SSR

Effect of Institutional Quality on Economic Growth: A Comparative Evidence from Ghana and Nigeria

Social Sciences Research
Nnamdi Azikiwe University, Awka Nigeria

[1]Muftau Adesina Abayomi and [2]Alex Chijioke Chidiebere
[1, 2]Department of Economics, School of Logistics and Innovation Technology
Federal University of Technology, Akure,Nigeria
Email of Corresponding Author: maabayomi@futa.edu.ng;
drsinaabayomi@yahoo.com

Abstract

Experts have argued that aside factors of production, institutions also matter in the production process across countries. This study investigated the effect of institutional quality on economic growth in Ghana and Nigeria, using panel data covering 1996 to 2019. Variables used in the study included the real gross domestic product growth rate, capital formation, labourforce, and inflation rate, all obtained from the World Development Indicators, while the proxies for institutional qualitysuch as government effectiveness, control of corruption and regulatory quality were obtained from the World Governance Indicators. This study carried out the unit root test, Pedroni's cointegration test and the Autoregressive Distributed Lag Model. The study established that control of corruption was very effective in Ghana while the reverse was the case in Nigeria thereby promoting economic growth in Ghana and retarding growth in Nigeria. Regulatory quality was also found to promote economic growth in Nigeria, whereas it retarded growth in Ghana. This study also found that there was government ineffectiveness which retarded economic growth in both countries. Finally, the study recommended that the Nigerian Government should intensify control of corruption by stipulating stiffer penalties, while the Ghanaian Government should improve upon regulatory quality in order to stimulate economic growth. Finally, National Governments of both countries should introduce a policy on

business process re-engineering backed by political will in order to improve government effectiveness with a view to accelerating economic growth.

Keywords: Autoregressive Distributed Lag Model, Economic Growth, Institutional Quality, Pedroni's Cointegration Test, Ghana, Nigeria

Introduction

There has been a growing concern on the role of institutions in economic growth, especially in developing countries such as Ghana and Nigeria. This concern has been stoked by how a number of researchers and experts have argued that aside factors of production, technological change and innovations, other factors such as institutions, also influence economic growth across countries. When factors of production are effectively harnessed and value is added, against the backdrop of existing institutions, with a view to producing desired goods and services in the society, output is created (Romer, 2002).A consistent increase in a country's total output or Real Gross Domestic Product (RGDP) over a long period of time is referred to as economic growth(Jhingan, 1997).

An institution can be described as a focused social structure with a set of rules, facilitated by cooperation of people and transcends individuals but influences people's behaviours and their lifestyle. In other words, institutions are humanly devised constraints that shape interaction between people (North, 1990, 1991).North (1990) also distinguishes institutions from organizations, as he stresses that while the latter are the players of the social interaction, the former are the umpires of the game. Joskow (2008) views forms of institutions as being legal, political, social or economic. Legal institutions are the most ubiquitous form as legislature can be found practically in any kind of social interactions. Political institutions are the organizations in a government that create, enforce, and apply laws. They often mediate in conflict, make government policy on the economy and social systems, and otherwise provide representation for the population. Institutional quality also involves individual and property rights as well as how a government regulates the economy and how it renders social services (**Bruinshoofd, 2016).**

Generally, institutional quality is expected to influence economic growth, as data show that countries with high institutional quality have been more successful in adopting frontier technology to enhance productivity since the turn of the millennium (**Bruinshoofd, 2016). B**ut the relationship between institutional quality and economic growth is not yet clear in developing countries such as Ghana and Nigeria, where many reforms targeted at economic growth have not yielded the desired results. The economic situations in both countries have been further adversely impacted by the COVID-19 pandemic. Hence, the main objective of the study was to investigate the effect of institutional quality on economic growth in Ghana and Nigeria. The specific

objectives of the study were to: analyse the trends of economic growth and institutional quality in Ghana and Nigeria; examine the dynamic long run relationship between institutional quality and economic growth; and compare the effect of institutional quality on economic growth in both countries.

The study would assist the national governments and their agencies to ascertain the role of the various measures of institutional quality on economic growth thereby enabling them to take informed decisions and institute necessary policies and strategies for driving economic growth in both countries.

Data covering the period 1996 to 2019 was obtained and analyzed to achieve the set objectives of the study. The start year of 1996 was chosen mainly because reliable data on institutional quality became available from that year. Ghana and Nigeria, have been purposively selected because the two countries constitute 75% of Gross Domestic Product of all States in West Africa Sub-region (ECOWAS, 2021).

Literature Review

A number of studies have been carried out on the relationship between institutional quality and economic growth both domestically and abroad. Some of the empirical studies are reviewed in this section.

Backed by historical evidence from some countries, including Egypt, China, Britain and some others from Latin America, Acemoglu and Robinson (2012) argue that only those countries which had well-functioning economic and political institutions had been able to achieve higher economic growth. They also debunk previously held believe that growth and development of less developed countries are dependent upon how favourable their climate is, or availability of natural endowments. Acemoglu and Robinson (2012) also aver that economic institutions will not engender the desired growth except strong political institutions are present. On his own part, Rodrik (1999) emphasise five types of market-supporting institutions that should be given consideration in every economy namely: property rights; regulatory institutions; institutions for macroeconomic stabilization; institutions for social insurance; and institutions for conflict management.

Based on the "Grease-the-Wheels Hypothesis", Leff (1964) and Huntington (1968) had opined that corruption is beneficial to economic activities as it helps to circumvent inefficiencies associated with bureaucracy in investment, which extends to economic growth. However, Mauro (1995), and Meon and Sekkat (2005) observe a significant negative link between corruption and investment that extends to growth.

Another study by Kaufman (2012) also examined the relationship between governance and per capita income of 173 countries using data of 300 previously used indicators of governance selected in cross-country studies for the years 1997-1998. The

results establish a significant positive influence of good governance on economic growth. Furthermore, Nguyen and Nguyen (2018), in their book "Institutional Quality and Economic Growth: The Case of Emerging Economies" examine the impact of institutional quality on GDP per capita and GDP growth with the role of each institutional quality component examined alternately. The results indicate that control of corruption, rule of law, government effectiveness, and voice and accountability significantly drive GDP per capita growth. However, the study reports that political stability and regulatory quality has insignificant positive effect on GDP per capita growth.

According to Akpan and Atan (2016) and Doan (2019), the key role of quality institution is in influencing the impact of trade openness on economic growth. In a related study, Akpan and Atan (2016), using pooled ordinary least squares (OLS) and the dynamic generalized method of moment (GMM) as estimation techniques, also investigated the relationship between trade openness, institutions and economic growth across 23 countries in Sub-Saharan Africa (SSA) covering a period of six years (1996–2011). The results reveal that trade openness exerts a significant negative effect on economic growth in SSA. However, once the interaction between trade openness and institutions is allowed for, the study finds growth to be positively affected by openness.

In a study conducted by Yildirim and Gökalp (2016), the results of the analysis reveal that institutional quality indicators such as the integrity of the law system, regulations on trade barriers, restriction of foreign investments, share of the private sector in the banking system and employment-dismissal variables have a positive effect on the macro-economic performance of the developing countries. However, according to the results of the analysis, variables such as judiciary independence, government expenditures, transfers and subsidies, civil freedoms, the black market exchange rate, collective bargaining and military tutelage (political stability) have been seen to have a negative impact on the macro-economic performance of developing countries (Yildirim & Gökalp, 2016).

In a study on institutions and economic performance of Sub-Saharan African economies, Kilishi, Mobolaji, Yaru and Yakubu (2013), using Arellano and Bond first difference and Blundell-Bond System Generalized Method of Moments (GMM) estimators find that institutions really matter for the study area's economic performance, and emphasise regulatory quality as the most important factor.

Kebede and Takyi (2017) investigated causality between institutional quality and economic growth in Sub-Sahara Africa, using annual panel data of 27 countries for the period spanning 1996 to 2014 by employing Pedroni panel co-integration, Wald panel causality, and the system GMM techniques. They established a co-integration relationship between institutional quality and economic growth. Analysis

of the study results also show a unidirectional causality running from economic growth to institutional quality but not the other way round. Furthermore, the study finds that institutional quality, trade openness, financial development, and debt positively affect economic growth. Also, economic growth and freedom are found to be important determinants of institutional quality. However, debt servicing and dependence on natural resources negatively affect economic growth and institutional quality respectively.

Dollar and Kraay (2003) investigated the partial effects of institutions and trade on growth. Employing cross-country regressions of changes in decadal growth rates on instrumented changes in trade and changes in institutional quality establish evidence of a significant effect of trade on growth, with a smaller role for improvements in institutions. In a study carried out by Ajakaiye and Jerome (2011), they investigated the role of institutions in the transformation of the Nigerian economy. In a comparative literature analysis of the Indonesian and Nigerian economies, they found that Nigeria's institutional framework was weaker than that of Indonesia.

Alexiou, Tsaliki and Osman (2014) employed the auto regressive distributed lag (ARDL) approach to investigate the short-run as well as long-run relationships between institutional quality with other relevant economic variables and economic growth over the period 1972-2008. The analysis of the empirical result showed that, for the Sudanese economy, institutional quality is one of the strong drivers of economic performance.

In a related study, Keho (2017) employed the autoregressive distributed lag model to examine the impact of trade openness on economic growth in Cote d'Ivoire using secondary data from 1965–2014. The study shows that trade openness has a significant positive effect on economic growth while capital and labor exert a significant negative effect on growth in both the short and long run.

Buterin, Skare and Buterin (2017) employed the Arellano–Bond dynamic panel analysis to investigate the impact of institutional reforms on the economic growth in transition economies for the period of 1996 – 2012. The results of the analysis revealed that there is a positive correlation between institutional reforms and economic growth.

Concluding from an empirical study that investigated the dynamic relationship between institutional quality and economic growth in Nigeria from 1984 – 2015, using auto-regressive distributed lag (ARDL), Fagbemi and Ajibike (2018) argued that sound institutions are the hub of economic growth. In particular, their study used the bounds test to conduct the co-integration analysis.

Khan, Kong, Xiang and Zhang(2019) also adopted the simple ordinary least squares technique to examine the long-run effect of institutional quality on the financial sector

in 15 emerging and growth-leading economies (EAGLES) from 1984 to 2017. Their findings show that there is a positive impact of institutional quality on financial development and that financial development leads to improved economic growth in these countries.

Furthermore, Duodu and Baidoo (2020) investigated the role of institutions on the impact of trade openness on economic growth in Ghana (1984–2018), using the autoregressive distributed lag model. They found that trade openness and quality of institutions individually has significant positive effects on economic growth in Ghana in both the short and long run. However, trade openness in association with quality of institutions exert an insignificant effect on economic growth in both short and long run.

Evidence from the empirical literature reviewed in this study reveals that a number of studies have been carried out on institutional quality and economic growth in Sub-Sahara Africa with mixed findings but none had specifically addressed a comparative analysis between Ghana and Nigeria, which are the two largest economies in West Africa sub region. Hence, this study contributes to the debate and bridges the gap by investigating the relationship between institutional quality and economic growth in Ghana and Nigeria by comparing the evidence from both countries.

Methodology

This study was anchored on the endogenous growth theory which simply states that economic growth is driven by strong influences within the economy. The underlying assumption is that economic prosperity is primarily determined by internal or endogenous factors as opposed to external or exogenous factors. Starting with the simple AK model, which is the simplest form of the endogenous growth model and a straight forward extension of the Solow model as defined in equation 1:

$$Y = f(AK) \quad \ldots (1)$$

Where Y is the national output, K is the composite measure of capital stock, while A is a constant on the assumption of constant return to scale (CRS). The CRS replaces the assumption of diminishing returns to scale in the neoclassical growth theory to ensure that investment matters for long run growth and that growth is endogenous (Hussien & Thirwall, 2000). But capital stock can be subdivided into physical capital and human capital, hence the model becomes:

$$Y = A\ f(K, L) \quad \ldots (2)$$

Where L represents labour force
This implies that:

$Y = AK + AL$ …(3)

If y = Y/A, then k=K/A, and ⌊=L/A, then equation (3) can be re-written as follows:

$y_{it} = \Omega_0 + \Omega_1 k_{it} + \Omega_2 ⌊_{it}$

Where; y represents output, k stands for physical capital, and ⌊ is human capital.

It is pertinent to note that the output in any economy will be influenced in one way or another by quality of institutions represented by *iq*. Hence, there is need to introduce institutional quality into the equation as follows:

$y_{it} = \Omega_0 + \Omega_1 k_{it} + \Omega_2 ⌊_{it} + \Omega_3 iq_{it}$ … (4)

In order to capture any other macroeconomic variable such as inflation, we introduce x_i into the equation as follows:

$y_{it} = \Omega_0 + \Omega_1 k_{it} + \Omega_2 ⌊_{it} + \Omega_3 iq_{it} + \Omega_4 + x_{it}$ … (5)

The model specification in this study was anchored on the endogenous growth theory. The main objective of the study was to examine the effect of institutional quality on economic growth in Ghana and Nigeria. The model to achieve this objective is as specified in (6):

RGDPGR= f (IQ, CAF, LF,,INFR) … (6)

Explicitly, model (6) can be re-written as follows:

$RGDPGR_{it} = \Omega_o + \Omega_1 GEF_{it} + \Omega_2 REG_{it} + \Omega_3 CRPT_{it,} + \Omega_4 CAF_{it,} + \Omega_5 LF_{it} + \Omega_6 INF_{it} + \varepsilon_{it}$ … (7)

Where:

GEF = Government effectiveness as a proxy for Institutional Quality, measured by its index.

REG = Regulatory quality as a proxy for Institutional Quality, measured by its index.

CRPT = Control of corruption as a proxy for Institutional Quality, measured by its index.

CAF= Capital formation proxied by growth rate of total domestic investment.

LF = Labor force proxied by population growth rate.

INF = Inflation rate proxied by consumer price index as control variable.

RGDPGR = Real Gross Domestic Product growth rate.

"Ɛ" is the stochastic disturbance term representing all factors that have influence on the dependent variable but which are not explicitly taken into account.

it= Country i in period t

"Ω_o" denotes the intercept term, that is, the mean or average effect on dependent variable of all the variables excluded from the model, especially when all the explanatory variables are set at zero values.

"Ω_1 … Ω_6" are the parameters or partial regression coefficients of the model, measuring the change in the mean value of the GDP per unit change in individual explanatory variable, while holding other variables constant.

According to the WGI (2020) Government effectiveness captures the quality of public services and the degree of its independence from political pressures, thus fostering a benign context for private investment; while regulatory quality is the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development, thus laying down uniform rules of economic engagement; and control of corruption is rooted in the notion that the stronger the control of corruption, the more economic success is a function of effort and competence, rather than connections and bribery.

Panel data encompassing the period of 24 years (1996-2019) were used in the study. Data on real gross domestic product and proxies for gross capital formation (gross domestic investment) and labour force (population) as well as inflation rate were obtained from the World Development Indicators. Data on the three proxies for institutional quality (government effectiveness, control of corruption and regulatory quality) were obtained from the World Governance Indicators.

The study employed the Panel Autoregressive Distributed Lag (ARDL) technique. The technique was selected as it depicts both long run and short run relationships among variables. The first step was the unit root test, which was used to determine the order of integration of each variable. That is, how many times a variable must be differenced to become stationary. The null hypothesis assumes the presence of unit root, which implies that a series is not stationary. The test was carried out using the Augmented Dickey Fuller (ADF) technique of estimation at 5 percent level. In general, the approach to unit root testing implicitly assumes that the time series to be tested $[y_y]_t^T = 1$ can be written as:

$$\Delta Y_{it} = a + \Omega_{it} + \varrho Y_{it-1} + \sum \delta \Delta Y_{it-1} + \mu_{it} \quad \ldots (8)$$

Where Y_t is the level of the dependent variable considered, t represents time trend, and μ_i is the error term which is assumed to be normally and randomly distributed with zero mean and constant variance. The optimal lag length was selected on the basis of Akaike information criterion (AIC), using Eviews 10. The unit root test was required to ascertain that the series were either I(0) or I(1) but not I(2) for them to be amenable to ARDL model. The starting point for a distributed lag model is an assumed structure of the form:

$$\Delta RGDPGR_{it} = \beta_0 + \sum_{i=1}^{n} \Omega_1 \Delta GEF_{it-j} + \sum_{i=1}^{n} \Omega_2 \Delta REG_{it-j} + \sum_{i=1}^{n} \Omega_3 \Delta CRPT_{it-j} + \sum_{i=1}^{n} \Omega_4 \Delta CAF_{it-j} + \sum_{i=1}^{n} \Omega_5 \Delta LF_{it-j} + \sum_{i=1}^{n} \Omega_6 \Delta INF_{it-j} + \alpha_7 RGDPGR_{it-1} + \alpha_8 GEF_{it-1} + \alpha_9 REG_{it-1} + \alpha_{10} CRPT_{it-1} + \alpha_{11} CAF_{it-1} + \alpha_{12} LF_{it-1} + \alpha_{13} INF_{it-1} + \varepsilon_{it} \ldots (9)$$

Here, n is the number of years for lag, μ_{it} is the disturbance terms and ß's are the coefficients for short run and long run relationships.

Results and Discussion

Trend Analysis

Figure 1 shows the trend of the growth rate of real Gross Domestic Product (RGDP) for Ghana and Nigeria. The graphs indicate that the Ghanaian economy has been growing at a faster rate than the Nigerian economy over the study period. The upward linear trend exhibited by Ghana might be due to various government and Bank of Ghana's policies (monetary and fiscal) aimed at facilitating sustainable economic growth in the country. However, a fall in RGDP growth rate in 2009 in both countries can be attributed to the fallout of the global economic crisis which started in 2007 after which both countries were set on a recovery trajectory with the growth rates for Ghana and Nigeria reaching their peaks in 2011 and 2012 respectively. While both economies exhibited a downward trend in RGDP from 2018 to 2019, the Ghanaian economy picked up in 2019.

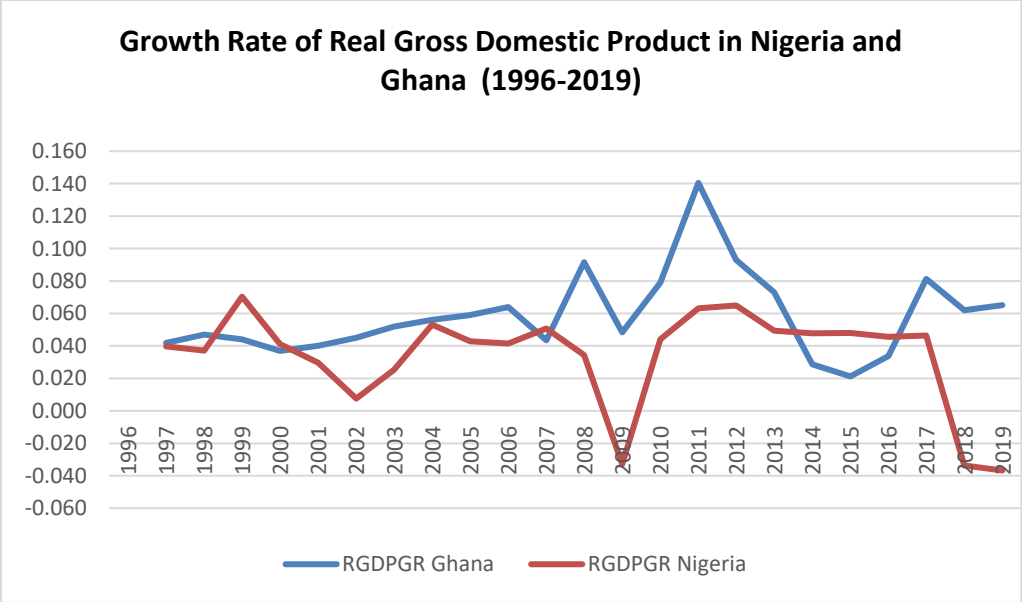


Figure 1: Trends of Economic Growth in Nigeria and Ghana
Source: Authors' Computation, 2021

Figure 2 shows that Government Effectiveness (GEF) Index for Ghana and Nigeria has been very low but both countries have been on the same trajectory except for 2013 when Ghana's GEF deteriorated sharply.

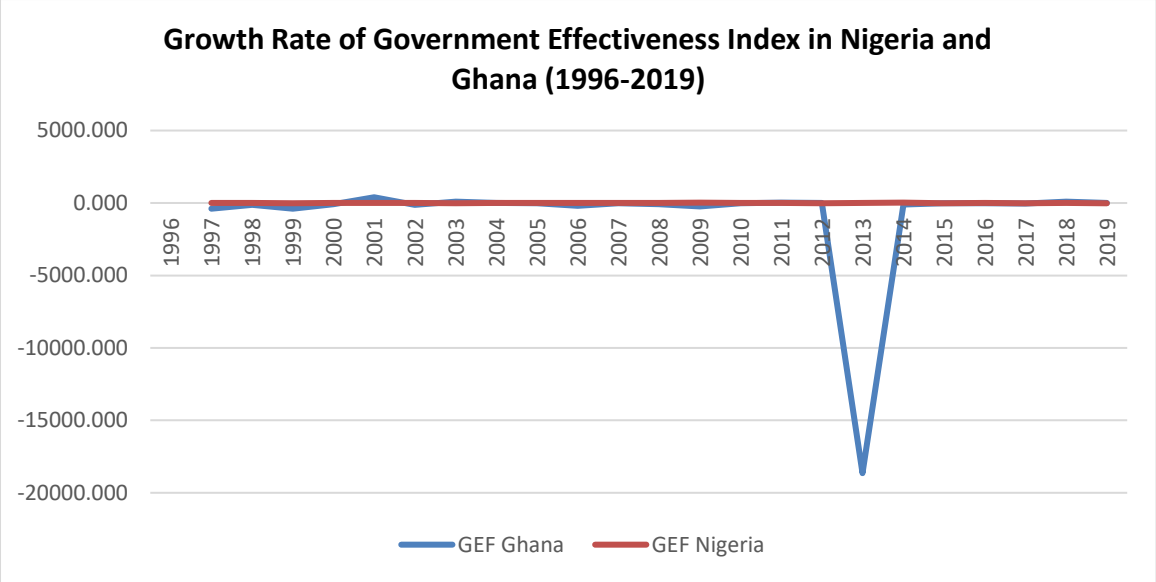


Figure 2: Trends of Government Effectiveness in Nigeria and Ghana
Source: Authors' Computation, 2021

While figure 3 shows that there has not been any significant improvement in the control of corruption index for Nigeria over the study period, that of Ghana has fluctuated widely, which can be ascribed to inconsistent corruption-related policies, while lack of political will has probably bedeviled both countries.

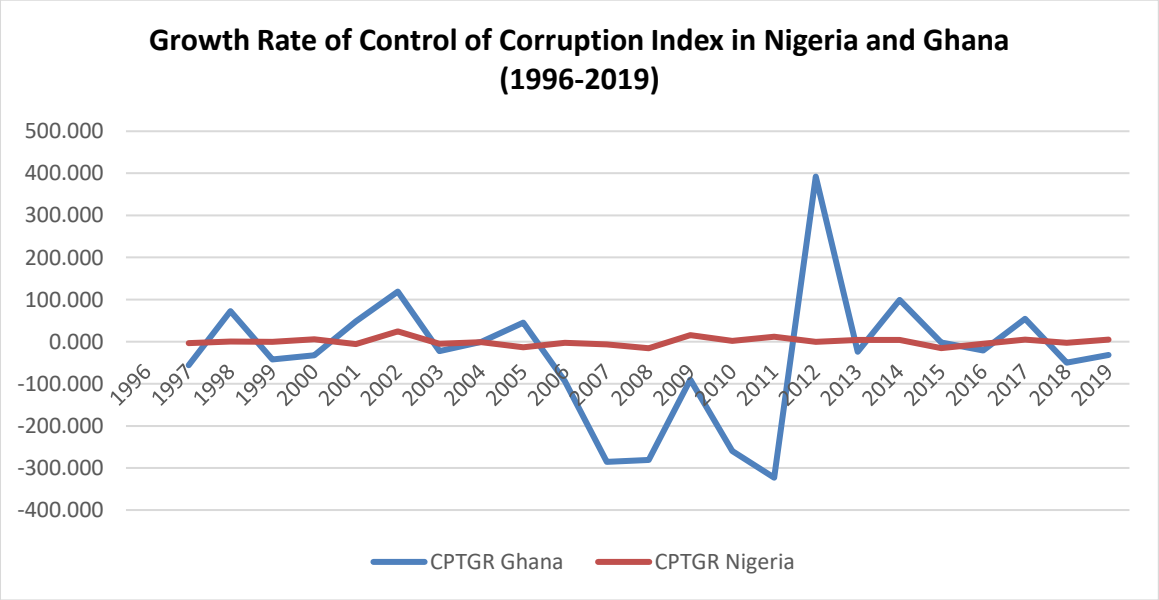


Figure 3: Trends of Control of Corruption in Ghana and Nigeria
Source: Authors' Computation, 2021

Finally, another proxy for institutional quality used in the study is regulatory quality. Figure 4 shows that while the regulatory quality in Nigeria has not witnessed any appreciable improvement over the study period, Ghanaian's regulatory quality has fluctuated widely probably due to inconsistent policies and lack of political will. For instance, the regulatory quality which improved astronomically in 2015/2016 deteriorated starting from 2017.

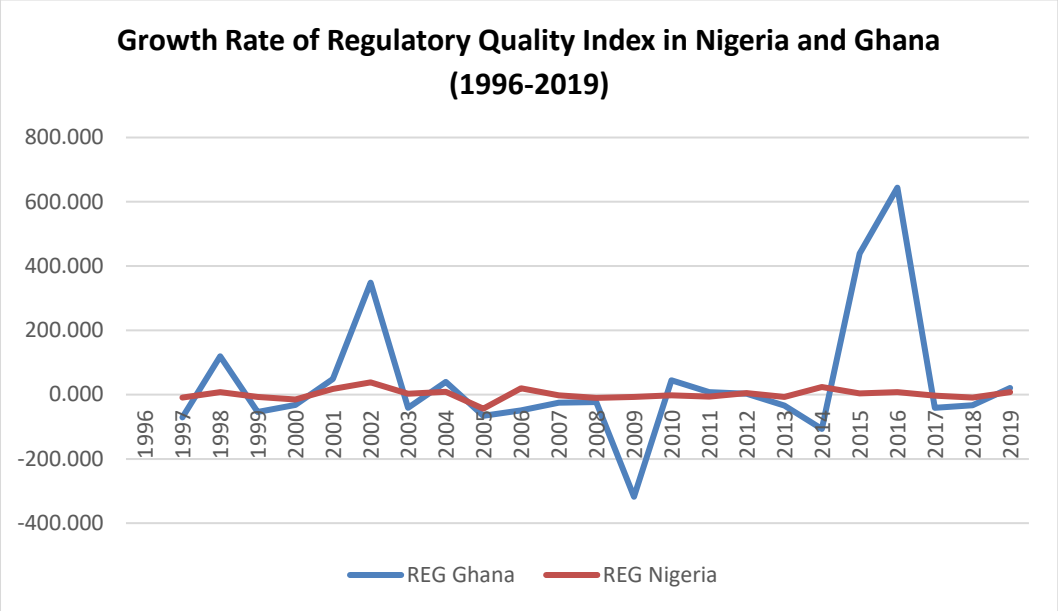


Figure 4: Trends of Regulatory Quality in Ghana and Nigeria

Source: Authors' Computation, 2021

Findings and Discussion

Results of Diagnostic Tests

To test for multicollinearity, correlation analysis was conducted among the variables and the result is presented in Appendix 1. The result shows that multicollinearity did not exist among the variables as no correlation coefficient between any two variables was up to 0.80. Furthermore, a normality test was carried on the data. With a Jarque-Bera Statistic of 1.45 (prob. 0.484), the result in Appendix 2indicates that the data used were drawn from a normal distribution. This means that the model used was capable of producing reliable results.

Unit Root Test Result

Table 1: Result of the Unit Root Test based on ADF - Fisher Chi-Square Test

Series	Level	Probabilities at level	First Difference	Probabilities At first Difference	Order of Integration
RGDPGR	9.23785	0.0454*	N/A	N/A	I (0)
GEF	21.8353	0.0002**	N/A	N/A	I (0)
CPT	9.66751	0.0464	N/A	N/A	I (0)
REG	4.26778	0.3710	13.2191	0.0103**	I (1)
CAF	-1.971257	0.6014	-8.727196	0.0000**	I (1)
LF	7.37556	0.1173	12.6465	0.0131**	I (1)
INF	13.5902	0.0087**	N/A	N/A	I (0)

* and ** indicate 5% and 1% levels of significance
Source: Authors' Computation, 2021

The result in Table 1 shows that four series are stationary at level while three are stationary at first difference. This indicates that the series are amenable to ARDL approach as none of the series is stationary at second difference.

Examination of Long Run Relationship among the Variables

Table 2 shows the result of the Pedroni's Cointegration test. The result reveals that the probabilities of six out of the seven statistics are greater than 0.05, hence the null hypothesis of no cointegration cannot be rejected, Therefore, there is no long run relationship among the variables in both countries. This implies that only the short run ARDL model could be estimated (Adeleye, 2018).

Table 2: Result of Pedroni's Cointegration Test

Within-Dimension	Statistic	Prob.	Weighted Statistic	Prob.
Panel v-Statistic	-1.423027	0.9226	-2.301396	0.9893
Panel rho-Statistic	1.898365	0.9712	1.490771	0.9320
Panel PP- Statistic	-0.941203	0.1733	-0.748555	0.2271
Panel ADF-Statistic	1.205068	0.8859	0.781058	0.7826
Between Dimension				
Group rho-Statistic	2.381340	0.9914		
Group PP- Statistic	-1.759932	0.0392*		
Group ADF-Statistic	1.678086	0.9533		

* indicates 5%level of significance
Source: Authors' Computation, 2021

Short Run Comparative Analysis

Tables 3 and 4 present the short run cross country results. While control of corruption exerts a significant negative effect on economic growth in Nigeria, it has a significant positive influence on economic growth in Ghana at 1% level. This implies that control of corruption is very effective thereby promoting economic growth in Ghana but the reverse is the case in Nigeria. The analysis of the results also show that regulatory quality exerts a significant positive effect on economic growth in Nigeria, whereas it exerts a significant negative effect on economic growth in Ghana at 1% level. This implies that the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development has been effective in Nigeria but the reverse is the case for Ghana. The results also indicate that government effectiveness exerts a significant negative effect on economic growth in both countries. This implies that the national governments have not demonstrated strong political will in the affairs of both countries. Hence, we reject the null hypotheses that institutional quality exert no significant influence on economic growth in the study areas.

This study has shown that institutional quality matters in economic growth, which in line with the argument of Acemoglu and Robinson (2012) as well as the findings of Kilishi, Mobolaji, Yaru and Yakubu (2013), Alexiou, Tsaliki and Osman (2014), and Kebede and Takyi (2017).

Further, the results reveal that capital formation exerts a significant positive effect on economic growth in both countries at 1% level, which implies that capital formation has been productive by creating jobs and engaging other factors of production. However, while labour force exerts a significant positive effect on economic growth in Nigeria, same exerts a significant negative effect on economic growth in Ghana. This implies that labour force has been productively contributing to economic growth in Nigeria, while the skill-mix in Ghana is ether defective or same has not been productively deployed. Finally, analysis of the results reveal that inflation rate exerts a significant positive effect on economic growth in the two countries, which indicates that inflation management has been promoting economic growth in both economies.

Table 3:Result of Short Run ARDL Estimation for Nigeria

Variable	Coefficient	t-Statistic	Prob.
D(GEF)	-0.000678	-5062.451	0.0000**
D(CPT)	-0.000371	-1770.244	0.0000**
D(REG)	0.000181	3093.522	0.0000**
D(CAF)	0.000671	1385.658	0.0000**
D(LF)	0.004789	256.0086	0.0000**
D(INF)	0.000982	560.0335	0.0000**

** indicates 1% level of significance

Source: Authors' Computation, 2021

Table 4:Result of Short Run ARDL Estimation for Ghana

Variable	Coefficient	t-Statistic	Prob.
D(GEF)	-1.01E-06	-1883894.	0.0000**
D(CPT)	4.72E-05	34481.47	0.0000**
D(REG)	-5.48E-05	-261043.4	0.0000**
D(CAF)	0.001272	1304.307	0.0000**
D(LF)	-0.050160	-198.0472	0.0000**
D(INF)	0.000416	1742.933	0.0000**

** indicates 1% level of significance.

Source: Authors' Computation, 2021

Conclusion and Recommendations

The main objective of this study was to investigate the effect of institutional quality on economic growth in Ghana and Nigeria, using panel data covering 1996 to 2019. The study established that control of corruption was very effective thereby promoting economic growth in Ghana but it retarded economic growth in Nigeria. Regulatory quality was also found to promote economic growth in Nigeria, whereas it retarded growth in Ghana. Also, the study found that there was government ineffectiveness thereby retarding economic growth in both countries. This might be due to the national governments' lack of strong political will in the affairs of both countries. Thus, this study has shown that institutional quality matters in economic growth in both countries. However, it should be noted that the result obtained largely depends on the institutional quality proxy used. Meanwhile, a study focused on institutional quality should be expected to adopt more than one measure of same in order to generate robust findings that could drive policy.

The study also revealed that capital was productively deployed and inflation management had been promoting economic growth in both economies. Furthermore, labour force, which had been contributing to economic growth in Nigeria had been retarding growth in Ghana, which calls for a review of skill-mix and educational curriculum.

Based on findings from the study, the following recommendations are hereby put forward in order to help the two African countries achieve and maintain quality institutions that can attract more investments, increase trade and promote economic growth:

i. The Nigerian government should intensify control of corruption by introducing stiffer penalties in the laws against corruption and thereby promote economic growth in the country.
ii. The Ghanaian Government should institute a policy that will entail a regular review of skill-mix, and appropriate training to meet the labour needs of the country with a view to stimulating economic growth.
iii. The Ghanaian government should put together a regulatory quality framework and improvement policy in order to promote economic growth in the country.
iv. Governments of both countries should institute a business process re-engineering policy backed by political will with a view to improving upon government effectiveness thereby stimulating economic growth in the two economies.

References

Acemoglu, D. & Robinson, J. A. (2012). Why Nations Fail: The Origins of Power, Prosperity and Poverty. New York: Crown Publishers.

Adeleye, N. (2018). How to Estimate Panel ARDL. Cruncheconometrix. Retrieved on 25th September, 2021 from https//www.youtube.com/c/CrunchEconometrix.

Ajakaiye, O. & Jerome, A. (2011). The Role of Institutions in the Transformation of the Nigerian Economy. *The Nigerian Journal of Economic and Social Studies*, 53 (1), 247-275.

Akpan, U. F.& Atan, J.A. (2016). Relationship between Trade Openness, Institutions and Economic Growth in Sub-Saharan Africa: A further look at the Evidence. *British Journal of Economics, Management &Trade,* 15(1), 1-20.

Alexiou, C., Tsaliki, P. & Osman, H. R. (2014). Institutional Quality and Economic Growth: Empirical Evidence from the Sudanese economy. *Economic Annals,* LIX(203), 119 – 137.

Bruinshoofd, A. (2016). Institutional Quality and Economic Performance. Retrieved from https://economics.rabobank.com/publications/2016/january/institutional-quality-and-economic-performance.

Buterin, V.; Skare, M.; Buterin, D. (2017) Macroeconomic Model of Institutional Reforms' Influence on Economic Growth of the new EU members and the Republic of Croatia. *Economic Research.* 30(1), 1-22.

Dollar, D., & Kraay, A.(2003) Institutions, Trade, and Growth. *Journal of monetary economics*, 50(1), 133-162.

ECOWAS (2021). GDP of Member States. Retrieved on 8th October, 2021 from https://countryeconomy.com/countries/groups/economic-community-west-african-states**.**

Huntington, S.P. (1968). Political Order in Changing Societies. New Haven, C.T: Yale University Press.

Jhingan, M.L. (1997). The Economics of Development and Planning. India: Vrinda Publications (P) Delhi, India.

Joskow, P. L. (2008). New Institutional Economics: A Report card. *Journal of Law, Economics and Organisation*, 18: 95-116.

Kaufman, J. (2012). China's Evolving AIDS Policy: The Influence of Global Norms and Transnational Non-Governmental Organizations. *Contemporary Politics*, 18(2), 225-238.

Kebede, J. & Takyi, P. (2017). Causality between Institutional Quality and Economic Growth: Evidence from Sub-Saharan Africa. *European Journal of Economic and Financial Research*, 2(1).

Keho, Y. (2017). The Impact of Trade Openness on Economic Growth: The Case of Cote d' Ivoire. *Cogent Economics &Finance*, 5(1), 1-14.

Khan, M.A.; Kong, D.; Xiang, J.; Zhang, J. (2019). Impact of Institutional Quality on Financial Development: Cross-Country Evidence Based on Emerging and Growth-Leading Economies. *Emerging Markets, Finance and Trade*, 56(4),2-17.

Kilishi, A. A., Mobolaji, H. I., Yaru, M. A.& Yakubu, A. T. (2013). Institutions and Economic Performance in Sub-Saharan Africa: A Dynamic Panel Data Analysis. *Journal of African Development*, 15(2), 91 – 120.

Leff, N.H. (1964). Economic Development throughBureaucratic Corruption. *American Behavioral Scientist*, 8(3), 8-14.

Mauro, P. (1995). Corruption and Growth. *The Quarterly Journal of Economics*, 110(3), 681-712.

Meon, P.G. & Sekkat, K. (2005). Does Corruption Grease or Sand the Wheels of Growth? Public Choice, 122(1-2), 69-97.

North, D. C. (1990). Institutions, Institutional Change and Economic Performance. Cambridge, N.Y.: Cambridge University Press.

North, D. C. (1991). Institutions. *Journal of Economic Perspectives*¸ 5(1), 97-112.

Rodrik, D. (1999). Institutions for High-Quality Growth: What They Are and How to Acquire Them. IMF conference on second generation reforms.

Romer, P. M. (2002). Economic Growth. The Concise Encyclopaedia of Economics: 1stEdition.

WGI (2020).Governance Indices. Retrieved on 24th May, 2021 fromwww.govindicators.org.

WDI (2020). World Bank Database. Retrieved on 24th May, 2021from www.worldbankstat.com.

Yildirim, A. & Gökalp, M.F. (2016) Institutions and Economic Performance: A Review on the Developing Countries. *Procedia Economics and Finance* 38, 347 – 359.

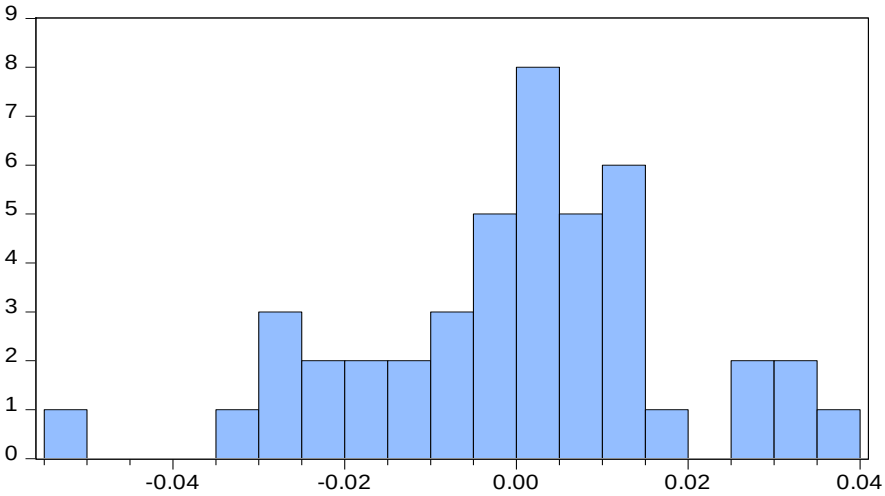
Appendix 1: Correlation Matrix of the Variables

Covariance Analysis: Ordinary							
Date: 10/12/21 Time: 08:16							
Sample: 1997 2019							
Included observations: 46							
Balanced sample (listwise missing value deletion)							
Correlation							
t-Statistic							
Probability	RGDP	GEF	CPT	REG	CAF	LF	INF
RGDP	1.000000						

GEF	-0.133205	1.000000					
	0.3775	-----					
CPT	-0.246696	0.013068	1.000000				
	0.0984	0.9313	-----				
REG	-0.112087	0.062232	0.119119	1.000000			
	0.4583	0.6812	0.4304	-----			
CAF	-0.259793	0.031693	0.258558	-0.008515	1.000000		
	0.0812	0.8344	0.0827	0.9552	-----		
LF	-0.304244	0.037241	-0.072198	-0.037437	-0.061798	1.000000	
	0.0398	0.8059	0.6335	0.8049	0.6833	-----	
INF	-0.160242	0.048934	-0.007674	0.044290	-0.363267	0.097562	1.000000
	0.2874	0.7467	0.9596	0.7701	0.0131	0.5189	-----

Source: Authors' Computation, 2021

Appendix 2: Normality Test Result



Series: Residuals	
Sample 1997 2019	
Observations 44	
Mean	-1.14e-17
Median	0.001219
Maximum	0.036366
Minimum	-0.052396
Std. Dev.	0.018228
Skewness	-0.382009
Kurtosis	3.455723
Jarque-Bera	1.450914
Probability	0.484103

Source: Authors' Computation, 2021