

Probing Further the Impact of Political Institutions on the Quality of Economic Institutions in Sub-Saharan Africa

Kilishi A. Abdulhakeem,^a and Emaiku Godwin Ojonugwa^b

Abstract: *Evidence in recent literature underscores the fact that political institutions are key determinants of the quality of economic institutions, particularly in Africa. However, the question of which political institutions matter most remains unresolved. This paper probes the evidence further by investigating the relative effect of four different categories of political institutions on different components of economic institutions in Sub-Saharan Africa. The Im-Pesaran-Smith (IPS) panel unit root test technique is used to evaluate the stationarity property of the variables. Three alternative long-run panel cointegration regression techniques, namely mean group (MG), pooled mean group (PMG) and dynamic fixed effects (DFE), are used to gauge the specified model. The most efficient among them is chosen using the Hausman specification test. The findings reveal that political institutions do not have short-run effects on the quality of economic institutions. However, they have significant positive impacts on both the overall economic institution and its components in the long run. Rule of law has the most consistent impact, followed by government effectiveness, while quality of democracy is the least consistent. Therefore, policymakers need to intensify efforts to ensure adherence to rule of law, and efforts should also be directed towards improving government effectiveness.*

Keywords: Rule of law; Government effectiveness; Economic institutions; Pool mean group (PMG); Sub-Saharan Africa

JEL Classification: C33, O43, O55, P16

^a Corresponding author. Department of Economics, University of Ilorin, Ilorin, Nigeria. Email: meetkilishi@yahoo.com / kilishi-a@unilorin.edu.ng

^b Postgraduate Student, Department of Economics, University of Ilorin, Ilorin, Nigeria

1. Introduction

Understanding what determines the quality of economic institutions, particularly in Africa, is premised on the growing argument in the literature that the dismal economic performance in developing countries, especially in Sub-Saharan Africa, is the repercussion of weak and bad institutions (see e.g., Hall & Jones, 1999; Acemoglu et al., 2003a, b; Ferrini, 2012; Luiz, 2009; Boettke & Fink, 2011; Osman et al., 2012; Kilishi et al., 2013; Yildirim & Gokalp, 2016; Mullings, 2018; Uddin et al., 2021). This line of thought is based on the theoretical argument that economic institutions are what incentivise people to save, invest, consume and carry out economic activities. Specifically, Osman et al. (2012) explore the link between institutional quality and economic performance using sample of 27 Sub-Saharan African countries and find that institutional variables assume a critical role in the process of economic development in the region. Using a sample of 48 African countries, Epaphra and Kombe (2017) show that institutions really matter for Africa's economic growth. Yıldırım and Gökcalp (2016) analyse the relationship between institutions and macroeconomic performance using a sample of 38 developing countries and reveal that institutional structure indicators, such as the integrity of the law system, regulations on trade barriers, restriction of foreign investments, share of the private sector in the banking system and employment-dismissal variables, have a positive effect on the macroeconomic performance of these countries. Saeed (2022) examines the short-run and long-run impact of institutional quality on economic growth in resource-dependent countries. The study shows that the short-run impact of institutions come from the ex-ante quality of institutions, while the long-run impact comes from the ex-post quality of institutions. Thus, the importance of carrying out research to identify specific policy variables that can influence the quality of economic institutions cannot be overemphasised.

Irrespective of the general consensus on the importance of institutions, the quality of institutions is still low and weak in most developing countries, particularly in Africa. Several indicators of the quality of economic institutions over the years have taken account of institutional quality, such as the Heritage Foundation Index of Economic Freedom. The index is measured in a scale of 0 to 100 and countries are grouped into five categories bases on their performance. Countries whose scores are between 0 to 49.9 are

categorised as repressed, between 50 to 59.9 as mostly unfree, 60 to 69.9 as moderately free, 70 to 79.9 as mostly free, and between 80 to 100 as free. Very few Sub-Saharan African countries recorded scores above 50, while the majority of the countries have low scores in the overall index as well as for specific indicators.

There is no single country in Sub-Saharan Africa categorised among the top rank of free countries; few countries have ever made it into mostly free category. Since 2017, the number of countries in Sub-Saharan Africa categorised as repressed countries has risen, reflecting the region's decline in economic freedom. As at 2022, Mauritius is the only country in Sub-Saharan Africa that remains among the mostly free category, hence it is the economically freest nation in the region. Botswana and Cabo Verde that were hitherto categorised as mostly free backslid into moderately free of late, largely due to the effect of Covid-19. In the 2022 index, it was reported that Rwanda suffered a steep drop of economic freedom in the past five years because of deficiencies in judicial effectiveness, fiscal health, and financial freedom. The country has fallen into the mostly unfree category after attaining the status of mostly free.

To foster economic growth and development as well as poverty reduction in Sub-Saharan Africa, the quality of economic institutions must necessarily be improved. Therefore, it is imperative to investigate the core determinants of institutional quality in the continent. Meanwhile, research on why weak institutions predominate in Africa still remains at infancy. Hence, a major focal research area in institutional economics is the quest to understand the major reasons for disparities in institutional quality among nations. Why do some nations have strong and good quality economic institutions and others do have? Most earlier studies in this area emphasise non-policy factors such as geography, culture and history (see for example, Gallup et al., 1999; La Porta et al., 1999; Acemoğlu et al., 2001, 2002; Easterly & Levine, 2003; Lehne et al., 2014). Other studies confirm positive relationship between trade flows and the quality of economic institutions (Nicolini & Paccagnini, 2011; Bhattacharyya, 2012; Levchenko, 2013; Bergh et al., 2014). However, Khalid (2017) shows that the effect of trade on quality of economic institutions is largely a function of the quality of political institutions and type of political regime. Almost all the studies that find a significant correlation between non-policy variables and quality of economic institutions are based on cross-sectional data analysis. However,

recent studies that use panel data, which account for both cross-section and time dynamics, as well individual heterogeneity, find no significant relationship between these factors (non-policy variables) and quality of institutions. Rather, emphasis is given to policy variables that can be influenced to change the institutional condition (see e.g., Acemoğlu, 2006; Acemoğlu & Robinson, 2016; Congleton & Yoo, 2018; Alhassan & Kilishi, 2019; Alonso et al., 2020).

Alhassan and Kilishi (2019) show that political institutions are key determinants of the quality of economic institutions in Africa. Using five different measures of democratic quality as presented in the Polity IV dataset to proxy political institutions, the authors investigate the impact of these measures on overall economic freedom and four components of economic freedom using a Hausman–Taylor estimator. However, it is not clear if different political institutions would have similar effect on economic institutions. Thus, this paper provides answers to three important questions: (i) Do different indicators of political institutions have similar influence on economic institutions, and by extension, which political institutions matter most? (ii) Do political institutions affect different components of economic institutions in the same way? (iii) Does the impact of political institutions on economic institutions differ in the short and long run? The present study investigates the relative influence of four categories of political institutions on quality of eight components of economic freedom as well as the overall index of economic freedom. Equally, different methodological approaches are used here to provide both short-run and long-run dynamic coefficients.

Following this introductory section, the brief literature review is contained in Section 2, the methodology in Section 3, results in Section 4, and ending with the conclusion and policy implications in Section 5.

2. Literature Review

The literature on the determinants of institutional quality has grown tremendously of late. Lawson et al. (2020) survey over 70 empirical studies on the determinants of economic institutions measured as economic freedom. Several variables were examined in the literature as potential determinants of economic freedom, ranging from income, growth, geography, history, natural resources, inequality, foreign aid, education, and fractionalisation, to political variables such as civil liberties, political rights, level of democratisation,

type of government, and level of political competitiveness, among others. While some of the variables show significant positive effects, others show significant negative impact or were not statistically significant.

Among the numerous factors that do show a positive effect, political institutions stand out as the most important determinant of economic institutions, with the most consistent significant positive effect across several studies. This means that political institutions that allow greater participation of people have the highest impact on economic institutions. There is evidence that formal democracy has positive significant effect on economic institutions. The standardised size of the effect of political institutions is about 0.23. Lawson et al. (2020) also show that many studies find positive associations between economic institutions and income. Another consistent finding in the literature is that the current quality of institutions depends largely on preceding levels. Aid appears not to be a strong determinant of economic institutions. Many of the other variables examined in the literature lack consistent effect across different studies, thus the findings are difficult to generalise.

Krieger (2022) presents a simple theoretical model which predicts that transition from autocracy to democracy would lead to an increase in the quality of economic institutions. The model further predicts that this improvement is larger with higher levels of human capital. Krieger's (2022) theoretical model is supported by an empirical analysis of panel data covering 150 countries over the period 1920 to 2019. An earlier study, Islam and Montenegro (2002), shows that political institutions that promote checks and balances enhance the quality of economic institutions. While trade openness has a robust positive effect on economic institutions, trade in natural resources, however, is associated with poor institutional quality. Moreover, social variables such as income inequality or ethnic diversity are not seen to have a significant impact on institutional quality. Khalid (2017) examines the influence of political institutions and trade on the quality of economic institutions. His findings suggest that the effect of trade on the quality of economic institutions depend on the type and nature of political institutions as well as political regimes. A democratic system that is accountable and transparent would create an environment for drafting of policies to promote trade and improve the quality of economic institutions. On the other hand, higher trade volumes will have smaller effects on economic institutions under an authoritarian regime that not accountable to

the people. Hence, an increase in trade flow alone is not enough to improve the quality of economic institutions, unless there are favourable political economic institutions.

Javed (2016) investigates the potential determinants of institutional quality using a panel data of International Monetary Fund (IMF) member countries over a time period when the number of the agency's programmes showed an increasing trend. Javed (2016) shows that a parliamentary form of government, aggregate governance level, civil liberties, and trade openness enhance institutional quality. While economic growth is conducive for enhancing economic institutional quality, military power negatively impacts institutional quality. Kotschy and Sunde (2017) examine the influence of income inequality on the effectiveness of democracy in shaping economic institutions. Their findings suggest that the level of inequality is a pivotal factor that determines whether democratic institutions have a positive and lasting effect on the quality of economic institutions. This means that the existence of excessively high levels of inequality erode the influence of democracy on institutional, such that democracies appear not to be able to provide good institutional environments. Saeed (2022) shows that voice and accountability have the most influence in shaping institutional quality in a sample of developing countries. This implies that the quality of economic institutions improves when political institutions allow most of citizens to participate in selecting their government, while they enjoy freedom of expression, freedom of association, and a free media.

3. Methodology

3.1 The model

Drawing from Alhassan and Kilishi (2019) and Alonso et al. (2020), the model used in this paper is specified as:

$$EI_{it} = \alpha + \beta_1 PI_{it} + \beta_2 PCI_{it} + \beta_3 LLA_{it} + \beta_4 TOP_{it} + \beta_5 EDUI_{it} + \beta_6 EMP_{it} + \beta_7 NRR_{it} + \mu_{it} \quad (1)$$

Where *EI* represents measures of economic institutions, *PI* is a vector of political institutions (measured with Polity II, rule of law, political stability

and government effectiveness, respectively), *PCI* is per capita income, *LLA* is log of land area (measure for geographical factor), *TOP* represents trade openness, *EDUI* represents education index, *EMP* equals number of employed people as percentage of total labour force, *NRR* represents natural resource rent, and μ_{it} is the Gauss–Markov error term which includes the unobservable heterogeneity across countries.

The estimation procedure essentially follows autoregressive distributive lag (ARDL) structure. Hence, equation (1) is respecified as:

$$\begin{aligned}
 EI_{it} = & \beta_0 + \sum_{j=1}^p \delta EI_{it-j} + \sum_{j=0}^{q_1} \lambda_{1ij} PI_{it-j} + \sum_{j=0}^{q_2} \lambda_{2ij} PCI_{it-j} + \sum_{j=0}^{q_3} \lambda_{3ij} LLA_{it-j} \\
 & + \sum_{j=0}^{q_4} \lambda_{4ij} EMP_{it-j} + \sum_{j=0}^{q_5} \lambda_{5ij} TOP_{it-j} + \sum_{j=0}^{q_6} \lambda_{6ij} EDUI_{it-j} \\
 & + \sum_{j=0}^{q_7} \lambda_{7ij} NRR_{it-j} + \mu_{it}
 \end{aligned} \tag{2}$$

$$i = 1, 2, \dots, N; t = 1, 2, \dots, T$$

Equation (2) includes the lags of the dependent variable, as well as the contemporaneous and lag values of the independent variables, as regressors. This allows us to capture the effect of the history of the variables on the current condition of economic institutions.

In order to obtain the short-run and long-run estimates, equation (2) is respecified as:

$$\begin{aligned}
 \Delta EI_{it} = & \beta_0 + \delta_i EI_{it-1} + \pi_{1i} PI_{it-1} + \pi_{2i} PCI_{it-1} + \pi_{3i} LLA_{it-1} + \pi_{4i} EMP_{it-1} \\
 & + \pi_{5i} TOP_{it-1} + \pi_{6i} EDUI_{it-1} + \dots + \pi_{qi} NRR_{it-1} \\
 & + \sum_{j=0}^{p-1} \alpha_{ij} \Delta EI_{it-j} + \sum_{j=0}^{q_1-1} \varphi_{1ij} \Delta PI_{it-j} + \sum_{j=0}^{q_2-1} \varphi_{2ij} \Delta PCI_{it-j} + \dots \\
 & + \sum_{j=0}^{q_9-1} \varphi_{9ij} \Delta NRR_{it-j} + \mu_i \\
 & + \varepsilon_{it}
 \end{aligned} \tag{3}$$

In equation (3), the short-run coefficients are represented by α_{ij} and φ_{ij} , while the long-run impact is measured for each of the explanatory variables by π_s and δ . The error correction equivalent of the specification in equation (3) is given as:

$$\begin{aligned} \Delta EI_{ik} = & \omega_i \emptyset_{it-1} + \sum_{j=0}^{p-1} \alpha_{ij} \Delta EI_{it-j} + \sum_{j=0}^{q-1} \varphi_{1ij} \Delta PI_{it-j} + \sum_{j=0}^{q_{2-1}} \varphi_{2ij} \Delta PCI_{it-j} + \dots \\ & + \sum_{j=0}^{q_{9-1}} \varphi_{9ij} \Delta NRR_{it-j} + \mu_i + \varepsilon_{it} \end{aligned} \quad (4)$$

Where \emptyset_{it-1} is the error correction term and Δ is the difference operator.

3.2 Some theoretical arguments

Acemoğlu and Robinson (2008, 2012), as well as Iwayemi and Kilishi (2016) argue that it is the nature and type of political institution a society chooses that determines the quality of economic institutions. This argument is premised on the fact that if political institutions are weak, there will be little or no restraint on the actions of the political elite. Consequently, political power will attract rents. Thus, political elites would be desperate for power, leading to serious infighting among various groups for control of power. Political elites are therefore likely to provide weak and exclusive economic institutions so as to limit the ability of citizens to take over government and policymaking. Overall, weak political institutions are more likely to produce weak economic institutions.

Iwayemi and Kilishi (2016) also point out that if the utility of the political elite is a function of natural resource rent rather than tax revenue, there is no incentive for the elite to create strong and effective economic institutions that would promote economic activities. Hence, resource-rich countries are likely to have weak institutions. This is related to the popular resource curse argument. A high level of education is expected to make people knowledgeable and better informed about government activities. The more people are educated, the more likely they are to demand good governance and better institutions. Therefore, it is expected that education would have a positive impact on the quality of economic institutions.

Employment is assumed to be a source of inequality in society. As Alonso et al. (2020) show, patterns of inequality are important determinants of institutional quality. It is therefore expected that as more people are employed, inequality would reduce and institutional quality would improve. A positive relationship is expected between employment and institutional quality.

Other variables like log of land, per capita income, and trade openness are introduced in order to capture the effects of geographic, economic and trade factors which are regarded in the literature as determinants of institutional quality (Lehne et al., 2014; Bergh et al., 2014). It is argued in trade literature that the more a country interacts with the outside world, the stronger its institutional quality and ability to compete at the international level. Studies like Góes, (2016), March et al. (2017), and Alonso et al. (2020) show that the higher the income per head in a country, the higher the quality of institutions. Higher income per capita would imply more the de facto power to citizens; hence, agitations for better institutions would arise.

3.3 Data issue

Data is gathered from 43 Sub-Saharan African countries over the period of 1996 to 2019. The Heritage Foundation Index of Economic Freedom is used as measure for economic institutions, and it describes economic freedom as “the fundamental right of every human to control his or her own labour and property.” The index includes 186 countries, and it is measured in ten dimensions: property rights, business freedom, monetary freedom, trade freedom, fiscal freedom, government size (government spending), freedom from corruption, investment freedom, financial freedom and labour freedom. Each component is assigned a score from 0 to 100, with 100 being most free.

The Polity II dataset, which measures the degree of democracy and autocracy, is used as measure of political variable alongside rule of law, government effectiveness and political stability which are the measures provided by the Polity IV and World Governance Indicators (WGI) data sets. The Polity II score is computed by subtracting the AUTOC (autocratic) scores from the DEMOC (democratic) score; the resulting unified polity scale ranges from -10 (strongly autocratic) to +10 (strongly democratic). Rule of law captures perceptions of the extent to which economic agents have confidence in and abide by societal rules, and in particular, the quality

of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence. The estimate gives a country's score on the aggregate indicator, in units of a standard normal distribution. The value ranges from approximately -2.5 to 2.5.

Data on education index is derived from the Oxford Poverty and Human Development Initiative (OPHI), and the Natural Resource Rent is gathered from the World Development Indicators (WDI). Trade openness is measured as the sum of exports and imports as ratio of gross domestic product (GDP), and the data is collected from WDI. Data on land area and GDP per capita are also collected from WDI.

3.4 *Estimation procedure*

The procedure begins with unit root testing using Im-Pesaran-Smith (IPS) panel unit root technique. The results of the test show a combination of $I(1)$ and $I(0)$ series. Given this outcome and the fact that both $N(43)$ and $T(1996 \text{ to } 2019)$ are relatively large, the autoregressive distributed lag (ARDL) modelling procedure is employed to gauge the models. Three alternative long-run panel cointegration techniques are used in the study, namely; mean group (MG), pool mean group (PMG) and dynamic fixed effects (DFE). According to Pesaran and Smith (1995) and Pesaran et al. (1997, 1999), the three techniques are consistent when both T and N are large. Even though they are based on different assumptions, all three techniques employ the ARDL framework where the series are a combination of $I(0)$ and $I(1)$. Both MG and DFE are two opposite extremes, while PMG is intermediate. MG assumes a heterogeneous slope and intercept coefficient, and thus derives long-run parameters by averaging the long-run parameters of the ARDL for individual units. DFE imposes the homogenous slope coefficients but allows constant intercepts to vary across units. PMG imposes the assumption of short-run heterogeneous slope coefficients and long-run homogenous slope coefficients. The most efficient of the alternatives is determined using the popular Hausman specification test.

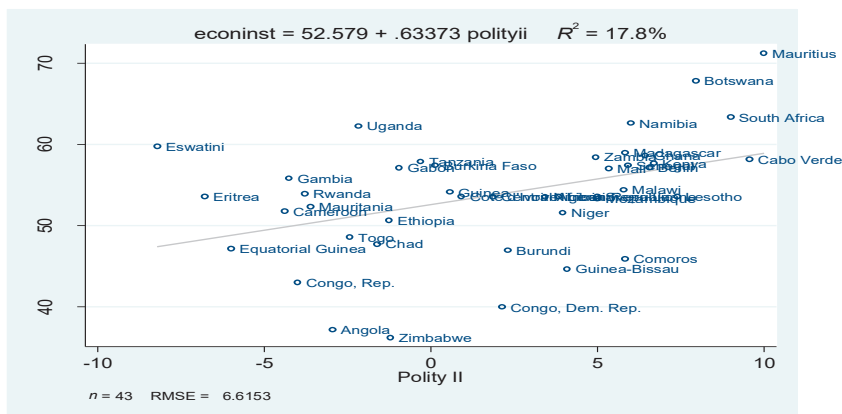
3.5 *Some stylised facts*

In this section, the relationship between the measures of political institutions and economic institutions is examined using two-dimensional graphs. Figure

1 displays the relationship between Polity II and economic institutions, while Figures 2, 3 and 4 show the relationship between economic institutions and rule of law, political stability and government effectiveness, respectively. All four figures show a positive relationship. However, the relationship is strongest with rule of law, followed by government effectiveness, Polity II and political stability, in that order.

The coefficient of determination reported in Figure 1 is 17.8%, meaning that Polity II can only explain 17.8% of variations in economic institutions. The figure shows that countries such as Mauritius, Namibia, South Africa and Botswana have robust democratic frameworks, as measured by higher values of Polity II. Correspondingly, these countries also have better economic institutions among other countries in SSA. On the other hand, countries like Angola, Zimbabwe, Republic of the Congo, Democratic Republic of the Congo, Togo, and Equatorial Guinea are at the bottom of the institutional quality ladder, and their scores for Polity II are relatively lower too.

Figure 1: Economic Institution and Political Institution



economic agents have low confidence in the rules of the society and seldom abide by them, particularly the quality of contract enforcement, property rights, the police and the courts. The likelihood of crime and violence is high in these countries. They equally have relatively weaker economic institutions.

Figure 2: Economic Institution and Rule of Law

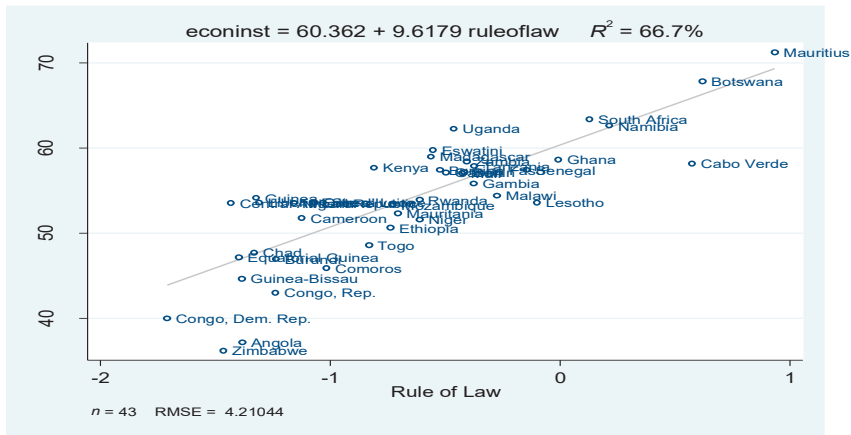
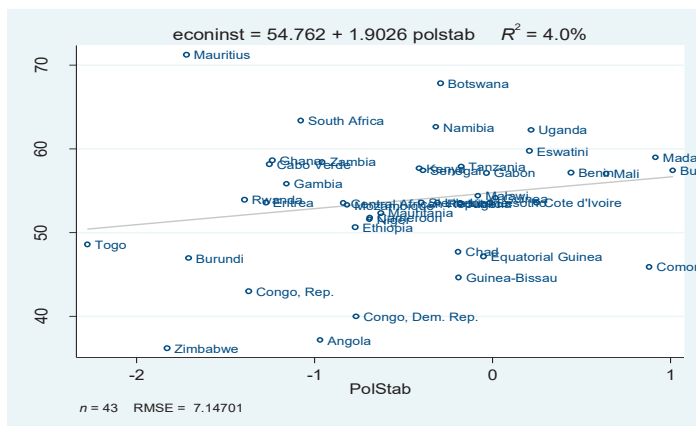


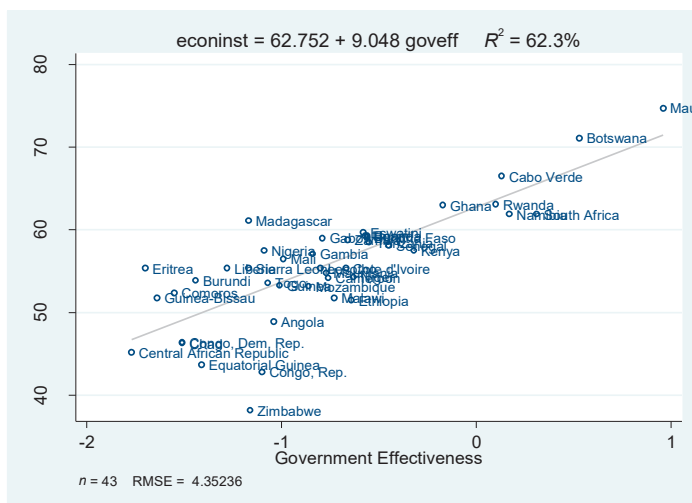
Figure 3 demonstrates the relationship between political stability and economic institutions. The relationship is weak, with just 4% coefficient of determination. This is the reason why some of the countries with stable politics such as Comoros, Burkina Faso and Benin have poor economic institutions. However, countries like Botswana and Namibia that have strong economic institutions also experience relative political stability. Some countries with poor economic institutions such as Zimbabwe, Angola, Congo, DR Congo also have relatively unstable political situations.

Figure 3: Economic Institution and Political Stability



The relationship between government effectiveness and economic institutions is very strong (62.3%) as displayed in Figure 4. Countries with more effective governments have stronger economic institutions. These countries include Mauritius, Botswana, Cabo Verde, Ghana, Rwanda, Namibia and South Africa. On the other hand, countries with less effective governments such as Zimbabwe, Congo, Equatorial Guinea, Central African Republic and DR Congo have weaker economic institutions.

Figure 4: Economic Institution and Government Effectiveness



4. Results

4.1 Report of unit root tests

The unit root test result is reported in Table 1, and it shows a combination of $I(0)$ and $I(1)$. While political stability, GDP per capita, education, natural resource rent, financial freedom, government integrity, government spending, property right and trade freedom are stationary at level, that is, integrated at $I(0)$, the rest of the variables are integrated of order one $I(1)$.

Table 1: Unit Root Test Results

Variable	Level (t-stat)	P-value	1st diff (t-stat)	P-value	Decision
Economic institution	-0.9481	0.1716	-11.2226	0.0000	$I(1)$
Political institution	-0.8118	0.2084	-12.1576	0.0000	$I(1)$
Rule of law (Ruleoflaw)	-1.1559	0.1239	-12.1427	0.0000	$I(1)$
Political stability (PolStab)	-1.8988	0.0288			$I(0)$
Government effectiveness (Goveff)	-2.8352	0.0023			$I(0)$
GDP per capita (GDPPC)	-10.6030	0.0000			$I(0)$
Trade openness (Top)	1.1695	0.8789	-12.2691	0.0000	$I(1)$
Employment (Emp)	0.7750	0.7808	-6.7747	0.0000	$I(1)$
Educational index (Educ)	1.4679	0.0000			$I(0)$
Natural resource rent (NatRes)	-2.6232	0.0044			$I(0)$
Log of land area (Lland)	1.0118	0.8442	-7.6732	0.0000	$I(1)$
Business freedom	0.3754	0.6463	-12.4807	0.0000	$I(1)$
Financial freedom	-4.4558	0.0000			$I(0)$
Government integrity	-3.3980	0.0000			$I(0)$
Government spending	-2.4383	0.0000			$I(0)$
Investment freedom	0.7321	0.7679	-10.0811	0.0000	$I(1)$
Labour freedom	-0.7070	0.2398	-10.7836	0.0000	$I(1)$
Property right	-3.4332	0.0003			$I(0)$
Tax burden	-1.3093	0.0952	-12.7653	0.0000	$I(1)$
Trade freedom	-5.3926	0.0000			$I(0)$

4.2 Regression results

The regression results are reported in Tables 2 to 6. While Table 2 presents the results of the aggregate economic institutions, each of the remaining tables presents the results of two components of economic institutions. The results of investment freedom and government integrity are reported in Table 3. Table 4 reports the results of government spending and labour freedom. Table 5 reports the results of monetary freedom and tax burden, while Table 6 reports the results of trade freedom and property rights. The coefficient of the error correction term (ECT) is negative and statistically significant in all the results, indicating the existence of a long-run relationship.

In Table 2, where the aggregate economic freedom is regressed on different measures of political institutions and other traditional variables, all political institutional variables are not statistically significant in the short run. This finding is not completely surprising, given that institutional reforms do not naturally have instantaneous impact. There is always a gestation period for the dividends of institutional reform to be visible in a society. However, in the long run, the four political institutional variables are significant with positive signs, meaning that political institutions have a significant positive long-run impact on the quality of economic institutions. Among the four political institutional variables, rule of law has the biggest effect, followed by government effectiveness, while democratic quality measured by Polity II has the least effect. A one point increase in quality of democracy, rule of law, political stability and government effectiveness would lead to improvement in quality of aggregate economic institutions by 0.21, 11.5, 0.64 and 5.03 points respectively in SSA.

Table 2: Aggregate Economic Freedom Results

Variables	(1) Polity II	(2) Rule of law	(3) Political stability	(4) Government effectiveness
Short-run				
ECT	-0.285*** (0.046)	-0.253*** (0.040)	-0.289*** (0.040)	-0.235*** (0.036)
D.GDPPC	-0.011 (0.024)	-0.035 (0.023)	-0.012 (0.024)	-0.016 (0.023)
D.Emp	0.0801 (0.322)	0.102 (0.293)	0.207 (0.267)	0.334 (0.369)
D.Educ	22.350 (18.150)	24.190 (17.610)	18.680 (16.450)	25.590 (19.880)
D.NatRes	0.026 (0.055)	-0.251 (0.212)	-0.379 (0.336)	0.462 (0.409)
D.Top	1.781 (2.481)	2.291 (2.264)	0.855 (3.034)	3.796 (2.588)
D.Lland	-261.7 (301.100)	-160.6 (214.800)	-356.7 (361.900)	-108.1 (159.000)
D.PolityII	-0.194 (0.141)			
D.Ruleoflaw		-0.884 (1.002)		
D.PolStab			-0.0963 (0.433)	
D.Goveff				0.175 (0.795)
Constant	396.300*** (64.120)	614.900*** (98.200)	-1.390*** (198.200)	1.662*** (262.200)
Long-run				
GDPPC	-0.0396 (0.060)	0.123** (0.052)	-0.024 (0.031)	-0.224*** (0.055)
Emp	-0.062 (0.080)	-0.414*** (0.067)	-0.275*** (0.0700)	0.683*** (0.115)
Educ	-32.630*** (3.749)	-30.470*** (2.964)	-23.890*** (3.617)	18.160*** (3.791)
NatRes	-0.135*** (0.018)	0.109*** (0.038)	0.084** (0.038)	-0.193*** (0.051)
Top	0.306 (0.681)	-3.825*** (1.473)	0.311 (0.953)	-1.752*** (0.296)
Lland	-104.200*** (18.480)	-183.900* (104.500)	389.900* (199.600)	-572.600 (740.300)
PolityII	0.211*** (0.0637)			
Ruleoflaw		11.500*** (0.924)		
PolStab			0.639*** (0.194)	
Goveff				5.034*** (0.881)
Hausman test	0.9970	1.0000	1.0000	1.0000
Observations	946	946	946	946

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$,

The short-run results in the component regressions (Tables 3, 4, 5 and 6) are generally similar to the findings for the aggregate regression. Specifically, Polity II and government effectiveness are statistically insignificant all through the short-run regressions. Rule of law is also not significant in the short run, except in regressions of government integrity and government spending, where the coefficients show a significant negative sign. In these two cases, the sign is not consistent with expectation. Similarly, political stability is equally insignificant in the short run except in two of the regressions. Political stability is statistically significant with a negative sign in investment freedom, and a positive coefficient under property rights regression.

In the long run, political institutions are generally significant, though with varying signs. Quality of democracy has a significant positive impact on government integrity, labour freedom, monetary freedom, and trade freedom, while it has a negative and significant impact on investment freedom, tax burden and government spending. Meanwhile, it has no significant impact on property rights. Improvement in quality of democracy by one point would bring about improvement of government integrity, labour freedom, monetary freedom, and trade freedom by 0.51, 0.08, 1.08 and 0.71, respectively.

Rule of law is statistically significant with a positive impact on all the components of economic institutions, except in monetary freedom regression where it is not significant. A one point increase in rule of law would increase investment freedom by 17.10 on the average, while government integrity, government spending, labour freedom, tax burden, trade freedom and property rights would increase by 9.99, 4.36, 4.04, 1.87, 6.97 and 16.73 points, respectively.

Political stability has a significant positive impact on investment freedom, government integrity, government spending and trade freedom, while it has a significant negative impact on property rights, monetary freedom, and tax burden. It is however not significant under labour freedom regression. A one point improvement in political stability would increase investment freedom, government integrity, government spending and trade freedom by 9.62, 2.50, 2.07 and 2.57 points, respectively.

Government effectiveness has a significant positive impact on investment freedom, government integrity, government spending, trade freedom and property rights. It has a significant negative impact on monetary freedom, while its impact on labour freedom and tax burden is

Variables	Investment freedom			Government integrity		
	(Polity II)	(Rule of law)	(Political stability)	(Govt effectiveness)	(Polity II)	(Rule of law)
	Long-run			Long-run		
GDPPC	0.207* (0.116)	-0.069 (0.199)	1.015*** (0.255)	-0.336*** (0.077)	-0.052 (0.038)	-0.057 (0.062)
Emp	-0.207 (0.209)	0.092 (0.501)	-1.314*** (0.305)	-0.420* (0.217)	-0.094 (0.173)	-0.194 (0.140)
Educ	52.930*** (9.202)	72.180*** (22.200)	-3.927 (12.480)	119.700*** (12.730)	5.532 (5.933)	11.830** (5.107)
NatRes	-0.324*** (0.079)	-0.089 (0.197)	-0.803*** (0.122)	0.505*** (0.060)	-0.190*** (0.035)	-0.031 (0.040)
Top	-33.820*** (4.198)	1.387 (6.147)	-1.828 (3.442)	-33.600*** (2.678)	-0.783 (1.094)	-1.055 (2.185)
Lland	241.449 (0.000)	872.800 (3.855)	259.220 (0.000)	41.340 (0.000)	597.200* (338.000)	392.400* (218.400)
PolityII	-0.487** (0.207)				0.508*** (0.170)	
Ruleoflaw		17.100*** (5.257)				9.986*** (1.390)
PolStab			9.622*** (1.317)			2.495*** (0.703)
Goveff				28.920*** (2.505)		
Hausman test	0.9816	0.0012	0.9996	0.9979	1.0000	1.0000
Observations	946		946	946	946	946

Note: Standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

Variables	Government spending			Labour freedom		
	(Polity II)	(Rule of law)	(Political stability)	(Govt effectiveness)	(Polity II)	(Political stability)
	Long-run			Long-run		
GDPPC	0.119** (0.059)	-0.334*** (0.093)	0.037 (0.064)	-0.451*** (0.106)	-0.120*** (0.042)	-0.036 (0.033)
Emp	-0.674*** (0.166)	0.488*** (0.147)	0.867*** (0.134)	0.484*** (0.129)	-0.350*** (0.047)	-0.321*** (0.042)
Educ	-19.060*** (4.674)	12.380*** (3.999)	6.816** (3.176)	-13.080*** (3.961)	-19.400*** (1.989)	10.050*** (2.188)
NatRes	-0.203*** (0.059)	-0.252*** (0.053)	-0.144** (0.061)	-0.056 (0.051)	-0.0328* (0.019)	-0.009 (0.016)
Top	-0.956 (2.594)	13.050*** (1.511)	8.189*** (1.545)	14.470*** (1.388)	1.602*** (0.265)	1.016*** (0.272)
Lland	2.315*** (411.800)	10.906 (0.000)	1.428*** (216.900)	-382.141 (0.000)	-1.100*** (162.700)	-7.525 (0.000)
PolityII	-0.921*** (0.100)			0.082* (0.044)		
Ruleoflaw		4.362*** (1.537)			4.036*** (0.861)	
PolStab			2.077*** (0.522)			-0.027 (0.272)
Goveff				7.919*** (1.233)		-0.049 (0.611)
Hausman test	0.9999	0.9968	0.9999	0.9453	1.0000	1.0000
Observations	946	946	946	946	946	946

Note: Standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

Variables	Government spending			Labour freedom		
	(Polity II)	(Rule of law)	(Political stability)	(Govt effectiveness)	(Polity II)	(Rule of law)
	Long-run			Long-run		
GDPPC	-0.490*** (0.086)	-0.115** (0.046)	-0.240*** (0.048)	-0.330*** (0.075)	0.359*** (0.070)	0.004 (0.037)
Emp	0.170 (0.135)	0.183 (0.147)	0.012 (0.116)	-0.006 (0.134)	0.470*** (0.107)	0.468*** (0.086)
Educ	-3.271 (6.980)	36.400*** (4.673)	-32.510*** (7.218)	-12.970* (7.438)	64.700*** (6.030)	-0.152 (2.992)
NatRes	-0.143*** (0.064)	-0.055 (0.047)	-0.061 (0.050)	-0.158** (0.065)	-0.280*** (0.044)	-0.168*** (0.037)
Top	7.506*** (1.534)	4.362*** (1.143)	14.000*** (1.455)	10.810*** (0.924)	0.232 (1.106)	3.342*** (1.074)
Lland	-3.590*** (579.500)	-2.440*** (585.700)	143.951 (0.000)	-2.220*** (663.700)	14.042 (0.000)	-3.690*** (352.900)
PolityII	1.077*** (0.150)			-0.810*** (0.125)		
Ruleoflaw		-1.297 (1.264)			1.873** (0.851)	
PolStab			-2.799*** (0.483)		-0.666* (0.372)	
Goveff				-4.52*** (1.094)		
Hausman test	1.0000	0.9999	0.9995	0.9997	1.0000	1.0000
Observations	946	946	946	946	946	946

Note: Standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

Variables	Government spending			Labour freedom		
	(Polity II)	(Rule of law)	(Political stability)	(Govt effectiveness)	(Polity II)	(Rule of law)
	Long-run			Long-run		
GDPPC	-0.190*** (0.052)	-0.073 (0.046)	-0.058 (0.038)	-0.100*** (0.035)	-0.067 (0.044)	-0.137 (0.134)
Emp	0.930*** (0.167)	0.982*** (0.207)	0.862*** (0.182)	0.114 (0.143)	-0.224* (0.134)	-0.436 (0.337)
Educ	43.540*** (7.340)	65.900*** (7.372)	48.600*** (6.622)	50.120*** (6.952)	13.770*** (4.130)	-7.357 (15.680)
NatRes	0.405*** (0.069)	0.258*** (0.0611)	0.213*** (0.051)	0.227*** (0.058)	-0.032 (0.024)	-0.007 (0.133)
Top	-0.378 (1.766)	0.939 (2.175)	0.760 (1.777)	0.615 (1.413)	-0.920 (1.160)	-5.181 (4.134)
Lland	1.680*** (316.300)	1.429*** (168.9)	698.200*** (153.700)	1.869*** (707.700)	1.695*** (575.700)	-1.464 (2.604)
PolityII	0.705*** (0.172)				0.194 (0.136)	
Ruleoflaw		6.973*** (1.619)				16.730*** (3.493)
PolStab			2.565*** (0.595)			-5.685*** (0.626)
Goveff				1.487** (0.722)		
Hausman test	0.9999	1.0000	0.9998	0.9991	0.9871	0.0000
Observations	946	946	946	946	946	946

Note: Standard errors in parentheses. *** p < 0.01, ** p < 0.05, * p < 0.10

not statistically significant. Investment freedom would increase by 28.92 points with just one point increase in government effectiveness. Similarly, government integrity, government spending, trade freedom and property rights would increase by 4.59, 7.92, 1.49 and 3.11 points respectively when government effectiveness improves by one point.

Juxtaposing the four categories of political institutions, rule of law is the most consistent, followed by government effectiveness, while political stability and quality of democracy are the least consistent. Rule of law has a significant positive effect on eight out of the nine indicators of economic institutions, while government effectiveness has six significant positive coefficients, and political stability, as well as quality of democracy, has five significant positive coefficients.

5. Conclusion and Policy Implications

This paper empirically examined the short-run and long-run impact of four different categories of political institutions on overall economic freedom and on eight different components of economic freedom. A panel data of 43 Sub-Saharan African countries over the period 1996 to 2019 was used. Non-stationary panel data techniques were used to analyse the data gathered. The unit root test results show a combination of $I(1)$ and $I(0)$ variables. Hausman specification test was used to choose among three alternative estimation methods for estimating the specified model, viz. DFE, MG and PMG.

The findings revealed that political institutions have a significant positive long-run impact on quality of economic institutions, though there is no evidence for the short-run impact. Among the four categories of political institutions considered, rule of law has the most consistent effect, followed by government effectiveness, while quality of democracy measured by Polity II has the least consistent positive effect. The findings therefore affirm the assertion that political institutions are critical in explaining the quality of economic institutions in Sub-Saharan Africa.

Conscious and decisive efforts should thus be made to ensure the existence of strong, effective and efficient political institutions in Sub-Saharan African nations. Precisely, reforms that will guarantee adherence to rule of law and enshrine effective governance, stable politics and quality democratic processes should be made. The reforms will lead to an increase in the rate at which people abide by the laws of the land and the level

of confidence people have in the law. The reforms will also improve the credibility of the police and the court system as well as the protection of property rights for majority of the people in the society. The reforms will again improve government effectiveness, which includes the quality of public services delivery, the quality of formulation and implementation of policies. Consequently, the reforms will ensure commitment and credibility of government. Policymakers should make effort to curtail politically motivated violence and all other forms of violence and crimes, including terrorism. Finally, this study recommends a reformation of the political process in a manner that strengthens the procedure of choosing executives and provides effective means of constraining the exercise of executive power.

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