External Debt, Institutional Quality and Debt Sustainability in Sub-Saharan Africa: Evidence from a Fixed Effects Panel Model

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DOI: https://doi.org/10.47772/IJRISS.2026.100700418

Received: 25 July 2026; Accepted: 30 July 2026; Published: 03 August 2026

ABSTRACT

The present study examined the effect of external debt and institutional quality on debt sustainability in Sub-Saharan Africa (SSA). Panel data analysis was employed using 26 selected countries covering the period 2007–2024. Debt sustainability was proxied by debt service as a percentage of exports, while external debt and institutional quality constituted the independent variables. Exchange rate, inflation, and trade openness were included as control variables. Data were obtained from the World Development Indicators (WDI) and Worldwide Governance Indicators (WGI) databases. The study employed descriptive statistics, correlation analysis, Variance Inflation Factor (VIF), Pesaran Cross-sectional Dependence test, panel unit root tests, Pedroni cointegration test, and Pooled Ordinary Least Squares, Fixed Effects, and Random Effects estimation techniques. The Hausman specification test identified the Robust Fixed Effects model as the preferred estimator. The findings revealed that external debt and exchange rate exert a positive and significant effect on debt sustainability, while institutional quality and inflation have positive but statistically insignificant effects. Trade openness, however, exerts a negative and significant effect, indicating that greater trade integration improves countries' capacity to meet external debt obligations. The study concludes that rising external debt and exchange rate depreciation increase debt sustainability pressures, whereas greater trade openness strengthens countries' capacity to service external debt. Institutional quality, although positive, does not significantly improve debt sustainability in the sampled countries. The study therefore recommends prudent external borrowing, strengthened institutional capacity, stable exchange rate policies, and greater trade integration to enhance debt sustainability in Sub-Saharan Africa.

Keywords: External Debt; Institutional Quality; Debt Sustainability; Trade Openness; Sub-Saharan Africa.

INTRODUCTION

Debt sustainability has become an important policy issue in many countries in Sub-Saharan Africa (SSA) because of the increasing reliance on external borrowing to finance infrastructure development, budget deficits, and other development programmes. Although external debt remains an important source of development finance, its rapid accumulation has raised concerns about the ability of many SSA countries to meet their debt servicing obligations without jeopardizing fiscal and macroeconomic stability. In recent years, rising debt servicing costs, exchange rate depreciation, tightening global financial conditions, and recurrent external shocks have increased the risk of debt distress across the region (World Bank, 2024a; IMF, 2024; Were, 2024).

Institutional quality is widely recognized as an important factor influencing debt sustainability. Strong institutions promote transparency, accountability, effective public financial management, and efficient utilization of borrowed funds, thereby improving a country's capacity to service its debt obligations. On the other hand, weak institutional frameworks are associated with poor debt management, corruption, inefficient public expenditure, and weak fiscal discipline, all of which may increase debt servicing burdens and weaken debt sustainability (North, 1990; Kaufmann et al., 2010; Lee et al., 2023). Despite governance reforms implemented across several African countries, institutional weaknesses continue to limit effective debt management in many economies within the region.

Several empirical studies have examined the relationship between external debt and economic performance,

while others have investigated the influence of institutional quality on debt sustainability. However, the findings have been mixed and inconclusive. Some studies report that improvements in institutional quality enhance debt sustainability (Lee et al., 2023; Onyele et al., 2024), whereas others show weak or insignificant effects across developing countries. In addition, many previous studies focused on individual governance indicators or single-country analyses, thereby providing limited evidence for Sub-Saharan Africa as a region.

To fill this gap, the present study examines the effect of external debt and institutional quality on debt sustainability in 26 Sub-Saharan African countries covering the period from 2007 to 2024. Debt sustainability is measured by total debt service as a percentage of exports, while institutional quality is represented by a composite index constructed from the six Worldwide Governance Indicators. Specifically, the study investigates how external debt and institutional quality influence debt sustainability, while exchange rate, inflation, and trade openness are included as control variables. The findings are expected to provide useful policy recommendations for strengthening institutional capacity and promoting sustainable debt management across Sub-Saharan Africa.

LITERATURE REVIEW

Conceptual Review

Institutional Quality

Institutional quality refers to the effectiveness of a country's governance system in promoting accountability, transparency, rule of law, regulatory quality, political stability and control of corruption. It determines how efficiently public institutions formulate and implement policies and manage public resources. According to Kaufmann et al. (2010), institutional quality is measured using six dimensions of governance, namely voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Strong institutions promote prudent fiscal management and efficient utilization of borrowed funds, thereby improving debt repayment capacity, whereas weak institutions encourage corruption, poor policy implementation and debt accumulation. Recent studies further suggest that improvements in institutional quality enhance debt sustainability by strengthening fiscal discipline and public financial management (Lee et al., 2023; Onyele et al., 2024).

External Debt

External debt refers to the financial obligations owed by a country to foreign creditors, including multilateral institutions, foreign governments, commercial banks and other international lenders. It serves as an important source of development finance, particularly in developing countries where domestic resources are inadequate to support investment and infrastructure development. According to the World Bank (2020), external borrowing can stimulate economic development when invested in productive sectors capable of generating future income. However, excessive borrowing without efficient debt management increases debt servicing obligations and exposes countries to fiscal and macroeconomic risks. Recent evidence indicates that rising borrowing costs, exchange rate depreciation and weak governance have contributed to growing external debt vulnerabilities across Sub-Saharan Africa (UNCTAD, 2025; IMF, 2025).

Debt Sustainability

Debt sustainability refers to the ability of a country to meet its current and future debt obligations without compromising economic growth or fiscal stability. A sustainable debt position enables governments to finance development programmes while maintaining adequate fiscal space for essential public services. In contrast, unsustainable debt arises when debt servicing obligations exceed a country's repayment capacity, increasing the risk of fiscal distress and economic instability. Were (2024) observed that debt sustainability has become a major policy concern in Sub-Saharan Africa due to rising debt servicing costs, weak institutions and persistent external shocks. In this study, debt sustainability is measured by total debt service as a percentage of exports (TDS_EX) because it reflects the extent to which export earnings are sufficient to meet external debt servicing obligations and remains one of the widely used indicators of external debt repayment capacity.

THEORETICAL REVIEW

The study is anchored on the Debt Overhang Theory **and** Institutional Theory**.** The Debt Overhang Theory, propounded by Krugman (1988**)**, explains that when a country's debt burden becomes excessively high, the expectation of future debt servicing discourages investment and weakens economic performance. The theory argues that excessive external debt diverts public resources from productive investment to debt repayment, thereby undermining fiscal sustainability. This proposition continues to explain the debt sustainability challenges confronting many developing economies, particularly in Sub-Saharan Africa (Were, 2024). This theory is relevant to the present study because many Sub-Saharan African countries continue to experience rising debt servicing obligations, making debt sustainability an important policy concern.

The Institutional Theory developed by North (1990) emphasizes that effective institutions promote accountability, transparency and efficient resource allocation, thereby improving economic outcomes. In the context of debt management, strong institutions enhance fiscal discipline and ensure that borrowed funds are utilized efficiently, while weak institutions increase the likelihood of unsustainable debt accumulation. Recent studies have shown that improvements in institutional quality strengthen debt sustainability through better fiscal management and governance (Lee et al., 2023; Onyele et al., 2024). The theory therefore provides a suitable basis for examining how institutional quality influences external debt sustainability in Sub-Saharan Africa.

Empirical Review

Existing studies have extensively examined the relationship between external debt, institutional quality, and macroeconomic performance in developing economies, although evidence on debt sustainability remains relatively limited. Ayana (2023a), using panel estimation techniques for 39 Sub-Saharan African countries, found that rising external debt reduced economic growth due to increasing debt servicing obligations. Similarly, Oppong (2023) reported that higher public debt suppressed economic growth, particularly in countries with weak institutional structures, while Manasseh et al. (2022) found that governance quality mitigated the adverse effect of external debt on economic growth. In contrast, Joshua et al. (2021) established that external borrowing promoted economic growth when borrowed funds were efficiently invested in productive sectors. Collectively, these studies suggest that the impact of external debt depends largely on the quality of institutions and the efficiency of debt management.

Recent studies have increasingly focused on debt sustainability rather than economic growth. Lee et al. (2023) found that institutional quality significantly improves debt sustainability through stronger fiscal discipline and public financial management. Likewise, Onyele et al. (2024), using Panel ARDL for 48 Sub-Saharan African countries, reported that governance indicators and fiscal policy significantly enhance debt sustainability in the long run, while Bangura et al. (2025) showed that effective institutions improve external debt servicing capacity and reduce debt vulnerability. Policy and review studies by Were (2024), Anajama and Nyamudzanga (2024), UNCTAD (2025), IMF (2025), and Were (2025) further highlight rising debt servicing costs, weak governance, exchange rate volatility, and adverse external financing conditions as major drivers of debt sustainability risks in Sub-Saharan Africa.

Despite these contributions, the literature has largely focused on debt and economic growth, fiscal policy, or country-specific evidence. Studies jointly examining the effects of external debt and institutional quality on debt sustainability across a broad panel of Sub-Saharan African countries remain limited. Furthermore, most previous studies relied on debt-to-GDP ratios and other conventional debt indicators, with relatively few employing total debt service as a percentage of exports as a measure of debt sustainability. The present study addresses these gaps by examining the effect of external debt and institutional quality on debt sustainability in 26 Sub-Saharan African countries over the period 2007–2024 using the Robust Fixed Effects estimator to provide more reliable empirical evidence.

3. METHODOLOGY

3.1 Research Design and Measurement of Variables

This study examined the effect of external debt and institutional quality on debt sustainability in Sub-Saharan

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume X Issue VII July 2026

Africa using annual balanced panel data from 26 selected countries covering the period 2007–2024. The countries were selected based on data availability. Data on external debt (EXD), debt sustainability (TDS_EX), exchange rate (EXR), inflation (INF), and trade openness (TRADE) were obtained from the World Development Indicators (WDI), while institutional quality (IQ) was constructed as the arithmetic average of the six Worldwide Governance Indicators (WGI). The description, measurement, sources of variables, and sampled countries are presented in Table 1.

Table 1: Variable	**Description**	**Measurement**	**Source**
TDS_EX	Debt Sustainability	Total debt service (% of exports)	WDI
EXD	External Debt	External debt stocks (% of GNI)	WDI
IQ	Institutional Quality	Average of the six Worldwide Governance Indicators	WGI
EXR	Exchange Rate	Official exchange rate (LCU per US$)	WDI
INF	Inflation	Inflation, consumer prices (annual %)	WDI
TRADE	Trade Openness	(Exports + Imports)/GDP × 100	WDI

Source: Author's Computation (2026).

Note: Sampled countries are Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Comoros, the Republic of the Congo, Côte d'Ivoire, The Gambia, Ghana, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Niger, São Tomé and Príncipe, Senegal, Sierra Leone, South Africa, Tanzania, Togo, Uganda, and Zambia.

Model Specification

Following the theoretical and empirical literature on debt sustainability, the functional relationship for the study is specified as follows:

$$TDS\_EX = f(EXD, IQ, EXR, INF, TRADE)$$

Econometric Model

$$TDS\_EXit = \beta 0 + \beta 1 EXDit + \beta 2 IQit + \beta 3 EXRit + \beta 4 INFit + \beta 5 TRADEit + \mu i + \varepsilon it$$

Where:

- **TDS_EX** = Debt sustainability (Debt service as a percentage of exports)
- **EXD** = External debt
- **IQ** = Institutional quality index
- **EXR** = Official exchange rate
- **INF** = Inflation rate
- **TRADE** = Trade openness
- **β_0** = Constant term
- **β_1–β_5** = Parameters to be estimated
- **μi** = Unobserved country-specific effects
- **εit** = Idiosyncratic error term

- **i** = Country (1, 2, …, 26)
- **t** = Time (2007–2024)

The expected signs are based on debt sustainability theory and the empirical literature. Higher external debt and exchange rate depreciation are expected to increase debt servicing obligations, while stronger institutional quality and greater trade openness are expected to improve debt sustainability.

Estimation Techniques

The estimation techniques include descriptive statistics, correlation analysis, and Variance Inflation Factor (VIF) to examine the properties of the data, the relationships among the variables and the presence of multicollinearity. The Pesaran Cross-sectional Dependence (CD) test was conducted to assess cross-sectional dependence, while the Im, Pesaran and Shin (IPS), ADF-Fisher, and PP-Fisher panel unit root tests were employed to determine the stationarity of the variables (Im et al., 2003). The Pedroni panel cointegration test was then used to examine the existence of a long-run relationship among the variables (Pedroni, 1999). Thereafter, Pooled Ordinary Least Squares (OLS), Fixed Effect (FE), and Random Effect (RE) models were estimated, while the Hausman specification test identified the Robust Fixed Effects model as the preferred estimator (Hausman, 1978). White cross-section (period cluster) robust standard errors were further applied within the Fixed Effect model to correct for cross-sectional dependence and heteroskedasticity, thereby providing reliable estimates.

RESULTS AND DISCUSSION OF FINDINGS

Table 2: Descriptive Statistics

	TDS_EX	EXD	IQ	EXR	INF	TRADE
Mean	11.397	54.232	-0.090	511.701	6.267	69.000
Median	7.492	39.949	-0.141	101.957	4.968	60.750
Maximum	103.732	432.222	0.601	4525.425	47.643	165.049
Minimum	0.540	4.168	-0.719	0.933	-16.860	21.257
Std. Dev.	11.138	54.641	0.281	853.162	6.249	29.721
Skewness	2.567	4.157	0.643	2.629	2.019	1.055
Kurtosis	14.875	24.319	2.806	9.677	10.624	3.509
Jarque-Bera	3263.848	10211.270	33.009	1408.602	1451.453	91.908
Probability	0.000	0.000	0.000	0.000	0.000	0.000
Sum	5333.654	25380.640	-42.134	239475.900	2932.835	32292.090
Sum Sq. Dev.	57936.820	1394286.000	36.868	340000000.000	18238.340	412510.800
Observations	468	468	468	468	468	468

Source: Author's computation (2026).

Table 2 presents the descriptive statistics of the variables used in the study. Debt sustainability (TDS_EX) recorded an average value of 11.397, while external debt (EXD) averaged 54.232**.** Institutional quality (IQ) had a mean value of −0.090, indicating relatively weak institutional quality among the sampled countries. Exchange rate (EXR) exhibited the highest standard deviation, reflecting substantial variations across the countries, while inflation (INF) and trade openness (TRADE) recorded average values of 6.267 and 69.000, respectively. The skewness and kurtosis statistics indicate asymmetric distributions and the presence of extreme values among the variables. Similarly, the Jarque-Bera statistics and probability values suggest that the variables are not normally distributed. Overall, the descriptive statistics reveal considerable variations among the variables, making them suitable for further econometric analysis.

Table 3: Correlation Matrix Result

	TDS_EX	EXD	IQ	EXR	INF	TRADE
TDS_EX	1					
EXD	0.568	1				
IQ	-0.048	-0.024	1			
EXR	-0.110	-0.165	-0.299	1		
INF	0.082	0.083	-0.001	-0.086	1	
TRADE	0.006	0.357	0.349	-0.327	-0.065	1

Source: Author's computation (2026).

Table 3 presents the correlation matrix of the variables used in the study. The result shows that external debt (EXD) has a moderate positive relationship with debt sustainability (TDS_EX), while institutional quality (IQ) and exchange rate (EXR) exhibit weak negative relationships with debt sustainability. Inflation (INF) shows a weak positive relationship with debt sustainability, whereas trade openness (TRADE) has a negligible positive relationship. The correlation coefficients among the explanatory variables are generally low, suggesting the absence of serious multicollinearity problem. This result is further confirmed by the Variance Inflation Factor (VIF) test.

Table 4: Variance Inflation Factor Test Result-

Variable	**VIF**
EXD	1.20
IQ	1.23
EXR	1.19
INF	1.03
TRADE	1.42

Source: Author's Computation (2026)

Table 4 shows values of 1.20, 1.23, 1.19, 1.03, and 1.42 for EXD, IQ, EXR, INF, and TRADE, respectively. which are substantially below the conventional threshold values of 5 and 10, further confirming the absence of a multicollinearity problem in the model.

Table 5: Unit Root Test Result

Variable	**Level**	**1st Difference**	**Order**
TDS_EX	LLC = 1.637 (0.95); IPS = 2.936 (0.99); ADF = 30.167 (0.99); PP = 69.087 (0.06)	LLC = -4.443 (0.00); IPS = -9.998 (0.00); ADF = 196.316 (0.00); PP = 612.792 (0.00)	I(1)
EXD	LLC = 0.221 (0.59); IPS = 1.582 (0.94); ADF = 41.416 (0.85); PP = 42.044 (0.84)	LLC = -4.282 (0.00); IPS = -6.518 (0.00); ADF = 135.517 (0.00); PP = 527.515 (0.00)	I(1)
IQ	LLC = -1.393 (0.08); IPS = 0.425 (0.66); ADF = 49.184 (0.59); PP = 69.174 (0.06)	LLC = -8.422 (0.00); IPS = -8.521 (0.00); ADF = 169.153 (0.00); PP = 351.747 (0.00)	I(1)
EXR	LLC = 0.221 (0.59); IPS = 1.582 (0.94); ADF = 41.416 (0.85); PP = 42.044 (0.84)	LLC = -9.704 (0.00); IPS = -10.438 (0.00); ADF = 209.511 (0.00); PP = 629.255 (0.00)	I(1)
INF	LLC = -12.550 (0.00); IPS = -7.913 (0.00); ADF = 159.587 (0.00); PP =	–	I(0)

	139.213 (0.00)		
TRADE	LLC = -5.189 (0.00); IPS = -3.460 (0.00); ADF = 92.463 (0.00); PP = 70.460 (0.05)	–	I(0)

Source: Author's Computation (2026)

Table 5 shows that inflation (INF) and trade openness (TRADE) were stationary at level, that is, at order zero, I(0)**.** On the other hand, debt sustainability (TDS_EX), external debt (EXD), institutional quality (IQ), and exchange rate (EXR) became stationary after first differencing, indicating they are integrated of order one, I(1)**.** The result indicates a mixed order of integration among the variables, making the panel estimation techniques appropriate for the cointegration analysis.

Table 6: Pedroni Cointegration Test Result

Test Statistic	**Statistic**	**Probability**
Panel v-Statistic	-0.7766	0.7813
Panel rho-Statistic	3.5652	0.9998
Panel PP-Statistic	-0.688	0.2457
Panel ADF-Statistic	2.0613	0.9804
Group rho-Statistic	5.4022	1
Group PP-Statistic	-1.3424	0.0897
Group ADF-Statistic	2.5798	0.9951

Source: Author's Computation (2026)

Table 6 determines whether or not the variables maintain a stable long-run relationship over time. The result shows that none of the Pedroni within-dimension and between-dimension statistics are significant at the 5 percent level. Consequently, the null hypothesis of no cointegration cannot be rejected. This indicates that there is no stable long-run relationship among external debt, institutional quality, exchange rate, inflation, trade openness, and debt sustainability in the selected Sub-Saharan African countries during the study period.

Table 7: Comparative Regression Results and Robust Fixed Effects Estimation

Variables	**Pooled OLS**	**Fixed Effects**	**Robust Fixed Effects**
C	—	16.8074*** (0.0000)	16.8074*** (0.0000)
EXD	0.1312*** (0.0000)	0.1431*** (0.0000)	0.1431*** (0.0002)
IQ	-2.3627 (0.1584)	2.7487 (0.4700)	2.7487 (0.1327)
EXR	0.0008 (0.1234)	0.0033** (0.0196)	0.0033*** (0.0005)
INF	0.2338*** (0.0004)	0.0100 (0.8955)	0.0100 (0.8904)
TRADE	0.0166* (0.0975)	-0.2124*** (0.0000)	-0.2124*** (0.0000)
R^2	0.2765	0.5991	0.5991
Adj. R^2	0.2703	0.5716	0.5716
F-statistic	—	21.7718	21.7718
Prob(F-stat.)	—	0	0
D-W Statistic	0.7297	1.2644	1.2644

Source: Author's Computation (2026)

Note: ***, ** and * denote significance at 1%, 5% and 10% levels respectively.

Table 7 presents the comparative regression results obtained from the Pooled OLS, Fixed Effects (FE), and Robust Fixed Effects (FE) models. The results show that external debt has a positive and significant effect on debt sustainability across the three models. Institutional quality is positive but statistically insignificant in both the Fixed Effects and Robust Fixed Effects models, while it is negative and insignificant under the Pooled OLS

model. Exchange rate exerts a positive effect and becomes statistically significant after applying the robust estimator. Inflation remains statistically insignificant under the Fixed Effects and Robust Fixed Effects models, whereas trade openness has a negative and significant effect in both models. The Robust Fixed Effects model exhibits the highest explanatory power, with an R-squared value of 0.5991, and is jointly significant based on the F-statistic and probability values. The Hausman test also supports the selection of the Fixed Effects estimator, while the use of White cross-section clustered standard errors improves the reliability of the estimated results.

Table 8: Hausman Specification Test

Test Summary	Chi-Square Statistic	d.f.	Probability	Decision
Cross-section Random Effects	15.905	5	0.007	Fixed Effects Preferred

Source: Author's Computation (2026)

The Hausman test shows a Chi-square statistic of 15.905 with a probability value of 0.007 which is significant at the 5 percent level. Therefore, the null hypothesis is rejected, indicating that the Fixed Effects model is more appropriate than the Random Effects model. Consequently, the Robust Fixed Effects model with White cross-section clustered standard errors was adopted for the analysis.

DISCUSSION OF FINDINGS

The analysis reveals that external debt has a positive and significant effect on debt sustainability, indicating that rising external borrowing increases debt servicing obligations relative to exports and places greater pressure on repayment capacity. This finding supports the debt overhang theory (Krugman, 1988) and is consistent with Ayana (2023a), Oppong (2023), and Manasseh et al. (2022), who reported that excessive debt weakens economic performance and debt sustainability.

Institutional quality has a positive but statistically insignificant effect on debt sustainability, suggesting that improvements in governance alone may not sufficiently enhance debt sustainability in the sampled countries. This outcome may reflect the persistent institutional weaknesses and governance disparities across Sub-Saharan African countries, where improvements in institutional quality have not yet translated into measurable gains in debt management. It may also indicate that the benefits of stronger institutions are realised only over a longer period or when accompanied by complementary fiscal and macroeconomic reforms. This finding contrasts with Lee et al. (2023), Onyele et al. (2024), and Bangura et al. (2025), who reported that stronger institutions improve debt management and debt servicing capacity. Exchange rate also exerts a positive and significant effect, implying that currency depreciation increases the domestic cost of servicing external debt. This finding agrees with the IMF (2025) and UNCTAD (2025), which identified exchange rate volatility as a major driver of debt servicing pressures in developing economies.

Inflation has a positive but insignificant effect on debt sustainability, whereas trade openness has a negative and significant effect, indicating that greater integration into international trade strengthens export earnings and improves debt repayment capacity. Overall, the findings show that external debt and exchange rate movements heighten debt sustainability pressures, while trade openness mitigates them. The significance of these variables under the Robust Fixed Effects model confirms the robustness of the estimated relationships.

CONCLUSION

The study examined the effect of external debt and institutional quality on debt sustainability in 26 selected countries in Sub-Saharan Africa covering the period from 2007 to 2024. The panel data techniques comprised Pooled Ordinary Least Squares (OLS), Fixed Effects (FE), and Random Effects (RE) estimators, while the Robust Fixed Effects model was adopted for the estimation based on the Hausman specification test. The findings revealed that external debt and exchange rate significantly increase debt sustainability pressures in the sampled countries, suggesting that rising external borrowing and exchange rate depreciation increase debt

servicing obligations relative to export earnings. Institutional quality recorded a positive but statistically insignificant effect, indicating that improvements in governance alone were insufficient to significantly influence debt sustainability during the study period.

The study further showed that trade openness significantly improves debt sustainability, implying that increased participation in international trade enhances export earnings and strengthens countries' capacity to meet external debt obligations, while inflation remained statistically insignificant. On a final note, the study concludes that sustainable debt management in Sub-Saharan Africa depends largely on prudent external borrowing, exchange rate stability, stronger institutional frameworks, and policies that promote trade integration. Greater attention should therefore be given to improving debt management practices, strengthening institutional capacity, and expanding export opportunities to ensure long-term debt sustainability across the region.

Notwithstanding these findings, the study acknowledges that institutional quality was measured using a composite governance index, which does not capture the individual effects of the six governance dimensions. Furthermore, the analysis employed a static Robust Fixed Effects estimator and therefore did not account for possible endogeneity and dynamic relationships among the variables. Future studies may employ disaggregated governance indicators, dynamic panel estimators such as the System Generalized Method of Moments (System GMM), and additional fiscal variables to provide more comprehensive evidence on debt sustainability in Sub-Saharan Africa.

Policy Implications and Recommendations

The findings suggest that governments in Sub-Saharan Africa should adopt prudent external borrowing strategies by ensuring that borrowed funds are channelled to productive investments capable of generating sufficient economic returns and foreign exchange earnings to meet future debt servicing obligations. This will reduce excessive debt accumulation and improve debt sustainability over time. Governments should also strengthen debt management institutions through greater transparency, accountability and effective monitoring of externally financed projects to ensure efficient utilisation of borrowed resources.

Furthermore, policymakers should implement policies that promote export diversification and greater trade integration, as increased trade openness was found to improve debt sustainability by strengthening countries' capacity to meet external debt obligations. Attention should also be given to maintaining exchange rate stability through sound monetary and fiscal policies in order to reduce the domestic cost of servicing foreign currency-denominated debt.

Finally, although institutional quality was not statistically significant, governments should continue to strengthen governance systems by improving public financial management, regulatory effectiveness and accountability in debt management. Sustained institutional reforms, together with prudent borrowing practices and supportive macroeconomic policies, will contribute to achieving long-term debt sustainability and reducing debt vulnerabilities across Sub-Saharan Africa.

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