



# INSTITUTIONAL DIMENSIONS AND BANK PERFORMANCE IN SELECTED WEST AFRICAN COUNTRIES: EVIDENCE FROM A SYSTEM GMM ANALYSIS

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## Abstract

*Amid ongoing financial reforms and institutional transitions across West Africa, understanding the extent to which institutional quality shapes banking performance has become increasingly pertinent. Although numerous studies have examined bank-specific and macroeconomic determinants of performance, the institutional environment, encompassing governance quality, political stability, and regulatory effectiveness, remains relatively underexplored within the regional context. This study re-examines the nexus between institutional quality and bank performance by employing the two-step System GMM estimator on a panel dataset of West African banks. Using the two-step System Generalized Method of Moments (System-GMM) estimator and data for the*

*period 2000 to 2023 from selected West African countries, the empirical findings indicate that the influence of institutional factors, whether considered as a composite governance index or disaggregated into economic, political, and institutional dimensions, is sensitive to the chosen measure of performance. Specifically, the results show that improvements in institutional quality exert the most pronounced effect when performance is proxied by the net interest margin (NIM), suggesting that enhanced institutional frameworks primarily strengthen banks' intermediation efficiency. Overall, the study underscores the centrality of governance reforms and institutional strengthening in fostering a more resilient, efficient, and profitable banking sector in West Africa, particularly in the context of post-pandemic recovery, digital financial inclusion, and evolving regulatory regimes across the region.*

*Keywords: Bank Performance; Institutional Quality; Governance; System GMM; West Africa*

## **INTRODUCTION**

The catalytic role of finance in fostering economic growth and development has been widely recognized in both development and finance literature. Banks, as central intermediaries, perform the critical function of mobilizing savings and allocating resources from surplus to deficit sectors, thereby facilitating investment and economic expansion. However, the efficiency of this intermediation process depends crucially on the institutional environment. As North (1990) famously posits, institutions—the “rules of the game”—constitute humanly devised constraints that structure economic interactions, safeguard property rights, and enable predictable enforcement of contracts. Effective institutions are particularly critical for financial systems, as they underpin stable property rights, enforceable legal frameworks, and efficient banking operations (La Porta et al., 1998; Mishkin, 2009).

In developing regions such as West Africa, the banking sector dominates the financial landscape due to the underdevelopment of capital markets (Beck et al., 2015; Demirgüç-Kunt et al., 2020). This structural reliance on banks as primary financiers makes understanding the determinants of bank performance in the region both policy-relevant and academically compelling. At the same time, weak institutions—manifesting as governance failures, regulatory inefficiencies, and political instability—have long been recognized as key constraints on Africa's growth trajectory (World Bank, 1989; Acemoglu et al., 2001; Jones & Olken, 2008). Unlike exogenous factors such as geography or disease burden, institutional weaknesses are, in principle, amendable through targeted reforms, thereby offering a practical lever for improving financial outcomes.

Against this backdrop, the present study investigates the causal relationship between institutions and bank performance in West Africa, with a focus on three dimensions of institutional quality: economic, political, and governance-related institutions. While prior studies have extensively examined the influence of bank-specific characteristics, industry factors, and macroeconomic variables on performance (Athanasoglou et al., 2008; Kosmidou et al., 2011; 2012), research directly linking institutional quality to bank performance in the West African context remains relatively scarce and fragmented. Recent studies suggest that institutional factors not only affect the level of financial intermediation but may also condition the effectiveness of bank management and risk-taking strategies (Laeven & Levine, 2009; Beck et al., 2013; Abor & Biekpe, 2020).

Examining this nexus for West Africa is particularly pertinent for several reasons. First, the countries in the region share common historical, economic, and political challenges, including resource dependence, governance vulnerabilities, and episodes of political instability. Second, the predominance of bank-centric financial systems implies that institutional quality is likely to have a direct and measurable impact on the efficiency and profitability of banking operations. Third, weak institutional environments have historically contributed to social unrest, property destruction, and systemic inefficiencies, thereby amplifying the importance of understanding which institutional dimensions matter most for financial stability and growth (North et al., 2013; IMF, 2021).

This study contributes to the literature in both theoretical and empirical terms. Theoretically, it integrates insights from institutional economics, banking efficiency theory, and governance literature to argue that institutional quality shapes not only the macroeconomic context but also the micro-level performance of banks. Empirically, it provides a systematic assessment of how economic, political, and governance institutions influence bank performance across multiple metrics using the two-step System GMM estimator, which addresses endogeneity and dynamic panel biases. By disaggregating institutional quality into its key components, the study identifies which dimensions are most salient for enhancing bank profitability and efficiency in the West African context, thereby offering actionable insights for the policymakers, regulators, and banking practitioners.

In sum, by focusing on West Africa—a region characterized by banking-dominated financial systems and persistent institutional challenges—this study fills a critical gap in the literature and provides evidence-based guidance for strengthening the role of institutions in fostering resilient and efficient banking sectors.

## LITERATURE REVIEW

The performance of banks is a multidimensional phenomenon influenced by a wide range of internal and external factors. Internally, bank-specific characteristics such as capitalization (Bourke, 1989; Liu et al., 2010), ownership structure (Innotta et al., 2007; Cornett et al., 2010), asset size (Bikker & Hu, 2002; Stiroh & Rumble, 2006; Dietrich & Wanzenried, 2011), liquidity (Bourke, 1989; Marozva, 2015), and efficiency in expense management (Guru et al., 2002; Staikouras et al., 2007) have been widely recognized as significant determinants of bank performance. Externally, macroeconomic and market-specific factors such as inflation, GDP growth, financial globalization, market structure, and competition (Molyneux & Thornton, 1992; Athanasoglou et al., 2008; Sufian & Habibullah, 2012; Demirgüç-Kunt et al., 2020) are also influential. Collectively, these determinants are often classified as internal (bank-specific) and external (macroeconomic and market-specific) factors.

Several empirical studies have explored these determinants in various contexts. Guru et al. (2002), in their study of Malaysian banks (1986–1995), emphasized the importance of expense management while highlighting the significant, albeit mixed, effects of macroeconomic indicators such as inflation and interest rates on bank profitability. Vong and Chan (2009) found that asset quality negatively affects bank performance in Macao, whereas management efficiency and capitalization have positive impacts. Similarly, Garza-Garcia (2011) in Mexico identified capital adequacy and lagged performance as positive drivers, while loan-to-asset ratios reduced profitability, challenging traditional market concentration hypotheses. Hoffmann (2011) documented a negative relationship between capital ratios and bank profitability in the U.S., suggesting over-cautious operational strategies, and highlighted non-linear scale economies where larger banks do not always enjoy higher profitability.

In the African context, Ahokposi (2013) studied determinants of bank interest margins across sub-Saharan countries and reported positive relationships with market concentration, inefficiency, and equity risk, while liquidity had a negative impact. Nkegbe and Ustarz (2015) analyzed Ghanaian banks (2000–2010) and confirmed the relative market power hypothesis, demonstrating that banks pass inefficiencies to customers through lending rates. Ayanda et al. (2013) and Khalfaoui and Saada (2015) similarly reported that capital adequacy, credit risk, and cost management are critical for Nigerian and Tunisian banks, with macroeconomic variables such as money supply growth also influencing performance.

While this body of literature provides extensive insights into traditional bank-specific and macroeconomic determinants of bank performance, the role of institutional quality has received limited empirical attention, particularly in West Africa. Recent studies have begun to highlight the importance of institutions in shaping financial sector outcomes. For instance, Beck et al.

(2013) and Laeven & Levine (2009) show that stronger institutions enhance financial intermediation efficiency and reduce systemic risks, while Abor and Biekpe (2020) demonstrate that governance quality and regulatory effectiveness directly influence bank profitability in African contexts. Furthermore, IMF (2021) and World Bank (2022) reports underscore that persistent institutional weaknesses in West Africa—ranging from regulatory gaps to governance deficits—constrain banking sector growth and stability.

This study fills a critical gap in the literature by empirically examining the causal effect of institutional infrastructure on bank performance in West Africa, disaggregating institutional quality into economic, political, and governance dimensions. By doing so, it contributes in two key ways. First, it extends institutional economics and banking performance literature by explicitly linking multidimensional institutional quality to bank profitability and efficiency, offering a nuanced understanding of how different institutional channels affect financial intermediation in bank-dominated economies. Second, it uses the two-step System GMM estimator to address endogeneity and dynamic panel biases, providing robust evidence on the relative importance of institutional dimensions for West African banks. This approach allows for a more precise identification of which institutional factors most effectively enhance banking sector performance, offering actionable insights for policymakers, regulators, and financial institutions in the region.

In sum, while traditional determinants of bank performance remain relevant, this study demonstrates that institutional quality is a critical, yet underexplored, driver of bank efficiency and profitability in West Africa, providing timely evidence for the design of governance and regulatory reforms aimed at strengthening the regional banking sector.

## METHODOLOGY

### Research Design

For the purpose of the study, a descriptive research design was adopted.

### The Model

To examine the role of institutional quality in shaping bank performance in West Africa, we extend traditional models of bank performance by explicitly incorporating governance measures. The general model is specified as follows:

$$BankPerf_{it} = \alpha + \beta_1 BankSpec_{it} + \beta_2 Macro_{it} + \beta_3 Institution_{it} + \varepsilon_{it} \quad (1)$$

Where,  $BankPerf_{it}$  represents bank performance measures, including Return on Assets (ROA), Return on Equity (ROE), and Net Interest Margin (NIM).  $BankSpec_{it}$  is a matrix of bank-specific

determinants, such as capitalization, liquidity, efficiency, and size.  $Macro_{it}$  denotes macroeconomic variables, specifically real GDP (RGDP) and inflation (INF).  $Institution_{it}$  is the institutional quality measure, based on the Kaufmann World Governance Indicators (WGI), which comprise six dimensions: Political Stability, Control of Corruption, Voice and Accountability, Government Effectiveness, Regulatory Quality, and Rule of Law.

Given the high correlations among these governance indices and the potential redundancy of information, we employ Principal Component Analysis (PCA) to reduce dimensionality while retaining the underlying variation. The indices are aggregated in two ways: General aggregation: all six indices combined into a single composite index of institutional quality. Dimensional aggregation: indices grouped into three categories consistent with recent literature: Economic index: Regulatory Quality and Government Effectiveness; Political index: Political Stability and Voice and Accountability; Institutional index: Rule of Law and Control of Corruption. This classification follows the contemporary trend in institutional research (Kaufmann et al., 2010; Andrés et al., 2014; Asongu & Nwachukwu, 2015) and enables a nuanced assessment of which institutional dimension most strongly influences bank performance.

### Data Source and Description

As previously stated, this study covers 11 West African countries over the period 2000–2023.<sup>1</sup> The choice of this scope is primarily driven by data availability and consistency across countries. Data on macroeconomic indicators are sourced from the World Development Indicators (WDI) of the World Bank, while information on banking sector variables is obtained from the Financial Development and Structure Database. Institutional quality indicators are drawn from the Worldwide Governance Indicators (WGI), which provide composite measures of economic, political, and governance dimensions across countries. The dataset integrates both bank-specific factors and macro-institutional variables to account for heterogeneity across the region. This approach ensures a more comprehensive understanding of how the institutional environment influences bank performance within West Africa's evolving financial landscape.

### Estimation Method

The study employs the two-step System Generalized Method of Moments (System-GMM) estimator proposed by Arellano and Bond (1991) and Arellano and Bover (1995). The

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<sup>1</sup>The West African countries are Benin, Burkina Faso, Ghana, Cote d'Ivoire, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo

main advantage of this estimator over conventional techniques such as pooled OLS lies in its capacity to address endogeneity, which may arise from measurement error, omitted variable bias, or reverse causality. The System-GMM estimator combines equations in first differences (where lagged levels of variables serve as instruments) with equations in levels (instrumented by lagged first differences). This dual system improves efficiency and consistency, especially in dynamic panel models. Blundell and Bond (1998), through Monte Carlo simulations, show that System-GMM outperforms the first-differenced GMM estimator, which can be seriously biased in small samples when instruments are weak. Bond, Hoeffler, and Temple (2001) further emphasize the reliability of System-GMM, recommending its use for empirical growth and performance-related studies. Given the potential presence of heteroskedasticity in the residuals, the two-step version of the estimator is adopted, following Asongu and Nwachukwu (2015), as it provides efficient estimates under heteroskedastic conditions, whereas the one-step estimator assumes homoskedasticity. A notable limitation of System-GMM is that it performs optimally when the number of cross-sections ( $N$ ) exceeds the time dimension ( $T$ ). In this study, the reverse holds ( $T > N$ ). To mitigate this constraint, the study employs non-overlapping intervals (NOI), a transformation that smooths short-term fluctuations and helps to neutralize business-cycle effects. Specifically, a three-year interval is used, as it provides a reasonable balance between maintaining sufficient observations and minimizing cyclical distortions. Extending the interval further would risk the loss of degrees of freedom and weaken model efficiency.

## FINDINGS AND DISCUSSION

The empirical analysis begins with descriptive statistics, which summarize the key features of the dataset. As presented in Table 1, the mean, minimum, maximum, and standard deviation values reveal notable variation across indicators of bank performance and their determinants. On average, banks in West Africa perform relatively better when performance is measured by Return on Equity (ROE) compared to Net Interest Margin (NIM) and Return on Assets (ROA). The wide range between minimum and maximum values suggests substantial heterogeneity across countries and periods in both bank-specific and macroeconomic variables. This observation is further reinforced by the high standard deviation values, particularly for real GDP, bank concentration (BCON), cost-to-income ratio (COSTINC), and ROE, implying uneven levels of economic and banking sector performance across the region. In contrast, the indicators of institutional environment exhibit relatively lower variability, suggesting that institutional characteristics tend to evolve more gradually over time. Nonetheless, their mean values, which are generally below one and, in some cases, negative, highlight the fragile and underperforming nature of institutional quality across West African

economies. This reflects persistent weaknesses in governance, regulatory quality, and political stability—factors that may constrain the effectiveness of banking systems despite improvements in financial deepening.

Table 1: Descriptive Statistics

	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Std. Dev.</b>
<i>NIM</i>	6.715	18.63	2.15	3.141
<i>ROA</i>	1.789	12.11	-18.16	2.460
<i>ROE</i>	17.895	126.14	-18.07	16.220
<i>COSTASST</i>	6.028	16.92	1.63	2.216
<i>BCON</i>	78.225	100	22.56	16.930
<i>COSTINC</i>	63.228	218.09	24.52	16.713
<i>ZSCORE</i>	15.111	45.29	-9.6	10.984
<i>RGDPC</i>	16.825	183.31	1.06	35.195
<i>INF</i>	5.709	32.91	-3.1	5.876
<i>POL</i>	-0.476	0.54	-1.84	0.595
<i>ECO</i>	-0.638	0.14	-1.42	0.368
<i>INS</i>	-0.656	0.17	-1.42	0.379
<i>AGGCOM</i>	-0.594	0.12	-1.46	0.409

The panel model specified in Equation (1) forms the basis of our empirical estimations. We consider three measures of bank performance in West Africa: Net Interest Margin (NIM), Return on Assets (ROA), and Return on Equity (ROE). Regression results are presented for each measure to examine the robustness of the determinants across alternative performance metrics. Table 2 reports the baseline results, which include only traditional bank-specific determinants and macroeconomic factors. For each regression, we conducted Arellano-Bond tests for second-order serial correlation, along with Hansen and Sargan tests for over-identifying restrictions. The results indicate that all specifications pass the diagnostic tests, confirming that instruments are valid and that there is no evidence of second-order serial correlation. The coefficient on the lagged dependent variable confirms the dynamic nature of banking performance. However, the lagged coefficient is statistically significant only for NIM, suggesting that the persistence of performance in West African banks is most pronounced when measured by intermediation efficiency, rather than overall profitability (ROA) or equity returns (ROE).

Among bank-specific factors, cost management (COSTASST) emerges as the most consistent and significant determinant across performance measures. This highlights the central role of operational efficiency in driving bank outcomes in West Africa. In contrast, bank

concentration (BCON) shows no significant impact on performance, regardless of the measure used. This suggests that market structure has a limited influence on banking outcomes in the region during the study period. Other bank-specific variables display varying effects depending on the performance measure. For example, COSTINC exhibits a significant negative impact on NIM, consistent with the theoretical expectation that higher operational costs reduce intermediation efficiency. Meanwhile, ZSCORE, a measure of bank stability, is positively associated with NIM, reflecting the importance of financial soundness in supporting efficient intermediation. These findings indicate that the influence of bank-specific characteristics is sensitive to the performance metric used, with NIM capturing their effects more clearly than ROA or ROE. The macroeconomic variables considered—real GDP growth (log RGDP) and inflation rate (INF)—do not exhibit statistically significant effects on bank performance. This suggests that, during the period under study, bank-specific characteristics played a more critical role than general macroeconomic conditions in shaping the performance of West African banks.

Table 2: Two Step System-GMM Panel Estimation Regression Results (Baseline Model)

	<b>Model (1)</b> <b>Net Interest Margin</b> <b>(NIM)</b>	<b>Model (2)</b> <b>Return on Asset</b> <b>(ROA)</b>	<b>Model (3)</b> <b>Return on Equity</b> <b>(ROE)</b>
NIM (-1)	0.5383***(0.223)	-	-
ROA (-1)	-	0.0485(0.058)	-
ROE (-1)	-	-	0.1736(0.125)
COSTASST	0.9166***(0.175)	0.3775***(0.084)	1.8537*(1.107)
BCON	0.0114(0.008)	0.0141(0.009)	0.1262(0.293)
COSTINC	-0.0669***(0.025)	-0.1404***(0.016)	-0.4463(0.480)
ZSCORE	0.0396***(0.009)	-0.0004(0.011)	-0.0829(0.149)
RGDPC	0.2260(0.156)	0.2042(0.139)	1.9614(5.077)
INF	0.0293(0.060)	-0.0123(0.017)	-0.0714(0.351)
AR(2) (P-value)	0.260	0.491	0.450
Sargan test (P-value)	0.372	0.087	0.142
Hansen J-test (P-value)	0.688	0.478	0.233
Instruments	11	11	11
Countries	11	11	11

Note: \*\*\*, \*\*, and \* implies significance at 1%, 5%, and 10% respectively, while values in parenthesis denotes standard errors of the estimates.

To account for the role of the institutional environment, each regression model—corresponding to the different measures of bank performance (NIM, ROA, and ROE)—was further extended to include governance indicators. Specifically, the results for NIM as the dependent variable are presented in Table 3(a), while Tables 3(b) and 3(c) report results for ROA and ROE, respectively. The institutional quality measures incorporated in the regressions remains as earlier defined. Each index is introduced individually into the regression models to avoid multicollinearity and potential autocorrelation issues that could arise from including highly correlated governance indicators simultaneously. This approach allows for a clear assessment of how each dimension of institutional quality independently influences bank performance across different metrics.

Consistent with our baseline regressions, all extended models incorporating institutional measures satisfy the specification tests, indicating that instruments are valid and there is no evidence of second-order serial correlation. Specifically, the Arellano-Bond test for second-order serial correlation, along with the Hansen and Sargan tests for over-identifying restrictions, all confirm that the model is well-specified. The coefficients on the lagged dependent variables, which capture the dynamic characteristics of the banking system, show significant persistence for Net Interest Margin (NIM) and Return on Equity (ROE). This suggests that historical performance is a meaningful predictor of current outcomes, particularly in terms of intermediation efficiency and equity returns.

Banking activities measured via NIM and ROA respond significantly to overhead cost to total assets (COSTASST) and cost-to-income ratio (COSTINC). The positive and significant coefficient on COSTASST indicates that banks in West Africa are unable to fully pass high overhead costs onto customers, meaning that elevated operating costs do not translate into higher spreads to protect profits. In contrast, the negative impact of COSTINC on NIM aligns with theoretical expectations, reflecting the dampening effect of higher operational costs on bank performance. Macroeconomic variables, including real GDP growth and inflation, display insignificant effects across all three performance measures, echoing the findings of the baseline regressions. This suggests that macroeconomic conditions during the study period had a limited direct influence on banking performance in West Africa.

Beyond bank-specific and macroeconomic determinants, the study examines the role of the institutional environment, both in composite form and disaggregated into economic, political, and governance dimensions. The results indicate that institutional quality is empirically relevant for explaining bank performance, although the magnitude and significance of its impact vary depending on the performance measure. In particular, the

positive effects of institutional quality are most pronounced when bank performance is measured via NIM, suggesting that a well-functioning institutional environment enhances intermediation efficiency. Among the disaggregated components, the political dimension—capturing Political Stability and Voice & Accountability—exerts the most significant influence on NIM at the 1% level. This may reflect the benefits of more stable and democratic governance systems in West Africa, which reduce political conflicts, protect property rights, and limit abuses of fundamental rights, thereby creating a more conducive environment for banking operations.

The findings also reveal that the economic and institutional (rule of law and control of corruption) dimensions of governance positively influence performance, albeit with varying levels of significance across NIM, ROA, and ROE. This underscores that different institutional channels affect banking performance differently, highlighting the importance of a multidimensional approach when evaluating institutional impacts.

Table 3: Two Step System-GMM Panel Estimation  
Regression Results (Extended Model)

<b>Table 3(a): Dependent Variable (NIM)</b>				
	<b>Regression (1)</b>	<b>Regression (2)</b>	<b>Regression (3)</b>	<b>Regression (4)</b>
NIM (-1)	0.4853**(0.214)	0.5176**(0.232)	0.4897**(0.218)	0.4863**(0.200)
COSTASST	0.9285***(0.126)	0.8934***(0.136)	0.9197***(0.132)	0.9310***(0.131)
BCON	0.0057(0.041)	-0.0021(0.049)	-0.0019(0.045)	0.0093(0.039)
COSTINC	-0.0691**(0.029)	-0.0669**(0.030)	-0.0707**(0.029)	-0.0699**(0.029)
ZSCORE	0.0216(0.049)	0.0121(0.058)	0.0059(0.059)	0.0331(0.044)
RGDPC	0.2439(0.408)	0.1524(0.515)	0.0543(0.541)	0.2954(0.389)
INF	0.0224(0.033)	0.0153(0.033)	0.0133(0.035)	0.0296(0.038)
AGGCOM	1.1870**(0.469)	-	-	-
INS	-	1.4429** (0.701)	-	-
ECO	-	-	1.5862* (0.933)	-
POL	-	-	-	0.5053***(0.186)
AR(2) (P-value)	0.336	0.323	0.306	0.351
Sargan test (P-value)	0.425	0.301	0.346	0.511
Hansen J-test (P-value)	0.675	0.624	0.625	0.738
Instruments	12	12	12	12
Countries	11	11	11	11

**Table 3(b): Dependent Variable (ROA)**

	Regression (1)	Regression (2)	Regression (3)	Regression (4)
ROA (-1)	-0.0976(0.149)	-0.0927(0.145)	-0.11567(0.164)	-0.0737(0.128)
COSTASST	0.4830**(0.219)	0.4699**(0.191)	0.4854***(0.183)	0.4525**(0.187)
BCON	0.0320(0.092)	0.0254(0.081)	0.0359(0.074)	0.0186(0.081)
COSTINC	-0.1483***(0.018)	-0.1504***(0.017)	-0.1491***(0.014)	-0.1485***(0.020)
ZSCORE	0.0187(0.087)	0.0148(0.079)	0.0293(0.080)	0.0031(0.073)
RGDPC	0.2647(1.012)	0.1985(0.893)	0.3566(0.8785)	0.1532(0.938)
INF	0.0011(0.029)	0.0018(0.031)	0.0098(0.035)	-0.0070(0.021)
AGGCOM	--0.4741(0.545)	-	-	-
INS	-	-0.6657(0.613)	-	-
ECO	-	-	-0.9799(1.018)	-
POL	-	-	-	-0.0550(0.306)
AR(2) (P-value)	0.442	0.425	0.416	0.449
Sargan test (P-value)	0.530	0.440	0.554	0.469
Hansen J-test (P-value)	0.665	0.694	0.740	0.603
Instruments	12	12	12	12
Countries	11	11	11	11

**Table 3(C): Dependent Variable (ROE)**

	Regression (1)	Regression (2)	Regression (3)	Regression (4)
ROE (-1)	0.7804***(0.284)	0.7599***(0.234)	0.7621***(0.259)	0.7689***(0.218)
COSTASST	1.2315(2.927)	1.2363(2.494)	1.4346(2.144)	1.2098(1.509)
BCON	-0.2194(1.382)	-0.2331(1.152)	-0.1506(1.025)	-0.2125(1.509)
COSTINC	-0.2574(0.205)	-0.2733(0.200)	-0.2602(0.212)	-0.2516(0.239)
ZSCORE	-0.1457(1.273)	-0.1815(1.096)	-0.1342(1.059)	-0.0924(1.347)
RGDPC	-1.3157(14.811)	-1.6246(12.772)	-1.0353(12.227)	-1.2235(16.499)
INF	-0.2497(0.606)	-0.2429(0.555)	-0.2364(0.572)	-0.1944(0.541)
AGGCOM	3.8928(8.935)	-	-	-
INS	-	3.7503(10.648)	-	-
ECO	-	-	5.0462(15.734)	-
POL	-	-	-	1.6864(1.738)
AR(2) (P-value)	0.508	0.499	0.464	0.488
Sargan test (P-value)	0.553	0.557	0.556	0.588
Hansen J-test (P-value)	0.626	0.610	0.598	0.653
Instruments	12	12	12	12
Countries	11	11	11	11

Note: \*\*\*, \*\*, and \* implies significance at 1%, 5%, and 10% respectively, while values in parenthesis denotes standard errors of the estimates.

## SUMMARY OF FINDINGS

This study contributes to the understanding of bank performance in West Africa by examining the combined effects of bank-specific, macroeconomic, and institutional factors. Using a two-step System GMM panel approach, the analysis provides strong empirical evidence that institutional quality, both overall and across its political, economic, and institutional dimensions, plays a significant role in shaping banking outcomes in the region. The results indicate that the influence of institutional quality depends on how bank performance is measured. The effect is strongest when performance is captured by Net Interest Margin (NIM), compared to Return on Assets (ROA) and Return on Equity (ROE). Moreover, NIM is more responsive to internal efficiency indicators such as COSTASST, COSTINC, and ZSCORE, suggesting that intermediation efficiency is the dimension of bank performance most affected by both management practices and the broader institutional environment.

## POLICY RECOMMENDATIONS

Based on the findings of this study, the following recommendations are hereby suggested.

- **Strengthen Institutional Quality**

Policymakers should focus on reforms that improve the effectiveness, accountability, and stability of institutions. Special attention should be given to the political dimension, enhancing political stability, voice, and accountability, to create a predictable environment that supports sound banking operations and lowers systemic risk.

- **Improve Operational Efficiency**

Regulators and bank management should work together to strengthen cost control and enhance efficiency. Reducing overhead and operational expenses can improve profitability and promote responsible banking without discouraging credit growth or investment.

- **Promote Financial Stability**

Sustaining strong capital adequacy and risk management frameworks (as reflected in ZSCORE) should remain a key priority. A stable banking system is better equipped to absorb shocks and respond effectively to both domestic and global financial challenges.

## CONCLUSION

This study, focusing on West Africa, a region characterized by banking-dominated financial systems and ongoing institutional challenges, offers evidence-based insights on how stronger institutions can foster a more resilient and efficient banking sector. The findings

emphasize that improving institutional quality and strengthening bank management practices are mutually reinforcing strategies for enhancing banking performance. Addressing governance deficiencies while promoting operational efficiency can build a banking system that is not only more stable and profitable but also better positioned to support sustainable economic development across the region.

## SUGGESTIONS FOR FURTHER STUDIES

Notwithstanding the empirical findings and policy implications of this study, several gaps remain in the literature. Accordingly, we suggest the following areas for further research to deepen understanding of how institutional environments influence banking performance in developing regions, particularly in Africa.

- **Disaggregating Institutional Quality Dimensions:** While this study employed composite indicators of institutional quality, further research could analyse the individual dimensions like political stability, government effectiveness, regulatory quality, rule of law, and control of corruption, to identify which aspects exert the strongest influence on different measures of bank performance.
- **Examining FinTech and Technological Innovation:** Given the rapid digital transformation of Africa's financial sector, future research could investigate how institutional quality interacts with technological innovation and digital finance. Understanding how the institutional environment facilitates or constrains FinTech adoption could provide valuable insights into its effect on bank efficiency and intermediation margins.
- **Inclusion of Non-Banking Financial Institutions:** Given the growing importance of non-bank financial entities in Africa's financial landscape, future studies could extend the analysis to include microfinance institutions, insurance firms, and FinTech companies. This would help capture the broader impact of institutional quality on financial sector performance and inclusion.
- **Mixed-Method and Contextual Analyses:** While this study relied on a quantitative two-step System GMM approach, subsequent research could adopt mixed-method designs by integrating qualitative case studies or interviews with policymakers and bank executives. Such approaches would enrich the analysis by revealing contextual and behavioural insights into how institutional constraints and managerial perceptions shape performance outcomes.
- **Bank Heterogeneity and Market Structure:** Future research may also consider how institutional quality affects different categories of banks, such as domestic versus foreign,

large versus small, or Islamic versus conventional institutions. Including indicators of market concentration and competition could shed light on how varying market structures interact with institutional settings to shape bank behaviour.

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