

INSTITUTIONAL QUALITY AND ECONOMIC PERFORMANCE IN NIGERIA

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Abstract

Successive governments in Nigeria have implemented various reforms aimed at improving institutional quality, particularly in the areas of governance, accountability, and regulatory effectiveness. Despite these efforts, the expected improvements in economic performance have not been achieved, indicating a complex and possibly non-linear relationship between institutional quality and macroeconomic outcomes. This study therefore investigated the effect of institutional quality on economic performance in Nigeria, addressing a gap in the existing literature which has predominantly focused on economic growth rather than broader indicators of economic performance. The study adopted an ex post facto research design and utilised annual time series data covering the period from 1987 to 2025. Data on economic performance, institutional quality, inflation rate, interest rate, and gross fixed capital formation were sourced from the Central Bank of Nigeria Statistical Bulletin and the World Governance Indicators dataset. The Autoregressive Distributed Lag (ARDL) technique was employed to examine both the short-run and long-run relationships among the variables, while statistical inferences were made at the 5 per cent level of significance. The empirical findings revealed that institutional quality has a negative and statistically insignificant effect on economic performance in both the short run and the long run. The study concluded that institutional quality alone is insufficient to drive economic performance in Nigeria. Consequently, the study recommended that policymakers adopt a more comprehensive macroeconomic framework that incorporates critical variables such as inflation rate, interest rate, exchange rate dynamics, unemployment, money supply, and balance of payments conditions in order to achieve sustainable improvements in economic performance.

Keywords: Economic performance, institutional quality, inflation rate, interest rate, gross fixed capital formation.

Introduction

Sustained economic growth that enhances overall economic performance remains a central objective for most countries. However, this goal is often difficult to attain in many emerging economies due to weak institutional frameworks. In countries such as Nigeria, poor economic performance has frequently been linked to deficiencies in institutional structures, which continue to constrain growth prospects (David & Arif, 2011). Consequently, the quest to improve economic performance has drawn increasing attention to the role of institutional quality.

Institutions are broadly defined as the “rules of the game” that structure human interaction. Douglass North conceptualised institutions as the constraints that individuals impose on themselves, shaping social, political, and economic behaviour by defining what actions are permitted, restricted, or required. These constraints consist of both formal rules such as laws,

regulations, and constitutions and informal norms, traditions, and conventions, which together provide the foundation for economic and social organisation.

Despite the growing recognition of their importance, empirical evidence on the specific mechanisms through which institutions enhance economic performance remains relatively limited. Institutions are widely regarded as indicators of governance quality and serve as the framework within which economic activities occur. Institutional theories emphasise that the effectiveness of governance related institutions significantly influences economic growth and performance (Alesina & Perotti, 1996). Empirical studies have further demonstrated that institutional quality plays a critical role in shaping a country's economic outcomes (Nguyene & Luong, 2021). For example, strong institutional frameworks have contributed significantly to sustained economic growth in several Asian economies. In contrast, many African countries, including Nigeria, continue to experience high unemployment, rising inflation, infrastructural deficits, and persistent poverty despite abundant human and natural resources.

Recent economic realities in Nigeria further underscore the importance of institutional quality. According to the National Bureau of Statistics and the World Bank, Nigeria's inflation rate rose significantly between 2023 and 2025, accompanied by increased food insecurity, exchange rate instability, and declining purchasing power among households. The removal of fuel subsidies and exchange rate liberalisation policies introduced additional economic pressures, exposing structural weaknesses in public institutions and policy implementation mechanisms. Similarly, unemployment and underemployment among youths have remained major concerns, contributing to increased social unrest, insecurity, and migration pressures.

In response, governments in developing countries have increasingly prioritised institutional reforms aimed at replicating the developmental successes observed in advanced economies (Rodrik, 2008). Nevertheless, evidence on the effectiveness of such institutional improvement initiatives in developing economies remains inconclusive (Andrews, 2013). In environments characterised by weak institutions, achieving rapid and sustained economic growth is particularly challenging, as institutions form a critical component of a country's productive capacity (Abubakar, 2020). Recent global economic shocks, including the aftermath of the COVID-19 pandemic, the Russia-Ukraine conflict, global inflationary pressures, and disruptions in international supply chains, have further demonstrated the importance of resilient institutions in sustaining economic performance.

In the contemporary global economy, institutional indicators such as political stability, voice and accountability, government effectiveness, regulatory quality, control of corruption, and adherence to the rule of law are widely recognised as key drivers of economic performance. However, these indicators have shown persistent decline in Nigeria over time, reflecting a gradual deterioration in institutional quality (World Bank, 2021). Nigeria continues to rank relatively low on global governance and corruption perception indices, while issues such as electoral irregularities, policy inconsistency, insecurity, weak judicial enforcement, and bureaucratic inefficiency remain major institutional challenges. These conditions have negatively affected investors' confidence, reduced foreign direct investment inflows, and constrained private sector productivity.

In an effort to strengthen institutional quality, successive Nigerian governments have established several oversight and accountability institutions. These include the Public Complaints Commission, the Code of Conduct Bureau, and the Corrupt Practices Investigation Bureau. Additional agencies such as the Independent Corrupt Practices Commission (ICPC) in 2000, the Economic and Financial Crimes Commission (EFCC) in 2003, the Nigerian Financial Intelligence Unit (NFIU) in 2004, and the Fiscal Responsibility Commission (FRC) in 2007 were created to promote transparency, accountability, and prudent management of public resources in both the public and private sectors. More recently, the Nigerian government has intensified efforts towards digital governance, public financial reforms, tax administration improvements, and anti-

corruption campaigns aimed at strengthening institutional effectiveness and improving service delivery.

Despite these institutional reforms, Nigeria's institutional quality and economic performance have continued to exhibit signs of deterioration, raising questions about the effectiveness of these interventions (Andrews, 2013). Persistent insecurity arising from terrorism, banditry, kidnapping, and communal conflicts has also weakened economic activities across several regions of the country. Furthermore, rising public debt, fiscal imbalances, and dependence on crude oil revenue continue to expose the fragility of Nigeria's economic structure and institutional capacity. Against this backdrop, this study seeks to critically examine the effect of institutional quality on economic performance in Nigeria. By providing empirical evidence on this relationship, the study aims to contribute to the policy discourse on institutional reform, good governance, and sustainable economic growth in Nigeria.

Theoretical Review

The relationship between institutional quality and economic performance is underpinned by both political economy and growth theories, notably Public Choice Theory and Endogenous Growth Theory, with the Solow Growth Model providing the foundational analytical framework. Together, these theories explain how institutional arrangements influence fiscal behaviour, investment decisions, productivity, and long-run economic outcomes.

Public Choice Theory offers a coherent analytical framework for understanding how institutional quality shapes economic performance, particularly in developing economies such as Nigeria. Rooted in the application of economic reasoning to political and public-sector decision-making, the theory assumes that policymakers, bureaucrats, voters, and interest groups are rational and self-interested actors who respond to incentives and constraints. Contrary to the normative assumption that public officials consistently pursue the collective good, Public Choice Theory posits that policy choices are often driven by political survival, personal gain, and rent-seeking motivations.

Within the Nigerian context, fiscal decisions including government spending patterns, borrowing behaviour, and budget execution are frequently influenced by political incentives rather than purely economic considerations. Politicians may favour expansionary fiscal policies, such as persistent deficit financing or increased public borrowing, to secure electoral support, expand patronage networks, or satisfy powerful interest groups. Consequently, fiscal deficits may persist even when macroeconomic fundamentals do not justify them. From this perspective, fiscal imbalance reflects not only macroeconomic mismanagement but also deeper institutional and political failures (Alesina & Perotti, 1995; Persson & Tabellini, 2000; North, 1990).

Institutional quality plays a central role in mediating these outcomes. According to Public Choice Theory, weak institutions characterised by limited accountability, corruption, weak rule of law, ineffective checks and balances, and poor public financial management reduce constraints on opportunistic behaviour by political actors. In such environments, rent-seeking and inefficient fiscal practices become pervasive, leading to the misallocation of public resources and excessive deficit accumulation. Conversely, strong institutions enhance transparency, enforce credible sanctions, and strengthen oversight mechanisms, thereby aligning fiscal policy decisions with long-term economic objectives. As a result, economies with higher institutional quality tend to experience more disciplined fiscal behaviour, improved resource allocation, and superior macroeconomic performance (Buchanan & Tullock, 1962; Mauro, 1995; Acemoglu & Robinson, 2012; Kaufmann, Kraay, & Mastruzzi, 2010).

Economic performance, therefore, reflects the interaction between fiscal behaviour and institutional quality. Persistent fiscal deficits that are not channelled into productive investments can crowd out private sector activity, heighten macroeconomic instability, and undermine debt sustainability. These adverse effects are magnified in weak institutional settings, where fiscal

resources are more likely to be diverted from growth-enhancing uses. Public Choice Theory thus predicts that stronger institutional frameworks mitigate opportunistic fiscal behaviour and promote sustainable economic growth.

Complementing this political economy perspective, Endogenous Growth Theory provides insights into how institutional quality influences long-run economic performance through investment in knowledge, human capital, and innovation. Developed in response to the limitations of the Solow–Swan neoclassical growth model, endogenous growth theory endogenises the sources of technological progress and long-term growth. Pioneered by economists such as Arrow, Romer, and Lucas, the theory emphasised that sustained growth arises from deliberate investment decisions rather than exogenous technological change (Arrow, 1962; Romer, 1986; Lucas, 1988). Romer (1986) introduced the concept of learning by doing, arguing that knowledge accumulation is an unintended by-product of investment. In his framework, output is generated using a production function in which public knowledge, derived from research and development activities, serves as a critical input. Knowledge is treated as a non-rival good that generates positive spillovers across firms, thereby increasing economy-wide productivity. The implication for institutional quality is clear: effective institutions that protect property rights, enforce contracts, and support research and innovation enhance incentives for investment in knowledge-creating activities, thereby fostering higher economic growth.

Similarly, Lucas (1988) developed an endogenous growth model centred on human capital accumulation. He argued that investment in education and skills development raises productivity through both internal and external effects. The internal effect reflects the productivity gains accruing to individuals who acquire education and training, while the external effect captures the spillovers that enhance the productivity of other workers and capital throughout the economy. In this framework, firms combine physical capital and human capital to produce output, while the average level of human capital in the economy generates positive externalities that sustain long-run growth. Institutional quality is critical in this process, as strong institutions promote effective education systems, equitable access to human capital formation, and efficient allocation of public investment toward skill development rather than rent-seeking activities.

Although endogenous growth theory explains sustained growth through human capital and innovation, the Solow Growth Model (1956) provided the foundational structure upon which these theories build. The Solow model posited that output is produced through the joint use of labour and capital under constant returns to scale. In the short run, higher rates of capital accumulation raise output and growth. However, due to diminishing returns to capital, long-run growth is ultimately driven by labour force growth and exogenous technological progress. While the Solow model does not explicitly incorporate institutional quality, it establishes the baseline from which endogenous growth theorists extend the analysis by internalising technology and human capital as outcomes of economic and institutional arrangements.

Conclusively, institutional quality influences economic performance through multiple theoretical channels. Public Choice Theory highlights how political incentives and institutional constraints shape fiscal behaviour and macroeconomic outcomes, while Endogenous Growth Theory explains how institutions affect long-run growth through human capital accumulation, innovation, and knowledge spillovers. Anchored in the Solow growth framework, these theories collectively demonstrate that strong institutions are essential for disciplined fiscal management, efficient investment, and sustainable economic growth.

Empirical Review

The relationship between institutional quality and economic performance has been widely examined in the empirical literature, yet findings remain mixed and context-dependent. Existing studies span both developed and developing economies, employing diverse methodological

approaches and producing varied conclusions regarding the role institutions play in shaping economic outcomes.

Several studies have focused on advanced economies to understand how institutional structures influence long-run economic performance. Laura and Thomas (2004) employed a quantitative approach to examine the relationship between political institutions and economic growth within the United Kingdom's parliamentary system. Their findings indicated that public goods provision and production inputs are largely financed through labour and capital taxation, with parliamentary institutions serving as the central mechanism through which fiscal and political decisions are made. The study further highlighted the role of endogenous political factors such as coalition formation, party competition, parliamentary composition, and negotiation processes in shaping economic outcomes. The study recommended that strengthening parliamentary transparency and accountability mechanisms should be prioritised to ensure that fiscal decisions, particularly taxation and public expenditure, are guided more by long-term economic efficiency rather than short-term political incentives. The limitation of the study is that it relied purely on a quantitative framework that primarily captures formal institutional interactions within the parliamentary system of the United Kingdom, while giving limited consideration to informal political practices and external macroeconomic shocks.

Similarly, Acemoglu and Robinson (2005) examined institutions as a fundamental determinant of long-run economic growth in the United Kingdom using a quantitative framework. Their findings suggested that economic progress is fostered when political power is broadly distributed, property rights are effectively enforced, and rent-seeking opportunities for elites are limited. The study also revealed that institutional arrangements evolve over time as dominant groups attempt to transform political institutions to consolidate both *de facto* and *de jure* political power, thereby influencing the allocation of economic resources. The study recommended that countries should strengthen inclusive political and economic institutions that ensure broad distribution of political power and effective enforcement of property rights. The limitation of the study is that it places significant emphasis on political institutions and elite behaviour, while giving relatively less attention to short-run macroeconomic shocks and sector-specific structural constraints that may also influence economic growth outcomes.

Constantine (2017) further explored the interactions between institutions, political authority, and economic structures in the United Kingdom using quantitative methods. The results underscored the existence of feedback mechanisms among these elements, demonstrating that markets alone are insufficient to generate sustained, growth-enhancing transformations without supportive institutional frameworks. The study recommended that policymakers should strengthen institutional frameworks that support and regulate market activities in order to ensure sustainable economic transformation. The limitation of the study is that its reliance on quantitative methods may not fully capture informal institutional dynamics and behavioural factors that also influence economic outcomes and feedback processes.

In Germany, Samarasinghe (2019) employed quantitative techniques to analyse the nexus between institutional quality and economic development. The study concluded that development is a continuous process driven by expanded choices and productive capacities. Investments in technology, physical capital, and human capital were found to significantly influence a country's ability to generate goods and services, with political and economic institutions playing a critical mediating role. The level of economic development was therefore shown to be closely linked to the strength and effectiveness of a country's institutional arrangements. The study recommended that policymakers in Germany should strengthen institutional frameworks that enhance the efficiency of investments in technology, physical capital, and human capital. A key limitation of the study is its focus on a single-country context (Germany), which limits the generalisability of the findings to developing or structurally different economies.

Using a narrative review approach, Lloyd and Lee (2018) assessed recent empirical research on the role of institutions in explaining long-run economic performance in Germany. Their analysis suggested that, despite extensive research, the precise contribution of institutions to long-term growth and prosperity remains inconclusive, reflecting methodological and contextual differences across studies. The study recommended that future research should adopt more unified and robust methodological frameworks to improve comparability across studies. The limitation of the study is its reliance on a narrative review approach, which is subject to selection bias and does not involve systematic statistical synthesis of empirical results.

In developing economies, the role of institutions appears more pronounced but equally complex. Zhao, Jin, Ghulam, Muhammad, and Syeda (2019), using treatment effect analysis, investigated the impact of institutional reforms on investment and economic growth in underdeveloped regions of Pakistan. The findings revealed that economic reforms exert a stronger influence on growth than political reforms, and that the two reform processes do not necessarily reinforce each other. The study recommended that policymakers in underdeveloped regions of Pakistan should prioritise economic reforms that directly enhance investment incentives and productive capacity. The limitation of the study is that treatment effect analysis, while useful for identifying causal impacts, may still be sensitive to model specification and unobserved heterogeneity.

Fikadu (2019) employed fixed effects and the Generalized Method of Moments (GMM) to examine the impact of institutional quality on economic performance in Eastern Africa, with a particular focus on Ethiopia. The results indicated that economic institutions significantly influence economic performance. Specifically, government effectiveness and control of corruption were found to have a positive and statistically significant effect on growth, while the rule of law exhibited a negative significant relationship. The study recommended that institutional reforms should be carefully designed to ensure that legal and regulatory frameworks support productive economic activities. A limitation of the study is that although the GMM technique addresses endogeneity, results may still be affected by measurement errors and omitted macroeconomic variables.

Using a panel dataset of 66 countries from 1996 to 2020, Arif and Arif (2023) applied Mean Group (MG), Pooled Mean Group (PMG), and fixed and random effects models to examine the institutional determinants of budget deficits. The results revealed that corruption worsens budget deficits, while bureaucratic quality, political stability, and the rule of law reduce fiscal imbalances. The study recommended strengthening institutional quality to improve fiscal discipline. The limitation is that the broad cross-country panel design may mask country-specific institutional dynamics.

Anna and Krista (2018), using the GMM technique, analysed the impact of institutional quality on economic development outcomes in the Baltic States. Their findings demonstrated that institutional indicators such as regulatory quality, government effectiveness, and investment protection exert positive and statistically significant effects on economic growth. The study recommended strengthening governance and institutional frameworks. The limitation is that the findings are not easily generalisable to developing economies such as Nigeria.

Edet (2018) applied a Multiple Regression Model and Error Correction Mechanism (ECM) to examine institutional infrastructures and economic growth in Nigeria. The findings revealed that economic and regulatory institutions enhance growth, while political and governance institutions may hinder it. The study recommended strengthening economic and regulatory institutions. The limitation is that the model may not capture non-linear relationships and structural breaks.

Tella and Adesoye (2019) employed the Granger causality test to examine inclusive growth, financial inclusion, and institutional quality in Nigeria. The results showed that institutional quality drives inclusive growth. The study recommended combining financial

inclusion policies with institutional reforms. The limitation is that Granger causality does not establish true structural causality.

At the regional level, Olumide and Oluwatosin (2020) examined ECOWAS countries using the Spatial Error Model and Driscoll–Kraay estimator. The study found that economic institutions enhance growth only when political institutions exceed a threshold level. The study recommended simultaneous strengthening of political and economic institutions. The limitation is potential data constraints and measurement errors. Abdulsalam, Saifullahi, and Zainab (2023) examined institutional quality and economic performance in Nigeria using ARDL. The findings showed that institutional quality improves growth, while revenue volatility reduces it. The study recommended diversification of revenue sources and institutional strengthening. The limitation is exclusion of external shocks and informal institutional dynamics.

Elida (2024) examined institutions and employment in Balkan countries using FMOLS and DOLS. The study found a positive relationship between institutions and growth. The study recommended strengthening institutions and education. The limitation is possible omitted variable bias and structural breaks.

Alfa and Kailash (2024) analysed 47 Asian countries and found that governance indicators significantly improve GDP and HDI, especially in high-income countries. The study recommended strengthening governance systems. The limitation is that country-specific differences may be obscured in panel analysis.

Bisong, Joshua and Adofu (2025) examined institutional quality, trade openness, and economic performance in Nigeria using ARDL. The findings revealed that institutions and trade openness improve economic performance in both the short and long run. The study recommended strengthening governance institutions that support trade. The limitation is its focus on Nigeria, limiting external validity.

Gaps in Literature and value Addition

Overall, the empirical literature revealed that while institutional quality generally matters for economic performance, its effects vary across countries, institutional dimensions, and stages of development. In developed economies, institutions interact dynamically with political and economic structures, while in developing countries particularly, Nigeria weak institutional frameworks often undermine growth outcomes. These mixed findings highlight the need for country specific and time-series empirical investigations to better understand how institutional quality influences economic performance in Nigeria.

Theoretical Framework

The endogenous growth model (Romer, 1990) and the modified Solow growth model (Solow, 1956) served as the theoretical groundwork for this investigation, which includes institutional quality as important factor affecting economic performance. According to the Solow growth theory, economic growth results from the expansion of the labour force and the accumulation of physical capital, as well as from the exogenous factors of technical input. The theory demonstrates that for the economic to be in equilibrium, total supply and demand must be equal. The theory employed, ‘the Cobb-Douglas production function’ to convey the functional relationship between production volume and the elements utilised, as well as their combinations, to ascertain aggregate supply. Three factors that drive economic growth are investments, the labour force, and technological advancement.

Technical advancement has highlighted in neoclassical theory as qualitative improvements in production, such as raising worker education levels, improving organisational structures, expanding production scales and so on. Solow demonstrates that the capital-labour ratio would have a propensity to gradually modify itself in the direction of the equilibrium ratio when the

technical variable coefficient was present. Capital and production would expand more slowly than the labour force if the starting capital to labour ratio was higher, and vice versa. With any capital-labour ratio as a starting point, Solow's analysis converges to the equilibrium path.

Although, several factors led to the adoption of the Solow (1956). First, estimating and extending the Solow model is simple. Furthermore, there is no solid proof that the Solow model outperforms endogenous growth models with growing returns in terms of empirical performance (Jones, 1995; Korcherlakota & Yi, 1996; Parente, 2001). Bermanke and Giirkayank (2002) noted that the neoclassical growth model is also useful in evaluating other types of growth models if they have a balanced growth path.

According to Romer's (1990) endogenous growth model, new ideas and technical advancements are endogenous. Using economic variables like subsidies, he further integrated institutions like the market, property rights, and the state to comprehend their effects on the rate of technological advancement and how they affect economic progress. According to Schiliro (2010), the justification for this institutional setup is based on the notion that increasing the number of employees dedicated to research advances technological knowledge and may accelerate growth. Furthermore, Saidu and Jaffer (2022) stressed the need of government efficacy in building human capital, which is essential for economic growth, especially through adequately financed health and education sectors. According to this model, improving institutional frameworks, the economy's technological level, and both human and physical capital are necessary for economic output growth.

The Solow model, on the other hand, stated that output has constant returns to scale and is a function of labour (L) and capital (K). Long-run capital accumulation rates are larger than short-run ones, capital's marginal efficiency is close to zero, and labour force expansion and technological advancements ultimately determine the growth rate. The augmented Solow growth model incorporates a human capital as an additional determinant of growth.

The original Solow growth model was specified as;

$$Y_t = K_t^\alpha (A_t L_t)^{1-\alpha} \quad (3.1)$$

The human capital augmented version by Mankiw et al. (1992) was specified as;

$$Y_t = K_t^\alpha H_t^\beta (A_t L_t)^{1-\alpha-\beta} \quad (3.2)$$

Where: $0 < \alpha < 1$, Y is output, α = elasticity of capital with respect to output, L is Labour, H is the stock of human capital and A represents the total factor productivity. The number of labour effective units increase at rate $n+g$, n is labour force growth rate, g is the rate of technological progress while $n+g$ is the growth rate of labour measured in efficiency units, described as:

$$L_t = L(0)e^{nt} \quad (3.3)$$

$$A_t = A(0)e^{gt} \quad (3.4)$$

It should be noted that the A term indicates not just technology, but comprises other factors including resource endowment, climate, institutions and so on, which may differ across countries (Mankiw et al., 1992).

Institutions enter the equation through their influence on technical efficiency or total factor productivity (TFP), as the study's main focus is on how institutional quality affect Nigeria's economic performance. It is thus assumed that institutional quality affect output growth through the total factor productivity. A as a function of institutional quality (IQ).

$$A = A_0 e^{IQ} \quad (3.5)$$

By substituting equation (3.5) into (3.2) and taking the natural logarithm of both sides, it becomes

$$Y_t = \alpha_o \ln K_t + \beta \ln H_t + (1 - \alpha - \beta) \ln L_t + IQ \quad (3.6)$$

Inferring from equation (3.2) by Mankiw et al. (1992). The functional form of the model is restated as follows;

$$Y_t = \alpha_o K_t + \beta H_t + (1 - \alpha - \beta) L_t + \theta IQ \quad (3.7)$$

If $\lambda = 1 - \alpha - \beta$, then equation (3.7) is represented as

$$Y_t = \alpha_o K_t + \beta H_t + \lambda L_t + \theta IQ \quad (3.8)$$

Specifying the equation (3.8) in a log form the model is presented as

$$Y_t = \alpha_o \ln K_t + \beta \ln H_t + \lambda \ln L_t + \theta \ln IQ \quad (3.9)$$

Where,

Y_t = GDP growth rate

IQ = Institutional quality

Institution play a crucial role in enhancing technical efficiency (Shleifer & Vishng, 1993; Bouis, 2011; and Bergglen, 2015). Thus the level of technical efficiency is affected by the quality of institution. This in turn affect the efficiency of investment.

Re-specifying equation (3.9) the model is presented as;

$$Y_t = \alpha_o \ln K_t + \beta \ln H_t + \lambda \ln L_t + \theta \ln IQ \quad (3.10)$$

Where α_o is the constant, the value of the dependent variable when the explanatory variables are zero, α_i = parameter estimate. The World Governance Indicators (WGI) dataset's institutional indicators are used in this study. Principal component analysis (PCA) was used to process various indicators in order to produce a composite variable. The WGI dataset is derived from expert evaluations conducted worldwide and a statistical compilation of responses pertaining to governance quality that were gathered from many respondents. Government effectiveness (Gov_effc), political stability (Pol_stab), rule of law (Rule_law), regulatory quality (Reg_qlty), voice and accountability (voice_acct), and corruption control are the six indicators that are part of the analysis.

Methodology

The variables of the study were first examined for the existence of unit root by using Augmented Dickey Fuller test. Furthermore, a co-integration test was carried out to examine the long-run and short-run relationship between the series and finally the diagnostic test was conducted to assess modeling residuals about with estimation.

The ADF test was used to determine whether a time series contains unit root and in thus non-stationary. Below is the equation for the ADF test.

$$\Delta Y_t = \beta_1 + \beta_2 t + Y_{t-1} + \alpha_i \sum Y_{t-1} + \varepsilon_t \quad (3.11)$$

In the equation, Y_t is the variable of interest. Δ is the differencing operator, t is the time trend and ε is the white noise residual of zero mean and constant variables. $\beta_1, \beta_2, Y, \alpha_i, \dots, \alpha_m$ is a set of parameters to be estimated. Both the null and hypothesis in unit root tests are:

$H_0: Y = 0$ (Y_t is unit root/non-stationary)

$H_1: Y \neq 0$ (Y_t is stationary)

The second stage involved conducting a co-integration test to examine the long-run and short-run relationship between the series. The (ARDL) model is a co-integration model used to ascertain the long-run co-integration among the variables used. The general ARDL is stated;

$$Y_{it} = \sum_{j=1}^p \alpha_{ij} Y_{i,t-j} + \sum_{j=0}^p \beta_{1j} X_{i,t-j} + Y_i + \varepsilon_{it} \quad (3.12)$$

- Y_{it} represent the GDP growth rate. It is the dependent variable
- $X_{i,t-j}$ is a (kx1) vector of regressors
- α_{ij} is the coefficient of the lagged dependent variable
- β_{ij} are (kx1) coefficient vector

Parameterization of ARDL Model into Error Correction Model

$$\Delta Y_{it} = \lambda_i (Y_{i,t-1} - \delta_i^1 X_{i,t-1}) + \sum_{j=1}^{p-1} Q_{ij} \Delta Y_{i,t-j} + \sum_{j=0}^q \mu_{ij} X_{i,t-j} + Y_i + \varepsilon_{it} \quad (3.13)$$

Where;

- λ_i is the speed of adjustment coefficient. It is expected to be negative and significant.
 - δ_i^1 represent the vector coefficients of the long-run relationships
 - $ECT_{t-1} (Y_{i,t-1} - \delta_i^1 X_{i,t-1})$ represents the error correction term that results from the long-run equilibrium relationship.
 - Q_{ij} and μ_{ij} are the short-run dynamic coefficients
 - Δ is the first difference of the variables
- This approach offers insights into both long-term and short-term relationships. Consequently, the study employed an ARDL (p, q, q, ...q) model, which provides a long-run equation and a short-run error correction model.
- $Q_i = (I - \delta)$, group-specific of adjustment coefficient (expected that $Q_i < 0$)
 - P and q are optimal lag orders
 - Δi = Long-run relationship vector
 - Q_{ij} = the coefficient of short-run dynamic
 - ε_{it} = is the error term

The study further evaluated the model assumptions and identify whether any observations have a large unjustifiable impact on the study, diagnostic tests are employed in econometrics. As a result, doing diagnostic testing of data series offers information of possible modeling approaches with data. It can therefore be used to assess modeling residuals about with estimation, acting the tests with the model sufficiency and test of the models coefficients (Baltagi,2001).

Diagnostic tests for estimated coefficients, such as the particular case of testing for omitted and reluctant variables, provide details and assess limits on the estimated coefficients.

Independent and dependent variables are used to categorise the variables being studied. The dependent variable is measured with gross domestic product growth rate. GDP growth rate is the percentage change in the real GDP of a nation over a specific period. GDP growth rate is a better instrument for judging long term economic performance (Girma, 2012). Thus, for this study, economic performance is measured with data on the GDP growth rate in Nigeria for the period under observation. A principal component analysis of six key institutional quality indicators; government effectiveness (Gov_effc), political stability (Pol_stab), rule of law (Rule_law), regulatory quality (Reg_qlty), voice and accountability (voice_acct), and control of corruption

(cont_corr) were used to capture the six indicators to make it a composite variable, which measures institutional quality. The consumer price index served as an indicator of the rate of inflation. Changes in the average consumer's cost of purchasing a basket of goods and services, which may be fixed or vary at predetermined periods like annually, are reflected in the consumer price index. Interest rate was measured using primary lending rate. Gross fixed capital formation was measured as total gross fixed capital formation (% of GDP).

Results and Discussion of Findings

To achieve the objective of the study, descriptive statistical analysis was performed on the collected data, and the outcomes are shown as follows

Table 1 Summary of Descriptive Statistics

Variable	GDP-rate	IQ	INT	INF	GFCF
Mean	4.2764	-6.7341	18.5988	19.8073	29.7586
Maximum	15.3292	-6.0604	31.6500	72.8353	30.0689
Minimum	-2.0351	-7.6027	11.4831	5.2880	29.3660
Std.Dev	3.8450	0.4045	3.9307	17.4173	0.1707
Skewness	0.4792	-0.4235	1.0428	1.7359	-0.2043
Kurtosis	3.4933	2.4705	4.9434	4.7109	2.4211
Jarque-bera	1.7440	0.9769	12.1893*	22.4706*	0.7532
Probability of J-B	0.4183	0.6136	0.0023	0.0000	0.6862

Note: *, and ** indicates significant level at 1 per cent, and 5 per cent respectively.

Source: Author's Compilation (2025)

Table 1 contains the descriptive statistic results. The study found that the mean estimator determines the average data point. Every value in the data set is factored into the mean's calculation, which is crucial characteristic. Mean estimator provides actual average moment of the data. These include; 4.2764, -6.7341, 18.5988, 19.8073, 29.7586 and -2583.5870 for GDP growth rate (GDP_rate). Institutional quality (IQ), interest rate (INT), inflation rate (INF), and gross fixed capital formation (GFCF) respectively. The above shows that institutional quality (IQ) has -6.7841, interest rate (INT) of 18.5988, inflation rate (INF) of 19.8073, gross fixed capital formation of 29.7506. GDP growth rate (GDP_rate) has the lowest mean value of 4.2764.

The standard deviation for GDP growth rate (GDP_rate), institutional quality (IQ), interest rate (INT), inflation rate (INF), and gross fixed capital formation (GFCF) are 3.8450, 0.4045, 3.9307, 17.4173, and 0.1707 respectively. By implication, the value of the standard deviations revealed fluctuation of the study variables from the mean. Gross fixed capital formation (GFCF) is less variable with lowest standard deviation (0.1707). A low standard deviation implies that most of the numbers are very close to the mean, such as institutional quality (IQ), interest rate (INT), GDP growth rate (GDP_rate) and inflation rate (INF) are close to the sample mean.

Skewness, is a parameter included in the descriptive statistics that offers details on the asymmetric probability of the study variables, it is another parameter that is presented. From the foregoing, as presented by the analysis, the skewness of the study variables includes; 0.4792, -0.4235, 1.0428, 1.7359, and -0.2043 for GDP growth rate (GDP_rate), institutional quality (IQ), interest rate (INT), inflation rate (INF), and gross fixed capital formation (GFCF) in that order. Having the skewness values greater +1 or -1 implies that GDP growth rate (GDP_rate), interest rate (INT), inflation rate (INF) were positively skewed while institutional quality (IQ), and gross fixed capital formation (GFCF) were negatively skewed

Kurtosis also provides information about the distribution tail's length. The following variables' kurtosis values are as follows: Leptokurtic in nature are the GDP growth rate (GDP_rate) (3.4933), interest rate (INT) (4.9434), and inflation rate (INF) (4.7109). Kurtosis

statistics are therefore greater than 3 ($K > 3$). This indicates that their distribution has longer tails and is more peaked than a normal distribution. However, because their kurtosis statistics are smaller than 3 ($k < 3$), institutional quality (IQ) (2.4905) and gross fixed capital formation (GFCF) (2.4211) are platykurtic in nature. This indicates that compared to a normal distribution with shorter tails, their distribution is flatter.

Additionally, the Jarque-Bera statistics demonstrated that the probability values for gross fixed capital formation, institutional quality, and GDP growth rate (GDP_rate) were all greater than 0.05. This suggests that these variables are normally distributed because their Jarque-Bera statistics are not statistically significant at the five percent level. The Jarque-Bera probability values for the remaining variables, however, are less than 0.05. Their distributions do not appear to be normal, as indicated by the fact that their Jarque-Bera statistics are statistically at the 5% level.

Principal Component Analysis Result

Principal Component Analysis (PCA) was conducted to reduce the dimensionality of the institutional quality indicators and to identify the underlying structure among the variables. The analysis produced two key outputs: (i) the eigenvalues and percentage of variance explained, and (ii) the component loadings for each principal component.

Percentage of Variance Explained

Table 2 presents the eigenvalues and the percentage of variance explained by each principal component (PC). The results show that the first principal component (PC1) alone accounts the 46.66% of the total variance, while PC2 explains 21.37%. Collectively, the first two components explained 68.03% of the total variability in the institutional quality indicators. Furthermore, the first four components jointly account for 91.97% of the total variance, suggesting that they captured most of the information in the dataset.

Table 4.2 Percentage of Variance Explained

Principal Component	Explained Variance (%)
PC1	46.66
PC2	21.37
PC3	12.87
PC4	11.07
PC5	5.42
PC6	2.61

Source: Author's Computation (2025)

Component Loadings

The component loadings, which represent the correlation between each variable and the principal components are shown in table 4.3. High positive or negative loading values indicate a strong relationship between a variable and a given component.

Table 3 shows that PC1 has strong loadings from Government Effectiveness (+), Political Stability (+), Control of Corruption (-), Rule of Law (-), and Voice & Accountability (-). This component appears to represent a broad governance performance dimension, capturing overall institutional strength. PC2 loads strongly on Regulatory Quality (+), Control of Corruption (+), and voice & Accountability (-). This suggests a component reflecting the interplay between regulatory capacity and democratic accountability. PC3 and PC4 reflect more specific pattern such as political stability and structural governance traits but contribute smaller proportions of variance

Table 3 Component Loadings

Variable	PC1	PC2	PC3	PC4	PC5	PC6
Government Effectiveness	0.391	-0.049	-0.413	-0.803	0.149	-0.087

Control	-0.447	0.416	0.125	-0.428	-0.316	0.572
Of Corruption						
Political Stability	0.398	0.398	0.555	-0.030	0.579	0.198
Regulatory Quality	-0.339	0.474	-0.598	0.211	0.506	-0.042
Rule of Law	-0.510	0.030	0.383	-0.344	0.172	-0.667
Voice & Accountability	-0.337	-0.664	0.032	-0.092	0.507	0.424

Source: Author's Computation (2025)

Multicollinearity is one of the important assumptions of Ordinary Least Square (OLS), it is a condition in which the explanatory variable in an equation is strongly interrelated. Thus, the correlation of explanatory variable is a concern because the model's conclusion undercuts its statistical significance.

Table 4 contains the correlation analysis result of the study variables. All pair-wise correlation coefficients were less than 0.8 which excluded any multicollinearity issues. GDP growth rate has a negative correlation of -0.7240 with institutional quality (IQ), whereas 0.5962 correlation occurs for interest rate (INT) and GDP growth rate (GDP_rate), inflation rate (INF) and gross fixed capital formation have negative correlation of -0.1340 and -0.5393. The correlation results for the research variables as shown in Table 4.4 suggest that there are no significant multicollinearity between any two variables of the study because correlation coefficient among them are (< 0.8), the indicated threshold for multicollinearity. Inflation rate (INF) has the lowest correlation coefficient of -0.1340, indicating a negative and very weak link between the two independent variables. However, institutional quality (IQ), interest rate (INT) and gross fixed capital formation had the highest correlation value (+0.5962) formation that is positive and above average.

Table 4 Matrix of Correlation Coefficients

Variables	GDP_rate	IQ	INT	INF	LOG(GFCF)
GDP_rate	1.000				
FD	0.4709				
IQ	-0.7240	1.000			
INT	0.5962	-0.4685	1.000		
INF	-0.1340	-0.1356	-0.2229	1.000	
LOG(GFCF)	-0.5393	0.3882	-0.239	-0.5365	1.000

Author's Compilation (2025)

In times series analysis unit root test is conducted to avoid spurious inferences that may arise from non-stationary series. Thus, the study employed the 'Augmented Dickey Fuller (ADF). The usage of this unit root tests was crucial for validation of results. As indicated in Table 4.5, all variables are stationary at levels, $I_{(0)}$, except institutional quality which was stationary at first difference, $I_{(1)}$, the series are combination of $I_{(0)}$ and $I_{(1)}$.

Table 5 Unit Root Tests

Variable	Level	ADF 1 st diff	5% critical value	Decision
GDP rate	-3.9347* (0.0045)	NA	-1.9504	I(0)
IQ	-2.7084	-6.1124* (0.0000)	-1.9602	I(1)
INT	- 3.5172** (0.0544)	NA	- 3.2124	I(0)
INF	-3.5391** (0.0129)	NA	-2.9511	I(0)
LOG(GFCF)	-5.8826* (0.0001)		-3.5485	I(0)

Note: *, and ** indicates significant level at 1 per cent, and 5 per cent respective
 Source: Author's Compilation (2025)

Table 6 Results of Bound Test for Long Run effect

Test statistics	Value	Significance	1 _(o) Bound	1 _(i) Bound
F-statistic	4.9229	10%	2.2	3.07
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37

Source: Author's Compilation (2025)

The ARDL Bound result presented in Table 6 shows that the F-statistic value of 4.9229 is greater than the lower and upper bound critical values of 2.56 and 3.49 at 5% level of significance respectively. This confirms the existence of a long-run co-movement among the variables estimated in the model.

Table 7 Short-Run Result of Institutional Quality on Economic Performance

Variable	Coefficient	Std Error	t-statistics	Prob
D(IQ)	-1.6880	0.9103	-1.8531	0.1010
D(IQ(-1))	-2.7937**	0.8247	-3.3877	0.0095
D(INF)	0.1665	0.1134	1.4685	0.1802
DLOG(GFCF)	-3.5406	3.0481	-1.1616	0.2789
DLOG(GFCF(-1))	20.3962**	5.1391	4.06610	0.0036
ECT (-1)	-0.0295*	0.0028	-10.4611	0.0000

Note: * and ** indicates significant level at 1 per cent and 5 per cent respectively.

Source: Author's Compilation (2025)

The result on Table 7 depicts the ARDL, short-run outcome for model two consisting of three independent variables, institutional quality (IQ), inflation rate (INF) and gross fixed capital formation (GFCF) with the dependent variable economic performance (GDP rate). From the findings, institutional quality (IQ) has a coefficient of -1.6880 but not significant. The insignificant of institutional quality is due to the fact that it will take some time before the institutions can influence economic performance and the impact may be visible in sub-sequent years. The one-year lag institutional quality (IQ) has coefficient of (-2.7937) and significant. This suggests that a 1% increase in institutional quality in one-year lag leads to -2.7937 percentage point reduction on

economic performance. This outcome defies the theoretical prediction that a boost in institutional quality leads to increase in economic performance. However, inflation rate (INF) has a coefficient of -0.2789 but not significant, the coefficient for gross fixed capital formation (GFCF) is -3.5406, implies that the gross fixed capital formation exerts negative but insignificant effect on economic performance. The coefficient for gross fixed capital formation (GFCF) for one-year lag 20.3962 at 5% level of significance) exerts positive and significant effect on economic performance.

The error correction model's (ECM) coefficient value is -0.0295, with a corresponding 1% probability, demonstrating the presence of a long-run correlation between the variables. Its coefficient of -0.0295 indicates a 20% adjustment rate from the short-run to the long-run equilibrium path. This suggests that it will take 33.8 years for institutional quality to return to equilibrium after deviating from it.

Table 8 Long Run Result of Institutional Quality on Economic Performance

Variable	Coefficient	Std Error	t-statistics	Prob
IQ	-0.5683	2.0679	-0.2748	0.7904
INT	-0.3999**	0.2017	-1.9827	0.0827
INF	-0.1438	0.1075	-1.3377	0.2178
LOG(GFCF)	-33.0136	7.3915	-4.4665	0.0021

Note: *, and ** indicates significant level at 1 per cent and 5 per cent.

Source: Author's Compilation (2025)

Table 8 presents the result on the long-run effect of institutional quality on economic performance. It revealed that institutional quality (IQ) has coefficient of -0.5683 and not significant. The situation is not as expected theoretically. This implies that the country's institutions are often not flexible and adaptive which make it difficult to changing economic. Interest rate has a coefficient of -0.3999 percentage point. This implies that 1% rise in interest rate (INT) brings about a reduction in economic performance by -0.3999 per cent. The outcome confirms the prediction. Moreover, the coefficient of inflation rate is -0.1438 and not significant. Gross fixed capital formation has a coefficient of -33.0136 percentage point and significant. This implies that 1% increase in gross fixed capital formation (GFCF) brings about a reduction in economic performance by -33.0136 per cent. The outcome deviated from the theoretical expectations

Diagnostic Tests of ARDL for Institutional Quality

Table 9 Diagnostic Tests of Institutional Quality on Economic Performance

Tests	Value	Prob
Jarque – Bera Normality Test	1.7727	0.4121
Serial Correlation LM Test	1.5536	0.2527
Breusch-Pagan-Godfrey Heteroskedasticity Test	0.3325	0.9469

Source: Author's Compilation (2025)

To evaluate the econometric qualities of the data, this study also performed some diagnostic tests in addition to the estimations. These tests included residual tests, which include 'the Breusch-Pagan-Godfrey Heteroskedasticity test, the Jarque-Bera Normality test', and the serial correlation LM test. From table 9, the 'Jarque-Bera statistics of the Normality test' was not significant implies that the residual of the regression estimate is normally distributed. The lack of serial correlation and heteroskedasticity problem in the regression estimate's residual was further supported by the non-significant F-statistics of the Serial Correlation LM test and the Heteroskedasticity test. These suggest that the regression model's estimation was accurate.

Conclusion

The study investigated how Nigeria's economic performance was affected by the quality of its institutions. Institutional quality has an insignificant and negative short-run effect on economic performance. Economic performance is significantly and negatively affected by the quality of the institutions from the previous year. Institutional quality has a negligible and insignificant effect on economic performance in the long-run. The study came to the conclusion that Nigeria's economic performance is not significantly affected by institutional quality.

Recommendations

The study recommended based on the finding that; government should implement specific institutional reforms by strengthen institutions that directly impact the economy such as judicial system, anti-corruption agencies and civil service. In the same vein, e-governance should be introduced, enforce procurement rules and make government operations more transparent to rebuild public trust and investor confidence. Rule of law and property rights should be promoted this will attract long term domestic and foreign investment. Furthermore, the researcher should also investigate which components of institutional quality are most irresponsible for the poor performance.

References

- Abubakar, A. (2020). Fiscal policy and economic growth in Nigeria. A vector autoregression (VAR) analysis. *Journal of Economics and Finance*, 14(2), 1-15.
- Acemoglu, D., & Robinson, J. A. (2012). *Why nations fail: The origins of power, prosperity, and poverty*. Crown Business.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. In P. Aeghion & S. N. Durlauf (Ed.) *Handbook of Economic Growth*, 385-472.
- Alesina, A., & Perotti, R. (1995). Fiscal expansions and adjustments in OECD Countries. *Economic Policy*, 10(21), 205-248.
- Alesina, A., & Perotti, R. (1996). Fiscal discipline and the budget process. *American Economic Review*, 86(2), 401-407
- Alfa, R. N., & Kailash, C. P. (2024). Institutional quality and economic performance. *Journal of Asian scholars*.
- Andrews, M. (2013). *The limits of institutional reform in development: Changing rules for realistic solutions (1st ed.)*. Cambridge University Press.
- Anna, M. R., & Krista, B. (2018). The role of institutional quality in economic growth: Implications for the Baltic States. *Proceedings of the RISEBA Business and Economics Conference* 1-14.
- Arif, A., & Arif, U. (2023). Institutional approach to budget deficit: An empirical analysis. *SADE open*, 13(2), 1-17. <https://doi.org/10.1177/21582440231171297>
- Arrow, K. J. (1962). Economic welfare and the allocation of resources for invention. In R. R. Nelson (Ed.), *The rate and direction of inventive activity: Economic and social factors* (pp. 609–626). Princeton University Press. <https://doi.org/10.1515/9781400879762-024>
- Baltagi, B. H. (2001). *Econometric analysis of panel data* (2nd ed.). John Wiley & Sons.
- Bergglen, N. (2015). The changing connection between institutions and economic growth: a review of the literature. *International Tax and Public Finance*, 22(6), 1279-1302. <https://link.springs.com/journal/10797>
- Bernanke, B. S., & Gurkaynak, R. S. (2002). Is growth exogenous? Taking Mankiw, Romer and Weil seriously, In NBER *Macroeconomics Annual 2001* MIT. Press, 16(4), 11-72. <https://www.journals.uchicago.edu/journals/ma>

- Bisong, A.E., Joshua, Y.B., & Adofu, I.O. (2025). Institutional quality, trade openness and economic performance: Evidence from Nigeria
- Bouis, R. (2011). A good institutions quality, comparative advantage of a country and its growth performance. *Economic Quantum*, 8(3), 61-85.
- Buchanan, J. M., & Tullock, G. (1962). *The calculus of consent: Logical foundations of constitutional democracy*. University of Michigan Press.
 doi: <http://dx.doi.org/10.47772/ijRiss.2025.9020041>
- Constantine, C. (2017). Economic structures, institutions and economic performance. *Journal of Economic Structures*, 6(1), 1-18.
<https://doi.org/10.1186/s40008.017-0063-1>
- Edet, U.N. (2018). Which institution infrastructure matter in economic growth and development in Nigeria. *International Journal of Economics and Finance*, 10(5), 80-93.
- Elida, L. (2024). Institutional quality and economic growth: Evidence from developing countries. *Journal of governance and regulatios*, 13(2), 395-402
- Fikadu, D.T. (2019). The impact of institutional quality on economic performance in Eastern Africa. *International Journal of Development and Economics Sustainability*, 7(1), 41-52.
- Girma, F.D. (2012). Relationship between inflation and economic growth in Ethiopia: An Empirical Analysis, 1980-2011 (Master's thesis, University of Osio).
<http://dx.doi.org/10.6007/IJARBSS/v7-i/>
- Javid, A. Y., & Arif, U. (2011). Economic, political and institutional determinants of budget deficits volatility in selected Asian countries. *The Pakistan Development review*, 50(4), 577-592. <https://doi.org/10.30541/v5041pp.649-662>
- Jones, T. M. (1995). Instrumental stakeholder theory : A synthesis of ethics and economics. *Academy of Management Review*, 20(2), 404-437
<https://doi.org/10.5465/amr.1995.9507312924>
- Kaufmann, D., & Mastruzzi, M. (2022). *Worldwide governance indicators*. World Bank.
- Kocherlakota, N., & Yi, K. (1996). Is There endogenous long-run growth? Evidence from the United States and the United Kingdom. *Journal of Money, Credit and Banking*, 29(2), 235-262. <https://doi.org/10.2307/2953685>
- Laura, B., & Thomas, H. (2004). Political institutions and economic growth in the United Kingdom. *Political Science Research and Methods*, 2(3), 323-348.
- Lloyd, P., & Lee, C. (2018) A review of the recent literature on the institutional economic: Analysis of the long-run performance of nations. *Journal of Economic surveys*, 32 (1),
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3-42. [https://doi.org/10.1016/0304-3932\(88\)90168-7](https://doi.org/10.1016/0304-3932(88)90168-7)
- Mankiw, N. G., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107(4), 407-417.
- Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, 110(3), 681-712
- Nguyen, T. T., & Luong, N. O. (2021). The impact of fiscal policy on economic growth: Evidence from Vietnam. *Journal of Economic Development*, 22(2), 1-15.
- North, D. (1990). Institutions, institutional changes and economic performance. Cambridge correlates: Further evidence from Niger North, D. (2005) *Economy International Journal of Academic Research in Business and Social sciences*, 7(1), 234-246.
- Olumide, I. A., & Oluwatosin, W. T. (2020). Institution and economic growth in ECOWAS: An investigation into the hierarchy of institutions hypothesis. *Journal of Economics, Business and Management*, 8(11), 21-34.
- Paronte, S. (2001). The failure of endogenous growth, knowledge. *Technology and policy*, 13 (1), 49-58. [https://doi.org/10.1016/S0264-8377\(01\)00012-3](https://doi.org/10.1016/S0264-8377(01)00012-3)

- Perotti, R., & Tabellini, G. (2000). Political equilibrium, income distribution and growth. *Review of Economic Studies*, 60(4), 755-776.
- Rodrik, D. (2008). Second-best institutions. *American Economic Review*, 98(2), 100-104.
- Romer, P. (1986). Increasing returns and long run growth. *Journal of Political Economy*, 94(5), 1002-1037. <https://www.journals.uchicago.edu/doi/abs/10.1086/261420>
- Romer, P. M. (1990). Endogenous technological change. *Journal of Political Economy*, 98(5, Part 2), S71–S102. <https://doi.org/10.1086/261725>
- Saidu, A. & Jaffer, M. (2022). Governance effectiveness, human capital development and economic growth, *Journal of Economic Development Studies*, 10(2), 45-60. <https://doi.org/10/jeds.2022>
- Samarasinghe, C. (2019). The relationship between institutions and economic development: Testing the Barro's hypothesis. *Economic Modelling*, 80, 533-544.
- Schilirò, D. (2010). *Governance and institutions for stability and growth in the Eurozone*. In *Regaining Global Stability After the Financial Crisis* (pp. 108–125). IGI Global. <https://doi.org/10.4018/978-1-5225-4026-7.ch006>
- Sheifer, A., & Vishny, R.W. (1993), Corruption. *The Quarterly Journal of Economics*, 108(3), 599-617. <https://doi.org/10.9734/AJAEES/2015/11648>
- Solow, R. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, 70(1), 65-94. <https://www.doi.org/10.2307/18884513>
- Tella, S. A., & Adesoye, (2019). Institutional quality, finance inclusion and inclusive growth: Casualty evidence from Nigeria. *International Journal of Economics and Finance*, 32(4), 911-929. <https://dc.cbn.gov.ng/efr/vol57/iss3/3/>
- World Bank, (2021). *World Development indicators*, World Bank Publications, Retrieved from <http://data.worldbankorgcom>.
- World Bank, (2022). *World Development indicators* World Bank Publications, Retrieved from <http://data.worldbankorgcom>.
- Zhao, J., Madni, G.. R., Anwar, M.A., & Zahna, S.M. (2019). Institutional reforms and their impact on economic growth and investment in developing countries. *Sustainability*, 13(9), 4941. <https://doi.org/10.3390/su13094941>