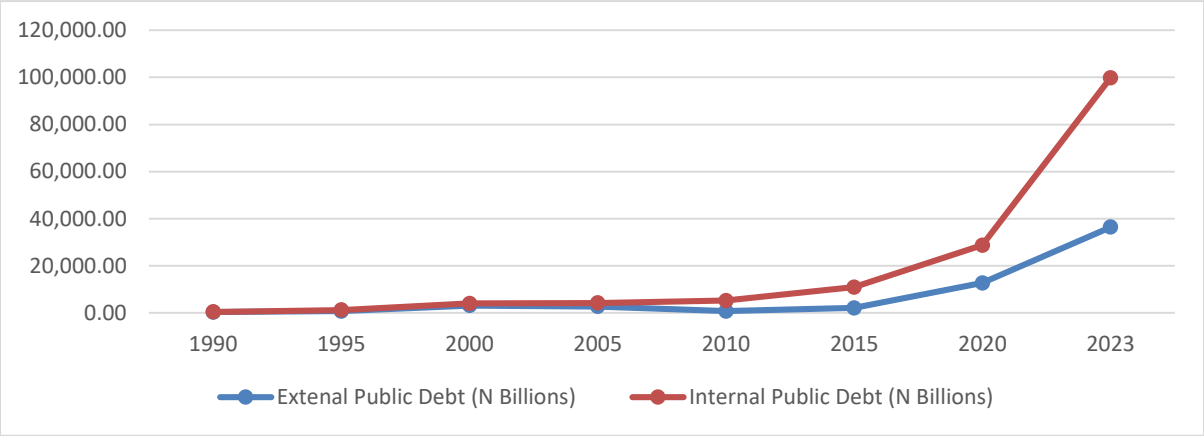

Figure 1. Public debt trend in Nigeria (Converted in Billions)

The sudden surge in the debt figures beginning in 2015 has sparked widespread concerns both domestically and internationally. The rapid accumulation of debt threatens its sustainability and burdens the national budget with substantial debt servicing costs, which could potentially plunge the country into a debt crisis. This is particularly concerning as Nigeria approaches its self-imposed debt-to-GDP ratio limit of 40% (Abdullahi et al., 2015).

These concerns are further exacerbated by Nigeria's consistently poor performance in institutional quality rankings by global watchdogs. For instance, Transparency International's 2023 Corruption Perceptions Index (CPI) ranked Nigeria 145th out of 180 countries, with a score of 25 out of 100 (Transparency International, 2023). Similarly, the World Governance Indicator (WGI) 2023 report showed that Nigeria scored 22.6 out of 100 and ranked 124th out of 137 countries in terms of rule of law. These statistics suggest that Nigeria faces significant challenges in upholding the rule of law, including limited independence of the judiciary, high levels of corruption and impunity, and inadequate protection of human rights and fundamental freedoms.

The implications of these global rankings are far-reaching, particularly in the management of public debt. The prevalence of corruption and low adherence to the rule of law may have resulted in the inefficient allocation of resources, misappropriation, and mismanagement, as well as a lack of transparency and accountability in public financial management. This, ultimately,

might have led to a high debt burden, with a significant portion of funds potentially diverted for personal gain (Abdullahi et al., 2016; Adegbie et al., 2022). As a result, Nigeria's debt burden is becoming increasingly unsustainable, with debt servicing costs exceeding 60% of government revenue in 2023 (DMO, 2023).

In light of the foregoing, this study aims to contribute to the existing body of knowledge by investigating the threshold effects of rule of law and corruption on public debt sustainability in Nigeria, covering the period from 1993 to 2022. The remainder of the paper is organized as follows: Section 2 presents a comprehensive review of the conceptual and empirical literature. Section 3 outlines the data, variables, and econometric methodology used. Section 4 reports the results, while Section 5 summarizes the findings, draws conclusions, and provides policy recommendations.

2.0 Literature review

Many scholars examine the determinants of public debt using different estimation techniques and considering various economic, social and institutional variables. For instance, Apergis and Apergis (2019) explored the link between corruption and government debt in 120 countries from 1999 to 2015. They found a non-linear relationship, with high corruption triggering faster debt growth. Factors increasing debt-to-GDP ratios included a larger shadow economy, higher government expenses, inflation, interest payments, and military spending. Conversely, higher GDP per capita, secondary school enrollment, and tax revenues relative to GDP decreased debt-to-GDP ratios, with findings remaining robust after accounting for the 2008 financial crisis and across developed and developing countries.

Similarly, Ibrahim (2020) investigated the impact of corruption on public debt and economic growth in 20 developing countries from 1996 to 2018, finding that corruption increases public debt-to-GDP ratios and interacts with public revenues and spending to further boost debt, while also hindering long-term economic growth and exacerbating the negative effect of public debt on growth in these nations.

Atiqasani and Darmawan (2022) examined the impact of various factors on the debt-to-GDP ratio in 74 middle-income countries in 2021. Their study found that the previous year's debt accumulation significantly contributes to the current debt-to-GDP ratio. In contrast, fiscal transparency and e-budgeting implementation have an insignificant negative effect, while corruption has a small positive effect, suggesting that corruption slightly increases the debt-to-GDP ratio. The study provides insights into the complex relationships between these factors and public debt in middle-income countries.

In country specific study, Hlongwane and Daw (2023) investigated the factors influencing public debt in South Africa using a Regime-Switching Approach. They found that government deposits, business confidence, consumer price inflation, government revenue, and unemployment are significant drivers of public debt in both regimes. However, government expenditure only has a negligible impact in Regime 2, and income inequality (Gini coefficient) is only insignificant in Regime 1. Additionally, Granger causality tests revealed that public debt has a causal effect on itself, suggesting persistence in public debt levels

Cifuentes-Faura & Simionescu (2024) conducted a comprehensive review of the literature on public debt determinants, aiming to inform policymakers on managing debt levels and fiscal pressure. The study identifies key explanatory variables of public debt from theoretical and empirical research, providing insights for policymakers to obtain financial resources for essential expenditures like healthcare, education, and infrastructure. The main policy implication is that governments can utilize these

findings to implement effective instruments and reduce general government debt, supporting sustainable fiscal management.

In the specific context of Nigeria, Didia & Ayokunle (2020) investigated the relationships between external debt, domestic debt, and economic growth in Nigeria, using data from 1980 to 2016 and the Vector Error Correction Model (VECM). Their findings showed that domestic debt has a significant positive long-term relationship with economic growth, whereas external debt has a negative but statistically insignificant relationship with economic growth, suggesting that domestic debt can support economic growth in Nigeria, while external debt may not have a substantial impact. Similarly, Kur et al. (2021) examined the impact of public debt on economic growth through its effect on investment in Nigeria from 1981 to 2019, using the Autoregressive Distributed Lag (ARDL) model. The study found that external debt and investment have a positive relationship with economic growth, while domestic debt and external debt service have a negative impact. The results also revealed threshold levels for investment, suggesting that domestic debt investment should not fall below 25.41% to avoid economic downturn, and external debt investment should not exceed 24.55% to prevent economic harm. The study concludes that investing in domestic debt is beneficial, while relying on external loans is detrimental to Nigeria's economy.

Moreover, Adegbie et al. (2022) examined the impact of public debt management on economic growth in Nigeria, analyzing time-series data on macroeconomic variables. The study found that effective public debt management has a significantly positive effect on economic growth in Nigeria, suggesting that prudent management of public debt can contribute to improved economic outcomes in the country. Similarly, Yusuf and Mohd (2023) investigated the asymmetric effects of public debt on economic growth in Nigeria from 1980 to 2020 using a nonlinear autoregressive distributed lag method. The study found that external debt has a positive and symmetric impact on economic growth in both the short and long term, while debt service payments have a symmetric negative effect, supporting the debt overhang hypothesis. Domestic debt, however, has an asymmetric negative impact in the short term and a linear negative effect in the long term. Additionally, foreign reserve holdings have an asymmetric positive influence on growth in the long term and a symmetric positive impact in the short term, highlighting the complex relationships between public debt and economic growth in Nigeria. In addition, Afure and Ifeanyi (2024) investigated the impact of public debt on Nigeria's economic development from 1981 to 2021, using the ARDL technique. The study found that domestic debt has a positive and significant effect on GDP per capita in both the short and long term. In contrast, external debt has a negative and significant effect in the short term but a positive and insignificant effect in the long term. Additionally, total debt service payments have a positive but insignificant effect in the short term and a negative and significant effect on GDP per capita in the long term, highlighting the complex and nuanced relationships between public debt and economic development in Nigeria.

Although numerous empirical studies have examined the relationship between public debt and various macroeconomic variables in Nigeria, the influence of institutional quality variables, such as corruption and the rule of law, remains largely unexplored. Notably, no previous studies have employed threshold regression analysis to investigate the effects of corruption and other determinants of public debt across different regimes. This study aims to fill these gaps by utilizing threshold regression analysis to investigate the impact of the rule of law and corruption on public debt in Nigeria.

3.0 Methodology

3.1 Sources of Data and Variables Description

This research utilizes a 30-year annual time series dataset spanning 1993 to 2022, comprising variables such as public debt, corruption, rule of law, GDP, and military expenditure. The data is sourced from World Bank databases: World Development Indicators (2023) and World Governance Indicators (2023)

Table 1: Description and Measurement of Variables

Variable	Definition	Measurement	Source
DEBT	The dependent variable which refers to the total amount of money owed by a government to foreign creditors resulting from borrowing to finance budget deficits or government spending	External debt stocks (% of GNI)	WDI (2023)
GDPP	GDP per capita is gross domestic product divided by midyear population. Data are in constant 2015 U.S. dollars.	GDP per capita (constant 2015 US$)	WDI (2023)
COC	Control of Corruption. It captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests	Scores (from −2.5 to 2.5)	WGI (2023)
RLAW	Rule of law refers to the principle that all individuals and institutions, including government, are subject to and accountable under the law.	Scores (from −2.5 to 2.5)	WGI (2023)
MEXP	Military expenditure refers to the amount of money a government allocates to fund its armed forces, defense programs, and related activities. This includes expenditures on personnel salaries, training, equipment, weapons, infrastructure, research and development, and other defense-related costs	Military expenditure (% of GDP)	WDI (2023)

3.3 Model Specification and Estimation Technique

Following Naz & Yasmin (2021) the baseline model is specified as follows:

$$DEBT_t = \alpha_0 + \alpha_1 COC_t + \alpha_2 RLAW_t + \alpha_3 GDP_t + \alpha_4 MEXP_t + \mu_t \quad (1)$$

Although model (1) is a linear model, it may not effectively capture variables with complex, nonlinear relationships. Therefore, considering the possibility of multiple regimes in corruption control, a more suitable approach is threshold regression, which allows for regime-switching and more accurate predictions. As a result, model (1) has been modified to accommodate two distinct regimes, leading to the development of threshold regression model (2):

$$DEBT_t = \begin{cases} \alpha_0 + \alpha_1 COC_t + \alpha_2 RLAW_t + \alpha_3 GDP_t + \alpha_4 MEXP_t + \varepsilon_t \ \ if\ \gamma_t \le \theta \\ \beta_0 + \beta_1 COC_t + \beta_2 RLAW_t + \beta_3 GDP_t + \beta_4 MEXP_t + \varepsilon_t \ \ if\ \gamma_t > \theta \end{cases} \quad (2)$$

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In model (2), the variables are defined as follows: $DEBT_t$ represents public debt, while COC_t, $RLAW_t$,GDP_t, and $MEXP_t$are denote control of corruption, rule of law, gross domestic product per capita, and military expenditure, respectively. The intercepts for the two regimes are represented by α_0 and β_0 with α_1, α_2, α_3, *and* α_4 being the coefficients for the first regime, and β_1, β_2,β_3, *and* β_4 being the coefficients for the second regime. The error term is denoted by ε_t while γ_t represents the threshold variable (COC), and θ is the threshold value. Model (2) can be expressed as follows:

$$DEBT_t = \begin{matrix} \left[\alpha_0 + \alpha_1 COC_t + \alpha_2 RLAW_t + \alpha_3 GDP_t + \alpha_4 MEXP_t\right] & COC\left(\gamma_t \le \theta\right) \\ +\left[\beta_0 + \beta_1 COC_t + \beta_2 RLAW_t + \beta_3 GDP_t + \beta_4 MEXP_t\right] + \varepsilon_t & COC\left(\gamma_t > \theta\right) \end{matrix} \quad (3)$$

This study used Control of Corruption (COC) as the threshold variable to examine its impact on public debt (DEBT). The optimal threshold value (θ) was determined by estimating model (3) and selecting the threshold that minimized the sum of squared errors. Additionally, the Bai-Perron test was employed to confirm the threshold value, which involves sequentially comparing L + 1 thresholds at a 5% significance level. This approach ensured a robust identification of the threshold value, allowing for a accurate assessment of the independent variables' impact on public debt.

Before proceeding with the threshold regression analysis, it is crucial to examine the characteristics of the data series. Therefore, the analysis commences with preliminary tests, including descriptive statistics, correlation analysis, and unit root tests to determine the stationarity of the series. However, research has shown that traditional unit root tests, such as the ADF test, may have low power in detecting stationarity when structural breaks are present in the data. This may lead to incorrectly accepting the null hypothesis of a unit root. To address this, the Zivot-Andrews (1992) and Perron (1997) unit root tests were employed, which account for structural breaks. The model is specified in equation (4)

$$y_t = \mu + \delta y_{t-1} + \beta_t + \gamma DU_t(\lambda) + \theta DT_t(\lambda) + \sum_{j=1}^{p} \phi_j \Delta y_{t-j} + \varepsilon_t \quad (4)$$

Similar to Zivot-Andrews unit root test, Perron (1997) also allowed only one single break point for any single series in his Innovational Outlier Model presented in equation (4):

$$y_t = \mu + \delta y_{t-1} + \beta_t + \theta DU_t + \gamma DT_t + \delta DU(T_b)_t + \sum_{i=1}^{k} \phi_j \Delta y_{t-i} + \varepsilon_t \quad (5)$$

Here Tb represents the time of break (1> Tb> T) which is unknown, DUt = 1 if t > Tb and zero otherwise, DTt = Tt if t > Tb and zero otherwise.

4.0 Results and Discussion

This section presents the findings in a logical sequence, beginning with the descriptive statistics and correlation analysis, followed by the results of the stationarity tests. The next part of the section focuses on the outcomes of the threshold regression analysis. Finally, the section concludes with a thorough discussion and interpretation of the results, synthesizing the key findings and their implications.

4.1 Descriptive Statistics and Pairwise Correlation matrix

Table 2 presents the descriptive statistics and pairwise correlations of the variables. The mean values for public debt, control of corruption, rule of law, GDP per capita, and military expenditure are 24.378, -1.166, -1.117, 1.482, and 3.466, respectively. Notably, all variables exhibit positive skewness, indicating a higher concentration of data

points at higher values. Additionally, the kurtosis values reveal that all series have platykurtic distributions, characterized by relatively flat shapes. The Jarque-Bera test confirms that all series, except military expenditure, follow a normal distribution, as the probability values are not statistically significant.

Table 2: Descriptive Statistics and Pairwise Correlation Analysis

Statistics/Variables	LNDEBT	COC	RLAW	GDP	MEXP
Mean	24.378	-1.166	-1.117	1.482	3.466
Median	24.273	-1.124	-1.098	1.500	3.368
Maximum	25.312	-0.901	-0.843	12.276	7.636
Minimum	23.645	-1.502	-1.513	-4.507	1.800
Std. Dev.	0.421	0.135	0.192	3.676	1.140
Skewness	0.737	-0.773	-0.598	0.454	1.606
Kurtosis	2.915	3.464	2.577	3.835	7.173
Jarque-Bera	2.725	2.606	1.608	1.902	34.656
Probability	0.256	0.272	0.447	0.386	0.000
Observations	30	30	30	30	30
LNDEBT	1.000				
COC	-0.935	1.000			
	(0.000)				
RLAW	-0.570	0.740	1.000		
	(0.001)	(0.000)			
GDP	-0.731	-0.527	-0.099	1.000	
	(0.000)	(0.003)	(0.609)		
MEXP	0.976	0.951	-0.462	0.818	1.000
	(0.000)	(0.000)	(0.012)	(0.000)	

Note: P-Values are in parenthesis ()

The correlation analysis reveals a significant negative correlation between public debt (DEBT) and the predictor variables, except for military expenditure (MEXP), which shows a positive correlation. This indicates that as control of corruption (COC), rule of law (RLAW), and GDP per capita increase, public debt tends to decrease. In contrast, an increase in military expenditure is associated with an increase in public debt. This suggests that the relationship between public debt and the predictor variables is inverse, except for military expenditure, which has a direct relationship with public debt.

4.2 Results of Stationarity Tests

The Zivot-Andrews (1992) unit root test results in Table 2 reveal that all variables exhibit stationarity at the level of integration [I(0)], indicating the presence of structural breaks. Furthermore, the Perron (1997) unit root test findings confirm that both public debt (DEBT) and control of corruption (COC) are also stationary at level [I(0)]. Therefore, we can reject the null hypothesis of a unit root with structural breaks in both intercept and trend for all series. This leads to the conclusion that the variables are stationary at the integration level [I(0)], suggesting that they maintain stability over time.

Table 2: Results of Unit Root Tests

Zivot-Andrews (1992)					
	Level		First Difference		Status
Variables	t-statistic	Break point date	t-statistic	Break point date	
DEBT	-4.929*	2004	-11.962***	2007	I(0)

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COC	-5.846***	2002	-6.291***	2003	I(0)
RLAW	-5.868***	2007	-6.480***	2009	I(0)
GDP	-5.901***	2001	-6.9302***	2004	I(0)
MEXP	-5.006*	1999	-15.365***	2001	I(0)
			Perron (1997)		
DEBT	-6.609***	2008	-11.901***	2006	I(0)
COC	-5.647**	2001	-10.935***	2002	I(0)
RLAW	-4.575	2008	-6.302***	2008	I(1)
GDP	-3.756	2000	-6.724***	2003	I(1)
MEXP	-4.899	1998	-15.042***	2000	I(1)

Note: The maximum lag used is 4; both intercept and trend are used in the estimations; ***, ** and * indicate statistical significance at 1%, 5% and 10% respectively.

Given that all variables are stationary at level [I(0)], as confirmed by the Zivot-Andrews (1992) unit root test which accounts for structural breaks, cointegration testing is not required. As a result, estimating a short-run model is unnecessary, since any short-term shocks to the system are quickly absorbed into the long-term equilibrium (Pesaran et al., 2001). Therefore, we proceed directly to estimating the long-run model using the threshold regression approach, and present the results in the subsequent section.

4.3 Results of Threshold Regression

Table 3 presents the outcomes of a threshold regression analysis, which investigates the relationships between various regressors and the dependent variable (DEBT) across two distinct corruption regimes. These regimes are defined by a threshold value of -1.121 for control of corruption, distinguishing between lower and higher corruption settings

Table 3: Results of Threshold Regression

Dependent Variable: DEBT			Threshold Variable: COC	
	First regime: COC < -1.121			
Regressors	Coefficient	Std. Error	t-Statistic	Prob.
COC	-2.271	0.812	-2.798	0.011
RLAW	-0.943	0.799	-1.180	0.252
GDP	0.029	0.601	0.048	0.962
MEXP	0.013	0.001	6.502	0.000
	Second Regime: -1.121≤ COC			
COC	-3.014	0.965	-3.124	0.005
RLAW	-4.354	0.635	-6.853	0.000
GDP	3.151	0.524	6.016	0.000
MEXP	0.011	0.001	12.867	0.000
	Non-Varying Threshold Regressor			
C	23.037	0.692	33.315	0.000
R^2	0.791			
Adjusted R^2	0.748			
F-statistic	18.040			0.000
D-W. stat	2.359			

The results are divided into two regimes, based on the threshold value of control of corruption. In the first regime, where control of corruption is below the threshold, a one-unit increase in control of corruption (a decrease in corruption) leads to a 2.271%

decrease in Nigeria's public debt levels. This suggests that reducing corruption corresponds with lower public debt levels, as efficient resource allocation and reduced mismanagement of public funds lead to decreased debt accumulation.

In the second regime, where control of corruption meets or exceeds the threshold, the relationship between control of corruption and public debt remains negative. A one-unit increase in control of corruption (a decrease in corruption) results in a 3.014% decrease in public debt levels in Nigeria. This negative coefficient indicates that beyond a certain threshold of control of corruption (-1.121), further reductions in corruption lead to decreased public debt. As corruption decreases beyond this threshold, governments become more efficient in managing public finances, resulting in lower debt accumulation. With reduced corruption, public funds are less likely to be misappropriated or wasted, allowing for more effective allocation of resources towards productive investments, infrastructure development, and public services. Consequently, this prudent management of resources leads to decreased reliance on borrowing and lower public debt levels. The findings also show that the in the first regime (COC < -1.121), the coefficient for RLAW is -0.943. However, with a t-statistic of -1.180 and a p-value of 0.252, the relationship between RLAW and public debt is not statistically significant at the conventional significance level (usually set at 0.05). This suggests that in the regime where corruption is relatively high, rule of law do not have statistically significant effect on public debt. However, in the second regime (-1.121 ⩽ COC), the coefficient for RLAW becomes more negative (-4.354), indicating a stronger negative relationship between the rule of law and public debt. The t-statistic of -6.853 and the p-value of 0.000 indicate that this relationship is statistically significant. Here, as the rule of law improves, public debt decreases significantly. This suggests that in Nigeria with lower corruption levels, a stronger rule of law is associated with lower public debt, likely due to more effective governance and fiscal management.

Additionally, in both regimes, the coefficient for GDP is positive, indicating a positive relationship between GDP and public debt. In the first regime, the coefficient is 0.029, which is not statistically significant (p-value of 0.962). This suggests that in this regime, changes in GDP do not have a significant impact on public debt. In the second regime, the coefficient for GDP is higher (3.151), and it is statistically significant with a t-statistic of 6.016 and a p-value of 0.000. This indicates that in Nigeria with relatively lower corruption levels, increases in GDP are associated with higher levels of public debt. This could be due to increased government spending or investment in response to economic growth.

Furthermore, in both regimes, the coefficient for military expenditure (MEXP) is positive and statistically significant. In the first regime, the coefficient is 0.013, with a t-statistic of 6.502 and a p-value of 0.000. This indicates that in the regime with higher corruption levels, increases in military expenditure are associated with higher levels of public debt. In the second regime, the coefficient for MEXP remains positive (0.011), with a higher t-statistic of 12.867 and a p-value of 0.000. This suggests that even with lower corruption levels, higher military expenditure Nigeria is associated with increased public debt.

4.4 Discussion of Findings

The threshold regression results reveal a negative relationship between control of corruption and public debt in the initial regime, aligning with economic theory and previous studies, such as Naz and Yasmin (2021). Reduced corruption leads to more efficient resource allocation, as resources are less likely to be misappropriated through bribery, kickbacks, or other illicit means. Instead, resources are allocated based on merit, need, and cost-effectiveness, resulting

in better outcomes for public projects and services. In the second regime, characterized by control of corruption above the threshold, a one-unit increase in control of corruption leads to a 3.014% decrease in public debt levels in Nigeria. This implies that the impact of corruption control on public debt becomes more pronounced beyond the threshold, with incremental improvements in corruption control associated with more substantial reductions in public debt levels. As corruption decreases, governments become more efficient in managing public finances, allocating resources effectively towards productive investments, infrastructure development, and public services, and reducing the need for borrowing.

Additionally, the analysis highlights the crucial role of the rule of law in reducing public debt levels. A robust legal framework, characterized by legal certainty, procedural fairness, and constraints on government power, fosters fiscal responsibility. Conversely, economic growth, as measured by GDP, shows a positive correlation with public debt levels, suggesting that while GDP growth stimulates economic activity, it also leads to increased government spending or investment, contributing to higher public debt burdens. Moreover, military expenditure emerges as a key determinant of public debt in Nigeria, with higher military spending correlating positively with increased debt levels. This indicates potential fiscal pressures arising from defense expenditures, particularly in contexts with relatively lower corruption levels.

5.0 Conclusion and policy recommendations

This study examines the impact of corruption and the rule of law on public debt levels in Nigeria, utilizing annual data from 1993 to 2022 and a threshold regression model for analysis. The results reveal that when corruption exceeds a certain threshold, it significantly contributes to increased public debt, indicating that corruption exacerbates the country's financial burden. Additionally, the findings suggest that a robust rule of law is associated with lower public debt levels, highlighting the crucial role of institutional quality in effective fiscal management. Based on these findings, this study recommends that the Nigerian government should prioritize strengthening anti-corruption efforts, enhancing the rule of law, promoting fiscal discipline, diversifying revenue sources, and building institutional capacity to ensure sustainable fiscal management.

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