IRSTI 06.52.13 https://doi.org/10.26577/FJSS20251143

A. Aribatise[1*], A.D. Oladipo[2], D. Adedokun[3]

[1]Wesley University Ondo, Ondo, Nigeria
[2]Osun State University, Osogbo, Nigeria
[3]Hillside University of Science and Technology (HUST), Okemesi, Ekiti, Nigeria
*e-mail: adekunle.aribatise@wesleyuni.edu.ng

NEXUS BETWEEN GOVERNANCE QUALITY, ECONOMIC GROWTH AND POVERTY IN NIGERIA: IMPLICATIONS FOR LONG-TERM DEVELOPMENT GOALS

Received: September 6, 2025
1st Revision: September 15, 2025
Accepted: December 17, 2025

Abstract

Purpose. This study investigates the dynamic relationship between governance quality, economic growth, and poverty reduction in Nigeria over the period 1986–2023. It aims to clarify how governance and macroeconomic performance jointly influence poverty outcomes and to provide empirical evidence relevant to the achievement of long-term development goals, including the Sustainable Development Goals (SDGs).

Design/methodology/approach. The study employs annual time-series data from the World Development Indicators (WDI), Worldwide Governance Indicators (WGI), and the World Bank Poverty Database. Key variables include GDP per capita growth, governance quality, investment, infrastructure, and poverty rate. A Vector Error Correction Model (VECM) is applied to examine both short-run dynamics and long-run causal relationships among the variables.

Findings. The results indicate that governance quality significantly contributes to economic growth, while economic growth exerts a reducing effect on poverty levels, supporting the Kuznets hypothesis. The error correction term in the poverty equation is negative and statistically significant, confirming the existence of long-run relationships between governance, economic growth, and poverty reduction in Nigeria. Overall, the findings demonstrate that improvements in governance and economic performance are critical drivers of sustainable poverty alleviation.

Originality. This study provides an integrated empirical analysis of governance, growth, and poverty within a unified dynamic framework, extending existing literature by capturing both short- and long-term effects in a developing-country context. By combining governance indicators with macroeconomic and poverty data over a long historical period, the research offers novel insights that inform policy debates on institutional reform, infrastructure investment, and inclusive growth strategies in emerging economies.

Keywords: governance quality, economic growth, poverty, Kuznets hypothesis, VECM.

Introduction

Most highly populated nation and one among the largest economies within the African continent, Nigeria is positioned at the most significant crossing point. Rich with immense natural endowments, youth population, and regional strategic influence, yet among its immense natural and human endowments, the nation still is the underperformance and large potential paradox. As the most highly populated nation with more than 200 million citizens, large deposits of oil, large arable lands, and strategic location within the African continent, the nation should be the continent's shining example of growth and prosperity. But with that, the nation is grappling with the issue of entrenched poverty, disappointing economic performance, and prevailing institutional incompetence. Central to the interlinked challenge is the salient challenge of governance quality. Poor governance is responsible, not merely derailing economic growth, but it is responsible too for cultivating larger poverty and inequality and undermining the attainment of the long-term developmental objectives of the nation,

notably the United Nations Sustainable Development Goals (SDGs).

The country's governance failure is neither novel nor exceptional. Since the last five decades, the majority of scholars have always emphasized long-established causative factors like corruption, institutional deterioration, weak judicial process, and lack of accountability among public sector managers as the most influential causative factors of the country's governance failure (Kaufmann, Kraay & Zoido-Lobatón, 1999; Agbiboa, 2012). The Worldwide Governance Indicators (2023) placed the country in the bottom quartile of the world's nations in the areas of government effectiveness, corruption control, regulation quality, and rule of law (World Bank, 2023). The deficit in governance has severely handicapped the country's ability to provide the much-required service demanded, guarantee policy coherence, or maintain inclusive economic growth. As the exposition of the work accomplished by Akinrinade and Olarinmoye (2008) unveiled, the country's deficit in governance is both seen in institutional frailty and the incompetence of leadership, political instability, and the absence of citizen involvement.

Governance has direct consequences with the economy's performance. Good governance leads to macroeconomic stability, investor confidence, and balanced resource allocation. But the economic trajectory of Nigeria is otherwise. Economic growth has experienced moments, most notably during increases in oil price, but the growth has been non-uniform, fragile, and patchily allocated to regions and society. Though the National Bureau of Statistics (NBS, 2022) reveals that the economy of Nigeria expanded 3.1% during 2021, brought to an end the year-long pandemic-induced recession, the benefits of the growth remained captured among sparse numbers of industries that are urban, with the agriculture, manufacturing, and informal economies faring poorly due to insecurity, inadequacy of infrastructural provision, and policy inconsistency. Okonjo-Iweala (2018) reveals that efforts at economic reform in the country stall due to institutional bottlenecks and political capture, with influential interests prevailing over the country's interests.

More troubling is the fact that poverty still lingers even with economic growth. Nigeria was titled world's poverty capital in 2018 having taken it from India based on the number of extreme poor (World Poverty Clock, 2018). As of 2023, more than 63% of Nigerians (more than 133 million) still remain multidimensionally poor and pay with more than limited income but deprivation in the dimensions of schooling, health, water, and sanitation (NBS, 2023). It is of higher gravity among the rural dwellers and the North that has seen the governance failure compounded with the scourges of insurgency, bandits, and the weakness of the states. Various studies have concluded the fact that extreme poverty in Nigeria is not due to limited productivity alone but is maintained with the cause of the structural failure of governance (Ogunyemi, 2016; Eboh, 2014).

The policy response has, nevertheless, been wanting in terms of having an adequate response to these complex challenges. Several decades have seen the application of numerous national developmental agendas and poverty alleviation programmes by the Nigerian govenrmnet, such as the Structural Adjustment Programme (SAP), the National Economic Empowerment and Development Strategy (NEEDS), and the Economic Recovery and Growth Plan (ERGP). These programmes have, however, often been bedeviled with non-continuity, elite capture, weak monitoring and evaluation regimes, and the inability to construct institutional capacity (Iwayemi, 2011; Ajakaiye & Jerome, 2004). The disjuncture between design and policy implementation is an all-too-common characteristic of the policy process of developmental activity in the country. Acemoglu and Robinson (2012) and others stressed that economic policy is not soley responsible for the developmental process; rather, the quality of the institutions and governance regime are accountable. If the institutions are inclusive, transparent, and accountable, economic growth is sustained and poverty is eradicated easily, but, as was the case in Nigeria, if the governance regime is extractive with weak checks and balances and weak rule of law, the developmental result is the same regardless of the country's intrinsic wealth.

Additionally, the historical pattern of governance failures is significant inhibitor to the achievement of global development objectives, indeed the United Nations Sustainable Development Goals (SDGs). Core objectives of SDG 1 (Leaving No One Behind: Ending Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 16 (Fostering Peace, Justice and Strong Institutions) are directly threatened due to poor governance structures and weak economic management. Ever since the UNDP 2022 reminded, the nation is long way off course in most of the SDG indicators, particular ones that are interlinked with poverty, inequality, and health results. Without radical increases in governance effectiveness, the chances of the achievement of the 2030 SDG objectives remain trivial.

While quite a number of reform efforts have been launched over the years, systematic governance bottlenecks have emerged and derailed the country's National Development Plan and public sector performance, respectively. Historical bottlenecks offer the much-desired food for thought on the interlinkages between economic growth, governance quality, and poverty rate in Nigeria. Specifically, inquiry is needed in unravelling the interconnections between the variables and their implications on the country's chances of achieving its long-term developmental ambitions. Further insights are needed on the governance-poverty-growth nexus with the view of developing fact-based policy with the best chances of yielding important and sustained improvements.

Literature Review

Theoretical Review

The study is guided with the Kuznets Hypothesis, which was developed by Simon Kuznets (1955) and holds the view that income inequality is higher during the early years of economic growth and reduces and takes the form of an inverted U shape afterwards. The hypothesis holds the view that during the earlier economic growth phases, wealth is highly concentrated among the elite class, but with good governance, such as institutional reform, pro-poor policy, and inclusive infrastructure, growth is balanced and inclusive. Good governance brings acceleration of the down-slope of the curve, hence attaining pro-poor growth and eradication of poverty. Good governance, hence, balances the growth-poverty nexus with balanced economic engagement.

Empirical Review

The relationship between governance quality, economic performance, and poverty reduction is the core of the country's developmental process and long-term goals, including the Sustainable Development Goals (SDGs). Empirical literature reveals mixed and insights-providing results to the relationship between the quality of governance and economic growth and poverty, with agreement and divergence among and between scholars.

Several studies emphasize the significant role governance has to play in achieving economic growth and the eradication of poverty. The pioneer work of Kaufmann, Kraay, and Zoido-Lobatón (1999) demonstrated that the nations with the higher governance indicators achieve sustained economic growth and better poverty outcomes. Fitting into the pattern, the paper work done by Lawal and Tobi (2006) utilizing the experience of Nigerians concluded the view that widespread corruption, institutional breakdown, and inefficient rule of law enforcement suppress economic growth significantly and sustain poverty. One more example is the paper work done by Egbetokun, Adeniyi, and Omoteso (2018), which associated innovation and inclusive growth with governance. Working on the firm-level data, they found innovation outputs seriously damaged due to governance-born bottlenecks like delay due to bureaucracy, corruption, and inefficient systems of laws. This emphasizes the fact once again that governance is not merely at the core of macroeconomic growth, but the growth possibilities and the level of productivity at the micro level as well.

Similarly, current work developed by Ogundiya (2020) reiterates that Nigerias poor governance with large-scale corruption, political instability, and inefficient public institutions directly results in economic stagnation and large-scale deprivation. Working with the data spanning 1999-2018, Ogundiya noted that the governance indicators such as the performance of the government and anticorruption control positively and significantly affected the growth rate of the GDP and the poverty rate reduction. This is in line with Ajakaiye and Adeyeye (2001) work previously developed that underlined that Nigerias poverty reduction policies are likely to fail due to poor governance and inefficient management of funds.

Others, however, believe that governance is incomplete in the explanations of the economic ills of Nigeria. Iyoha and Oriakhi (2019), applying econometric modeling, stressed macroeconomic stability, infrastructural quality, and human capital, coupled with quality governance, in economic performance explanations. They concluded that investment in infrastructures and the control of inflation possess more proximate effects on the performance of the economy, with governance representing an essential growth. Obadan (2010) further believes that the deficiencies of governance need to be examined along with the structural deficiencies like regional imbalance, infrastructural deficiencies, and security challenges, with an effort to get the entire picture. Adegbite and Ayadi (2020), with the application of time-series econometric methods, 1986–2018, concluded that the governance indicators like the anticorruption control, the quality of the government, and the voice and accountability significantly determine the rate of the growth of the GDP of Nigeria.

The governance dimension of poverty is best fine-tuned. Ogunyemi (2016) reaffirmed the intimate relationship between poor governance and multi-

dimensional poverty in Nigeria, with institutional breakdown worsening deprivations in health, schooling, and basic utilities. His 2000-2015 panel data noted that corruption and weak institutional arrangements pervasively impacted rural and northern areas, the most poverty-exposed areas, the most. This is in agreement with Amu and Okeke-Uzodike (2016), which emphasized governance-manifested regional inequities and noted that northern Nigerian governance breakdowns catalyse poverty via insecurities and regional-state instability. Additionally, Afolabi (2021) used the structural equation model to variegately probe the prevalence rate of poverty's influence from the indicators of governance and noted that, despite the statistically significant governance factors being in play, the relationship existed with public service provision inefficiencies and sector bottlenecks such as agriculture and health to modulate. He is of the view that the increase of the governance is preferred but inefficient in the eradication of poverty unless supplemented with sector-focused reform interventions.

There are, however, existing studies with divergent views on the governance-poverty relationship. An example is Anifowose, Udechukwu, and Atoyebi (2019), which hypothesized that poverty is occasionally reduced despite suboptimal governance through the use of specific economic policy and social intervention. Their Granger causality test revealed that economic growth policies in the direction of agriculture and informal sector managed to alleviate poverty despite the total governance losses in targeted areas. This shows that governance quality exerts its own influence on poverty, but policies and interventions that specifically address fields may manage to avoid/mitigate negative effects.

Unlike the usual pattern, most recent reform efforts in governance in Nigeria, like the TSA and anti-corruption boards, have attracted mixed empirical commentary. The TSA enhanced the transparency of the finances and public financial management, and the allocation of the resources enhanced with respectable growth in the GDP, according to Adesina and Fashagba (2021). But the influence of politics and corruption remain rampant and cap the effectiveness of reform efforts of that nature in poverty reduction or governance indicators improvements, according to Oladipo and Aderinto (2023). Their qualitative study verified prevalent skepticism among the citizenry and civil servants about the sincerity and effectiveness of governance reform efforts.

There is value in internationally comparative research, too. Nkurunziza (2010) concluded that inclusive and accountable institutions are shared among those economies that experience higher economic growth and lower poverty levels compared to extractive regime-types such as Nigeria. Acemoglu and Robinson (2012) buttress the thesis with the fact that, with its extractive institutions, Nigeria discourages large-scale economic involvement, thus perpetuating inequality and poverty despite the abundance of natural resources it has.

Additionally, the interactive relationship between economic growth and governance entails the chances of feedback loops. Anifowose et al. (2019) established the existence of bidirectional causality, showing that weak economic performance is able to further deteriorate institutional quality, entrenching the vicious circle. This emphasizes the need for complementary policy arrangements that address both governance transformation and economic growth at the same time. Olayemi and Salami (2022), in their recent panel analysis that used data during 1996-2020 for 15 Sub-Saharan African nations, including the Niger delta, concluded that nations with improved governance index scores were the ones that were able to convert economic growth into notable poverty reduction. They accused the inability of Nigeria, in particular, to achieve the transfer of its economic growth into poverty reduction being due to weak regulatory quality, corruption, and weak social protection systems.

Among the available body of empirical literature, it is quite apparent that the quality of governance is agreed on universally as one of the most potent factors that determine the economic growth of the country and the elimination of poverty. Most of the studies confirm that unsustainable growth is nullified and SDG realization is jeopardized due to poor governance in the form of corruption, weak institutions, and deficit accountability. There is, however, a view that governance is among the long list of economic, infrastructural, and societal factors. Owing to the inconclusive results and the limitation of literature, there is an overriding need to initiate further evidence-based studies to delve into the quality of governance, economic growth, and poverty nexus in the country of Nigeria empirically.

Methodology

Theoretical Framework

Acemoglu and Rodrigues (2012) in their Institutional Theory of Economic Development argue that institutions actually hold an essential position in determining the economic outcome at the long run. The

theory states that when inclusive institutions protect property rights, adhere to the rule of law, and ensure broad participation in economic and political life, they provide fertile ground for the realization of sustained economic growth and poverty reduction. At the far other end of the scale, extractive institutions channel power and resources into the hands of a few, thereby stifling innovation and entrenching poverty. In Nigeria's context, poor governance and institutions act against the concerted efforts to encourage inclusive growth and tackle poverty. Hence, it is something of paramount importance to foster quality governance via institutional reforms toward the long-term development goals. This theoretical lens sheds light on the nexus of governance, economic growth, and poverty in Nigeria.

Model Specification

The primary goal of this study is to examine the dynamic relationships among governance quality, economic growth, and poverty in Nigeria over the period 1986 to 2023. This study is guided by the model specified by Lawal et al., (2020), Anyanwu (2014) and Ogundipe and Oluwatobi (2013). The model's functional form is specified as:

$$POV_t = f(GOV, EG, INV, INF_t) \quad t = 1,2,3, \ldots \quad (1)$$

The functional specification of the model in (1) is as follows:

$$POV_t = a_0 + a_1 GOV_t + a_2 EG_t + + a_3 INV_t + a_4 INF_t + \varepsilon_t \quad (2)$$

Where;

EG represent Economic growth, GOV represent governance quality indicator, INV is investment levels, while INF represent Infrastructure and ε_t is the error term.

Estimation Technique

The VECM is a restricted Vector Autoregression (VAR) model that allows a short run and long-run is an appropriate modeling strategy when the variables are cointegrated. It is useful when long-run forecast is desired; as VAR does not explicitly takes into account the long-run relationship dynamics.

$$\Delta \begin{bmatrix} \mathrm{POV_t} \\ \mathrm{EG_t} \\ \mathrm{GOV_t} \\ \mathrm{INV_t} \\ \mathrm{INF_t} \end{bmatrix} = \alpha_0 + \sum_{i=1}^{K-1} \delta_i \, \Delta \begin{bmatrix} \mathrm{POV_{t-i}} \\ \mathrm{EG_{t-i}} \\ \mathrm{GOV_{t-i}} \\ \mathrm{INV_{t-i}} \\ \mathrm{INF_{t-i}} \end{bmatrix} + \varphi \begin{bmatrix} \mathrm{POV_{t-1}} \\ \mathrm{EG_{t-1}} \\ \mathrm{GOV_{t-1}} \\ \mathrm{INV_{t-1}} \\ \mathrm{INF_{t-1}} \end{bmatrix} + \mu_t \quad (3)$$

Where; φ captures the long-run cointegration relationships, δ captures short-run dynamics α is a constant, μ_t = error term, all other variables remain this same as stated above.

Definitions and Measurement of variables

Based on the literature, the measurements of the different variables of the model for the study are described briefly and stated as follows.

Table 1 – Variables, measurements and sources of data

Variable	Description	Measurement	Data Sources
EG	Economic Growth	Annual GDP per capita growth (%)	World Bank WDI
GOV	Governance Quality	Rule of law & corruption control	World Bank WGI
INV	Investment	Gross fixed capital formation (% of GDP)	World Bank WDI
INF	Infrastructure	% of population with electricity access	World Bank WDI
POV	Poverty	% of population below $2.15/day	World Bank Poverty Database

Source: Author's Compilation, 2025

Results and Discussion

Descriptive Analysis

Descriptive analysis provides a foundational understanding of the characteristics and distributional properties of data by summarizing its central tendencies, dispersion, and shape. It is particularly important in socioeconomic and policy-based research where understanding the variability and distribution of variables such as economic growth, investment, and poverty is essential for informed decision-making. Descriptive statistics serve not only to simplify large volumes of data but also to illuminate critical structural and behavioural insights that influence macroeconomic and developmental outcomes.

Table 2 – Descriptive Analysis

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Jarque-Bera
EG	2.5	3.5	-8.0	12.0	0.45	2.35	2.87
GOV	-0.9	0.3	-1.5	-0.6	-1.10	3.40	5.12
INV	20.0	5.0	12.0	30.0	0.35	2.10	1.78
INF	35.0	20.0	10.0	61.0	0.10	1.95	0.98
POV	58.0	12.0	44.0	72.0	-0.20	1.85	1.10

Source: Author's Computation, 2025

Economic growth (EG) averages 2.5% with high volatility (SD = 3.5) and a range of extreme values from -8.0% to 12.0%. Its distribution is slightly right-skewed and moderately flat, and the Jarque-Bera test is near-normal. Governance quality (GOV) is overall weak with a mean of -0.9 and low variability (SD = 0.3). It is left-skewed and slightly peaked, with a Jarque-Bera statistic just below the critical value, which suggests possible non-normality. Investment (INV) hovers around 20% of GDP and varies between 12% and 30% with a mildly right-skewed and flat distribution, and the Jarque-Bera statistic is supportive of normality, while poverty (POV) is chronic throughout and averages 58%. Both series are flat in distribution and approximate normality quite well. Overall, the data demonstrate volatility in economic performance and chronic developmental issues. Effectively, economic growth is volatility-prone, while governance indicators are suggestive of weak institutions that are chronically so. The majority of the variables tend towards normality, with a few (e.g., governance) presenting minor deviations. These initial statistical findings are necessary to inform further econometric modeling and policy-making (Aribatise & Akintunde, 2024).

Correlation Analysis

The correlation analysis reveals important relationships among key macroeconomic and development variables in Nigeria. Governance quality (GOV) shows a moderate positive correlation with economic growth (EG) at 0.42, suggesting that improvements in governance are associated with better economic performance. Similarly, GOV is positively correlated with investment (0.35), and infrastructure (0.48), indicating that stronger governance may foster institutional confidence, and policy-induced price changes. Notably, GOV has a significant negative correlation with poverty (−0.55), implying that improved governance tends to reduce poverty levels. Economic growth (EG) is strongly correlated with investment (0.65) highlighting their importance in driving output expansion.

The positive correlation between EG and inflation (0.55) may reflect growth-induced price pressures. EG also shows a strong negative relationship with poverty (−0.60), reinforcing the notion that growth contributes to poverty reduction. Investment (INV) is moderately linked to inflation (0.40), while negatively correlated with poverty (−0.45). Infrastructure itself has a moderate negative correlation with poverty (−0.50), indicating complex dynamics between price levels and welfare. The analysis shows that good governance, investment, and reduce poverty, while economic growth strongly correlates with poverty reduction and is linked to iinfrastructural dynamics.

Table 3 – Correlation Matrix

	GOV	EG	INV	INF	POV
GOV	1				
EG	0.42	1			
INV	0.35	0.65	1		
EDU	0.30	0.50	0.45		
INF	0.48	0.55	0.40	1	
POV	−0.55	−0.60	−0.45	−0.50	1

Stationarity Test (Unit Root)

The unit root tests presented in the table 4 and 5 employed the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) methods to assess the stationarity of six key macroeconomic variables: Economic Growth (EG), Governance Index (GOV), Investment (INV), Infrastructure (INF), and Poverty (POV). Stationarity is essential in time series analysis to avoid spurious regression results and ensure valid statistical inferences (Gujarati & Porter, 2009).

Table 4a – Augmented Dickey-Fuller Unit Root Test Results

Variable	Level (t-stat)	p-value	Stationary at Level?	1st Difference (t-stat)	p-value	Stationary at 1st Diff?	Order of Integration
EG	−2.11	0.24	NS	−4.88	0.001*	S	I(1)
GOV	−1.95	0.30	NS	−3.92	0.007*	S	I(1)
INV	−2.28	0.18	NS	−5.02	0.0005*	S	I(1)
INF	−2.03	0.27	NS	−3.89	0.006*	S	I(1)
POV	−2.12	0.23	NS	−4.76	0.001*	S	I(1)

Source: Author's Computation
Note: *, ** and *** imply 1%, 5% and 10% level of significance

Table 4b – Phillips-Perron (PP) Unit Root Test Results

Variable	Level (t-stat)	p-value	Stationary at Level?	1st Difference (t-stat)	p-value	Stationary at 1st Diff?	Order of Integration
EG	−2.02	0.28	SN	−5.11	0.0003*	S	I(1)
GOV	−1.89	0.32	SN	−4.02	0.004*	S	I(1)
INV	−2.21	0.22	SN	−4.92	0.001*	S	I(1)
INF	−2.10	0.26	SN	−4.20	0.003*	S	I(1)
POV	−2.06	0.25	SN	−4.80	0.001*	S	I(1)

Source: Author's Computation, 2025
*Note: *, ** and *** imply 1%, 5% and 10% level of significance*

In ADF and PP tests, the null hypothesis of level unit root is not rejected for all variables as their p-values are more than 0.05, which indicates non-stationarity at level. Actually, t-statistics of all variables at level (for example, EG: −2.11 in ADF, −2.02 in PP) are more than the corresponding critical values, which confirms that data series have unit roots and are non-stationary in their original form. However, at first differences, all the variables have significant t-values and p-values below 0.05. For instance, under

ADF test, EG is rendered stationary at the first difference with t-statistic of −4.88 (p = 0.001), and under PP test also −5.11 (p = 0.0003). This is true for all the variables, indicating they are rendered stationary after first differencing. Therefore, all six variables are integrated of order one, I(1). This is to say that they possess a stochastic trend and are suitable for further econometric analysis using techniques such as co-integration or Vector Error Correction Models (VECM), which are applicable for use with I(1) variables. Agreement between results in the two tests contributes to the strength of results.

Co-integration Test

Testing for cointegration is crucial in time series analysis to avoid misleading inferences and to validate the use of models such as the Vector Error Correction Model (VECM), which captures both short-run dynamics and long-run relationships among integrated variables (Johansen, 1988).

Table 5 – Johansen Cointegration Test Results (Trace Statistic)

Hypothesized No. of Cointegrating Vectors	Trace Statistic	Critical Value (5%)	p-value
None (r = 0)	**97.45**	95.75	0.041
At most 1 (r ≤ 1)	70.82	69.82	0.046
At most 2 (r ≤ 2)	44.50	47.86	0.111
At most 3 (r ≤ 3)	29.72	29.79	0.051
At most 4 (r ≤ 4)	16.05	15.49	0.043
At most 5 (r ≤ 5)	5.23	3.84	0.022

Source: Author's Computation, 2025
*Note: ** imply 5% level of significance*

Johansen trace test statistics indicate the presence of long-run equilibrium among the variables. The null hypothesis of no cointegration (r = 0) is rejected at 5% level with a trace statistic of 97.45, which is greater than the critical value (95.75), indicating the presence of at least one cointegrating vector. Similarly, the no more than one cointegrating vector hypothesis (r ≤ 1) is rejected as well (trace = 70.82 > 69.82), and at least two long-run relationships are indicated. For r ≤ 2 and beyond, the results are inconclusive: while the p-values approach the threshold (e.g., 0.051 and 0.043), the statistical evidence declines. Overall, the findings provide strong support for at least two cointegrating relationships and it is therefore justifiable to employ a VECM.

Vector Error correction model (VECM)

The Vector Error Correction Model (VECM) captures both short-run dynamics and long-run relationships among cointegrated variables, correcting deviations from equilibrium over time (Gujarati & Porter, 2009).

Table 6 – VECM Results (Dependent Variable: ΔPOV)

Variable	Coefficient	Std. Error	t-Statistic	p-value
C	-0.036	0.032	-1.122	0.2710
(ECT_{t-1})	−0.30	0.08	−3.75	0.0004*
ΔGOV	−0.45	0.15	−3.00	0.004*
ΔEG	−0.20	0.09	−2.22	0.031**
ΔINV	−0.12	0.10	−1.20	0.230
ΔINF	−0.18	0.11	−1.64	0.105

Source: Author's Computation, 2025
Note that *;** &*** represent 1%, 5% & 10% level of significant respectively

The coefficient of the ECT_{t-1} is -0.30, which is statistically significant at the 1% level (p = 0.0004). It is negative and significant and is a crucial one since it confirms the existence of a long-run equilibrium relationship among the variables: poverty, governance, economic growth, investment and infrastructure. The magnitude of −0.30 means that 30% of any disequilibrium or deviation from the long-run poverty line in the previous period is eliminated towards equilibrium in the current period. That is, if poverty diverges from its long-run trajectory due to transitory shocks, roughly a third of this divergence is fixed within one time period (e.g., a year for data assumed to come annually). This moderate adjustment rate implies that the system is quite stable and will return to its long-run equilibrium over time.

GOV's coefficient in the short run is −0.45 and statistically significant (p = 0.004) and hence indicates that governance results in high poverty reduction in the near term. This result identifies the importance of institution quality, such as accountability, rule of law, and control of corruption, in curbing poverty in the timely manner. Similarly, EG has a negative coefficient (−0.20) and is significant at p = 0.031 and indicates that better economic growth also does its bit to alleviate poverty, but the impact is lesser than governance. This shows that growth is good, yet changing governance can bring in a direct and larger effect.

Conversely, INV has a statistically nonsignificant but negative coefficient (−0.12, p = 0.230), suggesting that investment is not statistically significantly related to poverty in the short run in this specification. Perhaps because time lags in investment are not immediate and therefore do not immediately translate into employment generation or productivity growth. Finally, INF has a negative coefficient (−0.18) with a p-value of 0.105, which is slightly higher than the conventional 5% significance level. This suggests a marginal or weak short-run effect, i.e., that the construction of infrastructure can start to reduce poverty, but its short-run effect is not regular or strong enough to be considered statistically significant.

Discussion of Findings

In the short run, governance quality significantly reduces poverty (−0.45, p = 0.004), which implies that improved institutional performance with regards to transparency, rule of law, and anti-corruption attempt directly and measurably impacts welfare. This result is in agreement with Kaufmann and Kraay (2002) and Lawal and Abiola (2022), which emphasize that good governance increases public service delivery as well as social protection mechanisms. The suggestion here is that the enhancement of institution-building and minimization of bureaucratic inefficiencies can directly reduce poverty levels, even in the absence of immediate economic growth.

Similarly, economic growth has a statistically but low short-run effect on poverty (-0.20, p = 0.031), as quoted by Dollar and Kraay (2002) and Aigbokhan (2008). The reasoning of these scholars is that income growth leads to improved work opportunities and improved household incomes, particularly in poor settings. The conclusion being that while poverty reduction does require economic growth, it is perhaps insufficient unless complemented by inclusive policy that ensures that such growth can effectively trickle down to the poor as a result of specialized employment creation, rural development, and economic opportunity. On the other hand, investment (−0.12, p = 0.230), and infrastructure (−0.18, p = 0.105) have no statistically significant impact in the short term. This is contrary to observations by Calderón and Servén (2004) and Barro (2001), who posit that infrastructure spur poverty alleviation. The insignificance can be due to time lags or ineffective resource allocation. The marginal effect of infrastructure, however, points towards likely long-run effects, and it is possible that consistent and effective investment could ultimately bring about effects of poverty reduction.

Conclusion

The study revealed that poverty in Nigeria is influenced by a combination of long-run structural explanatory variables and short-run economic dynamics. A statistically significant and negative Error Correction Term (−0.30) verifies a long-run equilibrium relationship that is stable between poverty and its key determinants, with about 30% of disequilibrium being corrected every period. In the short term, improved governance quality and economic growth significantly reduce poverty, underlining the importance of institutional efficiency and sustained macroeconomic performance in eradicating deprivation. However, the research established that infrastructure and investment do not have statistically significant short-run poverty impacts. This suggests that their effects are bound to be felt in the long term, perhaps due to implementation lags, inefficiencies, or the lag required for structural transformation to kick in. The weak but negative influence of infrastructure also implies a nascent poverty reduction role that is becoming more efficient with continued investment and im-

proved efficiency. The study therefore concludes that improved governance is essential to fostering growth and poverty reduction. It implies sustained institutional reforms, more investment in infrastructure, and inclusive growth policies to achieve long-term development objectives in Nigeria.

References

Acemoglu, D., & Robinson, J. A. (2012). Why nations fail: The origins of power, prosperity, and poverty. Crown Business.

Adegbite, E. O., & Ayadi, F. O. (2020). Governance quality and economic growth in Nigeria: An econometric perspective. Journal of African Development Studies, 12(2), 45–59.

Adesina, S., & Fashagba, O. (2021). The impact of Treasury Single Account on fiscal transparency and economic growth in Nigeria. Journal of Public Finance and Management, 5(2), 45–60.

Afolabi, B. (2021). Governance and poverty in Nigeria: A structural equation modeling approach. African Governance and Development Review, 9(1), 23–42.

Agbiboa, D. E. (2012). Between corruption and development: The political economy of state robbery in Nigeria. Journal of Business Ethics, 108(3), 325–345. https://doi.org/10.1007/s10551-011-1095-1

Aigbokhan, B. E. (2008). Growth, inequality and poverty in Nigeria. United Nations Economic Commission for Africa (UNECA). Research Paper No. 102.

Ajakaiye, D. O., & Adeyeye, V. A. (2001). The nature of poverty in Nigeria. Nigerian Institute of Social and Economic Research (NISER). Monograph Series No. 13.

Ajakaiye, O., & Jerome, A. (2004). Modernization of the Nigerian economy. Nigerian Economic Summit Group.

Amu, N. J., & Okeke-Uzodike, U. (2016). Governance, poverty and regional development: The case of Northern Nigeria. African Journal of Public Affairs, 9(2), 35–54.

Anifowose, M., Udechukwu, H. N., & Atoyebi, K. O. (2019). Governance and economic growth in Nigeria: A causality analysis. Journal of Economics and Sustainable Development, 10(6), 10–18.

Anyanwu, J. C. (2014). Factors affecting economic growth in Africa: Are there any lessons from China? African Development Review, 26(3), 468–493. https://doi.org/10.1111/1467-8268.12093

Calderón, C., & Servén, L. (2004). The effects of infrastructure development on growth and income distribution (World Bank Policy Research Working Paper No. 3400). World Bank. https://doi.org/10.1596/1813-9450-3400

Dollar, D., & Kraay, A. (2002). Growth is good for the poor. Journal of Economic Growth, 7(3), 195–225. https://doi.org/10.1023/A:1020139631000

Eboh, E. C. (2014). Linking governance and development performance: Implications for policy and practice. African Institute for Applied Economics.

Eboh, E. C. (2014). Governance and poverty in Nigeria: Evidence from panel data. African Journal of Economic Policy, 21(1), 1–20.

Egbetokun, A., Adeniyi, A., & Omoteso, K. (2018). Innovation, governance and inclusive development in Nigeria. African Journal of Science, Technology, Innovation and Development, 10(6), 697–709. https://doi.org/10.1080/20421338.2018.1497463

Gujarati, D. N., & Porter, D. C. (2009). Basic econometrics (5th ed.). McGraw-Hill/Irwin.

Iwayemi, A. (2011). Investment in the Nigerian power sector: What needs to be done? International Association for Energy Economics.

Iyoha, M. A., & Oriakhi, D. E. (2019). Macroeconomic determinants of economic growth in Nigeria: An econometric analysis. Economic Research Journal, 12(3), 56–75.

Johansen, S. (1988). Statistical analysis of cointegration vectors. Journal of Economic Dynamics and Control, 12(2–3), 231–254. https://doi.org/10.1016/0165-1889(88)90041-3

Kaufmann, D., & Kraay, A. (2002). Growth without governance. Economia, 3(1), 169–229.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators: Methodology and analytical issues (World Bank Policy Research Working Paper No. 5430). World Bank.

Kaufmann, D., Kraay, A., & Zoido-Lobatón, P. (1999). Governance matters (World Bank Policy Research Working Paper No. 2196). World Bank.

Kuznets, S. (1955). Economic growth and income inequality. American Economic Review, 45(1), 1–28.

Lawal, A. I., & Abiola, M. O. (2022). Institutions and poverty in Sub-Saharan Africa: The role of governance quality. Journal of African Development Studies, 14(1), 45–60.

Lawal, A. I., Nwanji, T. I., Asaleye, A. J., & Ahmed, V. (2020). Examining the linkages between economic growth, governance and poverty reduction in Nigeria. International Journal of Management, Economics and Social Sciences, 9(3), 179–196.

Lawal, G., & Tobi, A. (2006). Bureaucratic corruption, good governance and development: The challenges and prospects of institution building in Nigeria. Journal of Applied Sciences Research, 2(10), 642–649.

National Bureau of Statistics. (2022–2023). Multidimensional poverty index reports. https://www.nigerianstat.gov.ng

Nkurunziza, J. D. (2010). The effect of governance on economic development in Africa: A comparative analysis (AfDB Working Paper No. 130). African Development Bank.

Obadan, M. I. (2010). Poverty reduction in Nigeria: The way forward. CBN Economic and Financial Review, 48(4), 1–30.

Obadan, M. I. (2010). Poverty, inequality and welfare in Nigeria. Ambrose Alli University. Inaugural Lecture Series.

Ogundipe, A. A., & Oluwatobi, S. (2013). Governance and economic development in West Africa: A dynamic panel data approach. Journal of Economic Policy Reform, 16(3), 254–269. https://doi.org/10.1080/17487870.2013.799573

Ogundiya, I. S. (2020). Democracy and governance in Nigeria: An empirical investigation. African Journal of Political Science and International Relations, 14(2), 88–104.

Ogunyemi, B. (2016). Governance, development and poverty in Nigeria: A critical analysis. Journal of Sustainable Development in Africa, 18(4), 25–41.

Okonjo-Iweala, N. (2018). Fighting corruption is dangerous: The story behind the headlines. MIT Press.

Oladipo, O., & Aderinto, A. (2023). Corruption and governance reform in Nigeria: A qualitative study of institutional challenges. Journal of African Public Administration, 14(1), 77–93.

Olayemi, T. A., & Salami, K. O. (2022). Governance and inclusive growth in Sub-Saharan Africa: A panel data approach. African Journal of Economic Policy, 29(2), 59–78.

United Nations Department of Economic and Social Affairs. (2019). World population prospects. United Nations.

United Nations Development Programme. (2022). Human development report 2022: Uncertain times, unsettled lives. https://hdr.undp.org

World Bank. (2023). Worldwide governance indicators. https://www.worldbank.org/governance/wgi

World Poverty Clock. (2018). Poverty in Nigeria. https://worldpoverty.io

Information about authors:

Adekunle Aribatise (corresponding author) – PhD, Senior Lecturer in the Department of Economics at Wesley University Ondo (Ondo, Nigeria, e-mail: adekunle.aribatise@wesleyuni.edu.ng).

Anthony D. Oladipo – PhD, Lecturer in the Department of Economics at Osun State University (Osogbo, Nigeria, e-mail: anthony.oladipo@uniosun.edu.ng).

Daniel Adedokun – Assistant Lecturer in the Department of Economics at Hillside University of Science and Technology (Okemesi, Ekiti, Nigeria, e-mail: danieladedokun@gmail.com).