

GOVERNANCE AND GROWTH OF NATIONS

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ABSTRACT

This study evaluates the role of institutions and governance on economic growth in West African (W/A) nations. The rationale for the study is that modern endogenous growth economic thinkers hold the view that economic growth proceeds from quality institutions and good governance more than exogenous growth theorists. The system Generalized Method Moments (GMM) analysis was implemented using e-view statistical packages in addition to other panel estimation methods. Data were obtained on ten W/A nations from 2000 to 2020. The result indicated that there is a significant positive connection between quality institutions and good governance on economic growth in the W/A region. Government effectiveness, political stability, voice and accountability, and government effectiveness had negative effects on the growth of W/A nations. The study implements a system GMM model in unraveling the economic growth effects of institutions and governments and explained the 14.19% total variation in the economic growth of W/A nations, by institution and governance variables basing analysis on the random effect model. The research is a contribution to the realization that economic growth in developing countries does not depend only on trade and technology transfer from the developed economies alone but also on good governance devoid of corruption together with the quality of institutions owned by developing nations. Advanced econometric techniques would be needed to test the validity of our estimates as such techniques would have the capacity to control for endogeneity. Accordingly, our results seem preliminary at moment.

Keywords: GMM, growth of W/A nations, institutions, governance
JEL Classification Number: E62, E63, O43

1. Introduction

Researchers are unanimous in recent pieces of literature that to concisely estimate economic growth hereafter referred to as EG, economic analysis has to focus on the nature and type of institutions and governance of such economies (Alence 2004). Economic institutions and governance can be taken as major contributors to economic growth because quality economic institutions and good governance impact EG through the efficient allocation of physical and human capital. According to Acemoglu et al. (2005) and Weil (2008), several reasons account for the preferred measure of quality economic institutions and good governance in stimulating economic growth. In a similar vein, it has been noticed that EG also results in effective economic institutions (EI) and good governance (GG), as such Valeriani and Peluso (2011) recognized a unidirectional connection between institutions, governance, and EG. The justification for such bi-causality is hinged on the premise that EG means a high living standard and greater cognizance. In turn, higher levels of awareness translate into a higher sense of discipline and the mandate for civility from the populace, this in turn results in higher quality institutions and governance such as the rule of law, property right, good judicial practices, etc. According to Ferrini (2012), institutions comprise instances of contractual and

contract administration, protection of property rights, enforcement of the law, and reduction of unnecessary government bureaucracies.

The realization that economic growth in developing countries does not depend only on trade and technology transfer from the developed economies have led economists and scholars of related discipline to look inward and to understand that the quality of an institution and good governance also contribute significantly to economic growth. Some economist has argued that quality institution and good governance impact more on economic growth than any other economic variable of growth (Abubakar 2020). However, some studies conducted in Asia and Latin American countries have shown mixed outcomes (Alesina et al. 2003). Similar studies in Africa have however shown that institution taken separately have impacted negatively on economic growth (Abubakar 2020) while governance has impacted positively on economic growth. Hence, the problem to be considered in this work is the joint effect of institutions and governance on EG in W/A nations. As well, other research work did not utilize the system S-GMM econometric package, whereas this work utilizes the system generalized method of moment (S-GMM).

The research questions that are formulated for this study include the following; Is the state of an institution in W/A nations capable of driving economic growth within the region? And, is the state of governance in W/A nations capable of driving economic growth within the region? The objectives for undertaking this study are stated as follows; to determine the impact of institutions on EG in W/A

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nations within the period under study. To determine the impact of governance on EG in W/A nations within the period under study. The hypotheses to be verified in this work are specified as follows; H_0 . Institutions exert no positive effect on EG within W/A nations.

Hypothesis two. H_0 . Governance exerts no positive effect on EG within W/A nations

Adequate knowledge of the impact of quality institutions and good governance of countries within the region will inspire both political and economic leaders within the region to place more emphasis on the provision of quality institutions and good governance for the good of the people. This work is structured into five segments; section one takes care of the background to the work, the problem statement, research questions, objectives of the study, the statement of hypothesis, and the significance of the work. Section two has the conceptual review, theoretical review, empirical review, and gap analysis. Section three involves the theoretical framework, model specification, estimation techniques, and data source. Section four takes care of data presentation and analysis while finally, section five is made up of a conclusion.

2. Theoretical issues and literature review

In line with the results of Acemoglu (2008) who argued that EG does not depend only on exogenous technology improvement but also on the level of governance and institutions. As well, consistent with the objective of this work and following the studies of Islam & Montenegro (2002) and Slessman et al. (2015), the framework used in the study is as follows;

GDP and control of corruption (CCP) In line with studies by Higbee & Schmid (2004), which show that countries with less corruption tend to have higher levels of GDP per capita this is because corruption depresses economic activities, hence our analysis, therefore, suggests a positive relationship between GDP and control of corruption. Therefore $CCP > 0$.

GDP and political steadiness (PSAV) Although it has been noted that high GDP leads to political stability while a low GDP encourages PSAV (Cervantes, Villasior-Becerra 2015), our study is of the position that the political instability among most W/A nations represents a breeding ground for violence, hence it is expected that PSAV will impact negatively on GDP within the period under study. Therefore $PSAV < 0$.

GDP and the rule of Law (ROL) Studies have shown that ROL is of prime significance as a value in its own right and as a contributor to other variables such as human liberty hence, ROL may either impact positively or negatively on GDP depending on how it is viewed. However, in line with the conclusions of

Haggard and Macintyre (2008), we specify a positive relationship between ROL and GDP, that is, $ROL > 0$.

GDP and accountability (VOA) Policies that improve voice and accountability can help to reduce incentives to take economic activities underground since accountability promote effectiveness through its impact on government behavior (Torgler et al. 2011).

GDP and government effectiveness (GE) According to Alam et al. (2017), government effectiveness has a significant positive association with EG. They conducted a study using the system GMM and noted further that government effectiveness does not work in isolation but is intended with another governance variable such as the rule of law. Since most governance structures in W/A nations are not very effective, the study postulates a negative connection between government effectiveness and EG, therefore, $GE < 0$.

The literature as regards the role of economic institutions in growth and development is vast. Przeworski & Curvale (2007) concluded in their work that institutions that encourage EG are institutions that engross and peacefully take care of probable conflict of interest and values under any circumstances and they must be self-sustaining. According to Easterly (2008), there are many arguments in favor of institutions promoting EG because they impact the motivation for key drivers of the economy. According to Acemoglu & Johnson (2010), the role of economic institutions in a democratic country is dissimilar from the economic establishment in a dictatorship state hence, the role of economic establishments differs from nation to nation. He noted that the role of economic institutions includes the following; protecting property right; managing the entry barrier; and accessibility of contracts for the private sector.

Quite several development economists consider good governance to have a positive influence on EG, (Kauffman et al. 1999 & 2005) and Knack & Keefer (1999). However, Khan (2004) recreated the view of governance in a wider intellect, taking into reflection the capability of states to drive structural transformation, and institutional, political, economic, and social arenas to guarantee long-term EG. Stressing further, he noted that the reforms of economic structures and government competencies are the primary step to expand the economic accomplishment of developing nations and the next step to permit EG to boost good governance. Mira (2017), noted that essentially, we have two types of governance that directly and indirectly impact economic growth and they are *Market enhancing governance* and *Growth Enhancing governance*. Knack (2006) revealed corruption, judiciary, and political stability contribute positively to the growth

of nations. Specifically, reported that the safety of individual property and enforcement of agreements are extremely interrelated to growth.

One may also highlight that most of the nations in W/A nations bear a shared set of features such as high levels of corruption, a low degree of democracy or at worst dictatorships, property rights issues, and bias in law administration, which have all brought about its poor socioeconomic performance. The ECOWAS block which comprises fifteen countries is situated in the West African region and shares a common or not-too-diverse culture, and economic and geographical ties. However, despite the above-listed laudable institutions which aim to promote good governance that will result in rapid economic growth for the region, almost all member nations have suffered a prolonged history of military rule. Added to the issue of military interventions in its polity, the region also suffered and it is still suffering from poor leadership (ECOWAS, 2019).

Previous research carried out along this line have not been determinate concerning the specific effect of Institutions and governance on EG, while some studies conducted in Asia and Latin American countries have shown mixed outcome (Alesina et al. 2003). Similar studies in Africa have however shown that institutions taken separately have impacted negatively on economic growth (Abubakar 2020) while governance has impacted positively on economic growth. Hence, the gap to fill in this literature is the joint impact of institutions and governance on growth in W/A nations. As well, other research work did not utilize the system-GMM econometric package, whereas this work utilizes the S-GMM. However, in the W/A nations-specific study, with emphasis on nations with very close features is believed that will control for the heterogeneity bias.

3. Methodology and data

In estimating our model, we utilized the S-GMM estimation technique to deal with simultaneity biases and endogeneity problems. This study utilized E-views 10.0 package for the estimation process and the results are presented in tables. Data used in the study were sourced from World Bank Database covering the period from 2000 to 2022. The data are pooled data for fifteen (15) W/A nations namely, Benin, Burkina Faso, Côte d'Ivoire, Cape Verde, Ghana, Guinea, Gambia, Guinea-Bissau, Liberia, Togo, Mali, Niger, Nigeria, Senegal, Sierra Leone. A model for examining the dynamics of institution and governance of countries in Africa was developed with GDP growth rate being a function of institution and governance in selected fifteen West African countries. So,

$$GDP = f(\text{Institution and governance}) \quad (1)$$

$$GDP = f(GE, PSAV, VOG, ROL, CCP) \quad (1)$$

Explicitly, equation 1 is:

$$GDP_t = \alpha_0 + \alpha_1 GE + \alpha_2 PSAV + \alpha_3 VOG + \alpha_4 ROL + \alpha_5 CCP + \varepsilon_t \quad (2)$$

The working SYS-GMM model in logarithmic transform takes care of the dimensionless variables unit of measurement and linearizes the variable functions.

$$\begin{aligned} & \text{DYN(LNGE(-1),-2) LNGE(-1) LNGE(-2)} \\ & \text{LNPSAV(-1) LNVOG(-1) LNROL(-1)} \\ & \text{LNCCP(-1)} \end{aligned} \quad (3)$$

where: government effectiveness-LnGE, political stability LnPSAV, the voice of governance-LnVOG, rule of law-LnROL, control of corruption-LnCCP) and gross domestic product-GDP in selected fifteen West African countries at period t. This study employs Miyajima, Omi & Saito's (2010) modified version of the econometric model in conducting a panel or cross-sectional study. Miyajima, Omi & Saito's (2010) econometric model is given as follows:

$$Y_{it} = \alpha_0 + \alpha_1 G_{it} + \varepsilon_t \quad (4)$$

where: Y_{it} = represents the predicted variable which is the gross domestic product of the sampled firms. This model is therefore expanded to provide the panel regression model equations that model the research hypotheses earlier stated. These are stated as follows:

Model 1: Pooled Model

$$Y_{it} = b_0 + b_{it} Z_{it} + C_i + \varepsilon_t \quad (5)$$

Model 2: Fixed Effect Model

$$Y_{it} = b_{it} Z_{it} + b_i + U_{it} \quad (6)$$

For $Cov(b_{i-1}, Z_{it}) \neq 0$

Model 3: Randm Effect Model

$$Y_{it} - Y_i^* = b_i (Z_{it} - Z_{it}^*) + (U_{it} - U_{it}^*) \quad (7)$$

For $Cov(b_{i-1}, Z_{it}) = 0$

where Y_{it} is a dependent variable

Z_{it} are independent variables

b_0 is the intercept value

b_{it} is panel regression model parameters.

ε_t and U_{it} are error terms

$Y_{it} - Y_i^*$ is the difference in Y

$Z_{it} - Z_{it}^*$ is the difference in Z

$U_{it} - U$ is the difference in error terms

Model 4: Model

The system GMM is the model to be estimated in this work as follows;

DYN(LNGE(-1),-2) LNGE(-1) LNGE(-2)
LNPSAV(-1) LNVOG(-1) LNROL(-1) LNCCP(-1)
(7)

where: government effectiveness-LnGE, political stability and absence of violence-LnPSAV, the voice of governance-LnVOG, rule of law-LnROL, control of corruption-LnCCP) and Gross Domestic Product-GDP in selected fifteen West African countries at period t (i.e $\alpha_i > 0$ and $i = 1,2,3,4,5$).

4. Results and discussions

The descriptive estimates for the study are in table 1 below;

To test for the incidence of a unit root in the variables of the model (LnGE, LnPSAV, LnVOG, LnROL, and Ln(CCP) impact on LnGDP in the fifteen West African countries from 2002 to 2019. The data collected and analyzed was further investigated using the Fisher-PP test statistic of the variables stationarity and the results presented in Table 1.

Institutional variables of LnPSAV, LnVOG, and LnCCP were stationary at order 1, 1(1). In addition, LnGDP and LnROL were stationary at level, I(0) as the Fisher PP test statistic exceeds 5% critical values and their probabilities are lesser than 0.05 (Table 2). The finding suggested the co-integration of variables. In table 3, there is no cointegration among the variables of an institutional index- LnGE, LnPSAV, LnVOG, LnROL LnCCP on GDP performance in W/A nations, hence Ho was not rejected. This implies that there is no LR equilibrium connexion

Table 1: Summary statistics

Size	LNKDP	LNKE	LNPSAV	LNROL	LNVOG	LNCCP
Mean	1.941562	3.041170	3.242237	3.199943	3.468109	3.272772
Median	1.928539	3.194532	3.558114	3.361977	3.601675	3.362070
Maximum	6.303856	4.175134	4.392289	4.291513	4.391831	4.382627
Minimum	-0.874669	1.347074	0.776529	1.168705	2.158004	1.464857
Std. Dev.	1.528245	0.671224	0.851669	0.705390	0.566651	0.637004
Skewness	0.749054	-0.383669	-1.000676	-0.673996	-0.510362	-0.501137
Kurtosis	3.566024	2.321950	3.087410	2.686523	2.439513	2.904183
Jarque-Bera	28.85300	11.79629	45.14685	21.54771	15.25528	11.40450
Probability	0.000001	0.002745	0.000000	0.000021	0.000487	0.003338
Sum	524.2217	821.1158	875.4041	863.9846	936.3895	883.6485
Sum Sq. Dev.	628.2584	121.1955	195.1163	133.8475	86.37405	109.1533
Observations	270	270	270	270	270	270

Source: E-views 10.0 as utilized by authors

Table 2 Unit root results

Variables	Order	Fisher- PP Test	Critical value	P-value
lngdp	-	-1.2572	-3.456	0.0000
lnge	-	-0.5834	-3.456	0.0008
lnpsav	-	-1.7685	-3.456	0.0005
lnvog	-	-1.2465	-3.456	0.0000
lnrol	-	-1.5324	-3.456	0.0038
lnccp	-	-0.4518	-3.456	0.0000
lngdp	I(1)	-5.3356	-5.1580	0.0000
lnge	I(1)	-4.6156	-5.1580	0.0008
lnpsav	I(1)	-3.2128	-5.1580	0.0005
lnvog	I(1)	-5.3356	-5.1580	0.0000
lnrol	I(1)	-4.6156	-5.1580	0.0038
lnccp	I(1)	-5.3356	-5.1580	0.0000

Source: E-views 10.0 as utilized by authors

between institutional indexes and GDP performance (table 3).

Table 3: Co-integration results

Test	Statistic	Prob.	W. Statistic	Prob.
v-Statistic	-2.333810	0.9902	-2.202286	0.9862
rho-Statistic	2.740212	0.9969	2.724771	0.9968
PP-Statistic	-0.633873	0.2631	-0.721303	0.2354
ADF-Statistic	0.891573	0.8137	1.398334	0.9190

Source: E-views 10.0 as utilized by authors

In terms of analysis of estimated panel results, table 4 shows results for pooled, fixed, and random effects models. The pooled model of our analysis on institution governance and EG of W/A nations which does not allow the heterogeneity of variables shows that the coefficients of (LnPSAV) and (LNCCP) harm growth in West African countries. The LnGE,

LnROL and LnVOG have a positive effect on the economic growth of member states (LnGDP). A unit increase in (LnPSAV) accounted for 1.52 and 0.84 decreases in the growth of ECOWAS member states (LnGDP). An increase by a unit in (LnGE), (LnROL), and (LnVOG) result in 0.79, 1.05, and 0.60 increases in the economic growth of W/A nations (LnGDP) respectively. No increase in the institutions and governance variables in West African countries accounts for 1.75 economic growth.

All the variables of institution and governance serve as a determinant of the economic growth of ECOWAS member states (LnGDP) because they were significant as the associated probability values of the t-statistic are less than 0.05 at the 5% level. The fixed effect model of panel data analysis of institution and governance in West African countries on growth tends to investigate the difference in the model intercept by allowing heterogeneity in time-variant, indicating that political stability (LnPSAV) and Government efficacy (LnGE) harm economic growth-GDP in West African countries.

Table 4: Model estimate results

	Pooled Effect Model					
	Variable	Coefficient	Std. Error	t-Statistic	Prob.	Remark
Model 1	lnge	0.79	0.17	4.65	0.00	Sig.
	lngdp(-1)	1.23	0.46	2.67	0.00	Sig.
	lnpsav	-1.52	0.10	-15.2	0.00	Sig.
	lnrol	1.05	0.23	4.57	0.00	Sig.
	lnvog	0.60	0.14	4.29	0.00	Sig.
	lnccp	-0.84	0.23	-3.65	0.00	Sig.
	c	1.75	0.46	3.80	0.00	Sig.
	Model 2	Fixed Effect Model				
Variable		Coefficient	Std. Error	t-Statistic	Prob.	Remark
lnge		-0.25	0.13	-1.91	0.06	Not Sig.
lngdp(-1)		0.19	0.02	9.50	0.00	Sig.
lnpsav		-0.29	0.07	-4.14	0.00	Sig.
lnrol		0.48	0.14	3.42	0.00	Sig.
lnvog		0.30	0.11	2.73	0.01	Sig.
lnccp		0.25	0.14	1.79	0.08	Not Sig.
c	0.24	0.48	0.50	0.62	Not Sig.	
Model 3	Random Effect Model					
	Variable	Coefficient	Std. Error	t-Statistic	Prob.	Remark
	lnge	-0.18	0.13	-1.38	0.16	Not Sig.
	lngdp(-1)	0.49	0.10	4.90	0.00	Sig.
	lnpsav	-0.34	0.07	-4.86	0.00	Sig.
	lnrol	0.51	0.14	3.64	0.00	Sig.
	lnvog	0.31	0.11	2.82	0.01	Sig.
	lnccp	0.18	0.14	1.29	0.20	Not Sig.
c	0.30	0.51	0.59	0.57	Not Sig.	

*Significant at 5%

Source: E-views 10.0 as utilized by authors

Control of corruption (LNCCP), rule of law (LnROL), and voice of governance (LnVOG) have positive effects on the economic growth of ECOWAS member states (LnGDP). An increase in political stability (LnPSAV) and government success (LnGE) accounted for 0.29 and 0.25 decreases in the economic growth of ECOWAS member states (LnGDP). An increase by a unit in corruption control (LNCCP), rule of law (LnROL), and voice of governance (LnVOG) result in 0.25, 0.48, and 0.30 increases in the economic growth of W/A nations (LnGDP) respectively. No increase in the institutions and governance variables in West African countries accounts for 0.24 economic growth. All the variables of institution and governance- political stability (LnPSAV), rule of law (LnROL), and voice of governance (LnVOG) indicate a significant relationship with economic growth of W/A nations (LnGDP) at a 5% level.

The random effect model of panel data analysis investigates the institution and governance measures of economic growth that, the sampled West African countries for the study if they have a common mean value for intercept. Political stability and absence of violence (LnPSAV) and Government efficacy (LnGE) have negative impacts on economic growth-GDP in West African countries. Corruption control (LNCCP), rule of law (LnROL), and voice of governance (LnVOG) have positive effects on the growth of W/A nations (LnGDP). An increase in political stability (LnPSAV) and government success (LnGE) accounted for 0.34 and 0.18 decreases in the growth of W/A nations (LnGDP). An increase by a unit in corruption control (LNCCP), rule of law (LnROL), and voice of governance (LnVOG) result in 0.18, 0.51, and 0.31 increases in growth of W/A nations (LnGDP) respectively. No increase in the institutions and governance variables in West African countries accounts for 0.24 economic growth. All the variables of institution and

governance- political stability (LnPSAV), rule of law (LnROL), and voice of governance (LnVOG) indicate a significant relationship with the economic growth of West African countries (LnGDP) at the 5% level.

Table 5: Global statistic of the institutional index on GDP in West African countries

Parameter	Pooled	Fixed effect	Random effect
R-squared	0.522815	0.925380	0.157845
Adj. R-squared	0.513777	0.919709	0.141895
F-statistic	-397.2451	-146.7532	

Source: E-views 10.0 as utilized by authors
 In comparing the three-panel models used in the evaluation of institution and governance on EG of W/A nations, the outcomes of pooled, fixed, and random effect models have different coefficient values and tests of significance of individual variables. This justifies the essence of analyzing panel data of cross-section and time series components. From the R² values, the pooled model has 0.5228 (52.3%); the fixed effect has 0.9253 (92.5%) and the random effect model has an R-square (R²) value of 0.157 (15.7%) implying that the models are well-fitted.

Table 6: Hausman test results

Hypothesis	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Ho vs. H1	27.548910	5	0.0000

Source: E-views 10.0 as utilized by authors

In selecting the best model for estimation, panel data estimate procedure, the Hausman test is used. The test follows the assumption Ho is accepted otherwise do not reject H₁ which is p>0.05 at 5%. From table 6, the result of the Hausman test for institution and governance on the economic growth of W/A nations is shown. The

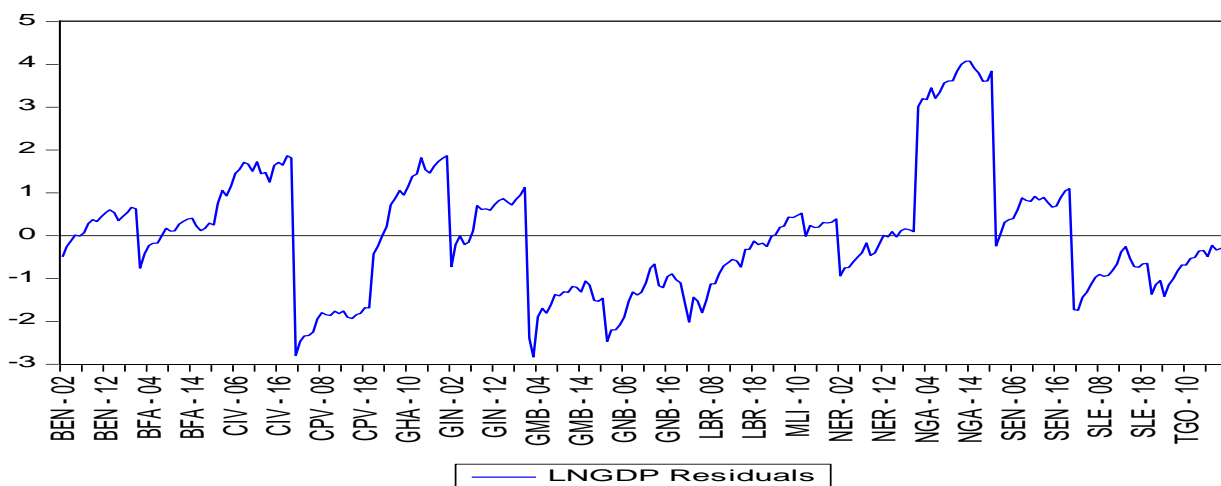


Figure 1: Trend analysis of economic growth in the presence of institutions and governance in West African Countries

Hausman test suggested that the best model for estimating the impact of institutions and governance on the economic growth of West African countries is the random effect model as the associated probability value is less than 0.05 at a 5% level of significance. This portrays that the model is homogeneous.

LnGDP follows an unstable pattern. The significant spikes of economic growth are present in EG of ECOWAS from 2004 and 2014 in Nigeria and 2004 through to 2016 in BFA, CIV, and CPV countries. Negative spikes of economic growth were seen within the periods of 2017, 2008, and 2018 in CIV and CPV countries and 2004, 2014, 2006, 2016, 2008, 2010 2002, and 2012 in countries like Gambia, Guinea Bissau, Liberia Mali, Niger, and Nigeria concerning institution and governance variables respectively. The findings suggest an unstable pattern of EG of W/A nations with prolonged periods of negative EG within the period under study.

period under study. In line with an earlier study by Alam, Kiterage, and Bizuayeh (2017) and ECOWAS report (2019) which noted that as a result of frequent military intervention in the polity of W/A nations, the sub-region has suffered and is still suffering from poor leadership which has made it impossible for them to have effective governance. A one (1) % increase in increase in government effectiveness leads to a -0.02 % decrease in EG during the period under investigation. However, one may note that the estimates for our model are only for the short run. On the long run, the variable is significant and positive if the government of various nations in W/A is stable and effective.

This is also in support of the recent findings by Higbee and Schmid (2004) who noted that countries with less corruption tend to have higher levels of GDP per capita. As well, voice and accountability are also observed to be significant at less than 5%

Table 7: Engle Kao Granger causality result

Null Hypothesis:	Obs	F-Statistic	Prob.
lnge does not granger cause lngdp	240	0.54191	0.5824
lngdp does not granger cause lnge		0.35949	0.6984
lnpsav does not granger cause ngdp	240	0.41625	0.6600
lngdp does not granger cause lnpsav		4.75226	0.0095
lnrol does not granger cause lngdp	240	1.15486	0.3169
lngdp does not granger cause lnrol		0.53583	0.5859
lnvog does not granger cause lngdp	240	0.40833	0.6652
lngdp does not granger cause lnvog		2.30072	0.1024
lnccp does not granger cause lngdp	240	0.51516	0.5981
lngdp does not granger cause lnccp		0.52301	0.5934

Source: E-views 10.0 as utilized by authors

Engle Kao Granger causality effect of institution and governance effect on the economic growth of W/A nations. All the institution and governance measures-except LnPSAV that has a causal effect on EG as the probability value is $0.0095 < 0.05$ at 5%. However, EG has a causal effect on LnPSAV as it has a probability value of $0.6600 > 0.05$ at a 5% significance level. The findings confirmed that the LnGE, LnVOG, LnROL and LnCCP, and LnGDP have no directional causal effects. However, there is strong evidence of a unidirectional causal effect of political stability and absence of violence-LnPSAV on the economic growth of W/A nations. This implies that in the short-run LnPSAV influences the EG of W/A nations.

The SYS-GMM estimates for our analysis are presented in table 4.8 above. Table one observes that all the variables used in our model are all significant at less than 5%, indicating that all the variables are important to our analysis. Specifically, government effectiveness (GE) is significant at less than 5% and it is appropriately signed indicating a negative relationship between economic growth within the

level appropriately signed in consonance with the results of Torgler, et al (2011) who noted that, voice and accountability can help to reduce corruption and other corrupt tendencies since accountability encourages efficiency through its influence on government behavior. The negative sign of the variable indicates that the level of accountability within the sub-region is very poor hence it is harming economic growth. We should, however, note that this negative impact is only in the short run.

The low level of political stability has led to pockets of violence within the sub-region, hence our outcome aligns with the conclusions of Cervantes and Villasior-Becerra (2015), who noted that higher levels of political stability lead to a higher level of economic growth while lower levels of political stability lead to a lower rate of EG. Specifically, One 1% increase in PSAV leads to a -0.04% decrease in economic growth within the period under study. Our last independent variable which is the rule of law (ROL) impacted positively on EG in line with similar findings by Haggard, MacIntyre, and Tiede (2008)

who noted that the rule of law is of high significance. Our analysis showed that this variable is appropriately signed further indicating that a 1% increase in the level of the rule of law results in a 0.03 % rise in EG within the period under review. We must however note that our interpretation is for the short run while utilizing the *ceteris Perabo*'s postulation. The J-statistics which is a test for the validity (joint significance) of our instrument indicates that the instrument used in this study is valid since the J-stat value of approximately 10.23 with a p-value of 0.33 is greater than 0.25 which is the threshold for instrument validity.

5. Conclusion

The paper investigates the implications for economic growth as it concerns the role of institutions and governance in West African countries. The method of analysis adopted in the study, which is the system generalized method of moment (S-GMM) is adequate for capturing economic growth using data from the sub-region which has laid to rest the question of the capability of S-GMM in adequate capturing the impact of institutions and governance on EG within the W/A nations. All the variables used in capturing the combined effect of the quality institutions and good governance on economic growth in West African countries were statistically significant at less than 5%, they were all stationary at the first difference. They were however not co-integrated. The analysis discovered a positive connection between ROL, CCP, and GDP but a negative relationship between GE, PSAV, VOG, and GDP. This clearly shows that the analysis shows that the current condition of institution and governance structure in the W/A nations impacts both positively and negatively on EG within the period under consideration. This is in line with the earlier mixed outcomes of institutions and governance by Alesina et al. 1996. In line with the findings of this work, we recommend that efforts should be made by the political and economic leaders of W/A nations to stamp out the scourge of corruption, encourage the strict application of the rule of law, and chant the drum of political stability, be effective in their governance, and be accountable to their respected people in their nations to have a robust EG. Each member state should entrench good governance within their respective countries and also encourage other member states to do the same to enhance the economic outlook of the region in the committee of global economics. A strong and sustainable institution must be developed and imbibed by W/A nations to facilitate meaningful EG and development in the West Africa region.

References

Abubakar S. (2020), Institutional quality and economic growth: evidence from Nigeria, "*African Journal of Economic Review*", vol VIII, no. 1, pp 23-49.

- Acemoglu, D., Robinson J.A. (2012), *Why nations fail: The origins of power, prosperity, and poverty*, Crown Publishers, New York.
- Acemoglu, D., Robinson J. (2012), *Why nations fail: the origins of power, prosperity, and poverty*, Crown Publishers, New York.
- Acemoglu, D., Johnson S., Robinson J.(2005), 'Institutions as the fundamental cause of long-run growth National Bureau of Economic research', in Aghion P., Durlauf S. N. (eds.), *Handbook of economic growth*, vol. 1a, pp. 385-472, Elsevier, Amsterdam. [https://doi.org/10.1016/S1574-0684\(05\)01006-3](https://doi.org/10.1016/S1574-0684(05)01006-3).
- Alam M.R., Kiterage E., Bizuayeh B. (2017), Government effectiveness and economic growth, "*Economic Bulletin*", vol. 37 no. 1, pp. 30-56
- Alence R. (2004), Political institutions and developmental governance in sub-Saharan Africa, "*Journal of Modern African Studies*", vol 42 no. (2), pp. 163-187.
- Alesina A., Devleeschauwer A., Easterly W., Kurlat S., Wacziarg R. (2003), Fractionalization, "*Journal of Economic Growth*", vol 8 no. 2, pp. 155-94.
- Andrea B. A., Stefano S. S. (2003), The Driving forces of economic growth: panel data evidence for the OECD countries, "*Economic Studies*", vol. 20, no 2, pp. 9-56
- Arndt C., Oman C., (2006), *Uses and abuses of governance indicators*, OECD development center, Paris.
- Cervantes R., Villaserior-Becerra J. (2015), Political stability and economic growth; some considerations, "*Cases studies*", vol 1 no. pp. 77-100.
- Djankov S., McLiesh C., Ramalhom R. (2006), Regulation and growth, "*Economics Letters*", vol. no. 9, pp. 45-92.
- Easterly W. (2008), Design and reform of institutions in LDCs and transition economic institutions: Top-down or bottom-up?' "*American Economic Review*", vol 98 no. 2, pp. 95-99
- Gray H. (2007), *Governance for economic and new directions reviewed*. Department for International Development / World Bank. *Mix growth and poverty reduction: empirical evidence*.
- Haggard S., MacIntyre A., Tiede L. (2008), The rule of law and economic development, "*Annual Review of Political Science*", vol II no 5, pp. 205-234.
- Islam R., Montenegro C. E. (2002), What determines the quality of institutions? *Building Institutions*

- for Markets, Background Paper for the World Development Report.
- Kaufmann D., Kraay A. (2002), Growth without governance, "Economia", vol. 3 no. 1, pp. 169-229.
- Khan M. H. (2002), State failure in developing countries and strategies of institutional reform. Proceedings of the World Bank's
- Mauro, P. (1995), Corruption and Growth, "Quarterly Journal of Economics", 110: 682-712.
- Narayan D., Chambers R., Shah M. K., Petesch P. (2000), Voices of the poor: Crying out for change. New York: Oxford University Press for the World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/13848> [09.06.2020]
- North D.C. (1988), Some fundamental puzzles in economic history/development, in W.B. Arthur S.N., Lane D. L. A. (eds.), The economy as an evolving complex system pp. 223-237.
- North D.C. (1991), Institutions, institutional change and economic performance, Cambridge University Press, Cambridge.
- Olaoye O.O., Orisadare M.A., Okorie U.U., Abanikanda E. (2019), Re-examining the government expenditure-economic growth nexus in ECOWAS, "Journal of Economic and Administrative Sciences", vol. 3 no. 6, pp. 210-236.
- Petrunya U., Ivashina A. (2010), Institutional factors of economic development, "Economic Theory", vol. 4 no. 6, pp. 24-31.
- Przeworski L., Curvale C. (2007), Political institutions and economic development in Americas: The long-run, Working Paper, No. 3, Institute for Economic Growth, New Delhi.
- Rodrik D. (2005), Growth strategies in Phillippe, A. and Steven, D. (Ed.), Handbook of Economic Growth, 1st ed., Elsevier, vol. 1, chapter 14, pp. 967-1014.
- Rodrick D., Subramanian A., Trebbi F. (2002), Institutions rule: the primacy of institutions over geography and integration in economic growth, Working paper No.wp/02/189, International Monetary Fund (IMF), Washington, DC.
- Romer P.M. (1990), Endogenous technological change", "Journal of Political Economy", vol. 98 no.5, pp. 71-102.
- Siddiqui D.A., Ahmed Q.M. (2013), The effect of institutions on economic growth: a global analysis based on GMM dynamic panel estimation, "Structural Change and Economic Dynamics", vol. 24 no. 5, pp. 18-33.
- Slesman L., Ahmad Z., Wahabuddin R. (2015), Institutional infrastructure and economic growth in member countries of the Organization of Islamic Cooperation (OIC), Economic Modelling", vol. 51 no 10, pp. 214-226.
- Sprogard R., James M. (2000), Governance and democracy: the people's view, a global opinion poll, Presented at the U.N. University's Millennium Conference, Tokyo, January 19-21.
- Tharanga S. (2019), The relationship between the institution and economic development. MPRA working paper No. 97755.
- Torgler B., Macintyre A., Schneider F., (2011), Shadow economy; voice and accountability and corruption. In Schneider F, (ed) Handbook on the shadow economy. Chp14. London. Edward elger.
- Valeriani E., Peluso S. (2011), The impact of institutional quality on economic growth and development: Empirical evidence, "Journal of Knowledge Management, Economics, and Information Technology", vol. 6 no. 2, pp. 1-25.
- Wanjuu L. Z., Le-Roux P. (2017), economic institutions and economic growth: Empirical evidence from Economic Community of West African States, "South African Journal of Economic and Management Science", vol. 20 no. 1, pp 24-56.
- Weil D.N. (2008), Economic growth, Pearson, London.
