



GOOD GOVERNANCE AND ECONOMIC GROWTH IN AFRICA

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ABSTRACT

African countries face with the problem of good governance and steady economic growth for over period of time. Therefore, the paper aims to examine the good governance and economic growth for the 50 African countries for the period of 2002 to 2020 using the System GMM approach. The data were sourced from the World Development Indicators and World Governance Indicators (2020). The Empirical findings indicated that all the good governance indicators are positive and statistically significant in influencing the level of economic growth in the region, except the government effectiveness which is positive but statistically insignificant. Based on the findings, African countries should provide extensive policies that promote good governance in the region as the region is the backward in terms of good governance compare with other regions in the world. More so, governments in the region should strengthen their political will through transparency and accountability in all aspect of government activities which will reduce the level of political unrest and promote regulatory quality in the region and propel growth.

Keywords: Good Governance; Economic Growth; Generalized Method of Moment (GMM).

INTRODUCTION

The emergence of new endogenous growth theories has directed scholars to determine alternative sources of economic growth and differences among the countries' economic development levels. In this regard, the impact of public governance, in other words, the quality of public administration, on the economic growth has been investigated theoretically and empirically. Public governance has the potential to affect economic growth via many direct and indirect channels because it is the main determinant of the economic environment and institutions that have a significant impact on the decision-making process of key economic actors (Acemoglu, Johnson and Robinson, 2005) and that affect investments in both physical and human capital and technology, which are major drivers of economic growth. Furthermore, public governance may positively affect economic growth by contributing to the development of the financial sector, increasing foreign direct investment inflows and improving corporate governance, which positively impact economic growth.

Therefore, public governance is an essential determinant of long-run economic growth. Although consensus is lacking on the definition of governance, Kaufmann, Kraay and Mastruzzi (2010), considering various definitions, view governance as 'the traditions and institutions by which authority in a country is exercised'. Therefore, governance is defined as (i) the process of the selection, monitoring and replacement of governments; (ii) the power of the government to effectively establish and perform sound policies; and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them (Kaufmann, Kraay and Mastruzzi, 2010).

The impact of governance on economic growth was disregarded by neoclassical growth theory, but public governance became an important component of economic growth with the emergence of endogenous growth theories in the late 1980s. Countries' institutional structure has the potential to affect economic growth within the context of new growth theories because it is a determinant of both transaction costs and production costs (Aron, 2000). Alternatively, the countries with

higher levels of public governance will likely stimulate domestic private investments and foreign direct investments by reducing uncertainty, creating an investment environment for both domestic and foreign firms and positively contributing to economic growth.

In Africa there is inadequate good governance indicators associated with economic growth due to lack of accountability and transparency in all government activities as well as mismanagement of resources which hinder the progress of their economies Alexander, (2017). This paper seeks to investigate the impact of good governance and economic growth in African countries. To the best of our knowledge none of the research covers more than 30 African countries in examine the relationship between good governance and economic growth. More so no study uses system GMM as econometric model to investigate the impact of good governance and economic growth.

LITERATURE REVIEW

Theoretical Literature

Unlike the previous, endogenous growth theory which has been linked to fiscal questions in which the government is either taken as a benevolent optimizer or an arbitrary tax authority. Not surprisingly, the new endogenous growth theory model has also been developed in the style of the new political economy in which government policy does itself become endogenous. As such model depends upon the balance of vested interests; they inevitably involve differentiation between individuals. Some analyses are relatively simple, associating lower investment with greater social instability, and the latter with inequality. At a more sophisticated level, an endogenous growth model is coupled with an endogenous political process, in which heterogeneous agents determine policy (for example, by reference to the tax level preferred by the median voter), with such policies subsequently affecting growth and stratification and so on. More generally, it has been argued that inequality is detrimental to growth in a democracy because resulting redistribution through the discus reduces the saving rate (rather than raising the saving rate through higher propensities to save from those on higher incomes). Further, if the process of endogenous growth disadvantages some economic interests, unskilled workers, for example, then there is an incentive for that group to use its

political power to obstruct change. In other words, politics is simply economics by other means.

Based on the above theoretical literature, the theoretical framework was built as the theory empathizes on the role of government policy as one of the engine of economic growth in terms of its political process and policy.

Empirical Literature

The impact of good governance, in other words, the quality of public administration, on the economic growth has been investigated theoretically and empirically. Good governance has the potential to affect economic growth via many direct and indirect channels because it is the main determinant of the economic environment and institutions that have a significant impact on the decision-making process of key economic actors (Acemoglu, Johnson and Robinson, 2005) and that affect investments in both physical and human capital and technology, which are major drivers of economic growth. Furthermore, good governance may positively affect economic growth by contributing to the development of the financial sector, increasing foreign direct investment inflows and improving corporate governance, which positively impact economic growth. For instance, Nguyen et al. (2019) found that provincial governance and public administration measured by transparency, accountability, and delivery of public services significantly affect economic growth and poverty reduction in Vietnamese provinces. Also, Thanh et al (2019) examined the public spending, public governance and economic growth at the Vietnamese provincial level for the period 2006–2015 by applying sequential (two-stage) estimation. The study concludes that good governance, characterized by different attributes, such as lower informal charges, greater transparency, and unbiased policy, plays a critical role in improving the impact of government expenditure on economic growth in Vietnamese provinces, particularly through its interactions with private sector investment.

In the same vein, Awan et al., (2018) examined the association among governance, corruption and economic growth in five SAARC countries: Bangladesh, India, Nepal, Pakistan and Sri-Lanka using panel data for the period 1996-2014. Panel regression was conducted using Fixed Effects Method and the results showed that Government

Effectiveness has positive and significant effect on Economic growth in selected SAARC countries. In contrast with above, Nguyen-Van et al. (2018) showed that local public spending does not significantly affect economic growth, and human capital has a significant effect on productivity growth in Vietnamese provinces. Salma et al. (2018) examined the governance and economic growth focusing on the role of exchange regime based on a panel of 50 countries of which 21 are developed and 29 are emerging over the period 1996-2012. The results found that governance is not highly significant to explain economic growth while exchange rate flexibility significantly destabilizes emerging markets and accelerates the economic growth of developed countries.

Paitoon (2018) comparatively investigated the level of governance of Thailand and few other Asian countries. The result showed that apart from capital per head and total factor productivity growth, the good governance can additionally be a significant factor that contributes to growth of income per head. A higher composite governance index by 1 percent from the past year can help raise country's income per head by US \$31.34 or 0.54 percent per year. For Asian developing countries, the good governance is therefore a crucial factor that can contribute significantly to their growth. Alexander, (2017) conducted a study to assess the impact of sound corporate governance on economic growth in Zimbabwe. A multiple linear regression model was used to examine the relationship. Secondary data for the period 1968 to 2015 was collected from World Bank's Worldwide Governance and World Development Indicators databases. It found that government effectiveness has negative insignificant impact on the GDP of Zimbabwe which is inconsistent with the norm, but the result might be acceptable in case of Zimbabwe as it is considering a developing country. Mohammad and Daryaei (2017) examined Good governance, innovation, economic growth and the stock market turnover rate of eight developing Islamic countries for the period 2005 to 2014. The results revealed a significant positive correlation between the rule of law, corruption control with economic growth and stock market turnover rate proxy.

Bayar (2016) examined the public governance and economic growth in the transitional economies of the European Union during the 2002-2013 periods. The results showed that all governance indicators except regulatory quality had a statistically significant positive impact on

economic growth. The findings also indicated that control of corruption and rule of law had the largest impact on economic growth, while political stability had the lowest impact. Beleiu et al (2015) examined the impact of governance on economic growth in Romania during the 1996-2013 periods by using correlation analysis and found a highly positive correlation both between rule of law and economic growth and between regulatory quality and economic growth.

From the forgoing literature none of them covered up to 50 countries in one region especially like in African countries. Therefore, this paper seeks to investigate the governance and economic growth in 50 African countries by using system GMM for the period from 2002 to 2020. The choice of the countries and the time frame is due to the availability of data as the comprehensive data of the variables started from 2002 as indicated in the World Governance Indicators (2020). The justification for using GMM is due to the fact that, in this study the number of countries is greater than the time frame ($N > T$) which statistically validates the use of the Generalized Method of Moments (GMM) estimator. (see Anderson and Hsio, Blundell, Bover, Bond etc)

METHODOLOGY

This section presents and discusses the econometric methodology used in the paper. The section begins by discussing the source and features of the data used for the purpose of this paper. It also discusses the variables and how they were constructed. The section goes further discussed the descriptive statistic and the econometric model applied in the paper.

Source of Data

The data for this research is mainly secondary obtained from the world development indicators and world governance indicators (2020). The period of the study covers from 2002 to 2020 and it is panel data of fifty (50) African countries. The choice of the time frame and countries are guided by the availability of data over the sample period. The countries are Algeria, Angola, Benin, Burkina Faso, Burundi, Botswana, Cameroon, Central Republic of Africa, Chad, Comoros, Congo, Cote d'Ivoire, DR Congo, Djibouti, Egypt, Equatorial Guinea, Eswatini, Ethiopia, Gambia, Gabon, Ghana, Guinea, Guinea Bissau, Kenya, Libya, Liberia, Lesotho, Madagascar, Mali, Malawi, Mauritius, Mauritania, Morocco,

Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leon, South Africa, Seychelles, Sao Tome and Principe, Sudan, Tanzania Togo Tunisia Uganda Zimbabwe and Zambia . The variables are GDP proxy for Economic Growth obtained from the world development indicators (2020), Rule of Law Government effectiveness, regulatory quality and political stability obtained from the world governance indicators (2020). The GDP data was converted in to logarithm to make the data unit and smaller as well as to check for outliers and hence heteroscedasticity tendency in estimation and to achieve easier interpretation of the variable as an elasticity.

Model Specification

The model is specified as

$$IGDP = f(RL, GOEF, R, Q PS) \quad (1)$$

Where:

GDP= GDP (current LCU) proxy for economic growth and transformed in to logarithm (IGDP)

RL= Rule of Law: Percentile Rank

GOEF= government effectiveness

RQ= Regulatory Quality: Percentile Rank

PS = Political Stability and Absence of Violence/Terrorism: Percentile Rank proxy for Political Stability of the region

f= functional relationship

The empirical econometric model is written as:

$$IGDP_{it} = \alpha_0 + \beta_1 RL_{it} + \beta_2 GOEF_{it} + \beta_3 RQ_{it} + \beta_4 PS_{it} + \mu_{it} \quad (2)$$

Where i and t stand for cross-sectional dimension and time period, $\beta_1, \beta_2, \beta_3$ and β_4 are parameters of the model while μ is the white noise disturbance. The prior expectation of all the parameters is positive that is $\beta_1, \beta_2, \beta_3$ and β_4 are greater than zero ($\beta_1, \beta_2, \beta_3$ and $\beta_4 > 0$).

Therefore, in order to explore the impact of good governance on economic growth in African Countries, the paper adopt the Arellano-Bond approach dynamic panel model based on the two step system

Generalized Method of Moment due to its advantage over other techniques as it is more efficient and robust in treating heteroscedasticity and autocorrelation. More so it is applicable only when the cross sectional individuals are greater than time frame (i.e. $N > T$) (Roodman, 2009). The model was developed by Arellano and Bond (1991) and there after the model was improved by Arellano and Bover (1995).

As an empirical issue, specification tests proposed by Arellano and Bover (1995) are applied to test the validity of the instruments in our system GMM estimation. First, the Arellano– Bond test for the serial correlation is adapted to test whether there is a second-order serial correlation in the residuals or not. The null hypothesis is that the residuals are serially uncorrelated. If the null hypothesis cannot be rejected, it provides the evidence that there is no second-order serial correlation and the system GMM estimator is consistent. Second, the Hansen J-test and the Diff-in-Hansen tests are applied to test the null hypothesis of instrument validity and the validity of the additional moment restriction necessary for system GMM, respectively. Failure to reject this null hypothesis means that the instruments are valid. Moreover, it is worth noting that the 2-step GMM estimator was used owing to its statistical superiority in checking for autocorrelation, heteroscedasticity and endogeneity. The estimator was developed by Arellano and Bond(1991) and has an in-built statistical mechanism that ensures robust standard errors to deal with autocorrelated and heteroscedastic errors and is also deemed as a consistent estimator to deal with endogeneity problem. Endogeneity bias could lead to inconsistent estimates and incorrect inferences if not properly handled. Therefore, by using this estimator, the second-order serial correlation in the residuals and heteroscedasticity are checked since it corrects / adjusts the standard errors to be robust against serial correlation and heteroscedasticity. Moreover, it resolves the problem of endogeneity as it is considered a statistically consistent estimator. Therefore, the worrisome statistical issues of autocorrelation, heteroscedasticity and endogeneity have been circumspectly dealt with in this paper by using the two-step system-GMM which is statistically consistent according to Arellano and Bover (1991).

RESULTS AND DISCUSSION

The section begins with the descriptive statistics which gives an insight the pattern of the variables under study and also provides the analysis of the data based on the system GMM estimator.

Descriptive Statistics

The usual starting point of the formal analysis is the examination of the characteristic and pattern of the data. Table I presents the descriptive results of the variables used in the study. The variables as described in the methodology are IGDP, RL, GOEF, RQ and PS respectively. Where IGDP is the dependent variable, and RL, GOEF, RQ and PS are the independent variables. The results show that Political Stability and Rule of Law have the highest mean of 32.54 and 30.02, follows by regulatory quality and Government effectiveness of 29.24 and 27.76, then IGDP with 27.62 respectively. The maximum and minimum value of the variables shows that, IGDP has a minimum of 20.43 and a maximum of 32.67 with skewness of -0.43 and a Kurtosis of 2.41 respectively. RL, GOEF, RQ and PS have a minimum of 0.47, 0.95, 0.48 and 0.48 and a maximum of 83.66, 81.73, 84.13 and 93.75 respectively. The Skewness of RL, GOEF RQ and PS are 0.42, 0.73, 0.58 and 0.50 with a Kurtosis of 2.34, 2.66, 2.78 and 2.52 respectively. The skewness and kurtosis statistical measures in this paper are used in checking probability distribution of the series as to whether the probability distribution of series is normal or not. It can be observed from table 1 that the skewness is not zero nor is the kurtosis three (3) in value. This implies that the probability distribution of the series is not normal.

Table 1: Descriptive Statistics

Variables	Obs.	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
Lgdp	950	27.62	2.70	20.43	32.67	(0.43)	2.41
RL	950	30.02	19.56	0.47	83.66	0.42	2.34
GOEF	950	27.76	19.90	0.95	81.73	0.73	2.66
RQ	950	29.24	18.08	0.48	84.13	0.58	2.78
PS	950	32.54	21.63	0.48	93.75	0.50	2.52

Sources: Researchers' computation 2021

The Dynamic Panel-Data Estimation

Table 2 presents the Dynamic Panel-Data Estimation based on the two step system GMM due to its advantage over other techniques as earlier mentioned. It is noteworthy that this study is micro econometric in nature as the number of cross sectional units (N) outweighs the time series (T) i.e. $N > T$. The results report that lagged 1 of dependent variables is positive and statistically significant at 1% level on influencing itself (economic growth). Empirical evidence indicated that all the good governance indicators are positive and statistically significant in influencing the level of economic growth in the region, except the government effectiveness which is positive but statistically insignificant. This means that any improvement of the rule of law, regulatory quality and political stability in the region by 0.78%, 0.42 and 0.50% respectively, may lead to a greater improvement in the level of economic growth by 1% over the sample period under study. This finding is in line with findings of Bayar (2016), Salma et al. (2018), Thanh et al (2019) and contradict with findings of Awan et al., (2018) who found that Government Effectiveness has positive and significant effect on Economic growth in selected SAARC countries but in the case of our finding Government Effectiveness is positive but statistically insignificant on economic growth in the region. The statistical insignificant of the coefficient of GOEFF implies that the Government effectiveness (GOEFF) even though positive has no influence on the dependent variable.

More so the results of the Arellano-Bond tests based on AR 1 and AR 2 indicate that there is no second-order serial correlation. The probability value of $AR(1)$ is less than 5% while the probability value of $AR(2)$ is greater than 5% this implies that there is no serial correlation of the second order (see Arellano and Bover 1991). The results based on Sargan test and Hansen test indicate that the null hypothesis cannot be rejected which implies the statistical validity of the instruments used. Hence, based on these results, it can be inferred that the model is well/correctly specified.

Table 2: Dynamic Panel-Data Estimation, Two-Step System GMM

Dependent Variable: IGDP					
Variables	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
IGDP L1.	0.933828	0.012256 7	76.1 9	0.000*	0.9098053 0 .9578507
RL	0.007764 3	0.002490 8	3.12	0.002*	0.0126461 0.0028825
GOEF	0.001628	0.001465 3	1.11	0.267	0.00449990 .001244
RQ	0.004234 8	0.001610 9	2.63	0.009*	0.0010776 0.0073921
PS	0.004979 4	0.002422 9	2.06	0.040* *	0.0002305 0.0097282
Cons	1.932479	0.344434 4	5.61	0.000*	1.257400 2.6075580
AR(1)					0.034
AR(2)					0.408
Sargan test					0.127
Hansen test					0.316

Note: * & ** are statistically significant at 1% and 5% level of significant

Source: *Researchers' computation 2021*

CONCLUSION AND RECOMMENDATIONS

This paper examines the impact of good governance on economic growth in Africa, over the periods 2002-2020 using the System GMM approach. The system GMM estimators provide support for some of the earlier findings. Whereas there is usually positive relationship between good governance and economic growth, all the coefficient of the variables are statistical significance with exception of Government effectiveness and is in line with sign of the prior expectation of the research. The paper conclude that good governance has positive relationship with economic growth in the region.

Based on the findings, African countries should provide extensive policies that promote good governance in the region as the region is the

backward in terms of good governance compare with other regions in the world. As it is shown in the finding, it has positive impact on economic growth in the region. Also, the governments in the region can strengthen their political will through transparency and accountability in all aspect of government activities which will reduce the level of political unrest and promote regulatory quality in the region and propel growth.

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