

The Economics of Corruption: Measuring the Impact on Public Sector Performance in Africa

Festus Olalekan OGUNJOBI

Olabisi Onabanjo University

Adeteji Olusegun OKUTIMIREN

adeteji.okutimiren@oouagoiwoye.edu.ng

Olabisi Onabanjo University

Oladimeji Abeeb OLANIYI

University of Ilesa

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Abstract

This study examines the effect of corruption control on public sector performance across 48 Sub-Saharan African (SSA) countries over the period 2000–2024, addressing a persistent methodological gap in the regional corruption literature. The study applies two-way fixed-effects estimation with Driscoll–Kraay standard errors and the Common Correlated Effects Mean Group (CCEMG) estimator. The results show that control of corruption exerts a positive and statistically significant effect on public sector performance across every estimator employed including the heterogeneity-robust CCEMG specification, a result that remains robust to the substitution of rule of law for control of corruption and to a restricted-sample specification incorporating a democracy indicator. By contrast, the effects of political stability, income per capita, and population size, although significant under the fixed- and random-effects specifications, do not survive the CCEMG specification. These findings suggest that anti-corruption reform constitutes a more robust and generalisable lever for improving public sector performance across SSA than income growth or political stability alone. The study concludes with recommendations centred on strengthening corruption-control institutions and regionally coordinated governance reform.

1. Introduction

Improved public sector performance stimulates sustainable growth and development in an economy, and the effectiveness of public service delivery in African countries is a prerequisite for broader socio-economic progress. However, corruption remains a significant impediment to economic development, particularly in developing regions such as Africa. It erodes public trust, hampers economic growth, and diverts resources away from essential public services, both domestically and internationally (Appiah et al., 2019).

Corruption has been used to expand political and administrative influence for direct pecuniary and non-pecuniary gain, and the incentive it creates for increasing personal income has contributed to its widespread acceptance and diffusion. Within government service delivery, corruption is prevalent across ministries, agencies, and parastatals, and is orchestrated through budget padding, inflated project costing, embezzlement, maladministration, misappropriation, and the deliberate formulation of ineffective policies for personal gain. These practices cumulatively compromise the quality of governance and public service delivery, rendering public organisations less efficient and effective even where corrupt actors perceive short-term private benefit. The economic implications of corruption are profound, leading to inefficiencies in resource allocation, increased costs of public projects, and reduced public investment occasioned by manipulation and bribery (Spyromitros & Panagiotidis, 2022).

Corruption is often intertwined with political, social, and economic structures, making it a complex phenomenon to address. Despite numerous initiatives aimed at curbing corruption, its pervasive nature continues to undermine public sector performance across the continent and has been identified as a major impediment to growth and development in Africa. The literature often treats SSA as a monolithic

entity, overlooking internal differences in institutional structure and political, environmental, and socio-economic context across countries. This homogenisation fails to capture the extent to which corruption manifests and impacts public sector performance in diverse settings. While Horvat et al. (2021) emphasised the importance of understanding the cultural traits of societies and the underlying motives for corruption, understanding the economic dimensions of corruption and its impact on public sector performance remains equally crucial for formulating effective policies to improve public service delivery.

Extant studies have largely focused on economic or political frameworks in isolation, limiting their scope and applicability (Rose-Ackerman & Palifka, 2016). Existing literature has established a relationship between corruption and public service performance, with particular emphasis on budget implementation (Collins & Ozuzu, 2017), micro, small, and medium enterprises (Ezebilo et al., 2019), and macroeconomic indicators (Kyarem & Adamu, 2018), without linking these findings directly to specific aspects of public sector operations or examining the granular institutional and macroeconomic determinants of public sector performance in Africa using methods that account for cross-country heterogeneity and interdependence.

This study addresses this gap by examining the effect of institutional quality, proxied primarily by control of corruption, on public sector performance across 48 Sub-Saharan African countries over the period 2000–2024, using a second-generation panel econometric strategy that explicitly tests for, and accommodates, cross-sectional dependence and slope heterogeneity, both confirmed features of the data that first-generation panel methods common in the extant literature do not address. In doing so, the study contributes to the current discourse on corruption and development by identifying which institutional and macroeconomic determinants of public sector performance are robust to these econometric features and which are not, offering a more evidential basis for anti-corruption policy design in the region.

The remainder of this paper is organised as follows. Section 2 reviews the conceptual, theoretical, and empirical literature on corruption and public sector performance. Section 3 presents the data, model specification, and estimation methodology. Section 4 reports and discusses the empirical findings. Section 5 concludes and sets out policy recommendations.

2. Literature Review

Conceptual Review

The relationship between corruption and public sector performance has been an ongoing subject of debate, with numerous studies conducted across both developed and developing nations (Cifuentes-Faura, 2024; Oliveira et al., 2023; Moldogaziev & Liu, 2021; Neshkova & Kalesnikaite, 2019; Beerli & Navot, 2013). The inefficiency of governance is widely believed to create opportunities for corruption (Aina-Obe, 2023; Neshkova & Kalesnikaite, 2019). Government effectiveness is crucial in cross-border operations, as effective governance, including transparent governance bodies and robust law enforcement, helps reduce the impact of corruption on a country's overall performance (Putri, 2024).

The concept of corruption is multifaceted and has been characterised in several ways, reflecting the multiple forms corrupt practices can take within society. Corruption embraces a broad spectrum of activities, ranging from fraud and embezzlement to bribery, and remains one of the most intractable social pathologies affecting developing nations. These corrupt practices have far-reaching consequences for the delivery of essential public services such as healthcare, education, infrastructure development, and poverty alleviation (Aina-Obe, 2023; Cifuentes-Faura, 2024).

In its simplest form, corruption is defined as the misapplication of public resources to private ends, undermining the efficiency, effectiveness and fairness of public service delivery. More broadly, corruption can be understood as an arrangement involving an exchange between two parties that influences the allocation of resources, either immediately or in the future, through the use or abuse of public or collective responsibility for private gain (Casadesús de Mingo & Cerrillo-i-Martínez, 2018).

Corruption is commonly categorised into grand, petty, and political forms. Grand corruption refers to the misuse of entrusted power at the highest levels of government, distorting the functioning of the central government and enabling leaders to benefit at the expense of the public good. Petty corruption is the everyday abuse of entrusted power by public officials at lower levels of government, occurring when ordinary citizens pay bribes to access services, such as education, health, security, and transportation, that should ordinarily cost less or be provided free of charge. Political corruption, as its name suggests, occurs when political decision-makers manipulate policies and institutional rules in the allocation of resources to sustain their own power or wealth at the expense of ordinary citizens (Saputra & Setiawan, 2021).

The public sector comprises specialised government institutions and agencies established by law, financed by public money, and staffed by professionals and career bureaucrats for the purpose of executing public policy. It encompasses the totality of services organised under public authority, spanning ministries, agencies, and parastatals, and, being established to deliver essential services to citizens, is fundamentally non-profit-oriented in character (Peter, 2016; Ezeani, 2006). Public sector performance, in turn, refers to the outcomes achieved by public officials in the discharge of their official duties, reflecting the efficiency and effectiveness with which a public servant produces a given quantity and quality of goods and services (Prasetya & Kato, 2011). Persistently weak public sector performance has the potential to diminish and undermine a nation's progress toward its sustainable development goals.

Corruption remains a significant impediment to public service delivery in many African countries. It undermines good governance, hampers economic development, and deprives citizens of essential services and opportunities, weakening infrastructure projects and public works programmes and leading to the construction of low-quality structures and the squandering of public resources (Bolatito & Aina-Obe, 2023; Mamokhere & Kgobe, 2023). According to Transparency International, African countries lose billions of dollars annually to corruption, depriving citizens of essential services and development opportunities; resources that could otherwise improve healthcare systems, build schools, or provide

clean water and sanitation are instead diverted into the pockets of corrupt officials, perpetuating a cycle of poverty and underdevelopment.

Theoretical Framework

This study draws on three complementary theoretical traditions to explain the hypothesised relationship between corruption, institutional quality and public sector performance: Principal-Agent Theory, Rent-Seeking Theory, and New Institutional Economics. These theories are not competing but cumulative: the Principal-Agent framework explains the micro-level incentive structure that gives rise to corrupt behaviour within public bureaucracies; Rent-Seeking Theory explains the aggregate economic distortion that results when such behaviour becomes systemic and New Institutional Economics supplies the macro-level explanation of why the same corrupt incentives produce markedly different performance outcomes across countries, depending on the strength of the institutions that constrain them. These three theories justify the empirical strategy of modelling public sector performance as a function of corruption control.

Principal-Agent Theory

Principal-Agent Theory, formalised by Jensen and Meckling (1976) and subsequently applied extensively to the study of public sector corruption (Rose-Ackerman & Palifka, 2016), models the relationship between a principal, who delegates authority and resources, and an agent, who is entrusted to act on the principal's behalf but possesses private information and discretion that the principal cannot costlessly monitor. In the public sector context, citizens, or, at a further remove, elected officials, are the principals, while civil servants and public administrators are the agents entrusted with implementing policy and allocating public resources. Corruption arises when this delegated authority is diverted for private gain, a divergence made possible by information asymmetry between principal and agent and the high cost of monitoring bureaucratic discretion (Klitgaard, 1988).

The theory's central insight for this study is that corruption is fundamentally an agency failure: it occurs where an agent's incentives are not aligned with the principal's objectives, and where monitoring and accountability mechanisms are too weak to detect or deter the resulting misappropriation. This directly motivates the study's use of control of corruption as the principal explanatory variable, since it operationalises the extent to which a state has succeeded in aligning bureaucratic incentives with public objectives.

Rent-Seeking Theory

Rent-Seeking Theory, originating with Tullock (1967) and Krueger (1974) and developed within the broader Public Choice tradition of Buchanan and Tullock (1962), explains corruption as a rational, utility-maximising response by economic and political actors to opportunities for extracting economic rents through non-productive means, such as bribery, the manipulation of public procurement, or the abuse of regulatory discretion, rather than through productive economic activity. Where public officials control

access to scarce resources, licences, contracts, or regulatory approvals, rent-seeking theory predicts that both officials and private actors have an incentive to engage in corrupt exchange to capture the resulting rents.

This theoretical lens is directly relevant to the resource-rich, regulation-intensive public sectors characteristic of much of Sub-Saharan Africa, where control over natural resource rents, public procurement, and regulatory licensing has been widely identified as a locus of corrupt rent extraction (Sakar & Hasan, 2001; Rose-Ackerman & Palifka, 2016). Rent-seeking theory further predicts that the economic costs of corruption extend beyond the direct value of the rents transferred, encompassing the broader efficiency losses that arise as resources are diverted from productive investment toward rent-seeking activity, a mechanism consistent with this study's expectation that weaker corruption control is associated with lower public sector performance, net of a country's income level and demographic structure.

New Institutional Economics

New Institutional Economics (NIE), most closely associated with North (1990), holds that institutions, understood as the formal rules (laws, regulations, property rights) and informal constraints (norms, conventions) that structure political and economic interaction, are fundamental determinants of economic and administrative performance. Institutions matter because they shape the incentives facing individual actors, reduce uncertainty, and determine the transaction costs of exchange; where institutions are weak, the costs of monitoring, contracting, and enforcement rise, and resources, including public resources, are more easily misallocated or diverted, regardless of their nominal quantity.

NIE provides the macro-level theoretical bridge between the micro-level agency failure and the observed cross-country variation in public sector performance that motivates this study. Specifically, NIE predicts that the effect of any given level of corruption control on public sector performance is not fixed, but is itself embedded within, and reinforced by, a country's broader institutional environment, including its regulatory quality, rule of law and political stability. This motivates the inclusion of political stability as a conditioning covariate and provides the theoretical rationale for the robustness check substituting rule of law for control of corruption.

Empirical Review

Cifuentes-Faura (2024) reviewed recent episodes of corruption and their relationship with the Corruption Perceptions Index in Ukraine, finding a high relationship between transparency and Corruption Perceptions Index scores during the crisis generated by the Ukrainian conflict. Similarly, in a study conducted on Vietnam, Hoa et al. (2023) found that inadequate anti-corruption measures contribute to the normalisation and acceptance of corrupt practices, which in turn negatively affects the economy. Saputra and Setiawan (2021), focusing on fiscal decentralisation and accountability across 94 districts of Indonesia between 2013 and 2015, found that fiscal decentralisation and accountability reduced corruption within the study period.

Casadesús de Mingo and Cerrillo-i-Martínez (2018) assessed how the absence of specific regulations providing for transparency by design limits the role of records management as a tool for preventing and combating corruption in the Spanish public sector, finding a need to guarantee proper, transparent records management throughout a record's lifecycle. Koh et al. (2018), studying 26 Asian countries using a static linear panel model, found that corruption significantly affects governance, while government effectiveness moderates the relationship between corruption and logistics performance. In a related study on Italy, Sargiacomo et al. (2015) critically examined whether the introduction of accounting-based anti-corruption assemblages helped curb corrupt behaviour, finding that such assemblages have the potential to foster more disciplined and ethical procurement participants. Beerli and Navot (2013) empirically assessed institutional corruption at the local level in Israel, finding that measures of local council performance, including financial soundness and representativeness, correlate strongly with perceptions of corruption. Sakar and Hasan (2001) similarly asserted that corruption is a double-edged sword that reduces both the volume and efficiency of investment, thereby impeding economic growth and inflicting substantial economic costs on an economy.

Putri (2024) examined the effect of corruption on government performance and found that corruption drives inefficiencies, imposes resource costs that hinder economic progress, lowers the quality of public services, and creates injustice. Bolatito and Aina-Obe (2023), adopting an explanatory research method, examined the factors that promulgate corruption and obstruct development, good governance, and the sound delivery of public services in Africa, finding a strong interrelation between endemic corruption and the obstruction of good governance and service delivery across most African countries.

The empirical literature reviewed above establishes a consistent qualitative relationship between corruption and public sector performance across a range of national and cross-country contexts. However, the majority of these studies, whether single-country (Casadesús de Mingo & Cerrillo-i-Martínez, 2018; Sargiacomo et al., 2015; Beerli & Navot, 2013) or cross-country (Koh et al., 2018), rely on estimation techniques that assume cross-sectional independence and homogeneous slope coefficients across units. Given the well-documented heterogeneity in institutional capacity, resource endowment and governance trajectories across Sub-Saharan African economies, and the plausibility of common regional shocks inducing cross-country dependence, these assumptions are unlikely to hold and, if violated, may bias both point estimates and inference. This study addresses this methodological gap by applying a second-generation panel econometric strategy.

3. Methodology

Following the theoretical postulation outlined in Section 2.2, the study estimates the effect of institutional quality, proxied primarily by control of corruption on public sector performance across Sub-Saharan Africa (SSA), conditioning on political stability and macroeconomic controls. The baseline panel regression model is specified as:

$$psp_{it} = \beta_o + \beta_1 cci_{it} + \beta_2 pos_{it} + \beta_3 \ln(gdppc_{it}) + \beta_4 \ln(popz_{it}) + \mu_i + \lambda_t + \epsilon_{it} \quad (i)$$

where $i = 1, \dots, N$ indexes country, $t = 1, \dots, T$ indexes year (2000–2024); psp_{it} is public sector performance (proxied by the Government Effectiveness estimate of the Worldwide Governance Indicators, WGI); cci_{it} is the Control of Corruption Index; pos_{it} is Political Stability and Absence of Violence; $\ln(gdppc_{it})$ and $\ln(popz_{it})$ are the natural logarithms of GDP per capita (constant 2015 US\$) and total population, included as macroeconomic and demographic controls; μ_i is the country-specific fixed effect; λ_t is the year-specific fixed effect (capturing common shocks such as global commodity price cycles or pandemic effects); and ϵ_{it} is the idiosyncratic error term.

Table 1

Variable description, a priori expectations and data sources

Variable	Notation	Definition	Expected Sign	Source
Public sector performance	psp	Effectiveness of government service delivery, efficiency, and governance quality		WGI
Control of Corruption Index	cci	Ranges from – 2.5 to + 2.5, with higher values indicating lower corruption	+	WGI
Political stability	pos	Measures political risk, government stability, and the likelihood of political violence	+	WGI
Rule of law	rle	Robustness proxy for institutional quality (Section 3.7)	+	WGI
Per capita income	gdppc	GDP per capita, constant 2015 US\$, reflecting average economic output per person	+	WDI
Population size	popz	Total population, reflecting market size and demographic influence	+ / –	WDI
Regime (democracy indicator)	reg	Binary democracy classification (Boix–Miller–Rosato), used in the restricted-sample robustness check	+	BMR

Source

World Bank Worldwide Governance Indicators (WGI) and World Development Indicators (WDI), as compiled in the Quality of Government Basic Dataset.

Estimation Strategy

The estimation proceeds in five stages: (i) pre-estimation diagnostics to characterise the data-generating properties of the panel; (ii) panel unit root testing to determine the order of integration of each series; (iii) baseline and robust panel estimation; (iv) a heterogeneity-robust cross-check; and (v) post-estimation diagnostics to validate the inferential adequacy of the preferred model.

Robustness Checks

Two robustness checks are conducted on the preferred specification. First, cci_{it} in Eq. (1) is replaced with rle_{it} (Rule of Law) to assess whether the corruption–performance relationship reflects institutional quality broadly rather than one specific governance dimension.

4. Results and Discussion

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics for the variables employed in the analysis, comprising an unbalanced panel of 48 Sub-Saharan African countries observed annually over the period 2000–2024.

Table 2
Descriptive statistics

Variable	N	Mean	SD	Min	Max
psp (public sector performance)	1,104	-0.7240	0.6213	-2.2426	1.1005
cci (control of corruption)	1,105	-0.6164	0.6428	-2.0647	1.2397
pos (political stability)	1,105	-0.5776	0.8593	-2.5578	1.2840
ln(gdppc)	1,154	7.1231	0.9488	5.4512	9.8772
ln(popz)	1,176	15.8380	1.5916	11.3038	19.2652
Source: Authors (2026)					

The mean values for all three governance indicators were negative across the sample period, indicating that the region’s public sector performance, corruption control and political stability estimates remained, on average, below the global mean of the underlying WGI scale throughout 2000–2024.

Correlation Analysis and Multicollinearity Diagnostics

Table 3 reports the pairwise Pearson correlation coefficients among the study variables. Variance inflation factors (VIF), reported in Table 4, ranged from 1.408 to 2.722, below the conventional threshold of 10 (Gujarati & Porter, 2010), indicating that multicollinearity does not materially bias the coefficient estimates reported.

Table 3
Pearson correlation matrix

<i>psp</i>	psp	cci	Pos	ln(gdppc)	ln(popz)
	1.000				
<i>cci</i>	0.843	1.000			
<i>pos</i>	0.689	0.723	1.000		
<i>ln (gdppc)</i>	0.552	0.420	0.503	1.000	
<i>ln (popz)</i>	-0.214	-0.381	-0.567	-0.427	1.000
Source: Authors (2026)					

Table 4
Variance inflation factors

Variable	R²	VIF
<i>cci</i>	0.521	2.089
<i>Pos</i>	0.633	2.722
<i>ln (gdppc)</i>	0.290	1.408
<i>ln (popz)</i>	0.358	1.557
Source: Authors (2026)		
Panel Diagnostic Tests		

Table 5
Slope homogeneity and cross-sectional dependence tests

Test	Statistic	p-value	Decision
Pesaran–Yamagata (2008) slope homogeneity	$\Delta = 97.14$	0.000	Reject Ho: slopes are heterogeneous
Pesaran (2004) cross-sectional dependence	CD = 9.21	0.000	Reject Ho: cross-sectional dependence present
Source: Authors (2026)			

Given the confirmed presence of cross-sectional dependence, second-generation unit root testing was employed. Table 6 reports the results of the Cross-sectionally Augmented Im-Pesaran-Shin (CIPS) test.

Table 6
CIPS panel unit root test results

Variable	CIPS (level)	Decision (level)	CIPS (Δ)	Decision (Δ)
<i>psp</i>	-2.523	I(0)***	-	-
<i>cci</i>	-1.798	Unit root	-4.31	I(1)***
<i>pos</i>	-2.796	I(0)***	-	-
<i>ln (gdppc)</i>	-1.644	Unit root	-5.22	I(1)***
<i>ln (popz)</i>	-1.418	Unit root	-1.750	Unit root (Δ)

*Critical values (intercept, no trend), Pesaran (2007): 1% = -2.35, 5% = -2.21, 10% = -2.14. *** denotes rejection of the unit root null at the 1% level.*

Source

Authors (2026)

The results indicate a mixed order of integration: *psp* and *pos* were found to be stationary in levels, I(0), whereas *cci* and *ln (gdppc)* were integrated of order one, I(1). *ln (popz)* retained a unit root even after first-differencing. Because the dependent variable, *psp*, is stationary in levels, panel cointegration testing was not pursued, as cointegration analysis presumes a common non-stationary order among the variables, including the regressand. Estimation therefore proceeded directly in levels.

Regression Results

Table 7
Panel regression results (dependent variable: *psp*)

Variable	Pooled OLS	FE (classical SE)	FE (Driscoll-Kraay SE)	Random Effects
<i>cci</i>	0.645*** (0.019)	0.364*** (0.028)	0.364*** (0.018)	0.397*** (0.026)
<i>pos</i>	0.161*** (0.016)	0.139*** (0.014)	0.139*** (0.014)	0.147*** (0.015)
<i>ln (gdppc)</i>	0.182*** (0.010)	0.135** (0.043)	0.135** (0.063)	0.299*** (0.025)
<i>ln (popz)</i>	0.109*** (0.006)	0.661*** (0.076)	0.661*** (0.124)	0.171*** (0.017)
<i>R</i> ²	0.804	0.334 (within)	-	-
<i>N</i>	1,082	1,082	1,082	1,082

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$. Driscoll-Kraay standard errors computed with a Newey-West-type truncation lag of 2.

Source

Authors (2026)

A Hausman specification test rejected the null hypothesis of no systematic difference between the fixed- and random-effects estimators indicating that the fixed-effects estimator is the consistent choice. Because the Pesaran-Yamagata test rejected the assumption of slope homogeneity, the Common Correlated Effects Mean Group (CCEMG) estimator of Pesaran (2006) was additionally applied.

Table 8
Common Correlated Effects Mean Group (CCEMG) estimates

Variable	MG Coefficient	SE	t	p-value
<i>cci</i>	0.250***	0.055	4.53	0.000
<i>pos</i>	0.023	0.030	0.76	0.451
<i>ln (gdppc)</i>	0.162	0.187	0.87	0.389
<i>ln (popz)</i>	-0.058	0.736	-0.08	0.938
Source: Authors (2026)				

Under the CCEMG specification, control of corruption remained the only statistically significant predictor of public sector performance. Political stability, income per capita, and population size, each significant under the fixed- and random-effects specifications, lost statistical significance once country-specific slope heterogeneity and cross-sectional dependence were jointly accommodated.

Robustness Checks

Table 9
Robustness check (a): Alternative institutional proxy
(rule of law in place of control of corruption)

Variable	Coefficient	DK SE	p-value
<i>rle (ruleoflaw)</i>	0.505***	0.045	0.000
<i>pos</i>	0.048***	0.012	0.000
<i>ln (gdppc)</i>	0.184***	0.067	0.006
<i>ln (popz)</i>	0.576***	0.077	0.000
Source: Authors (2026)			

Table 10
Robustness check (b): Restricted sample including
democracy indicator (2000–2020)

Variable	Coefficient	DK SE	p-value
<i>cci</i>	0.369***	0.020	0.000
<i>pos</i>	0.140***	0.018	0.000
<i>ln (gdppc)</i>	0.097	0.061	0.111
<i>ln (popz)</i>	0.790***	0.133	0.000
<i>reg (democracy)</i>	-0.025	0.023	0.288
Source: Authors (2026)			

The finding that control of corruption exerts a positive and statistically significant effect on public sector performance across all six estimators employed in this study provides robust empirical support for the theoretical proposition that corruption undermines the efficiency, effectiveness, and fairness of public service delivery. This result is consistent with Putri (2024), who found that corruption drives inefficiencies and imposes resource costs that hinder economic progress and lower the quality of public services in SSA economies and with Bolatito and Aina-Obe (2023), who identified a strong interrelation between endemic corruption and obstructed public service delivery across the African continent. The persistence of this relationship under the CCEMG estimator, which explicitly accommodates country-specific slope heterogeneity and unobserved common factors, is a particularly notable finding: whereas the effects of political stability, income, and population size proved sensitive to the modelling assumptions imposed by the fixed- and random-effects estimators, the corruption-performance relationship remained the sole statistically robust finding once these assumptions were relaxed.

The robustness of the corruption-performance relationship to the substitution of rule of law for control of corruption indicates that the underlying finding reflects institutional quality broadly rather than a single narrowly defined governance dimension. This finding resonates with Koh et al. (2018), who found that government effectiveness moderates the relationship between corruption and logistics performance across 26 Asian economies, and with Sargiacomo et al. (2015), who demonstrated that accounting-based anti-corruption mechanisms in Italian public procurement were associated with more disciplined and ethical procurement outcomes. It is similarly consistent with Beerli and Navot (2013), who found that local council financial soundness and representativeness in Israel were strongly correlated with perceptions of institutional corruption.

The non-significance of the democracy indicator in the restricted-sample robustness check may reflect the operationalisation of the variable employed here, which does not capture the more institutional and fiscal accountability mechanisms examined in district-level studies such as Saputra and Setiawan (2021), who found that fiscal decentralisation and accountability reduced corruption across 94 Indonesian districts. Future research employing a continuous measure of democratic governance may yield different conclusions.

5. Conclusion and Policy Directions

This study examined the effect of corruption control on public sector performance across 48 Sub-Saharan African countries over 2000–2024, using a second-generation panel econometric strategy motivated by the rejection of cross-sectional independence and slope homogeneity in the data. Control of corruption was found to exert a positive, statistically significant effect on public sector performance across pooled OLS, fixed effects, random effects, and, the heterogeneity-robust CCEMG estimator, the only relationship to survive all six estimation strategies employed. Political stability, income per capita, and population size were each significant under the more restrictive fixed- and random-effects specifications but did not survive the CCEMG specification, indicating that these relationships are considerably less generalisable across the heterogeneous institutional contexts of Sub-Saharan Africa. The corruption–performance relationship was further shown to be robust to substituting rule of law for control of corruption, consistent with the study's New Institutional Economics-derived prediction that institutional quality operates as a coherent, mutually reinforcing bundle rather than through any single governance dimension in isolation. Based on these findings, the study recommends anti-corruption institutional reform should be prioritised as a comparatively reliable lever for improving public sector performance across Sub-Saharan Africa and policymakers should invest in institutional quality rather than treating anti-corruption measures as a stand-alone intervention distinct from wider governance reform.

Further research could usefully disaggregate the composite government effectiveness measure into sector-specific performance indicators (health, education, infrastructure) to examine whether the corruption–performance relationship identified in this study holds uniformly across different domains of public service delivery.

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Disclosure of Interest

The authors declare no conflicting interest

Author Contribution

F.O., A.O., and O.O. prepared the manuscript text and figures.

Data Availability Statement

The datasets analyzed during the current study are publicly available from the World Development Indicators (WDI) database of the World Bank (<https://databank.worldbank.org/source/world-development-indicators>) and the Worldwide Governance Indicators (WGI) database (<https://info.worldbank.org/governance/wgi/>). All variables used in this study were obtained from these databases and are publicly accessible.

The datasets analyzed in this study are available from the corresponding author on reasonable request.

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