The Impact of Institutional and Governance Quality on Economic Performance: Cross Country Analysis

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Abstract

This research aimed to assess the impact of five major indicators of institutional and governance quality on economic performance in 12 African and Asian countries[2]. These indicators include rule of law, political stability, government effectiveness, government regulatory quality, and corruption control indicator, all taken from the World Bank database on Worldwide Governance Indicators. The study employs annual panel data cross-section analysis using a structural equation model, for the sample period 2012 - 2017. The share of the agriculture sector as a ratio of GDP for each country used as a dependent variable, and the five institutional and governance quality indicators as explanatory variables. Our finding shows the rule of law indicator has a significant impact on the other four indicators. That is to say, improvement in the rule of law induces less corruption, improvement in government effectiveness, improvement in regulatory quality, and improvement in political stability. Also, our finding indicates a one-unit decrease in corruption, increase economic growth by 0.17 units, and one-unit improvement in government effectiveness enhance economic growth by 0.15 units. The findings of the paper also indicate if the group of the countries in the sample, able to improve their institutional and governance quality to a non-negative zero scores level, they can sustain an economic growth rate of 8% on average per year.

Keywords: Corruption; Institutional Weakness; Governance.

1. INTRODUCTION

Despite its publicity and common use among policymakers and scholars, there is no consensus on a single definition of governance or institutional quality. Various authors have produced a different array of definitions. Some (World Development Report, 2002) are so broad in such a way that they refer to it as “Building Institutions for Markets”. Others (World Bank, 1991) define it more narrowly in the context of public sector management as “how power is exercised in the management of a country's economic and social resources for economic development".

In someareas of governance such as the rule of law, there arewide debates among scholars over the“thin” versus “thick” definition where the former implies whether existing rules and laws are enforced, while the latter reflects the content of justice in the laws. However, in this paper, we adopt the World Bank approach to define governance as: “the traditions by which authority in a country is exercised”. This constitutes six indicators: Regulatory Quality which reveals the ability of the government to formulate and implement sound policies and regulations that promotes private sector development. Control of Corruption reflects the extent to which public power is employed for private benefits, including both minor and grand forms of corruption. Government Effectiveness implies the quality of public services and the degree of civil service independence from political pressures and the degree of government commitment to its policy implementations. Political Stability and Absence of Violence measures the likelihood of political instability including politically-motivated violence and terrorism. Rule of Law captures the extent to which people have confidence in and abide by the rules of society. While the existing literature in this area focuses on the impact of corruption on economic growth, the current paper investigates the transmission mechanism of governance quality on economic growth taking into account the interdependence between components of governance quality, including corruption, for several countries in Africa and Asia which considered amongst the lowest in their governance performance. The interdependence of governance indicators cast methodological problems on studies that uses a single indicator such as corruption on economic performance or many governance indicators under the assumption that they are independent of one another. As a result, a more appropriate estimation process of governance on economic performance requires estimation of size and direction of the causal effect of governance indicators on each other and their effect on economic performance indicator. In this paper, the economic performance indicator is measured by the agricultural sector output, rather than per capita income, because a numerous research findings (Imai *et al*., 2016; Ligon and Sadoulet, 2018) covering cross-country panel data for a sample of developing countries indicate agricultural growth is the most

[1] The author would like to thank an anonymous reviewer of the journal for helpful comments on an earlier version of the paper.
[2] Countries include Sudan, Kenya, Uganda, Nigeria, Egypt, Tunisia, Ghana, Senegal, Iran, Pakistan, Lebanon and Kazakhstan.

important factor in economic growth acceleration, beside the observation that GDP as aggregate is not a precise measure of economic well-being in developing countries where income inequality gaps are very high.

The remaining parts of the paper are structured as follows. Section 2 reviews the most relevant literature on the topic. Section 3 illustrates the research methodology and discusses the findings. The final section concludes the study.

2. LITERATURE REVIEW

A number of research papers contended the need for economic and political freedom as indispensable conditions for economic growth and development of nations. Empirical research in the 1990s has taken the impact of poor governance (as measured by political and export instabilities and corruption) on economic growth. Campos and Nugent (1999), and Kaufmann *et al*. (1999) conclude that, despite problems related to aggregation of good governance measures, but have a positive impact on economic growth. A more comprehensive study by Chauvet and Collier (2009) that covers all developing countries indicated, countries suffering from poor governance, on average, experience a 2 percentage points decline in GDP growth per year.

Other more recent research findings indicate a strong causal effect between good governance and economic growth. Despite such strong support for the positive impact of good governance on economic growth, yet there are a few studies that raise questions about the positive impact evidence of good governance on economic performance. Sachs *et al*. (2004) indicate that in the African context, the differences in economic performance among African countries cannot be attributed only to the quality of their governance without taking into account the differences in their levels of development as a result, they conclude that a focus on governance reforms can misguide its impact on economic performance. Fayissa and Nsiah (2020) investigate the impact of different measures of good governance (such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption) while controlling for the conventional sources of growth, and examine the impact of the composite index of good governance on the economic growth of Sub-Sahara African countries. Their findings suggest that good governance or lack thereof contributes to the gaps in income per capita between richer and poorer African countries. Furthermore, their results indicate the role of governance on economic growth depends on the type and the level of income growth of countries under consideration. In another study on Africa, Fosu *et al*. (2006) conclude that while politically accountable governments can lead to improved economic performance, they are unlikely to adopt economically desirable policies that are unpopular with the public and that the tendency of such governments increases the risk of political disagreement may stand in the way of a meaningful economic growth path.

However, many authors in the past decade have taken corruption as an indicator of governance quality by investigating the impact of corruption on economic growth in various countries across the globe. To date, there is no consensus on the impact of corruption on economic growth, as the issue still under debate. Among research papers that associate a negative impact of corruption with the investment are Mauro (1995), Brunetti and Mauro (1998), and Mo (2001). But others like, Beck and Maher (1986), Huntington (2006), Leys (1965), and Lien (1986) indicate corruption could lead to economic growth as it induces more efficient government services by acting as a lubricant that smooth operations constrained by bureaucracy, hence, raises the efficiency of an economy by reducing barriers to investment and economic development. Mo (2001) uses cross-sectional data covering 49 countries in two separate periods 1970-1995 and 1996- 2000 and concludes that corruption has a negative impact on economic growth through its negative effect on investment and human capital development and its positive impact on political instability. Ugur and Dasgupta (2011) investigated the impact of corruption on economic performance using two separate groups of countries that are of low income and high income. Their finding revealed that corruption harms GDP per-capita growth in high-income groups, but a negative impact in low-income groups, that is one unit fall in perceived corruption index lead to 0.59 percentage point increase in GDP per capita growth.

Aidt *et al*. (2008) developed a model of interdependence between corruption and governance using panel data on separate two groups, a group of countries of high-quality institutions and countries of low-quality institutions. They found no significant association between corruption and growth in countries with low-quality institutions but with regard to high-quality institutions corruption has a negative impact but insignificant for many countries in the group. Venard (2013) investigate the association between institutional quality, corruption level, and economic development using cross-sectional data of 120 countries using the World Bank database on governance indicators using Partial Least Square (PLS) estimator to show that the impact of both institutional quality and corruption on economic development is negative, implying that improvement of institutional quality and corruption control is more effective for economic development in countries with lower institutional quality than those of high institutional quality.

Méon and Sekkat (2005) use cross-country analysis to investigate the association between quality of governance including corruption and economic growth to conclude that corruption has a negative impact on economic growth in countries with relatively efficient institutions and a positive impact in countries of weak institutional efficiency. Similar results were also concluded by Tarek and Ahmed (2013). Egger and Winner (2005) employed data from 73 developed and underdeveloped countries to investigate the relationship between the level of corruption and FDI inflows and come up with findings that as corruption helps FDI avoid disorderly regulations and administrative constraints, it enhances efficiency in underdeveloped economies. Aidt and Dutta (2008) show that corruption affects negatively economic performance in countries with good institutional quality, but positively or insignificantly the countries with poor institutional quality. In a similar approach Heckelman and Powell (2010), used data from 83 countries for the sample period 1995-2005, and investigate the association between corruption and institutional environments such as democracy and economic freedom on economic growth. Their findings show

that corruption has a positive effect on economic growth in countries with a low level of economic freedom, but a negative impact on countries with high economic freedom. Similar results were found by Méon and Sekkat (2005).

3. RESEARCH METHODOLOGY AND ANALYSIS

The data in this research was collected from the Worldwide Governance quality database during the sample period 2012 – 2017 for twelve African and Asian countries of similar political and economic status[3]. The governance quality indicators assign a numeric score to each indicator ranging from -2.5 in the worst case to +2.5 in the best performance. The governance quality indicators include regulatory quality, control of corruption, government effectiveness, rule of law, and political stability. Each of these indicators defined as follows: Regulatory Quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Government Effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Rule of Law captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

To identify the causal direction between these indicators we employed the Granger causality test which is summarized in Table (1) and in the path diagram, which reveals that rule of law influence the four major indicators: corruption control, government effectiveness, government regulatory quality, political stability. Government effectiveness, in turn, influence corruption and political stability. As a result, rule of law influences economic performance indirectly via its influence on these four major indicators, as indicated in the following path diagram.

To identify the influence of each of these indicators on each other and on the economic performance we employed the structural equation model (SEM) which has been viewed as the most appropriate model in these situations. The superior features distinguishing structural equation models from other classical linear models, include: structural equation models reveal hidden relationships among variables which are not measurable directly. Possible mistakes in the measurements of the observed variables are taken into consideration in SEM, as the classic regression approach assumes no measurement error. In addition, it is a very useful method to analyze highly complex multiple variable models to reveal direct and indirect relationships between variables.

Results of SEM estimates reflecting the above-stated path diagram included in Table (2) below. The four major indicators, regulatory quality, corruption control, government effectiveness, and political stability play a mediating role between rule of law and economic performance represented in the growth of agricultural output. As a result, rule of law has an indirect effect on economic growth via its influence on the four major indicators. Estimation results in the Table show the direct and indirect effects of all these indicators on economic growth. It is indicated that the rule of law indicator has a positive and significant impact on each of the four indicators: corruption control, government effectiveness, government regulatory quality, and political stability indicator. This implies that a weaker rule of law induces: a higher level of corruption, weaker effectiveness of government, lower regulatory quality, and political instability. It also indicated that government effectiveness influences significantly the corruption indicator. That is to say, the weaker effectiveness of governments leads to a higher level of corruption.

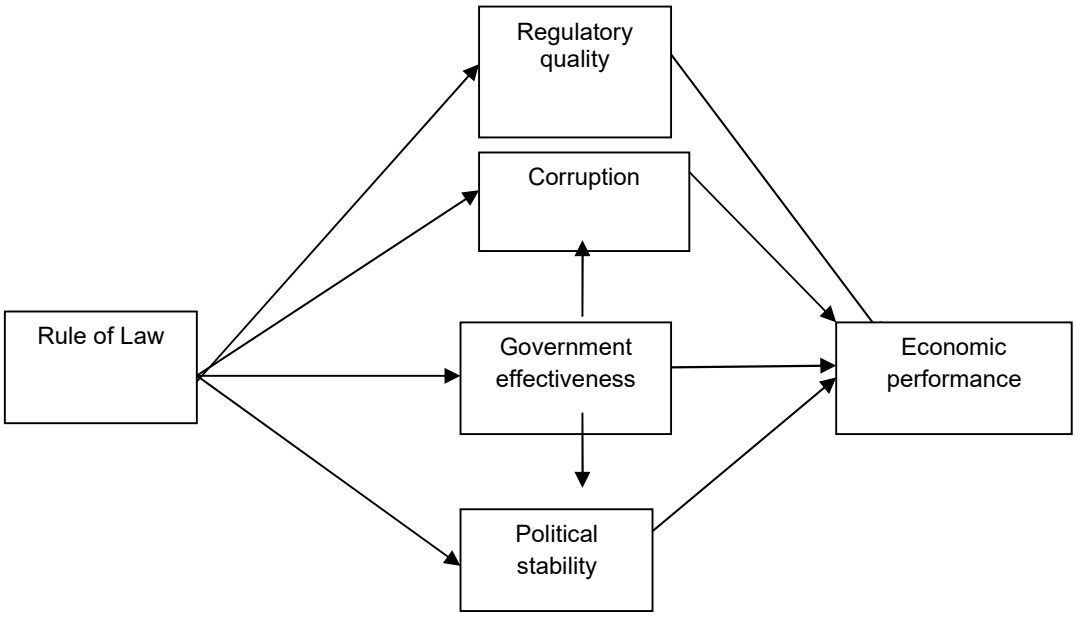
Table 1: Bi-directional causality test.

Direction of influence	Rule of law	Regulatory quality	Corruption	Political stability	Gov. effectiveness
Rule of law (p-values)	-	0.79 (0.02)*	0.93 (0.04)*	1.54 (0.00)*	0.69 (0.04)*
Regulatory quality (p-values)	0.65 (0.34)	-	0.71 (0.67)	1.41 (0.34)	0.91 (0.19)
Corruption (p-values)	0.65 (0.22)	0.60 (0.11)	-	0.55 (0.71)	0.73 (0.21)
Government effectiveness (p-values)	0.58 (0.22)	0.61 (0.19)	0.89 (0.08)**	0.83 (0.06)**	-
Political stability (p-values)	0.32 (0.81)	0.35 (0.17)	0.57 (0.32)	-	0.81 (0.45)

*Significant at 5% significance level. **Significant at 10% significance level.

[3] The World Bank data on World Governance summarize views on the quality of governance provided by a large number of enterprises, citizen and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms.

Figure 1: Path diagram.



However, government effectiveness has an insignificant impact on political stability. In terms of the direct effect of each of the four indicators on economic performance, our results show that corruption, government effectiveness, and political stability have a significant impact on economic performance. In other words, one unit increase in corruption reduce economic growth by 0.17 units, and one unit decrease in government effectiveness reduces economic growth by 0.15 units, and also one unit decrease in political stability reduces economic growth by 0.03 units. Estimation results in the Table also include indirect effects of rule of law on economic growth via mediating effects of each of the four indicators: corruption, government effectiveness, government regulatory requirements, and political stability indicators. It has been shown that the effect of rule of law on economic growth via each of corruption control, government effectiveness, government regulatory quality, and political stability is negative. Implying that a weaker rule of law has an adverse effect on economic growth via each of the four indicators. From the results of Table (1) it can also be noticed that the constant term of 0.08 reveals if the group of the countries in the sample able to control these indicators to a non-negative zero level, it is expected that on average they can achieve an economic growth rate of 8% per year.

4. CONCLUSION

The paper estimates the impact of five institutional and governance indicators on the economic growth of twelve African and Asian countries during the period 2011-2017. The indicators include rule of law, corruption control, government ineffectiveness, government regulatory quality, and political stability. The finding of the paper indicates rule of law has a positive and significant impact on each of the other four indicators, implying that a weaker rule of law induces a higher level of corruption, weaker effectiveness of government, lower regulatory quality, and more political instability. Also indicated in the paper government effectiveness influence positively and significantly corruption control. That is to say, the weaker effectiveness of governments leads to a higher level of corruption (or lower level of corruption control). However, government ineffectiveness has a positive but insignificant impact on political instability.

In terms of the direct effect of each of the four indicators on economic performance, it is indicated that corruption, government ineffectiveness, and political instability have an adverse significant impact on economic performance. More specifically, one unit increase in corruption reduces economic growth by 0.17 units, and one unit increase in government ineffectiveness reduces economic growth by 0.15 units.

The paper also assesses the indirect effects of rule of law on economic growth via mediating effects of corruption, government effectiveness, government regulatory requirements, and political instability indicators. It has been shown in the paper the effect of rule of law on economic growth via each of corruption control, government effectiveness, government regulatory quality, and political instability are negative. Implying that a weaker rule of law has an adverse effect on economic growth via each of the four indicators. As a result, through the mediating role of corruption, a unit decline in rule of law reduces economic growth by 0.12 units. Also, to be noticed that the constant term value of 0.08 under the direct effect of the governance indicators reveal that if the group of the countries in the sample able to control these governance and institutional quality indicators to a non-negative zero level (i.e., average level), it is expected on average, they can achieve an economic growth rate of 8% per year.

Table 2: Structural equation model.

Variables[4]	Coefficient	Std. error	p-value
CC:			
GE	0.25*	0.107	0.01
RL	0.75*	0.11	0.00
cons	-0.15*	0.49	0.00
GE:			
RL	0.84*	0.08	0.00
cons	-0.03	0.05	0.55
RQ:			
RL	0.99*	0.09	0.00
cons	0.07	0.06	0.26
PS:			
GE	0.27	0.25	0.29
RL	1.09*	0.27	0.00
cons	-0.47*	0.11	0.00
Direct effect			
AGVA:			
CC	-0.17*	0.039	0.00
GE	-0.15*	0.037	0.00
PS	-0.03	0.015	0.07
RQ	-0.05	0.032	0.13
cons	0.08*	0.017	0.00
Indirect effect of RL			
AGVA:			
RL→CC	-0.12	-	-
RL→GE	-0.12	-	-
RL→PS	-0.03	-	-
RL→RQ	-0.04	-	-
Var (e.cc)	0.05	0.009	-
Var(e.ge)	0.07	0.013	-
Var(e.ps)	0.32	0.056	-
Var(e.rq)Var(e.agva)	0.09	0.01	-
	0.004	0.001	-

*Significant at 5% significance level.
Note: The indirect effect of RL on AGVA calculated via RL effect on governance indicators multiplied by governance indicators on AGVA.

Conflict of Interest

There is no conflict of interest.

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[4] CC = high level of corruption; GE = government ineffectiveness; RL = low level of rule of law; PS = political instability; RQ = low level of regulatory quality; Agva = agriculture value added.

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