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Department of Economics
Federal University Gusau, Zamfara State.
gjedsfugus@gmail.com
+2348134539669

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IMPACT OF INSTITUTIONAL QUALITY ON PRIVATE SECTOR INVESTMENT IN ECONOMIC COMMUNITY OF WEST AFRICAN STATES

Abdullahi Shehu
Department of Economics, Federal University, Birnin Kebbi

Saifullahi Sani Ibrahim and Zulaihatu A. Zubair
Department of Economics, Federal University, Dutsinma

Corresponding Author's email: asgatawa@gmail.com

ABSTRACT

The objective of the study is to investigate the impact of institutional quality on private sector investment in ECOWAS countries. The study covers the period from 1995 to 2022 and employed the Pool Mean Group (PMG) as its technique for data analysis. The result reveals that accountability and voice, and rule of law have statistical and positive significance influence of private sector investment in the long run, while control of corruption has a negative relationship in the long run with private sector investment in ECOWAS members' countries. However, the Granger causality test results revealed that there is strong evidence that past patterns of private sector investment predict future political stability, accountability and voice, control of corruption, and rule of law. The study therefore concludes that private sector investment is driven by accountability and voice, and rule of law in ECOWAS countries. The study recommends the need by governments of ECOWAS members' countries to strengthen mechanisms that promote transparency and citizen participation. Emphasis should be placed on the rule of law by prioritizing legal reforms that create a fair, predictable, and supportive business environment. Ensuring continuous monitoring and evaluation of implemented reforms, collaboration among ECOWAS countries to share best practices and coordinate initiatives that create a more favourable business environment in the region.

***Keywords**: Institutional Quality, Private Sector Investment, PMG, ECOWAS*

1. Introduction

The role of Private Sector investment in sustainable economic growth cannot be over emphasized. In the global landscape, the relationship between indicators of institutional quality and private sector investment has been a topic of significant interest and debate. The private sector, being a key driver of economic development, flourishes in environments where institutions provide a predictable and supportive backdrop. Investors are more likely to commit capital when they perceive a stable political and legal environment, transparent regulatory processes, and mechanisms for dispute resolution (Eslamloueyan & Jafari, 2018). Private sector investment refers to allocating private individuals, firms, or institutions' funds into productive activities such as infrastructure development, manufacturing and services. Private sector investment is critical to job creation, and technological progress (Iqbal, et al.023). It enhances productivity, fosters innovation, and expands business opportunities. Private sector plays a crucial role in the sustenance as well as provision of goods and services, and opportunities for entrepreneurs to create wealth and value. Indicators of institutional quality such as political stability, accountability and voice, control of corruption and rule of law, also play crucial role in shaping the economic environment, influencing the behaviour of private sectors' investment and affecting the overall investment climate (Borojo & Yushi, 2020). The understanding of these dynamics has far-reaching implications, particularly for regions aspiring to foster sustainable growth of private sector investment (Mduduzi & Talent, 2015; Lawanson, 2015).

Globally, scholars and policymakers have recognized that a sound institutional framework is vital for attracting and sustaining private sector investments. Institutions encompass a wide range of factors, including the political stability, accountability and voice, control of corruption, and rule of law. Countries with robust institutions often experience increased investor confidence, reduced business risks, and enhanced economic stability (Kraemer-Mbula, 2021). Zooming into the Economic Community of West African States (ECOWAS), an economic bloc which comprises of 16 West African countries, the distinctions of the relationship between institutional quality and private sector investment become even more pertinent. As a region with diverse

economic landscapes, political systems, and institutional capacities, ECOWAS provides an intriguing case study. Examining the specific institutional quality dynamics within ECOWAS allows for a granular analysis of how factors such as political stability, legal frameworks, and regulatory practices impact private sector investment at both the macro and micro levels. Understanding these dynamics can contribute valuable insights to regional policymakers, international development organizations, and investors seeking opportunities within West Africa. In ECOWAS, private sector investment faces various challenges that hinder its growth and potential impact on economic development, including infrastructure deficiencies (World Bank, 2016), regulatory and administrative constraints, political and security risks (GIZ, 2020), skill gaps, and human capital development. However, addressing these obstacles is crucial for unlocking the potential of private sector investment and fostering sustainable economic development.

The decision to conduct a disaggregate analysis stems from the recognition that a subtle understanding of the components comprising institutional quality is essential. By breaking down the elements of institutional quality, this study uncovered specific strengths, weaknesses, and areas for improvement within the ECOWAS member states. The disaggregate approach involve a comprehensive examination of key indicators such as the effective stable political system, accountability and voice, efficiency of legal systems to control corruption, and the efficiency of bureaucratic processes. This level of detail is crucial for formulation of targeted policy recommendations that can address the unique challenges faced by each member state, thereby contributing to the overall improvement of institutional quality across the ECOWAS countries. This study investigates the impact of institutional quality on private sector investment in ECOWAS, by providing a disaggregate analysis. Thus, seeks to offer practical insights that can inform policy decisions, attract investments, and contribute to the sustainable economic development of ECOWAS member countries.

The subsequent sections of this article delve into a comprehensive review of relevant literature in section 2, outline the employed methodology in section 3, present results in section 4, and section 5 concludes the article and provides some

recommendations for future policy implications.

2. Literature Review

In exploring the link between indicators of institutional quality and private sector investment, studies have identified positive associations. For instance, Saha et al. (2022) investigated the effect of institutional quality indicators on private sector investment in lower-middle income countries, spanned the period from 2002 to 2018, using dynamic panel estimation (two-step system GMM). The results indicated that control of corruption, voice and accountability, and rule of law have a positive impact on private sector investment in lower-middle income countries. On the contrary, political stability do not have any significant impact on private sector investment. According to the regional findings, each of the institutional quality indicators is only effective in the East Asia and Pacific region. Minović et al. (2021) investigated the relationship between private sector investment and institutional quality indicators (control of corruption, political stability, and rule of law) in the Western Balkans. The study employed panel techniques (unit root tests and causality) covering the period from 2002 to 2017. The results revealed that control of corruption, political stability and rule of law have positive impact on private sector investment in Western Balkans.

Yakubu et al. (2021) and Winfu et al. (2016) independently found that accountability and voice, and rule of law significantly influence stock market development in Ghana and emerging countries, respectively. Both studies utilized different methodologies such as ARDL and GMM estimation techniques, emphasizing the robust positive impact of accountability and voice, and rule of law on stock market performance. Similarly, Borojo & Yushi, (2020) and Abdelghany (2020) studied the African countries, and findings revealed that a positive and significant effect of accountability and voice, and rule of law on private sector investment. Borojo & Yushi (2020) examined 44 African nations, while Abdelghany (2020) focused on 46, yet both arrived at the conclusion that improving accountability and voice, and rule of law is vital for stimulating private investment in the African continent. Baker et al., (2019) investigate the impact of political stability on public-private partnerships' performance. Analysing panel data

regressions with country-specific effects, involves a sample of 14 emerging countries for the period of 1999 to 2014. The results indicated that political stability has marginal effect on private infrastructure investments.

Ahmed & Alamdar (2018) investigated the impact of corruption and budget deficit on private sector investment in Pakistan. They utilized the Johansen & Juselious (1991) method to assess cointegration between the models variables. Additionally, an error correction model was applied to analyze the short-term relationship. Annual time series data from 1984 to 2015 was utilized to examine both the long and short-term relationships. The findings indicate that corruption has a significant adverse effect on private sector investment. Therefore, the study concluded that corruption has detrimentally affects private sector investment in Pakistan.

Conversely, Jurčić, et al., (2020) and Nondo et al., (2016) presented different results concerning the impact of political stability on private investment. Jurčić et al., (2020) conducted their analysis in Croatia using OLS regression and concluded that political stability is not crucial determinants of private sector investment in the country. On the other hand, Nondo et al. (2016) studied 45 Sub-Saharan African countries, emphasizing that political stability did not play a crucial role in private sector investment. However, Nondo et al., (2016) proposed that private sector investment in SSA might be more influenced by access to natural resources rather than indicators of institutional quality. These divergent findings underlined the distinctive nature of the relationship between institutional quality and private investment, which can vary significantly across countries and regions.

Critically, while the positive associations found in the mentioned studies (Borojo & Yushi, 2020; Abdelghany, 2020; Yakubu et al., 2021) provided valuable insights, it is essential to acknowledge their limitations. One key concern is the diversity in methodologies employed, ranging from ARDL and GMM to OLS regression, making direct comparisons challenging. Additionally, the temporal and geographical scope varies across studies, further complicating the synthesis of overarching conclusions. The inconsistency in findings, such as those in Jurčić et al. (2020), Baker, et al (2019) and Nondo et al. (2016), underscores the complex interplay of factors that contribute

to the relationship between indicators of institutional quality and private sector investment. Further research could benefit from standardized methodologies and broader cross-country comparisons to enhance the generalizability of the findings. Studies like those by Nondo et al. (2016) and Yakubu et al. (2021) provide general findings applicable to broader regions, such as Sub-Saharan Africa and emerging countries, but may not capture the specific dynamics within ECOWAS. This lack of regional specificity limits the applicability of their findings to ECOWAS.

The literature reviewed reveals critical gaps in existing studies on the impact of institutional quality on private sector investment in ECOWAS. It lacks a focused examination and do not specifically address the unique institutional and economic contexts of ECOWAS countries. This lack of regional specificity limits the applicability of their findings to ECOWAS. It is also noted that, Saha et al. (2022) employ dynamic panel estimation (two-step system GMM) technique, other studies rely on simpler techniques like ARDL and OLS regression. This methodological diversity can lead to inconsistent findings and complicates the synthesis of conclusions. It is against these identified gaps the study investigated the impact of institutional quality on private sector investment in ECOWAS, employed a standardized methodological approach and robust estimation technique (PMG) that considers cross-sectional dependency syndrome and could provide more reliable results.

3. Methodology

This section specified model(s), outlines data sources and systematic approach employed to analyze and interpret data with relevant statistical and econometrical techniques. It serves as a blueprint for replicability, providing a transparent framework that allows other researchers to assess the study's rigor and validity.

Model Specification

The study utilizes panel data regression to examine the impact of Institutional quality on private sector investment, a disaggregate analysis of ECOWAS member countries. It employs the Pooled Mean Group (PMG) estimation technique proposed by Pesaran et al. (1999) in the study. The panel analysis specification for the (PMG) model (for t=1, 2… 28 and groups i=1, 2… 16) is given as:

$psi_{i,t} = \alpha_o + \alpha_1 pst_{i,t} + \alpha_2 acv_{i,t} + \alpha_3 ctc_{i,t} + \alpha_4 rol_{i,t} + u_{i,t}$…… (1)

where, is private sector investment, is political stability, is accountability and voice, is control of corruption, is rule of law , represents the error term which is expected to tend towards zero and denotes the speed of adjustment to long run equilibrium.

The PMG long run equation for the model can be specified as:

$$\Delta psi_{i,t} = \varphi_o + \sum_{i=1}^{n} \varphi_1 \Delta psi_{i,t-j} + \sum_{i=1}^{n} \varphi_2 \Delta pst_{1i,t-j} + \sum_{i=1}^{n} \varphi_3 \Delta acv_{2i,t-j} + \sum_{i}^{n} \varphi_4 \Delta ctc_{3i,t-j} + \sum_{i}^{n} \varphi_5 \Delta rol_{4i,t-j} + +\epsilon_{i,t} + \beta_1 psi_{1i,t-1} + \beta_2 pst_{2i,t-1} + \beta_3 ctc_{3i,t-1} + \beta_4 rol_{4i,t-1} + \epsilon_{i,t} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

The PMG short run equation for the model is represented as:

$$\Delta psi_{i,t} = \varphi_o + \sum_{i=1}^{n} \varphi_1 \Delta psi_{i,t-j} + \sum_{i=1}^{n} \varphi_2 \Delta pst_{1i,t-j} + \sum_{i=1}^{n} \varphi_3 \Delta acv_{2i,t-j} + \sum_{i}^{n} \varphi_4 \Delta ctc_{3i,t-j} + \sum_{i}^{n} \varphi_5 \Delta rol_{3i,t-j} + \varphi_8 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3$$

A priori Expectation

Institutional quality is expected to have significant positive impact on private sector investment in Economic Community of West African States

Source of Data

Data were collected from the World Bank Development Indicators (WDI) 2023 database.

Table 1: Variable Codes and Data Sources

Variable Codes	Variable Name	Description of the Variable	Source
PSI	Private Sector Investment	Gross capital formation (i.e. Gross domestic investment) is the total change in the value of fixed assets plus change in stocks/FDI	WDI/World Bank(2023)
PST	Political stability	The capacity of government in avoiding internal and external conflicts and ethnic tensions	WDI/World Bank(2023)

ACV	accountability and voice	View of the degree to which citizens can take an interest in selecting their government, the opportunity of free expression and association, and a free media.	WDI/World Bank(2023)
CTC	Control of corruption	Indicates the position of countries in fighting against corruption.	WDI/World Bank(2023)
ROL	Rule of law	Shows contract and property right protection and abilities of police and court to enhance private rights.	WDI/World Bank(2023)

Source: Researchers' compilation, 2024

They includes the variables - political stability, accountability and voice, control of corruption, and rule of law as presented in the Table 1.The choice of these countries is inform by the poor state of private sector investment in the region (Draper et al., 2011), despite these countries enormous natural and human resources that can have a significant impact on their private sector investment.

4. Results and Discussions

This section of the paper reveals the outcomes of the data analysis, accompanied by a thorough interpretation of the results. The descriptive statistics lay the groundwork for a nuanced interpretation, fostering a clearer comprehension of the inferences derived from the data. The subsequent interpretation delves into the implications of the findings, offering insights into the relationships between the model's variables and their significance. This analytical phase serves to unravel the intricacies of the studied factors, guiding the reader through a comprehensive understanding of the empirical results.

Descriptive Statistics

The descriptive statistics and the correlation matrix of the raw data are presented in Table 2.

Table 2: Summary statistics of variables and correlation matrix

Variables	PSI	PST	ACV	CTC	ROL
Mean	6.916752	-0.549310	-0.486377	-0.672420	-0.717332
Std. dev	4.893090	0.786722	0.561604	0.408327	0.474254
Min	-0.412043	-2.570763	-3.927999	-3.672543	-2.619789
Max	12.90648	1.251745	1.798868	0.247914	0.390523
Skewness	-0.293676	-0.530366	-0.265561	-0.885645	-0.413762
Kurtosis	1.371222	2.433096	5.800391	8.532370	3.165955

Obs	448	448	448	448	448
Correlation Matrix					
PSI	1.0000				
PST	0.0887	1.0000			
ACV	-0.2790	0.3409	1.0000		
CTC	0.2482	0.4417	0.5554	1.0000	
ROL	0.0453	0.6170	0.5291	0.7476	1.0000

Source: Researchers' computation using Eviews 11, (2024)

This table shows the number of observations, mean, standard deviation, minimum and maximum values of the data. This is prior to engaging the data to examine the impact of institutional quality on private sector investment in ECOWAS member countries, the analysis reveals that the mean of private sector investment in ECOWAS is 6.916752, with the maximum value of 12.90648 and minimum at -0.412043, reflecting disparities in private sector investment. This implies that, on the average, PSI exhibits a positive mean suggesting a generally favourable investment climate. On average, political stability is slightly below zero with a mean of -0.549310, while accountability and voice, control of corruption, and rule of law have mean values of -0.486377, -0.672420 and -0.717332 respectively. Standard deviations for these variables indicate varying degrees of dispersion around the mean, accountability and voice (0.561604), control of corruption (0.408327), and rule of law (0.474254) across the observed panel data. These statistics offer insights into the central tendency, variability, and distribution of key governance. The standard deviation of 4.89 indicates some variability around this mean, emphasizing the need to consider the dispersion of data points. The skewness values close to zero (-0.29 for PSI) suggest a relatively symmetric distribution. However, the kurtosis values (1.37 for PSI) indicate a moderate level of peakedness in the distribution. Notably, the variability in PST, ACV, CTC, and ROL are evident through their respective standard deviations. Furthermore, the negative skewness in PST, ACV, and ROL implies a slight leftward tail in their distributions, while positive skewness in CTC indicates a rightward tail. The kurtosis values suggest varying degrees of tailedness, with CTC exhibiting particularly heavy tails. These statistics collectively provide a comprehensive overview of the central tendency, dispersion, and shape of the distributions, aiding in understanding the relationships

and influences between private sector investment and the independent variables.

The correlation matrix reveals the linear relationships between private sector investment (PSI) and its determinants: political stability (PST), accountability and voice (ACV), control of corruption (CTC), and rule of law (ROL). The data indicated a weak positive correlation between PSI and PST, implying that increased political stability may be marginally associated with higher private sector investment. Conversely, a weak negative correlation between PSI and ACV suggests a slight decrease in private sector investment with greater accountability and voice. A weak positive correlation between PSI and CTC implies that higher control of corruption is modestly linked to increased private sector investment. The correlation between PSI and ROL is very weak, suggesting minimal association between rule of law and private sector investment. Notably, the strongest correlation in the matrix is between CTC and ROL, indicating a moderate to strong positive correlation between control of corruption and rule of law. These correlation findings provide valuable insights into the relationships among these variables.

Cross Sectional Dependence Test

Examining the cross-sectional dependence test, the parametric testing procedure proposed by Pesaran (2004), Friedman (1937) as well as Frees (1995, 2004) showed that the null hypothesis of no-cross sectional dependence test is rejected at 1%, 5% and 10% significance levels.

Table 3: Cross Sectional Dependence Test Result

Test	Statistics
Pesaran CSD Test	3.512***
Friedman CSD Test	23.275**
Frees CSD Test	4.154*

Note: ***, ** and * represent statistical significance at 1%, 5% and 10%, respectively.
Source: Researchers' computation using stata 17, (2024).

The results collectively suggest significant evidence of cross-sectional dependence in the dataset. The Pesaran CSD test is significant at 1%, while the Friedman CSD Test is significant at 1%, and the Frees CSD test shows significance at 10%, level. This implies that the assumption of independence across cross-sectional units may not hold, and therefore, there are some

forms of dependence among the ECOWAS members' countries.

Panel Unit Root Test

To investigate the impact of institutional quality on private sector investment in ECOWAS with a disaggregate analysis, the variables in the model is subjected to test of stationarity.

Table 4: Panel Unit Root Test Result

	Pesaran's CADF Test				**Pesaran's CIPS Test**	
	Level Value		First Difference		Level Value	First Difference
	t-bar	Z(t-bar)	t-bar	Z(t-bar)	t-bar	Z(t-bar)
PI	-1.435	1.301	-3.265***	-6.246***	-1.605	-4.092***
PST	-1.416	1.378	-4.151***	-9.900***	-2.592***	
ACV	-1.512	0.983	-3.507***	-7.247***	-2.235***	
CTC	-1.286	1.915	-3.592***	-7.596***	-1.980	-5.696***
ROL	-1.009	3.055	-3.219	-6.056***	-1.601	-6.037***

Note: *, ** and * represent statistical significance at 1%, 5% and 10%, respectively.**
Source: Researchers' computation using stata 17, (2024).

Due to the nature of the data it is expected that some explanatory variables follow a unit root process (Nelson and Plosser, 1982; Samargandi et al., 2015). The presence of cross-section dependence informed the study to employed second-generation unit root test by Pesaran (2003 and 2007). Table 4 present the results of Pesaran's (2003) Cross-sectional Augmented Dickey-Fuller (CADF) and Pesaran's (2007) CIPS unit root test where PI, PST, ACV, CTC, and ROL are integrated of order I(1) across all the cross-sectional units and statistically significant at 1% levels. The variables becomes stationary at order one I(1), suggesting that their first orders are needed to achieve stationarity. PST and ACV are integrated of order zero I(0), indicating stationarity at levels. In this case, differencing may not be necessary for these variables in the analysis, while PI, CTC and ROL are integrated of order one I(0), indicating non-stationarity at levels but stationarity in their first orders. This implies that the variables become stationary after first order. This implies that the null hypothesis of the panel unit-root for the variables is rejected at 1% level of significance.

Panel Cointegration Tests

Before the estimation of the PMG, it is important to test for panel cointegration among the models variables under investigation to determine the existence of cointegration or otherwise.

Table 5: Cointegration Tests Result

Kao test for cointegration	
Test	Statistics
Modified Dickey-Fuller t	-2.5298***
Dickey-Fuller t	-3.0052***
Augumented Dickey-Fuller t	-0.1375
Unadjusted Modified Dickey-Fuller t	-5.4007***
Unadjusted Dickey-Fuller t	-4.2261***
Pedroni test for cointegration	
Modified Phillips-Perron t	2.4234***
Phillips-Perron t	-4.0980***
Augumented Dickey-Fuller t	-49965***
Westerlund test for cointegration	
Variance ratio	-2.8999***

Note: *, ** and * represent statistical significance at 1%, 5% and 10%, respectively.**
Source: Researchers' computation using stata 17, (2024).

The test for cointegration is not entirely a necessity but provides some robustness to confirm the existence of a long run relationship among the variables in the model. The study employs Kao (1999), Pedroni (2003) and Westerlund tests or cointegration and the results is presented in Table 5. The Kao test results indicate statistical significance for the Modified Dickey-Fuller t, Dickey-Fuller t, Unadjusted Modified Dickey-Fuller t, and Unadjusted Dickey-Fuller t statistics at the 1% levels. This suggests evidence of cointegration based on these statistics. Similarly, the Pedroni test results demonstrated statistical significance for all three test statistics at the 1% levels, providing further evidence of cointegration. Furthermore, the Westerlund test result indicates statistical significance for the variance ratio statistic at 1% level, supporting the presence of cointegration.

Slope Heterogeneity Test

These tests were conducted to inform the study about the presence of heterogeneous effects, and guide in the selection of an appropriate estimation technique.

Table 6: The Slope Heterogeneity Test Result

Pesaran and Yamagata (2008) test for slope heterogeneity	Statistic
Delta	5.070***
Adj. Delta	7.854***

Note: ***, ** and * represent statistical significance at 1%, 5% and 10%, respectively.
Source: Researchers' computation using stata 17, (2024).

Table 6 presents the slope heterogeneity test results, following the Pesaran and Yamagata (2008), yields a highly significant result with a Delta statistic of 5.070 and adjusted test statistic is reported as 7.854 indicating a 1% significance levels. This high level of statistical significance suggests robust evidence against the null hypothesis, strongly supporting the conclusion that there is significant heterogeneity in the slopes across the tested variables.

Pooled Mean Group (PMG)

The result of the Slope Heterogeneity test reveals significant heterogeneity in the slopes across the tested variables in a panel data context; the study therefore employed the Pooled Mean Group (PMG) estimation technique. It is commonly used in panel data analysis when there is heterogeneity in the slopes across different cross-sectional units. It also combines fixed and random effects, accommodating individual-specific effects and addressing the observed heterogeneity in short-run dynamics across panel units. Additionally, PMG assumes a common long-run equilibrium, making it adept at assessing common trends and equilibrium relationships among the variables of interest while acknowledging short-run heterogeneity.

Table 6 present the results of Pooled Mean Group (PMG), with both long-run and short-run equations. In this analysis, the dependent variable is private sector investment (PI), while independent variables are political stability (PST), accountability and voice (ACV), control of corruption (CTC) and rule of law (ROL). The result reveals that a unit increase in accountability and voice is associated with an increase of approximately 0.156-unit increase in private sector investment. Similarly, a unit increase in rule of law lead to an increase of approximately 0.047 units in private sector investment. On the other hand, the coefficient of control of corruption is -0.121371, which implies that a unit increase in control of corruption is associated with a decrease in private sector

investment by approximately -0.121 units. Even though the result shows that, political stability has a positive coefficient (0.014935) but there is insignificant relationship with private sector investment. The disaggregated analysis has suggested that accountability and voice (ACV), control of corruption (CTC) and rule of law (ROL) play more significant role in influencing private sector investment in ECOWAS countries compared to political stability (PST) in the long run.

Table 7: Result of Pooled Mean Group (PMG)

Long-Run Equation		
Variable	Coefficient	Std. Error
PST	0.014935	0.011945
ACV	0.156242	0.045273***
CTC	-0.121371	0.036244***
ROL	0.047621	0.041196***
Shot-Run Equation		
ECM-1	-0.402873	0.085557***
PST(D1)	-0.101658	0.081111
ACV(D1)	0.197664	0.080808**
CTC(D1)	-0.092372	0.164803
ROL(D1)	-0.103844	0.060768*
Cons	2.205709	0.712558***

Note: ***, ** and * represent statistical significance at 1%, 5% and 10%, respectively.
Source: Researchers' computation using stata 17, (2024).

However, there is a highly significant negative relationship between the short-term error correction term (ECT) and private sector investment in ECOWAS member countries. This is confirmed given the value of coefficient at -0.402873. This term captures the speed of adjustment in the short run, suggesting that deviations from the long-run equilibrium are corrected at a significant rate. A change in political stability and control of corruption do not exhibit a statistically significant relationship with private sector investment in the short run. On the other hand, accountability and voice, and rule of law show a statistically significant positive impact on private sector investment in the short run at 1% and 10% level of significance respectively.

Granger Causality Test

Table 8 presents the results of the Dumitrescu and Hurlin (2012) Granger non-causality test. The Granger Causality

Test was utilized to investigate whether the past values of one variable within a panel can predict the future values of another variable, offering insights into causal relationships in a panel setting. This test is particularly valuable for model specification in time series analysis but applied in this study to understand the direction of causality between variables and providing relevant information for constructing robust forecasting models tailored to panel data structures.

Table 8: Dumitrescu and Hurlin (2012) Granger Causality Test Results

Null Hypothesis (H_0)	W-Stat.	Z-stat.
PSI→PST	2.9933***	5.6980***
PST→PSI	1.0517	0.1461
PSI→ACV	2.8769***	5.3087***
ACV→PSI	0.6218	1.0697
PSI → CTC	2.7815***	5.0389***
CTC → PSI	1.1159	0.3277
PSI→ROL	2.2691***	3.5895***
ROL→PSI	15429	1.5354

Note: ***, ** and * represent statistical significance at 1%, 5% and 10%, respectively.
Source: Researchers' computation using Eviews 11, (2024)

The Granger Causality Test outcomes unveil the directional relationships between private sector investment (PSI) and the independent variables—political stability (PST), accountability and voice (ACV), control of corruption (CTC), and rule of law (ROL). The result showed that there is strong evidence that past patterns of private sector investment predict future political stability, accountability and voice, control of corruption, and rule of law. However, the reverse causation from these variables to private sector investment is not consistently supported, with statistically insignificant results for political stability, accountability and voice, control of corruption and rule of law to private sector investment in ECOWAS members' countries. In essence, these findings suggest a unidirectional influence where historical private sector investment patterns serve as predictors for improvements in political stability, accountability, control of corruption, and the rule of law. It is crucial to interpret these results cautiously and consider the implications for understanding the causal dynamics between private sector investment and institutional factors.

Discussion of Findings

The Pooled Mean Group (PMG) results sheds light on the determinants of private sector investment (PSI) in ECOWAS countries, particularly focusing on political stability (PST), accountability and voice (ACV), control of corruption (CTC), and rule of law (ROL). Results in the study offers valuable intuitions into the intricate relationship between indicators of institutional quality indicators and private sector investment in the context of ECOWAS countries. Accountability and voice (ACV) is in consistent alignment with previous studies, (Saha et al. 2022; Abdelghany, 2020; Borojo & Yushi, 2020). These studies emphasized the affirmative impact of institutional quality indicators, highlighting the role of accountability and voice as crucial components. The positive effect of ACV on private sector investment aligns with the broader literature on the positive influence on stock market development. Similarly, the positive association between the rule of law (ROL) and private sector investment corresponds to the findings of (Minović et al. 2021; Borojo & Yushi, 2020; Abdelghany 2020), where rule of law positively influenced private sector investment in African countries. The result supports the notion that a strong rule of law contributes to creating an environment conducive to private sector activities.

Conversely, result of control of corruption (CTC) is in line with the study of (Ahmed & Alamdar, 2018) which indicated that corruption is detrimental to private sector investment. The negative impact suggests that high levels of corruption can act as a hindrance to private sector investment. The finding of an insignificant relationship between political stability (PST) and private sector investment aligns with the studies of (Jurčić et al. 2020; Baker et al. 2019; Nondo. et al. 2016). This confirms the insignificant relationship between political stability and private sector investment.

The significant negative relationship between the short-term error correction term (ECT_1) and private sector investment is consistent with the context-dependent nature emphasized in the literature. The rapid adjustment in the short run aligns with the need for rapid considerations based on regional and national contexts highlighted in the literature. Furthermore, the study concluded that accountability and voice (ACV), control of corruption (CTC), and rule of law (ROL) play a more significant

role in influencing private sector investment in ECOWAS countries compared to political stability in the long run. The multifaceted impact of institutional quality indicators on private sector investment is acknowledged, emphasizing the importance of considering various indicators of institutional quality for fostering private sector development.

5. **Conclusion and Recommendation**

The study concluded that accountability and voice, control of corruption and rule of law play significant roles in influencing private sector investment in ECOWAS countries. Accountability and voice, and rule of law maintain their significance in the short run, control of corruption and political stability do not show statistically significant relationships in the short term. This information is valuable for policymakers and investors interested in the factors influencing private sector investment in the ECOWAS region.

To foster an environment conducive for private sector investment in ECOWAS countries, a comprehensive set of recommendations emerges from the study.

i. Primarily, there is a need to strengthen mechanisms that promote transparency, citizen participation, and accountability. Policymakers should focus on enhancing accountability and voice (ACV) to positively influence private sector investment in both the long and short run in ECOWAS members' countries.
ii. Moreover, governments of ECOWAS members' countries should emphasis the rule of law (ROL) by prioritizing legal reforms that create a fair, predictable, and supportive business environment in the region.
iii. Addressing corruption is crucial in the ECOWAS members' countries, as the negative impact of the control of corruption on investment highlights the necessity for robust enforcement of existing laws and transparent processes in the region.
iv. Ensuring long-term political stability is recommended in ECOWAS members' countries through political reforms, conflict resolution, and the establishment of stable governance structures by the governments of the members' countries.

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