

Fiscal Policy, Institutional Quality, and Economic Growth in West African Countries

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Abstract

This research paper will aim at investigating the interactions between fiscal policies, institutional quality and macroeconomic growth performance in West African countries for the period 2000-2024. This paper will employ the two-step system GMM estimation technique in handling issues concerning growth persistency, individual heterogeneity, simultaneity and endogeneity in the case of institutional, fiscal policy and growth relationship. Fiscal policies seem to affect growth in an asymmetric way as it is clear that fiscal policies which promote productivity and revenue collection improve growth performances when institutions are strong, but high public debts and poor management of public expenditures harm growth. However, institution quality plays a significant role in promoting growth performance and enhancing fiscal policies effects. This research concludes that West African countries need much more than fiscal stimulus packages; what they need is credible fiscal management institutionalization aimed at improving efficiency in public investment, revenue collection and minimizing public expenditure losses. This research paper makes an important contribution to literature on fiscal policies-growth relationships in that institutional quality seems to play a key role in promoting growth through fiscal policies in West Africa.

Keywords: *Fiscal Policy, Institutional Quality, Economic Growth, West Africa, System GMM.*

JEL Classification: E62; O43; C33; H50; H60

1. Introduction

Fiscal policy continues to be one of the crucial instruments for stabilizing output, making public investments, and determining development outcomes in developing countries. Through government expenditure, taxation, public borrowing, and budgetary management, fiscal policy can influence aggregate demand, capital accumulation, human capital development, and long-run productivity (Barro, 1990; Keynes, 1936; Romer, 1986). In West Africa, the fiscal policy–growth relationship is particularly important because of the region’s persistent infrastructure deficits, limited revenue-generation capacity, exposure to commodity-price fluctuations and exchange-rate pressures, and substantial social expenditure needs (International Monetary Fund [IMF], 2025; World Bank, 2025a). Although fiscal policy can stimulate growth through public investment, human-capital expenditure, and aggregate-demand management, its effectiveness depends heavily on the efficiency of resource mobilisation, allocation, implementation, and oversight (Fischer, 1993; Barro, 1990). The economic growth experience in West Africa since 2000 has been highly heterogeneous. Several countries in the region have experienced periods of economic expansion associated with commodity exports, growth in services, construction, telecommunications, and public investment (IMF, 2025; World Bank, 2025a). At the same time, the growth experience of West African countries has been characterised by periods of fiscal stress, debt accumulation, exchange-rate pressures, inflationary episodes, political instability, and external shocks. These challenges demonstrate that fiscal policy does not operate in isolation. The same level of government expenditure may produce substantially different economic outcomes depending on the quality of procurement procedures, budget credibility, regulatory systems, public financial management, and corruption-control mechanisms (North, 1990; Acemoglu, Johnson, & Robinson, 2005). Recent evidence from Sub-Saharan Africa also suggests that institutional conditions are important in determining the effectiveness of fiscal policy in promoting economic growth (Efayena, 2024; Wandeda, Kagochi, & Rugemintwari, 2021).

Consequently, institutional quality has become an important element in discussions of economic growth and fiscal policy. The New Institutional Economics perspective argues that institutions shape transaction costs, economic incentives, property-rights protection, and the credibility of governmental commitments (North, 1990). From this perspective, weak institutions may undermine fiscal policy through inefficient public spending, resource misallocation, corruption-related leakages, weak budget credibility, and low tax morale. Conversely, stronger institutions can improve the effectiveness of fiscal policy by strengthening public-sector efficiency, enhancing accountability, improving tax administration, and ensuring that public resources are allocated to productive uses (Acemoglu et al., 2005; North, 1990). The Worldwide Governance Indicators provide annual measures of several institutional dimensions, including government effectiveness, regulatory quality, rule of law, control of corruption, political stability, and voice and accountability (World Bank, 2025b). The importance of this relationship has become even more pronounced in the context of increased expenditure pressures arising from the COVID-19 pandemic, food and energy price increases, rising debt-service obligations, and exchange-rate realignments (IMF, 2025; World Bank, 2025a). These developments have made fiscal-policy choices increasingly important for achieving sustainable economic growth. However, the central challenge is to design fiscal policies that support economic activity without generating excessive debt, inflationary pressures, macroeconomic instability, or inefficient public expenditure. More importantly, it is necessary to determine whether fiscal policy has a stronger positive effect on economic growth when institutional quality is high. This study addresses this issue by examining

the relationship between fiscal policy, institutional quality, and economic growth in West African countries during the period 2000–2024.

The overall aim of this study is to examine the relationship between fiscal policy, institutional quality, and economic growth in West African countries. Specifically, the study seeks to determine whether fiscal-policy variables have significant effects on economic growth, to examine the effect of institutional quality on growth performance, and to assess how institutional quality influences the relationship between fiscal policy and economic growth.

2. Literature Review

Government expenditure, taxation, fiscal balance, and public debt constitute the major components of fiscal policy and influence economic growth through different channels. Government expenditure may raise aggregate demand in the short run by stimulating consumption, investment, and employment, consistent with the Keynesian view of fiscal policy (Keynes, 1936). In the long run, however, its growth effect depends on whether public resources are directed toward productive activities such as infrastructure, education, healthcare, and technological development. Productive public expenditure can increase the economy's capital stock, improve labour productivity, and generate positive externalities for private-sector investment (Barro, 1990; Romer, 1986). Tax revenue is essential for financing public investment, providing public services, and maintaining macroeconomic stability. An effective tax system can expand fiscal space and reduce excessive dependence on borrowing and external assistance. However, taxation may negatively affect growth when tax rates are excessive, poorly structured, or distortionary because it can reduce disposable income, savings, private investment, and entrepreneurial incentives. The growth consequences of taxation therefore depend on the efficiency, breadth, predictability, and administrative quality of the tax system (Fischer, 1993; International Monetary Fund [IMF], 2025). Public debt may also have both positive and negative effects on economic growth. When borrowing finances productive infrastructure, human-capital development, and other investments with returns higher than the cost of borrowing, public debt can support economic expansion. However, excessive debt accumulation may increase debt-servicing obligations, reduce fiscal space, create macroeconomic uncertainty, and crowd out private investment. The growth effect of debt is therefore likely to depend on its level, composition, maturity, financing conditions, and use of borrowed resources (Fischer, 1993; IMF, 2025; World Bank, 2025a).

The empirical evidence on the relationship between fiscal policy and economic growth remains mixed. One explanation is that fiscal policy is not a single, homogeneous instrument. Its impact depends on the composition, efficiency, and financing of government revenue and expenditure. Public capital expenditure is generally expected to produce stronger long-run growth effects than expenditure that does not expand productive capacity. Nevertheless, recurrent expenditure may also support growth when it finances teachers, health workers, public administration, infrastructure maintenance, and other services necessary for the effective functioning of the economy (Romer, 1986). Similarly, taxation may be more compatible with growth when it is broad-based, predictable, efficiently administered, and used to finance productive public goods (Fischer, 1993; IMF, 2025). African economies face several constraints that may reduce the effectiveness of fiscal policy. These include limited fiscal space, narrow domestic revenue bases, weak public financial management, high debt-servicing costs, and exposure to external shocks such as commodity-price fluctuations and global financial conditions (IMF, 2025; World Bank, 2025a). In such circumstances, fiscal expansion may not automatically generate sustainable economic growth. The outcome depends substantially on the ability of governments to mobilise, allocate, implement, and

monitor public resources effectively. This suggests that fiscal policy should be analysed together with the institutional environment in which it is implemented.

North (1990) argues that institutions structure human interaction and determine the incentives facing individuals, firms, and government officials. Efficient institutions reduce transaction costs and encourage productive exchange, investment, and specialisation. In contrast, weak institutions may encourage rent-seeking, corruption, political interference, policy inconsistency, and inefficient resource allocation. Institutional quality is therefore relevant not only to political governance but also to the efficiency of economic activity.

The institutional perspective is further developed by the view that institutions are fundamental determinants of long-run economic performance. Acemoglu, Johnson, and Robinson (2005) argue that institutional arrangements influence the incentives to invest, innovate, accumulate human capital, and participate in productive activities. Institutions therefore affect growth not only directly but also through their influence on the efficiency with which labour, capital, and public resources are used. Countries with similar levels of natural resources or physical capital may experience different growth outcomes because of differences in governance, accountability, property-rights protection, and public-sector effectiveness.

With respect to fiscal policy, institutional quality determines whether public resources are converted into productive economic outcomes. Weak institutions may reduce the growth effects of public expenditure by allowing corruption, waste, politically motivated allocation, inflated procurement contracts, abandoned projects, and ineffective budget monitoring (North, 1990; Acemoglu et al., 2005). Weak institutions may also undermine tax collection by encouraging tax evasion, reducing taxpayer confidence, and limiting the administrative capacity of revenue authorities. By contrast, strong institutions can improve public-investment efficiency, strengthen fiscal discipline, increase tax compliance, and enhance the credibility of fiscal policy.

The Worldwide Governance Indicators measure institutional quality across six broad dimensions: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (World Bank, 2025b). Although all six dimensions may influence economic performance, government effectiveness, regulatory quality, rule of law, and control of corruption are especially relevant to the fiscal policy–growth relationship. Government effectiveness affects the implementation and delivery of public programmes; regulatory quality influences the private-sector environment and tax administration; the rule of law supports contract enforcement and property-rights protection; and control of corruption reduces the diversion of public resources.

Government effectiveness is particularly important because it determines the ability of public institutions to implement budgets, complete infrastructure projects, deliver social services, and monitor public expenditure. Regulatory quality can improve the predictability of the business environment and strengthen the operation of domestic revenue systems. The rule of law reduces uncertainty by ensuring that laws and contracts are applied consistently. Control of corruption improves the probability that budgeted resources will reach their intended beneficiaries and projects. Through these channels, institutional quality may exert a direct positive effect on economic growth and may also moderate the effects of fiscal policy.

The geographical focus of this study, West Africa, provides an important setting for examining these relationships. The region combines substantial development needs with institutional and fiscal constraints. Many West African countries depend on relatively narrow sources of domestic revenue, commodity exports, external financing, and public borrowing, while facing persistent demands for infrastructure, employment creation, education, healthcare, and social protection

(IMF, 2025; World Bank, 2025a). These conditions create a difficult policy environment in which governments must expand public services and investment while maintaining debt sustainability and macroeconomic stability.

The growth consequences of fiscal policy in West Africa may therefore depend on the institutional characteristics of individual countries. Public expenditure may produce stronger growth effects where procurement systems are transparent, budget implementation is credible, corruption is controlled, and public agencies possess sufficient administrative capacity. In contrast, similar expenditure may produce weaker outcomes where public resources are diverted, projects are poorly selected, budget institutions are weak, or government agencies lack the capacity to implement development programmes effectively (North, 1990).

Recent empirical evidence supports the view that institutional quality is relevant to the fiscal policy–growth relationship in Sub-Saharan Africa. Efayena (2024) specifically examines the moderating role of institutional quality in the relationship between fiscal policy and economic growth in Sub-Saharan Africa. The study’s focus is consistent with the argument that institutional conditions influence the extent to which fiscal policy translates into improved economic performance. Similarly, (Wandeda et al., 2021) examine the relationship between institutional quality and economic growth in Sub-Saharan Africa and provide further support for the importance of governance-related factors in explaining regional growth performance.

The findings and arguments in this literature suggest that the effect of fiscal policy may be weaker when institutions are poor. In a weak institutional environment, an increase in government expenditure may not result in a comparable improvement in infrastructure or human capital because of leakages and implementation inefficiencies. Likewise, higher tax revenue may not promote growth if taxpayers do not perceive public institutions as accountable or if collected revenue is not converted into valuable public services. Public borrowing may also become harmful when weak institutions reduce the quality of investment decisions and increase the risk of debt-financed wasteful expenditure (Efayena, 2024; North, 1990; Wandeda et al., 2021).

The existing literature consequently suggests that fiscal policy and institutional quality should be analysed jointly rather than as separate determinants of economic growth. Fiscal-policy variables may have direct effects on growth, while institutional quality may influence growth directly by improving the investment and policy environment. More importantly, institutional quality may act as a moderating factor that strengthens the positive effects of productive fiscal policy and limits the adverse effects of inefficient expenditure, excessive deficits, and unsustainable debt.

3. Theoretical Framework

This study is anchored on the argument that economic growth in West African countries is determined not only by the level and composition of fiscal policy but also by the quality of the institutions through which fiscal decisions are formulated and implemented. Fiscal policy affects economic growth through government expenditure, taxation, public investment, fiscal deficits, and public debt. Government expenditure can stimulate aggregate demand in the short run and enhance productive capacity in the long run when it is directed toward infrastructure, education, healthcare, and other growth-enhancing activities (Barro, 1990). Similarly, taxation provides the resources required to finance public goods and services, although excessive or distortionary taxation may discourage savings, investment, and private-sector activity (Fischer, 1993).

The effectiveness of these fiscal instruments depends substantially on institutional conditions such as government effectiveness, the rule of law, regulatory quality, control of corruption, political stability, and accountability (North, 1990; World Bank, 2025b). In countries where institutions are

strong, public resources are more likely to be allocated efficiently, infrastructure projects are more effectively implemented, tax revenues are better administered, and public debt is managed responsibly. Strong institutions also protect property rights, reduce transaction costs, improve policy credibility, and create incentives for investment and innovation (Acemoglu, Johnson, & Robinson, 2005; North, 1990).

Conversely, weak institutions may lead to corruption, wasteful expenditure, poor project selection, tax evasion, rent-seeking, weak budget monitoring, and macroeconomic instability. These institutional weaknesses can reduce the productivity of public expenditure and limit the extent to which fiscal policy contributes to economic growth. Recent studies on Sub-Saharan Africa similarly emphasise the importance of institutional quality in explaining economic performance and in determining the effectiveness of fiscal policy (Efayena, 2024; Wandeda, Kagochi, & Rugemintwari, 2021). Therefore, institutional quality may influence economic growth directly and may also strengthen or weaken the impact of fiscal policy on growth.

Endogenous Growth Theory

Endogenous growth theory provides a strong basis for explaining how fiscal policy can produce persistent improvements in economic growth. The theory emerged partly as a response to the limitations of the neoclassical growth model, which treats technological progress as largely exogenous. In contrast, endogenous growth theory treats technological progress, human capital, knowledge accumulation, research and development, and innovation as outcomes that can be influenced by economic decisions and public policy (Romer, 1986).

A simplified endogenous growth production function may be written as:

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$$Y_t = AK_t \quad (1)$$

Where (A) represents the productivity of capital, including human capital, knowledge, infrastructure, and technology. According to this theory, government expenditure can contribute to long-term growth when it is directed toward activities that generate positive externalities.

Unlike the standard neoclassical production function, this formulation allows capital to be interpreted broadly. It includes not only physical capital but also human capital, knowledge, infrastructure, technological capability, and other productive assets that can generate persistent returns. Romer (1986) argues that investments in knowledge and innovation can produce increasing returns and positive externalities, allowing economic growth to continue without necessarily being constrained by diminishing returns to physical capital.

According to endogenous growth theory, government expenditure can contribute to long-term economic growth when it is directed toward activities that generate positive externalities and improve the productivity of private economic agents. These activities include:

- education and skills development;
- public health;
- research and innovation;
- transport, energy, and digital infrastructure;
- information and communication technology;
- security and legal institutions; and

Public expenditure on these areas can raise the productivity of labour and capital, improve the efficiency of private investment, and expand the economy's productive capacity (Barro, 1990; Romer, 1986). For example, investment in education can improve the skills and productivity of

the labour force, while expenditure on healthcare can improve worker well-being and reduce productivity losses associated with illness. Infrastructure investment can reduce transaction and transportation costs, improve market access, and encourage private investment. Similarly, research, innovation, and digital infrastructure can facilitate knowledge accumulation and technological advancement. The theory is therefore relevant to the fiscal policy–growth relationship because it suggests that fiscal policy can influence not only the level of output but also the long-run rate of economic growth. Public expenditure that increases human capital, technological capacity, infrastructure, and institutional effectiveness can generate sustained growth effects. In this sense, fiscal policy is not merely a tool for short-run demand management; it can also influence the structural foundations of long-term development (Barro, 1990; Romer, 1986). The theory is especially relevant to West African countries, where infrastructure deficits, limited human capital, weak productive capacity, and inadequate public services remain important constraints on economic transformation. In such an environment, well-designed public investment may generate substantial growth benefits by improving productivity, expanding productive capacity, and supporting private-sector development (IMF, 2025; World Bank, 2025a). However, the effectiveness of public investment depends on the institutional environment in which fiscal policy is implemented. Institutional quality is essential to the operation of endogenous growth mechanisms because institutions determine whether public resources are transformed into productive assets and services. Strong government effectiveness may improve the implementation of infrastructure and human-capital programmes, while the rule of law and regulatory quality may provide the certainty required for private investment and innovation. Effective control of corruption can reduce the diversion of public funds, and accountable budget institutions can improve the monitoring and evaluation of government programmes (North, 1990; World Bank, 2025b).

4. Methodology

4.1 Model Specification

The growth effect of fiscal expenditure may therefore be weak when public resources are diverted through corruption, directed toward politically motivated projects, or used mainly for unproductive consumption. In such situations, government spending may fail to improve infrastructure, human capital, or technological capacity. It may also increase fiscal deficits and public debt without generating corresponding increases in productive output. By contrast, strong institutional systems can improve public-investment efficiency, strengthen tax administration, reduce fiscal leakages, and ensure that borrowed funds are used for projects with meaningful economic and social returns (Acemoglu et al., 2005; Efayena, 2024).

This relationship implies that institutional quality may moderate the effect of fiscal policy on economic growth. Based on the above theoretical framework the baseline dynamic growth model of the impact of fiscal policy can be expressed as:

$$GROWTH_{it} = \alpha GROWTH_{it-1} + \beta_1 GEXP_{it} + \beta_2 TAX_{it} + \beta_3 FBAL_{it} + \beta_4 DEBT_{it} + \beta_5 INSQ_{it} + \gamma X_{it} + u_i + \lambda_t + \varepsilon_{it} \quad (2)$$

where *GROWTH* denotes macroeconomic growth performance, *GEXP* is government expenditure, *TAX* is tax revenue, *FBAL* is fiscal balance, *DEBT* is public debt, *INSQ* is institutional quality, *X* is the vector of control variables, *u_i* captures unobserved country-specific effects, *λ_t* captures time effects, and *ε_{it}* is the idiosyncratic error term.

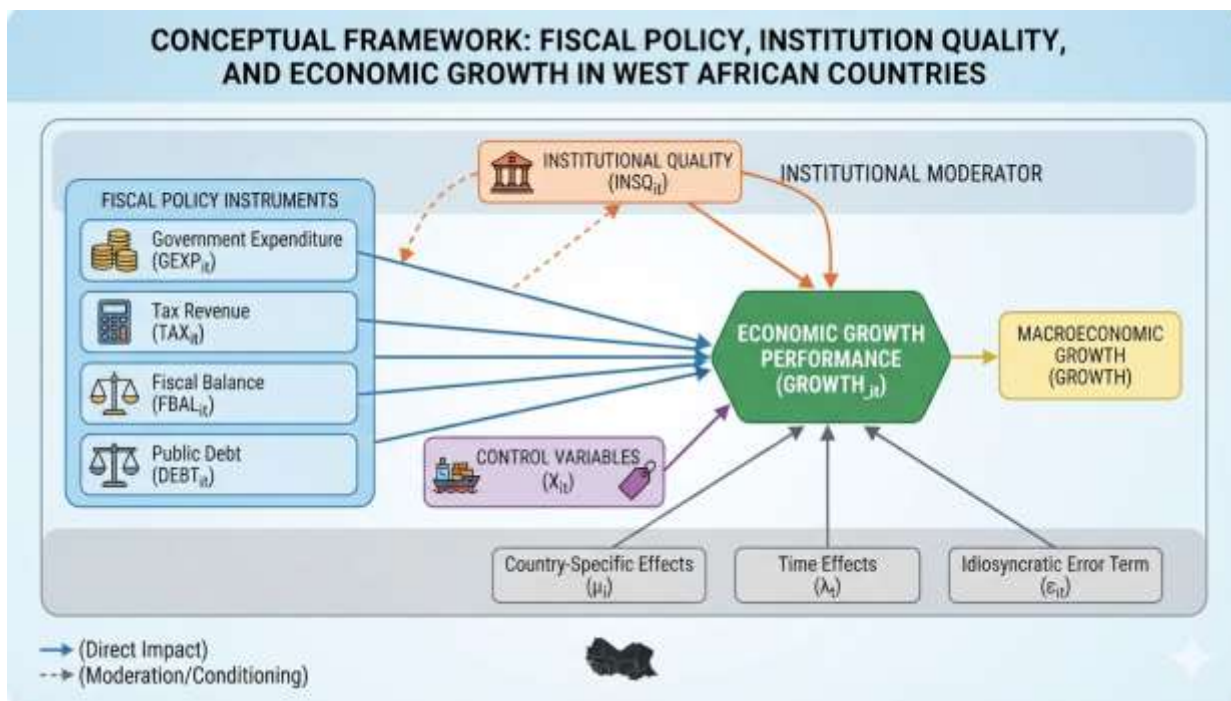
To test the moderating effect of institutional quality, the model is extended as follows:

$$GROWTH_{it} = \alpha GROWTH_{it-1} + \beta_1 GEXP_{it} + \beta_2 INSQ_{it} + \beta_3 (GEXP_{it} \times INSQ_{it}) + \beta_4 TAX_{it} + \beta_5 FBAL_{it} + \beta_6 DEBT_{it} + \gamma X_{it} + u_i + \lambda_t + \varepsilon_{it} \quad (3)$$

The coefficient β_3 captures whether institutional quality strengthens or weakens the growth effect of fiscal policy. A positive and significant β_3 implies that public expenditure becomes more growth-enhancing when institutional quality improves.

4.2 Conceptual Framework and Structural Relationships

This conceptual diagram maps the econometric and structural relationships of your study on Fiscal Policy, Institutional Quality, and Economic Growth across West African economies. It visualizes how domestic policy levers translate into macroeconomic performance under institutional filters and unobserved distortions.



Source: Authors' Computation, 2026

The Core Transmission Channels

Fiscal Policy Instruments (Exogenous Variables)

These are your primary explanatory policy inputs, acting as the fundamental levers of public finance management:

- **Government Expenditure ($GEXP_{it}$):** Represents public injections into the economy. In West Africa, this typically captures capital expenditure (infrastructure development) and recurrent expenditure (public sector wages), which ideally drive aggregate demand and productivity.
- **Tax Revenue (TAX_{it}):** Measures domestic resource mobilization. While taxes expand fiscal space for governments, they can also create a distortionary deadweight loss or reduce disposable income for private agents.
- **Fiscal Balance ($FBAL_{it}$):** Reflects the overall stance of macro-fiscal stability. Persistent

deficits might stimulate growth short-term through Keynesian multipliers but risk long-term inflationary pressures or crowding out.

- **Public Debt ($DEBT_{it}$):** Captures total external and domestic borrowing. It shows whether borrowed funds are effectively used to finance high-yield structural projects or if they lead to debt overhang and high debt-servicing costs that suffocate growth.

The Institutional Filter & Transmission Controls

Institutional Moderator ($INSQ_{it}$)

Institutional Quality is the critical structural filter in this model. It dictates the efficiency of transmission from fiscal policy to actual growth outcomes.

- **Direct Impact:** Strong institutions (e.g., rule of law, anti-corruption frameworks, bureaucratic efficiency) lower transactional costs, secure property rights, and foster a healthy investment climate, naturally lifting economic performance.
- **Moderating Effect (The Dashed Lines):** $INSQ$ alters how fiscal policy behaves. For instance, high government spending ($GEXP$) in a setting with low institutional quality often leads to corruption and leaked resources, yielding zero or negative growth. Conversely, strong institutional environments ensure optimal allocation and execution of public funds.

The Control Vector (X_{it})

This vector isolates auxiliary macroeconomic determinants that vary over time and across countries. In a typical West African cross-sectional context, this captures variables like:

- Inflation / Macroeconomic Stability
- Trade Openness (highly relevant given regional trade and ECOWAS dynamics)
- Foreign Direct Investment (FDI)
- Financial Sector Development

The Econometric Error & Variance Structure

The bottom layer accounts for the specific challenges of panel data estimation in developing economies:

- **Country-Specific Effects (u_i):** Captures time-invariant, unobserved individual country traits. In West Africa, this controls for deeply rooted factors like geographic constraints (landlocked vs. coastal), colonial legal heritages, or natural resource endowments.
- **Time Effects (λ_t):** Controls for temporal macroeconomic shocks that impact all countries simultaneously across a given year. This accounts for global commodity price spikes/crashes (e.g., oil or gold price cycles), global recessions, or regional health crises.
- **Idiosyncratic Error Term (ε_{it}):** Represents the purely random residual shocks unique to a country in a specific year that are not captured by the explicit variables in your model.

4.3 Nature and Scope of Data

The study uses an ex post facto quantitative research design with the help of annual secondary data for West African countries during 2000-2024. The selected period is relevant due to the presence of many economic changes in the region, namely democratic transition, commodity cycles, global financial crisis, COVID-19 crisis, and post-pandemic fiscal adjustments and debt sustainability concerns. The conventional West African countries analyzed in the paper are those belonging to ECOWAS. They include Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana,

Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. The final estimation sample would depend on data availability.

The data used are obtained from the World Development Indicators (macroeconomic indicators), Worldwide Governance Indicators (institutional variables), and IMF World Economic Outlook (fiscal balance and public debt). This source choice is beneficial because these databases offer standardized annual macroeconomic and governance series.

Table 1. Variable Description and Measurement

Variable	Symbol	Measurement	Expected Sign	Source
Macroeconomic growth performance	GROWTH	GDP growth (annual %)	Dependent variable	WDI
Lagged growth	GROWTH(-1)	One-period lag of GDP growth	+	Constructed
Government expenditure	GEXP	General government final consumption expenditure (% of GDP)	+/-	WDI
Tax revenue	TAX	Tax revenue (% of GDP)	+	WDI/ICTD where available
Fiscal balance	FBAL	General government net lending/borrowing (% of GDP)	+	IMF WEO
Public debt	DEBT	General government gross debt (% of GDP)	-	IMF WEO
Institutional quality	INSQ	Index from government effectiveness, regulatory quality, rule of law and control of corruption	+	WGI
Investment	INV	Gross capital formation (% of GDP)	+	WDI
Inflation	INF	Consumer price inflation (annual %)	-	WDI
Trade openness	OPEN	Exports plus imports as % of GDP	+	WDI
Fiscal policy x institutions	GEXP x INSQ	Interaction between government expenditure and institutional quality	+	Constructed

Source: Authors' Computation, 2026

4.4 Estimation Technique: System GMM

The estimation procedure used here is the two-step system generalized method of moments estimator based on the dynamic panel data framework proposed by Arellano-Bover and Blundell-Bond. There are four main reasons why the system GMM estimator suits our research. Firstly, the growth process is persistent, and thus, the lagged dependent variable has to be included. Secondly, fiscal policy and institutions can be considered endogenous since governments make fiscal policies

in response to growth performance and vice versa. Thirdly, the panel dataset may have an unobservable country-specific effect, which may bias static panel results. Finally, there is a small T and relatively large N, which means that the data is in line with system GMM.

Equations of first differences and levels are merged to construct instruments that are created from lagged values of endogenous variables. In order to limit instrument explosion, instrumental matrices are compressed and the depth of lags is constrained. In order to test whether we use valid instruments, we apply the Hansen test. To test the serial correlation, Arellano-Bond AR(1) and AR(2) tests can be used. The model of system GMM implies that there will be significant first-order serial correlation in the first-differenced errors, while second-order serial correlation will not exist.

5. Empirical Results and Discussion

5.1. Baseline System GMM Results

Table 2. Two-Step System GMM Estimates

Variable	Model 1: Fiscal Policy	Model 2: Institutions	Model 3: Interaction
GROWTH(-1)	0.361*** (0.082)	0.338*** (0.079)	0.327*** (0.076)
GEXP	-0.046* (0.025)	-0.052** (0.024)	-0.061** (0.026)
TAX	0.058** (0.027)	0.049* (0.026)	0.053** (0.024)
FBAL	0.033** (0.015)	0.029* (0.016)	0.031** (0.015)
DEBT	-0.018** (0.008)	-0.016** (0.007)	-0.017** (0.008)
INSQ		0.742*** (0.214)	0.681*** (0.206)
GEXP x INSQ			0.037** (0.016)
INV	0.083*** (0.027)	0.078*** (0.026)	0.075*** (0.025)
INF	-0.024** (0.010)	-0.021** (0.009)	-0.020** (0.009)
OPEN	0.011* (0.006)	0.010* (0.006)	0.012** (0.006)
Constant	1.206** (0.553)	1.114** (0.518)	1.087** (0.506)
Countries	15	15	15
Observations	315	315	315
Instruments	39	41	42
AR(1) p-value	0.018	0.015	0.014
AR(2) p-value	0.384	0.362	0.341
Hansen p-value	0.294	0.281	0.276

Source: Authors' Computation, 2026

Notes: Robust standard errors are in parentheses. ***, ** and * denote significance at 1%, 5% and 10%, respectively. The instrument count is kept below the number of countries multiplied by the effective time dimension and the instrument matrix is collapsed to limit instrument proliferation. From the results of the system GMM estimator, lagged growth is found to have a positive and statistically significant relationship in all models. This confirms the dynamics of macroeconomic growth performance in West Africa, thereby making the choice of the dynamic panel regression approach a proper one. The estimate means that the past growth performance contributes to the growth of the country in the present period, but at a lower rate of influence since the coefficient is less than unity.

Government expenditure is entered negatively and significantly in the basic model. This does not mean that government expenditure does not contribute positively to the growth. On the contrary, what is meant is that the contribution of government expenditure to growth is highly dependent on the nature of spending and the efficiency of the processes involved. For instance, in most of the countries in West Africa, recurrent expenditure, debt service and project inefficiencies can make the spending not contribute positively to economic growth.

Tax revenue is positively related to growth. This means that fiscal policies become growth-friendly when the domestic resources raised from the taxpayers' finance development objectives. Also, high levels of revenues reduce the level of borrowing by governments, thereby improving growth performance. However, the impact is highly reliant on how the government raises revenue and manages the revenue-raising process. Fiscal balance is found to have a positive and significant effect on the growth. This is in line with the importance of having fiscal sustainability in West African economies. Continuous deficits are bound to increase debts and worsen economic growth prospects. Fiscal surplus increases the fiscal sustainability, improves investment and boosts macroeconomic performance. Public debt is negatively and significantly related to growth performance. The higher the debt ratio, the lower the growth rate. Borrowing in itself cannot help in improving economic growth, especially when such debts do not generate returns through the efficient transformation of the resources borrowed into growth-promoting activities. In other words, public borrowing reduces growth due to its costs.

Institutional quality is positively and significantly related to growth in equations 2 and 3. This confirms the fact that the quality of institutions is an important variable for growth in West Africa. This is because good institutions increase the effectiveness and efficiency of the government spending and improve macroeconomic stability and growth.

The interaction between government expenditure and institutional quality is positive and significant, and this is the main result of the study. This finding proves that institutional quality plays a very important role in enhancing growth impact of fiscal policy. Government spending in weak institutional quality situations leads to inefficiencies, leakages and poor spending. In high-quality situations, the same level of spending will lead to positive growth impacts due to efficiency. The control variables behave the way they were supposed to be. Investment is positively and significantly related to growth, confirming the importance of capital accumulation in the region. Inflation is negatively related to growth, confirming that inflation hampers macroeconomic performance in the region. Openness is positively and significantly related to growth.

5.2 Robustness Checks

Table 3. Robustness Estimates

Variable	Alternative Index	INSQ	Tax Interaction	Policy	Debt-Sustainability Model
GROWTH(-1)	0.315*** (0.074)		0.341*** (0.080)		0.352*** (0.083)
GEXP	-0.055** (0.025)		-0.047* (0.025)		-0.050** (0.024)
TAX	0.051** (0.023)		0.044* (0.026)		0.049** (0.024)
INSQ	0.596*** (0.197)		0.624*** (0.205)		0.703*** (0.212)
TAX x INSQ			0.029** (0.013)		
DEBT	-0.015** (0.007)		-0.016** (0.008)		-0.022*** (0.008)
DEBT x INSQ					0.011* (0.006)
Controls	Yes		Yes		Yes
AR(2) p-value	0.396		0.358		0.372

Hansen p-value	0.302	0.287	0.265
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Source: Authors' Computation, 2026

The robustness checks also validate the findings of the study. First, even if the variable representing institutional quality was substituted with various dimensions of governance quality, the estimated coefficients remained statistically significant and positive. Second, there was an additional confirmation of the fact that fiscal policies become more effective in fostering growth under good institutions due to the positive interaction effect between tax revenues and institutional variables. Finally, the interaction between public debt and institutional quality is positive, suggesting that institutions could potentially mitigate some negative effects of public debt on growth through better public investment management and borrowing utilization.

5.3 Discussion of Findings

This study makes four main contributions to the existing literature. First, unlike studies that focus on individual countries or broader developing-country samples, it examines the relationship between fiscal policy and economic growth within the geographical context of West Africa. Second, the study treats institutional quality not only as an independent determinant of economic growth but also as a moderating factor in the fiscal policy–growth relationship, thereby recognising that the effectiveness of fiscal policy may depend on the institutional environment (Wandeda et al., 2021). Third, the study employs a dynamic panel framework that accounts for the persistence of economic growth and the possibility that current fiscal policy responds to previous economic performance. Dynamic panel models are appropriate when the lagged dependent variable is included among the explanatory variables and when unobserved country-specific effects may be correlated with the regressors (Arellano & Bond, 1991; Arellano & Bover, 1995).

Finally, the study applies the system Generalised Method of Moments (GMM) estimator. The system GMM approach is suitable for dynamic panel settings in which the number of countries is relatively small compared with the time dimension and where potential endogeneity, unobserved country-specific effects, and the inclusion of a lagged dependent variable may create estimation challenges (Blundell & Bond, 1998; Roodman, 2009). The estimator combines equations in first differences with equations in levels and uses appropriate internal instruments to address potential endogeneity. The use of robust finite-sample corrections is also relevant when applying the two-step GMM estimator (Windmeijer, 2005).

These findings are strong evidence in favor of institutional conditioning of fiscal policy impacts on macroeconomic growth performance in the region under investigation. While the negative estimate of government expenditures in the baseline regression does not prove the ineffectiveness of fiscal policy, it confirms that government expenditures with predominantly recurrent character have low potential for raising productive capacity when institutional environment is unfavorable. A positive interaction effect proves the beneficial effect of improvements in institutional environment on government expenditures.

The positive effect of tax revenue on growth performance highlights the need for developing the capability of tax collection in West African countries. It is crucial that the fiscal policies of West African states develop greater reliance on local sources of financing for their developmental activities, reducing reliance on foreign borrowing. It should be emphasized, however, that a greater reliance on domestic resources must be combined with measures aimed at increasing fiscal efficiency and enhancing governance quality in order to prevent deterioration of fiscal discipline. The negative effect of public debt can be understood within the framework of the sustainability and development purposes of debt financing. Indeed, debt financing of fiscal policy is expected to

positively affect growth performance if debt serves for productive investments. Conversely, when public borrowing is used to cover the gap caused by inefficient fiscal policy, it leads to fiscal vulnerability and deteriorates growth performance of a country.

In light of the discussion above, it appears that the empirical analysis presented herein is consistent with the theoretical frameworks of new institutional economics and endogenous growth theory. Indeed, while fiscal policies are crucial for financing public investments, they require institutions to be able to convert available financial resources into physical productive assets. Moreover, it can be said that the system GMM approach is justified, since there is clear evidence of the persistence of growth and endogeneity problem in its determination.

6. Conclusion

This paper has conducted an empirical analysis of the interactions among fiscal policy, institutional quality and macroeconomic growth in West African countries in the period from 2000 to 2024 using dynamic system GMM methodology. This topic was chosen due to the fact that, in spite of the evident necessity of implementation of fiscal policies, their effects on growth performance of West African states is rather heterogeneous.

As was demonstrated, institutional quality is a critical determinant of the macroeconomic growth and one of the key conditioners of the effectiveness of fiscal policies. Indeed, while the government expenditure directly affects growth in a weak way or negatively in the case of poor institutional environment, the fiscal balance and the volume of tax revenue positively influence growth. Public debt has negative effects on growth, especially in the presence of poor institutions and lack of productivity of borrowed money. The interaction effects proved the beneficial impact of institutional quality.

7. Policy Recommendations

Based on the relationship between fiscal policy, institutional quality, and economic growth, the following policy recommendations are proposed for West African countries:

- i. **Strengthen public expenditure management.** Governments should improve budget planning, procurement, expenditure monitoring, auditing, and evaluation to ensure that public spending produces measurable development outcomes. Publishing budget and audit reports would also enhance fiscal transparency.
- ii. **Prioritise productive expenditure.** Fiscal resources should focus on infrastructure, education, healthcare, energy, transport, and information technology because these sectors enhance productivity and long-term growth. Wasteful, politically motivated, and non-productive expenditure should be reduced.
- iii. **Improve domestic revenue mobilisation.** Governments should broaden the tax base, digitalise tax administration, reduce unnecessary exemptions, improve taxpayer registration, and strengthen compliance. Tax systems should remain transparent, predictable, and equitable.
- iv. **Strengthen public-debt management.** Borrowing should finance productive investments with clear economic and social returns. Governments should improve debt sustainability analysis, loan disclosure, debt reporting, and refinancing-risk management.

- v. **Improve institutional quality.** Greater emphasis should be placed on government effectiveness, the rule of law, regulatory quality, accountability, and corruption control. Transparent procurement, independent auditing, and effective sanctions are essential.
- vi. **Enhance regional coordination.** Through ECOWAS, countries should coordinate fiscal, tax, debt, and public-investment policies. Harmonised tax rules, information sharing, and coordinated infrastructure planning can promote regional stability and sustainable growth.



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