# Governance and Development Performance: A Cross-Country Analysis of Sub-Saharan Africa

Godwin E. Akpan<sup>1</sup> Ekpeno L. Effiong<sup>1\*</sup>

1. Department of Economes, University of Uyo, PM.B. 1017, Uyo, Akwa Ibom State, Nigeria.

\* Email of corresponding author: ekpenoeffiong@uniuyo.edu.ng

#### Abstract

Based on a panel data analysis of 21 Sub-Saharan Africa countries for the period 1998- 2007, we examined the relationship between governance and development performance following World Bank observation linking Africa's development problems to governance crisis. We use the datasets from Worldwide Governance Indicators to measure the quality of governance and investigate the hypothesis that governance matters for development. We find that the rule of law, regulatory quality and political stability are positive and significantly associated with development outcomes. The results suggest that the aspect of governance relevant to SSA has to do with strong rule of law, regulatory framework and political stability with the usual policy prescription of institutional reforms for re-invigorating development in the region.

Keywords: Governance; Development; Sub-Saharan Africa; Panel Data Analysis; Institutional Reforms.

#### 1. Introduction

#### "Good governance is perhaps the most important factor in eradicating poverty and promoting development"<sup>1</sup>.

The economic performance of Sub-Saharan Africa (SSA) overtime has been dismal as revealed by basic indicators of development such that the region is still a laggard behind other regions of the world despite implementing series of economic reforms with emphasis on stabilization and structural adjustment. For instance, the growth record has been slow and episodic. From a moderate annual average growth rate of 5.0 percent at 1960-1975, it plunged to 2.0 percent for 1976-1995<sup>2</sup> before rising to 3.7 percent for 1996-2005 due to significant economic recovery (see Fosu, 2009). In terms of human development, the human development index<sup>3</sup> based on 2005 Human Development Report (HDR) reveals little or no improvements as 30 out of the 32 countries classified in the 'low human development' category are in SSA for which Diagne (2007) observed that "the HDI curve for SSA has remained flat since 1990". With extremely high poverty incidence, weak institutions and poor social conditions, development remains elusive to SSA countries.

While development models and policies may be capable of explaining the development performance of SSA countries over time, more fundamental is the consideration of the institutions of governance which according to North (1990) structures the incentives that shapes human interactions, whether social, economic and political, and the policies likely to be chosen and implemented. Over the last three decades, governance issues have dominated the discourse on African's development agenda following the assertion by the World Bank in 1989 linking the litany of Africa's development problems to governance crisis (Brautigam, 1991; Brautigam and Knack, 2004). Many African states, till date, are embodiments of poor institutions of governance such as poor quality of institutions, weak rule of law, ill-defined property rights, and absence of accountability, political instability and high levels of corruption.

Empirical evidence from the development literature have confirm that governance (institutions in general) matters for improved economic performance (see Hall and Jones, 1997; Keefer and Knack, 1997; Kaufmann et al, 1999; Rodrik et al, 2004; Acemoglu and Johnson, 2005). Governance may affect development in several ways (Globerman and Shapiro, 2002; Lio and Liu, 2008). For instance, the functioning of the market system is maintained by creating institutions that protects property rights, a judicial system that administers justice and enforces contracts thereby affecting the incentives for production and investment. Further, good governance supports a low transaction cost and competitive environment for innovation, adoption of appropriate technology and sound economic policies. Good governance is important for promoting development as

<sup>&</sup>lt;sup>1</sup> Kofi Annan, Former Secretary General of the United Nations (Resnick and Birner, 2006).

 $<sup>^2</sup>$  This period is regarded as 'Africa's lost decades' since there was a sharp deterioration in the socio-economic conditions of Africans below the level prevailing at the beginning of the decade due to a combination of adverse external developments, structural and institutional bottlenecks and policy error (UNCTAD, 2001).

<sup>&</sup>lt;sup>3</sup> The index is a summary indicator of overall development performance and economic well-being. It is composed of three components, namely, income, level of education/adult literacy and life expectancy.

acknowledged above by the former Secretary General of the United Nations, Kofi Annan (see footnote 3 above).

With growing interest in the effects of governance and cross-country evidence that institutions of governance matters in explaining differences across countries in incomes and growth rates, the paper utilizes three out of six governance indicators developed by Kaufmann et al. (2008) for 21 Sub-Saharan African countries over the period 1998-2007 to test the hypothesis that governance can explain significant variation in development performance across countries and over time. The aim is to examine the relative impact of each of these dimensions of governance - rule of law, quality of regulatory framework and absence of political violence and instability - on development performance outcomes in SSA which has received little attention from the related literature.

The paper is laid out as follows: Section 2 provides a survey of relevant literature on governance; Section 3 details the methodology and data; while the results are presented in Section 4 and Section 5 concludes the paper.

#### 2. Literature Review

#### 2.1 The concept of Governance.

Governance has it root word in "govern" and is usually thought of as "government" though it transcends the former due to its complexity and as a universal force existing in all societies. Governance is used on a daily basis by people to manage human relationships, just as corporations and countries use it to manage their interaction and activities with several realities of the term ranging from related notions such as state governance, corporate governance, local governance, global governance etc.

Despite its assuming great importance at various levels - national, regional and international - no internationally acceptable definition exists for the term. At the international level, the definition of governance varies across international institutions, though with similar content. The United Nations Development Programme (UNDP) defines governance as "the exercise of economic, political and administrative authority in the management of a country's affairs at all levels. It comprises the complex mechanisms, processes and institutions through which citizens and groups articulate their interests, mediate their differences and exercise their legal rights and obligations" (Resnick and Birner, 2006). The European Commission refers to governance as "the rules, processes and behaviour by which interests are articulated, resources are generated and power is exercised within a society". The World Bank through its Development Institute's Task Force on Governance views governance from both an analytic and operational framework. Thus, governance is defined as "the traditions and institutions by which authority in a country is exercised for the common good". This includes the process by which those in authority are selected, monitored and replaced; the capacity of the government to effectively manage its resources and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them (Resnick and Birner, 2006; Kaufman et al., 1999).

In general, governance is understood to be a neutral concept with the exercise of power and authority lying at its heart (Brautigam, 1991). Conventionally, it means "the manner in which power is exercised by authorities in managing both the social and economic resources of a country for overall development". Governance lays emphasis on the institutional framework (both formal and informal rules) in the management of a country's resources. On the other hand, the concept of "good" governance, which is a subset of the wider concept of governance, connotes the exercise of power by the various tiers of government particularly in an efficient, honest, equitable and transparent manner. Good governance is characterized by the principles of participation, transparency, accountability, rule of law, effectiveness, equity and strategic vision; whereas "bad" governance entails absence of the above principles in the exercise of power with widespread corruption as an obvious sign.

Consequently, if governance should mean the very essence of exercising power to manage the affairs of a country, then it must be based on the consent and approval of the governed (i.e. all the citizens). It is the degree to which the institutions and processes allow people to participate in decisions affecting them, and at the same time, make those in government accountable to them that is referred to as the quality of a country's governance. Thus, Qureshi (1999) opines that the quality of life enjoyed by citizens resulting from the impact of the exercise of authority determines the quality of governance.

2.2 Governance and Development

The link between governance and development is better understood by exploring the various dimensions of governance and how it affects development performance. The operationalization of governance by Kaufmann et al. (1999) into three aspects with six institutional dimensions offers an appealing construct for the theoretical background. These aspect of governance which includes "respect for the institutional framework", "quality of government action", and "selection of the authority" are derived from the governance definition by Kaufmann et al. (1999) as the traditions and institutions by which authority in a country is exercised.

Following Meon and Weill (2005) and Lio and Liu (2008), the first aspect of governance that captures the respect of citizens and the state for the institutions that govern economic and social interactions among them is referred to as the "respect for the institutional framework". This aspect consists of two dimensions, namely, the "rule of law" and the "control of corruption". The "rule of law" captures the confidence and obedience of the rules of the society by economic agents. The absence of laws, law enforcement or government creates a free-for-all society with anarchistic tendencies. Economic agents would rather indulge in stealing as the easiest route towards economic activity than engaging in productive activities. However, the institution of fair and predictable rules creates an enabling environment and provides the basis for economic and social interactions among agents. For instance, the enforceability of contracts, protection of property rights, effective and predictable judiciary play significant role in accelerating private investment which is crucial for economic development. "Control of corruption" on the other hand indicates the extent to which public offices are exploited for private gains. The involvement of the state in the market economy for the purpose of reducing transaction costs brings about rent-seeking activities. The outcome is a diversion of resources from productive activities and erosion of the governance infrastructures which are crucial for economic development.

The second aspect of governance, the "quality of government action" consists of two dimensions of governance, namely, "government effectiveness" and "regulatory quality". "Government effectiveness" captures the ability of government to design and implement sound policies as well as the provision of public goods and services. The provision of public goods and services in the form basic social infrastructures such good road networks, portable drinking water, steady electricity supply etc. determines the extent of a country's development. The inability of government to effectively deliver on these public goods along with sound macroeconomic policies creates a hostile environment which retards development. The second dimension, "regulatory quality" measures the tendency of adopting market-friendly policies in the area of business and trade. Its importance to development is best understood through the adoption of policies by most governments which influences the terms of trade and drives a wedge between world prices and domestic prices. For instance, high taxation, excessive regulation in areas of foreign trade and business development, industrial protectionism limits private sector participation and discourages investment in the economy. Whereas, market-based reforms such deregulation and liberalization promotes the expansion of the private sector's role in the economy.

The third aspect of governance, the "selection of the authority" consists of two dimensions, namely, "voice and accountability" and "political stability". The extent to which the citizens of a country are able to participate in the selection of governments is capture by "voice and accountability". It emphasizes the independence of the media, civil society especially in monitoring those in authority and holding them accountable for their actions. The participation of interest groups in policy-making debate promotes transparency. Without it, improved governance and policies can be impeded. Active participation of all groups in the economic and political activities facilitates the enforcement of decisions and averts state capture by a few interest groups interested in rent-seeking activities. The "political stability" dimension captures the extent to which the government in power can be overthrown through unconstitutional means or violence. Political instability creates insecurity and threatens private investment. Development is unattainable in a state of violence and anarchy.

While these dimensions of governance - the rule of law, control of corruption, government effectives, regulatory quality, voice and accountability and political stability - offers an effective tools for assessing the status of governance in different countries, they are interrelated. In other words, these dimensions of governance are complements to each other and not substitutes (Campos and Nugent, 1999). The effectiveness and satisfaction of one dimension depends on the effectiveness and satisfaction of another. For instance, effective delivery of public goods and services by government requires political stability which in turn depends on the ability of citizens to participate in the selection and monitoring of government actions. Persistent corruption or fragile rule of law reduces the effectiveness of governments in the provision of developmental infrastructure and reduces people's confidence in the governance reinforces development through low transaction costs, effective delivery of public goods and services, sound economic policies and induces investment and technological development whereas decay in the institutions of governance in a country creates adverse conditions for development.

#### 2.3 Indicators of Governance

Governance indicator is a measure of the state of governance in a country and is often narrowed down to specific characteristics such as levels of corruption, human rights, civil and political liberties, etc. Until recently, obtaining quantitative measures of any characteristics of governance was impossible and no easy matter as several of these characteristics are, in principle, multidimensional. However, several new sources of governance data have been compiled and made public in recent years for relatively large number of countries with empirical relevance in the development literature. According to Herrera, et al. (2005), the introduction of the "quality" of institutions, political regimes among others has overcome the limitations of the traditional approach which considered the classic production factors (capital and labour) and technological change in explaining long-run development paths. Table 1 provides some of the international database on governance and their sources with a discussion on those widely used in the empirical literature below.

Indicator/Database	Institution		
Country Policy and Institutional Assessment (CPIA)	World Bank		
Governance Matters I-IV	Kaufmann, Kraay, Mastruzzi/World Bank		
International Country Risk Guide (ICRG)	Political Risk Service Group		
Index of Economic Freedom	The Heritage Foundation		
Corruption Perceptions Index	Transparency International		
Political rights, Civil liberties, Freedom status	Gastil/Freedom House		
Polity I-IV (Politity's Institutionalized democracy Index)	Gurr/University of Maryland (CIDCM)		
Bollen's Index (Bollen's liberal-democracy Index)	Bollen/University of North Caroline(ICPSR)		
EFC (Ethno-linguistic fractionalization)	Roeder/Dept. of Science, University of Carolina, San Diego		
World Values (Trust, well-being etc.)	Inglehart/WVE Association, Institute for Social Research, University of Michigan		

#### Table 1. International Database on Governance

#### Source: Herrera, Razafrindrakoto and Roubaud (2005)

Aside from the Freedom House measures, ICGR and Polity IV datasets, the World Governance Indicators dataset developed by World Bank researchers, Daniel Kaufmann, Aart Kraay and Pablo Zoido–Lobaton is the most comprehensive dataset on governance because it is an aggregation of a wide variety of data on 250 measures from 25 separate data sources including the Freedom House's civil liberties and political rights indices, and the ICRG (Kaufmann et al., 1999).

The governance dataset captures three dimensions of governance: (i) "the process by which government are selected, monitored and replaced; (ii) capacity of government to effectively formulate and implement sound policies; and (iii) the respect of the citizens and the state for the institutions that govern the economic and social interactions among them" (Kaufmann, et al., 1999a). The dataset measures six indicators (two each) corresponding to these dimensions by reducing the 250 measures through as unobserved components model, and is available for the periods 1996, 1998, 2000 and annually for 2002 – 2007 (Kaufmann et al., 2008). The first dimension of governance captures two indicators: "voice and accountability" and political "stability". While Voice and Accountability measures "the extent to which citizens of a country are able to participate in the selection of governments", the Political Stability indicator measures "the likelihood of a change in government either through violent or unconstitutional means." The indicators "Government Effectiveness" and "Regulatory Quality" belong to the second dimension. While the former measures 'the quality of public service provision, the quality of the bureaucracy and the credibility of government commitment to policies; the latter focuses on whether policies are market friendly in the areas of trade and business. The last dimension also has two indicators, namely, "Rule of law" and "Control of Corruption". The 'rule of law' includes the enforcement of property rights and the predictability of rules governing social and economic interactions; 'control of corruption'

measures the perception of corruption conventionally defined as "the exercise of public power for private gains."

The six indicators have standardized measurement unit such that estimate of the distribution of each governance indicator has a mean of zero and a standard deviation of one with the resultant estimate of each governance indicator lying within the range of -2.5 to 2.5, with higher values implying better outcomes. The dataset has its own flaws. The wide error margin of governance estimates and as noted by Resnick and Birner (2006), countries estimates may change over time with increasing data availability without any substantive change within the countries. Hence, Kaufmann, et al., (2003) emphasized caution when using the indicators for cross–country comparisons of the level of governance prevailing in a particular country.

#### 2.4 Crisis of Governance in SSA

The governance crisis in SSA which was first identified by the World Bank in 1989 has persisted ever since with grievous implication on the growth and development prospects of the region. Nevertheless, the continuing governance crisis is explained by some causes, which are captured in literature.

State capacity and governmental institutions in many SSA countries are weak. This according to Brautigam and Knack (2004) is due to colonialism which failed to develop indigenous institutions to meet the demands of modern states. Evidence from Acemoglu, et al (2000) suggests that Africa is poorer compared to the rest of the world not as a result of purely geographic or cultural factors but due to weak institutions. According to them, European powers created "extractive colonies" in Africa due to its unfavourable environment for their settlement. As such, the institutions introduced by the colonialists were devoid of checks and balances to enforce accountability and the trend has persisted even after political independence. Presently, the state in many SSA countries is greatly influenced by neo-patrimonial tendencies and poor policy choices which have severely hampered state capacity (Ndulu and O'Connell, 1999; Luiz, 2009).

Political instability and wars have contributed to poor governance. Much of African history is replete with cases of political instability ranging from violent coups to civil wars. According to the Organization of African Unity (now African Union), out of 26 African conflict which took place between 1963 to 1998 affecting 61 percent of the continent's total population, 7 were classified as inter-state while 19 occurred within countries (Luiz, 2009). Aside from impacting negatively on governance, Collier (1999 cited in Luiz, 2009) identifies five effects associated with political violence. These includes, the destruction of physical and human capital, reduction in savings, diversion of foreign direct investment from domestic economies with concomitant capital flight, disruption of economic activities and structural change in government expenditure from the provision of social services to military expenditure.

Third, poor leadership is a continual problem. Many SSA countries are plagued by the leadership problem. African leaders, aside from being malevolent authoritarian are noted for their high level corruption and in no position to promote development (Luiz, 2009). By amending state's constitution or rigging elections, majority of African leaders continue to perpetuate themselves in office. Statistics show that between 1960 and 1999 only 7 percent African leaders left office via election compared to 60 percent overthrown in a coup invasion, war or by assassination with an average time in office of 7.2 years compared to 3.2 years in Europe (Luiz, 2009). Corrupt elongation of tenure of office has adversely affected effective leadership, which is critical to building strong and efficient institutions for good governance.

Fourth, is the limiting impact of foreign aid. Evidence from some studies has pointed to the fact that high levels of aid can work for and against governance improvement. According to Brautigam and Knack (2004), high levels of aid could affect governance in several ways: either to build state capacity and establish institutions or weaken institutions and established perverse incentives. Their major empirical finding is that deterioration in the quality of governance is associated with high levels of aid to SSA. Thus, aids weaken institutions and introduce perverse incentives in SSA. Further, it is argued among scholars that the conditional aid in the 1980s to Africa, created political turmoil that was unexpected (Ndulu and O'Connell, 1999). On the whole, aid has been found to undermine the institutional capacity in Africa.

#### 2.5 Empirical Evidence

Empirical evidence emanating from cross-country studies buttresses the fact that the quality of governance has robust effects on growth and other development conditions (e.g. poverty and inequality). The quality of governance as captured in these studies lay emphasis on institutional quality in the form of rule of law, political stability, civil liberties and rights, political freedom, etc. These cross-country studies arguably include measures of governance as independent variables while utilizing some development indicators such as growth, poverty and inequality as dependent variables.

Early contributions on the effect of quality of governance on growth and development includes Barro (1997), Knack and Keefer (1997) and Mauro (1995). Recent studies supportive of the above evidence are provided in Chong and Calderon (2000), Hall and Jones (1999), Campos and Nugent (1999) and Kaufmann, et al. (1999a). For instance, Kaufmann, et al. (1999) after aggregating different dimensions of governance into six aggregate indicators, examined their respective association on three development indicators: per capita income, infant mortality and adult literacy. They found that a one-standard deviation increase in any of the six indicators of governance matters for growth and development. On the other hand, studies such as Knack and Keefer (1995), Acemoglu, et al. (2000), Rodrik et al. (2002) used the security of property rights as their measure of institution in arguing for the positive impact of institutions on economic growth. Gwartney, et al. (2006) used the Economic Freedom of the World (EFW) to investigate causation between institutional quality and economic growth in future, with no feedback from growth to improvement in institutional quality.

Aside from linking governance with growth, other studies have highlighted the effect of governance on poverty and inequality. Examining whether the policies and institutions that promote growth also have impact on poverty, Dollar and Kraay (2000) using a sample of 92 countries over the period 1950 – 1999, found that the 'rule of law' indicator from the World governance data set was positively and significantly correlated (with low magnitude) with the growth in per capita income. Chong and Gradstein (2004) examined the impact of political institutions on income inequality for 121 industrial and developing countries using the six indicators from the World governance data set, the ICRG civil liberties and political rights indices, and country credit ratings as proxies for political institutions. Their major findings was that poor institutions and income inequality reinforces each other regardless of the measure of political institutions, with the 'political stability' indicator from the KKZL dataset having the largest influence on inequality. Similarly, studies have confirmed that better governance fosters agricultural productivity (Lio and Liu, 2008) and efficiency (Meon and Weill, 2005).

Admittedly, the empirical literature on governance is covered here is few but asserts that governance is an important factor for growth and development. Besides, some methodological challenges have been raised. According to Khan (2006), the indices used to proxy the quality of governance are liable to bias and subjectivity. This view is supported by Weyland (Keefer, 2004), although he opines that their usage has brought statistical analysis to bear on topics previously investigated in theory and case studies. Another issue is the consideration of the relationship between governance and development on one-side while overlooking the possibility of a feedback effect, thereby creating simultaneity and endogeneity problems. Thus, Resnick and Birner (2006) asserts that "econometric studies typically suffer from bias created by omitted variables and the ubiquitous problem of endogeneity".

Following Campos and Nugent (1999), we acknowledge the methodological challenges raised in the literature and emphasize with caution that that the analysis is exploratory with no intent at putting forward a formal theoretical model whose findings can be validated against a set of hypothesis. Whereas poor economic performance can retard the establishment of well-functioning institutions due to lack of resources, higher standard of living is a panacea for curbing corruption and political violence. Studies (e.g. Hall and Jones, 1999; Rodrik et al., 2002) have shown that indeed the direction of causality runs from bad institutions to poor economic performances. Hence, we assume that the institutions of governance are exogenous to development performance.

#### 3. Methodology and Data

Based on the hypothesis that better governance improves economic development, we test empirically the relationship between governance and development performance in SSA. We estimate the following model specification of the relationship:

### $Income_i = \psi_0 + \psi_1 \, Governance_i + \psi_2 \, Trade_i + \varepsilon_i \tag{1}$

where *Income* is the per capita income as proxy for development performance, *Trade* is introduced as control variable to capture openness of the economy which has already been used in the literature. Both variables are transformed into their logarithmic form. *Governance* is the country's institutional quality according to the index of governance. The institutions of governance are proxied by three standardized measures to capture three dimensions of governance as: (i) the process by which those in authority are selected monitored and replaced;(ii) capacity of the government to effectively manage its resources and implement sound policies; and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them (Kaufmann, et al., 2008). These measures include the rule of law index (*Rulaw*), regulatory

quality index (*Requal*) and political stability index (*Polstab*). The term  $\varepsilon_i$  represent the stochastic disturbance term and is assume to be independent over all time periods and for each country *i*.

For purpose of sensitivity analysis, we use the Human Development Index (HDI) as an alternative measure of development performance to robustness checks. A priori, we expect the  $\psi$  parameters (excluding the intercept term) to assume positive signs as postulated in theory.

Overall, the sample covers 21 Sub-Saharan African countries<sup>4</sup> with observations for eight years, 1998, 2000, 2002, 2003, 2004, 2005, 2006 and 2007, which forms a balanced panel data structure. The data on institutions of governance is obtained from Kaufmann et al. (2008), while the Real GDP Per capita and trade openness (sum of exports and imports as a percentage of GDP) are from Penn World Tables (Heston, Summers and Aten, 2009). Human development index is retrieved from various Human Development Reports (HDRs), downloaded from the UNDP website (<u>http://hdr.undp.org/reports</u>) All data collected for each variable are harmonized across the sample. In other words, homogenous methods are utilized in compiling the data for each variable is same across countries included in the sample.

#### 4. Results.

As first sight into the impact of governance on development, we plot the proxy for development performance (i.e. *Income*, *HDI*) against the governance indices (*Rulaw*, *Requal*, *Polstab*) as presented in Figure 1 (Panels 1-6). A quick inspection of these panels reveals a positive relationship between the quality of governance and development performance as confirmed by the slopes of the regression lines.

As a complement to the above graphs, Table 2 reports the correlation coefficients for the sample variables. Positive correlations exist among all variables. Specifically, the correlation between the measures of development performance and the quality of governance are positive thus re-affirming the relationship from the earlier graphical plots. Also, the three governance indicators are highly correlated exceeding 60 percent each. For this reason, Globerman and Shapiro (2002) and Lio and Liu (2008) argue that it will be very difficult to use them simultaneously in a single regression equation for avoidance of the multicollinearity problem. Hence, we treat the quality of governance indices separately in estimating equation (1).

Variable	Income	HDI	Trade	Rulaw	Requal	Polstab
Income	1.000					
HDI	0.858	1.000				
Trade	0.576	0.479	1.000			
Rulaw	0.635	0.656	0.387	1.000		
Requal	0.644	0.636	0.454	0.758	1.000	
Polstab	0.457	0.365	0.457	0.693	0.743	1.000

#### **Table 2. Pairwise Correlation Matrix**

Interpreting the governance-development relationship on the basis of the pairwise correlations could be misleading since the influence of other relevant variables is not controlled for. For this reason, a comprehensive regression of equation (1) for each different pair of governance indicators becomes necessary.

Table 3 reports the OLS regression results with logarithmic transformation of per capita income as dependent variable. We estimated the basic model with the control variable, *Trade*, in column (1) before introducing each pair of the governance indicators. The coefficient of *Trade* is positive and significantly unchanged throughout the estimation from column (1) - (4). This supports evidence from cross-country studies that countries that more open attract increased trade and capital inflows which stimulates growth (see Baliamoune and Ndikumana, 2007).

Table 3, column (2) shows the effect of the rule of law index (Rulaw) capturing a dimension of governance involving the respect of citizens and the state for institutions that govern both social and economic interactions. Its coefficient is positive and statistically significant with a one-standard deviation change increasing income by

<sup>&</sup>lt;sup>4</sup> This include: Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Mali,

Mauritania, Mauritius, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Sudan, Tanzania, Uganda, Zambia.

a factor of 0.274. The result is strongly in line with Dollar and Kraay (2002) and Rodrik et al. (2002) who observed that the same index is positively associated with faster growth and higher per capita income. Therefore, it is acknowledge that enforcement of basic fundamental rights such as human and property rights is capable of providing a conducive economic environment for factor accumulation.

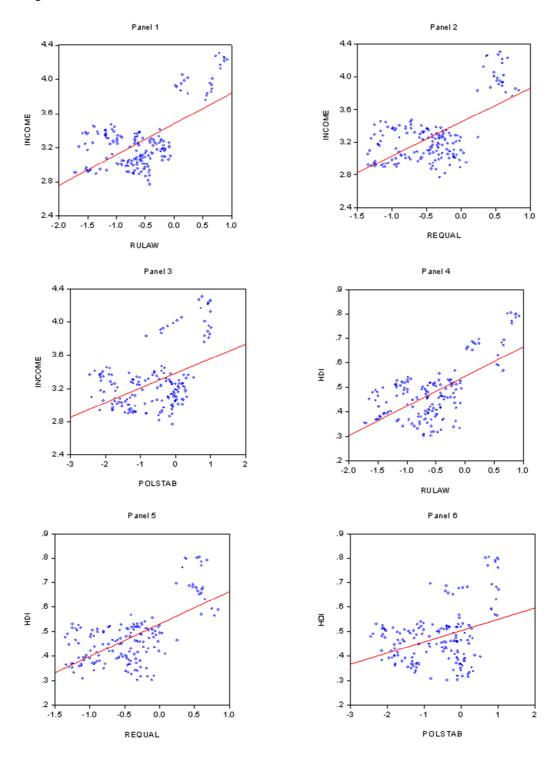


Figure 1: Scatter Plots of Development and Governance Measures

Independent Variables	(1)	(2)	(3)	(4)
Constant	1.245 (5.544)***	2.063 (9.718)***	2.146 (9.626)***	1.698 (6.739)***
Trade	1.150 (9.06)***	0.775 (6.717)***	0.713 (5.865)***	0.927 (6.721)***
Governance Variables				
Rulaw		0.274 (8.394)***		
Requal			0.309 (7.924)***	
Polstab				
No. of Countries	21	21	21	
No. of Observations	168	168	168	168
Adjusted R	0.327	0.525	0.509	
F-Statistic	82.263 [0.000]	95.581 [0.000]	87.838 [0.000]	50.283 [0.000]

#### Table 3. Income and governance - OLS regressions.

Notes: The dependent variable is Real GDP Per capita. t-statistics are in parentheses. \*\*\*,\*\*,\* statistically significant at 1%, 5%, 10% levels respectively.

The second dimension of governance involving government's capacity to effectively manage its resources and implement sound policies is captured using the regulatory quality index (*Requal*). Its coefficient is positively signed and statistically significant with 0.309 factor improvement in income following a one standard deviation change (column 3). In other words, the adoption of less distortionary and market-friendly policies in the areas of trade and business is a stimulant for healthy competition and innovation which are crucial for meaningful and sustainable development. The political stability index (*Polstab*) from column (4) is positively associated with higher per capita income and also significant. It implies that a one standard deviation improvement in the political climate increases income by a factor of 0.094. It can be inferred that absence of political violence are essential in determining an economy's capacity for development. Persistent political violence, as the case in SSA, frustrates investment and its security thereby impeding factor accumulation and by extension growth and development.

The results in Table 3 are checked for robustness by substituting human development index (HDI) as an alternative measure of development performance. The result is presented in Table 4 with same specification. The results are robust without any significant variation from that in Table 3 as all variables had the expected sign and are statistically significant although the magnitudes are considerably low.

Independent Variables	(5)	(6)	(7)	(8)
Constant	-0.071	0.231	0.248	0.039
	(-0.916)	(3.221)***	(3.220)***	(0.438)
Trade	0.310	0.171	0.155	0.255
	(7.022)***	(4.385)***	(3.685)***	(5.218)***
Governance Variables				
Rulaw		0.102		
		(9.197)***		
Requal			0.109	
			(8.144)***	
Polstab				0.023 (2.449)**
No. of Countries	21	21	21	21
No. of Observations	168	168	168	168
Adjusted R	0.224	0.484	0.443	0.247
F-Statistic	49.312	79.370		
	[0.000]	[0.000]	67.527 [0.000]	28.398 [0.000]

#### Table 4. HDI and governance - OLS regressions.

Notes: The dependent variable is Human Development Index (HDI). t-statistics are in parentheses. \*\*\*,\*\*,\* statistically significant at 1%, 5%, 10% levels respectively.

In sum, the results in Table 3 and 4 reveals that governance has a significant positive effect on development in six of the eight regressions which means that good institutional quality plays an important role in the process of economic development. A mixture of strong rule of law, quality regulatory framework and political stability are essential ingredients which should be emphasized and assigned top priority by governments at all stages of the development process.

#### 5. Conclusion

In this paper, we have made a conscious effort at testing empirically how the quality of governance explains development performance across a sample of 21 countries in the Sub-Saharan Africa over the period 1998 - 2007. This justifies the identification by the World Bank linking Africa's development problems to a crisis of governance and the current emphasis by the Bank on strengthening the performance of governance in combating poverty.

Utilizing the governance datasets developed by Worldwide Governance Indicators, the results generally support the current contention in the development literature that quality institutions of governance matters for economic development especially for developing countries in re-invigorating a new development trajectory. The robustness and magnitude of the specific aspects of governance namely, rule of law, regulatory quality and political stability play important roles in influencing development. The results are consistent with previous studies on the impact of institutions on economic growth and development.

Our findings have important policy implications. Genuine commitment of African governments to good governance is sine qua non to the achievement of development. Strengthening the rule of law, regulatory framework curbing political instability remains the foundation towards improving economic performance. Institutional reforms are priorities which should not be overlooked especially in ensuring the independence and adequate funding of the justice system and law enforcement agencies to improve access to fair and equitable administration of justice for all citizens, constitutional and electoral reforms to control the excessiveness of executive powers of African rulers to enhance the attainment of development. Besides, consistent and transparent rules for economic transactions aimed at improving economic outcomes and welfare are also important.

#### References

Acemoglu, D., Johnson, S. & Robinson, J. A. (2000), "The colonial origins of comparative development: an empirical investigation", *NBER Working Paper* No. 7771, National Bureau of Economic Research.

Acemoglu, D. & Johnson, S (2005), "Unbundling institutions", American Economic Review, 113(5), 949-995.

Baliamoune, M. & Ndikumana, L. (2007), "The growth effects of openness to trade and the role of institutions: new evidence from African countries", Department of Economics Working Paper No. 05, University of Massachusetts, Amherst.

Barro, R. J. (2007), "Determinants of Economic Growth: A Cross-Country Empirical Study", Cambridge, MA, MIT Press.

Brautigam, D. (1991), "Governance and economy: a review", *World Bank Policy Research Working Papers* No.815, World Bank, Washington, DC.

Brautigam, D. & Knack, S. (2004), "Foreign aids, institutions and governance in Sub-Saharan Africa", *Economic Development and Cultural Change*, 52(2), 255 – 286.

Campos, N. F. & Nugent, J. B. (1999), "Development performance and the institutions of governance: evidence from East Asia and Latin America", *World Development* 27(3), 439-452.

Chong, A. & Calderon, C. (2000), "Casualty and feedback between institutional measures and economic growth", *Economics and Politics* 12, 69 – 82.

Chong, A. & Gradstein, M. (2004), "Inequality and institutions", *Research Department Working Paper* No.506, Inter-American Development Bank, New York.

Diagne, A. (2007), "Good governance and the provision of public health and education in SSA", in *Governance and Pro-Poor Growth in Sub-Saharan Africa*, African Economic Research Consortium, Nairobi, Kenya.

Dollar, D. & Kraay, A. (2000), "Growth is good for the poor", *Macroeconomic and Growth Working Paper* No.2687, World Bank, Washington, DC.

Fosu, A. K. (2009), "Understanding the African growth Record: the importance of policy syndromes and governance", *UNU –WIDER Discussion Paper* No.2009/02, World Institute for Development Economics Research, Helsinki.

Globerman, S. & Shapiro, D. (2002), "Global foreign direct investment flows: the role of governance infrastructure", *World Development* 30(11), pp. 1899-1919.

Gradstein, M. (2004), "Governance and growth", Journal of Economic Development 73,505-518.

Gwartney, J. D., Holcombe, R. G. & Lawson, R. A. (2006), "Institutions and the Impact of Investment on Growth", *Kyklos*, 59(2), pp. 255 -73.

Hall, R. & Jones, C. (1997), "Why do some countries produce so much more output per worker than others?", *Quarterly Journal of Economics*, 144, pp. 83-116.

Herrera, J. Razafindrakoto, M. & Roubaud, F. (2005), "Governance, democracy and poverty reduction: lessons drawn from household surveys in sub-Saharan Africa and Latin America", *Discussion Paper* No.136, Ibero-America Institute for Economic Research, Goettingen, Germany.

Kaufmann, D., Kraay A. & Zoido-Lobaton, P. (1999), "Aggregating governance indicators", *World Bank Policy Research Working Paper* No.2195, World Bank, Washington, DC.

Kaufmann, D., Kraay A. and P. Zoido-Lobaton (2003), "Governance and Growth: Causality which way? Evidence for the World in brief", Global Issues on Governance mechanisms. World Bank Washington, DC, February.

Kaufmann, D., Kraay A. and M. Mastruzzi, (2008), "Governance matters VII: aggregate and institutional governance indicators 1996 – 2007", *World Bank Policy Research Paper* No.4654, World Bank, Washington, DC.

Keefer, P. (2004), "A review of the political economy of governance: from property rights to voice", *World Bank Policy Research Working Paper* No. 3315, World Bank, Washington, DC.

Knack S. & Keefer, P. (1995), "Institutions and economic performance: cross-country test using alternative institutional measures", *Economics and Politics* 7, 207-227.

Knack, S. & Keefer, P. (1997), "Why don't poor countries catch up? a cross-country investigation", *Quarterly Journal of Economics* 112, 1251 – 1288.

Lio, M. & Liu, M. (2008), "Governance and agricultural productivity: a cross-national analysis", *Food Policy* 33, pp. 504-512.

Luiz, J. M. (2009), "Institution and economic performance: implication for African development", *Journal of International Development* 21, pp. 57-75.

Mauro, P. (1995), "Corruption and growth", Quarterly Journal of Economics, 681 - 712.

Meon, P. G. & Weill, L. (2005), "Does better governance foster efficiency? an aggregate frontier analysis", *Economics of Governance* 6, 75-90.

Ndulu, B. J. &. O'Connell, S. A. (1999), "Governance and growth in Sub-Saharan Africa", *Journal of Economic Perspectives* 13 (3), pp. 41-66.

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

Qureshi, S. K. (1999), "A governance perspective on development issues", *The Pakistan Development Review* 38(4), 327 – 332.

Resnick, D. & Birner, R. (2006), "Does good governance contribute to pro-poor growth? a review of the evidence from cross-country studies", *Development Strategy and Governance Division (DSGD) Discussion Paper* No.30, International Food Policy Research Institute (IFPRI), Washington DC.

Rodrik, D., Subramanian, A. & Trebbi, F. (2002), "Institution rule: the primacy of institutions over integration and geography in economic development", *International Monetary Fund (IMF) Working Paper* No.02/189, IMF, Washington, DC.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

## CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/Journals/</u>

The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request from readers and authors.

## **IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

