

INSTITUTIONAL SYSTEMS AND QUALITY OF LIFE IN SUB-SAHARAN AFRICA

Peter Tobi Awe¹ & Abdulganiyu Idris Abdulrahman^{2*}¹PG student, Department of Economics, Faculty of Social Sciences, University of Ilorin, Ilorin, Nigeria²Department of Economics, Faculty of Social Sciences, University of Ilorin, Ilorin, Nigeria*Correspondence author's email: agrahman@unilorin.edu.ng**Abstract**

This study examined the impact of institutional systems drawn from economic and political institutions on the quality of life in Sub-Saharan Africa. A panel data of thirty-seven Sub-Saharan African countries over the period 2007 to 2021 sourced from the World Bank database and Heritage Foundation. A two-step system-Generalised Method of Movement (GMM) technique was employed to estimate the model. The Sargan test for over-identification restriction and the Arellano-Bond test for second-order serial correlation were conducted. The study reveals that there is a positive relationship between the institutional systems and the quality of life in Sub-Saharan Africa. The study concluded that, for the quality of life in Sub-Saharan Africa to improve, the government in Sub-Saharan Africa should implement laws and policies that will strengthen the existing institutions to improve the quality of life of the people.

Keywords: Political institution, Economic institution, Quality of life, Sub-Saharan Africa**JEL Classifications** I 31, I 38, E 02, O 43**Doi:** <https://dx.doi.org/10.4314/ijep.v11i1.4>**Article history**-Received: December 30, 2023, Revised: April 20, 2024, Accepted: April 29, 2024**Introduction**

Over time, there has been a mounting prominence in the literature on the vital role institutional systems play in the quality of life in Sub-Saharan Africa. The quality of a country's institution which is measured by the quality of laws endorsed good enforcement of laws and regulations, ease of doing business, protection of property rights effectiveness of parastatals, transparency, democratic practices and state protection of citizens against social and economic shocks (Ogbebor 2021). The Sub-Saharan African continent comprises 48 countries, of which 24 were characterised by low income with a Gross National Income per capita of \$1.025 and a population of 1.18 billion individuals (Hussein, 2023). The countries comprise four regions, with the North African region being the only exception. These countries are faced with poor quality of life for their citizens, owing to state failure and weak institutions (Ajayi, 2008). The current state of major African intra- and inter-regional economic communities' performances in the global economy is unsatisfactory. The level of intra-regional trade within Africa is not meeting anticipated levels due to inadequate standard of living on human development indicators. These include, but are not limited to life expectancy, educational attainment, and satisfactory standard of living conditions.

Sub-Saharan Africa (SSA) presently emerged as one of the most underprivileged and underdeveloped regions globally, hence attracting significant attention from international aid organisations. Available data on macro trends in 2022 shows the SSA region exhibited a poverty rate of 86.50 per cent in 2019, which forms a 0.3 per cent decline from 2018. The Sub-Sahara African poverty rate in 2018 was 86.80 per cent, which represents a 0.3 per cent decline from 2017 (Macrotrends, 2023). The figures represent the highest poverty rate observed globally. This particular region is home to approximately 60 per cent of the global poor, who live on a daily income of less than \$1. East Asia and the Pacific account for 3 per cent of the

people living on less than \$2.15 per day. This confirms incredible progress in poverty reduction in the region compared to Sub-Saharan Africa.

The Human Development Report of the World Bank (2021) indicates that 1.2 billion individuals residing in 111 developing nations are currently experiencing multidimensional poverty. This value constitutes 19 per cent of the global population. Quite a significant number of individuals residing in these areas have been identified as contributing to these discrepancies. The primary cause of these irregularities has been attributed to poor institutional quality within the area and insufficient law and order enforcement. Institutional weakness has been widely documented as a significant problem in Sub-Saharan Africa by various scholars and researchers. This is primarily due to the difficulty in realising the benefits of development programmes and projects, particularly those funded by bilateral and multilateral donors that have been blamed on underdeveloped and inefficient institutions in most African countries.

Given the ineffectiveness of formally established structures in Africa that were passed from the colonial era, Africa must develop institutions that are capable of effectively maintaining democratic rule. Therefore, this paper examines the impact of political and economic institutions on the quality of life in Sub-Saharan Africa.

Literature Review

The link between institutions and human development has been fairly explored in the literature, but the debate is still ongoing on the differences in measurements, methodologies and choice of regressions. The study by Ejubekpokpo (2016) examined the impact of institutional quality on human development in Sub-Saharan Africa using the traditional panel data model (FE) and the Generalised Method of Moment (GMM). The results revealed that institutional quality promotes human development in sub-Saharan African countries. The work of Bhanumurthy et al. (2016) explored the relationship between public expenditure, governance and human development in Madhya Pradesh district, India. The study established that government spending is not sufficient to foster human development without quality institutions in place. The results revealed further that, all five governance indicators exerted a significant effect on human development outcomes in the district. Additionally, Andrés et al. (2017) explored the connection between Information and Communication Technologies (ICTs) adoption and inclusive human development in Sub-Saharan Africa. The results showed that institutional quality promotes ICT development in the region with a positive impact on inclusive human development. Furthermore, Dhaoui (2022) analysed the electronic government for sustainable development in the Middle East and North Africa (MENA) countries. The result revealed that the implementation of e-governance services has a strong positive effect on human development in MENA countries. The results also showed that e-government development performs creditably well in managing corruption and government effectiveness in developing countries, thereby leading to better regulatory quality control. It is, however, observed that the human capital index does not have a predictable impact. Hence, the MENA countries require more developed skills to benefit from the ICT devices. However, a good number of indicators of good governance showed a positive contribution to sustainable development.

In another study, Balcerzak (2017) explored the relationship between human capital development and the quality of institutions using GMM estimator, with data from 2004 to 2010. The findings revealed that the quality of institutions positively promotes human development in highly developed countries. Moreover, the work of Muhanji et al. (2018) evaluated the effect of natural resources endowment and institutional quality on human welfare and debt in Africa. The results showed that human development is enhanced by the existence of quality institutions in Africa. Aloui (2019) also observed institutional quality as a proxy for the rule of law to have a positive and statistically significant impact on human welfare in Sub-Saharan Africa and South American countries. Even though, this impact is higher in the latter than in the former. In

addition, Hashem (2019) found good governance has a positive effect on human development in 20 MENA countries.

Similarly, Kamalu and Ibrahim (2021) reported the same effect in Sub-Saharan Africa. Mardanov (2020) investigated the impact of political and economic institutions on human development in 22 transitional economies using a two-stage OLS method of analysis. The results revealed that freedom from corruption and economic freedom have positive and statistically significant effects on human development. Similarly, Ali et al. (2020) examined the moderating role of institutional quality in the relationship between Foreign Direct Investment (FDI) and human development in 65 developing countries, using the two-step GMM technique of analysis. The results revealed that institutional quality enhances the positive effect of FDI on human development in developing countries.

De Luca, et al. (2021) found institutional quality to be positively associated with life expectancy in a cross-country analysis. In a more focused study on Asian countries, Uddin et al. (2021) also found institutional quality contributes to longer life expectancy. Specifically, their long-run estimates suggest a unit increase in the institutional quality index as life expectancy increases by 0.04486 per cent. This finding is consistent with Sharma et al. (2022) who also found institutional quality as positively associated with life expectancy in a study of Latin American countries. These studies collectively highlight the importance of institutional quality as a determinant of health outcomes and suggest policies aimed at improving institutional quality that could have positive significant impacts on population health. Uddin, et al. (2023) examined the factors affecting life expectancy in six Asian countries from 2002 to 2020. The study found that institutional quality, financial development, and healthcare expenditure had positive impacts on life expectancy, while carbon emissions, ecological footprint, birth rate, mortality rate, and population growth had negative effects.

Data and Methodology

Model specification

The theoretical framework that forms the foundation for this study is based on human capital development theory. This study adopts and modifies the empirical model of Tang and Lean (2009), Pirae and Barzegar (2011), and Saboor, *et al.* (2016) by replacing the dependent variable with quality of life which is measured with standard of living, educational attainment and life expectancy to achieve the study objectives. The empirical model as stated below:

$$QOL = f(INS, TO, INF, EMPT) \quad (1)$$

The structural form of the model for the study is as in Equation 1.

$$QOL_{it} = \alpha_0 + \alpha_1 ECO_{it} + \alpha_2 POL_{it} + \alpha_3 TO_{it} + \alpha_4 INF_{it} + \alpha_5 EMPT_{it} + \varepsilon_{it} \quad (2)$$

QOL is the quality of life which is measured with real GDP per capita, life expectancy and educational attainment. The institution (*INS*) is divided into economic and political institutions and five different indicators of economic freedom are considered to measure economic institution ECO_{it} is a vector of economic institution that consists of government integrity (GINT), business freedom (BF), investment freedom (IF), financial freedom (FF) and property right (PR). POL_{it} is a vector of political factors comprising the world governance indicators that include voice and accountability, political stability, regulatory control, and rule of law. The subscripts ‘*i*’ and ‘*t*’ stands for individual country, and time respectively.

The vector of control variables includes trade openness (TO), employment (EMPYT) and inflation (INF). Trade openness is the additive of exports and imports divided by the GDP. Inflation is measured by the consumer price index (CPI), while employment is measured by the employment rate. Basically, including

these control variables is to correctly estimate the effect of the variable of interest on the dependent variable. This study treats the lagged value of the dependent variable as an instrument (Blundell and Bond 1998). When introducing a lag to the dependent variable as an exogenous variable in Equation 2, this forms a dynamic model obtained in Equation 3. ε_{it} is the error component which consists of unobservable individual specific effect (μ_i) and the usual Gauss Markov disturbance (V_{it}). Equation 3 is given as:

$$QOL_{it} = \alpha_0 + \alpha_1 ECO_{it} + \alpha_2 POL_{it} + \alpha_3 TO_{it} + \alpha_4 INF_{it} + \alpha_5 EMPT_{it} + \alpha_6 QOL_{it-1} + \varepsilon_{it} \quad (3)$$

Where: $EF_{it} = \sum_{i=1}^5 ECO$, $PI_{it} = \sum_{i=1}^5 POL$, $\varepsilon_t = \lambda_t + \psi_i + v_{it}$, λ_t = time effect: a policy that changes over time but affects all countries the same way, ψ_i = country fixed effect: it is time-invariant but its effect varies from one country to another and v_{it} = gauss markov error term

Nature and sources of data

A panel data of thirty-seven Sub-Saharan African countries from 2007 to 2021 is gathered for the analysis. The countries covered include Angola, Burundi, Benin, Botswana, Cameroon, Ethiopia, Ghana, Kenya, Lesotho, Libya, Namibia, Nigeria, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Sierra Leone, Sudan, South Africa, Tanzania, Tunisia, Uganda, Zambia, etc. Some of the countries in the continent such as Somalia, Sao Tome and Principe, Comoros, Sudan and South Sudan were omitted due to difficulties in assessing necessary information for the analysis. The data on economic institutions was obtained from the Heritage Foundation (freedom score), while data on the control variables such as employment, GDP per capita expenditure and inflation were obtained from the World Development Indicators (WDI) as published by the World Bank (2021). The data on governance measures the political institution obtainable from the World Governance Indicators (WGI). Three different indicators were used as a measure of quality of life, which include standard of living, life expectancy and educational attainment.

Technique for analysis

This study employed the dynamic panel technique to estimate the specified model. Considering the issue of endogeneity bias, this study applies the most popular technique of the system Generalised Method of Moments (GMM). To test the consistency of the system GMM estimator two specification tests were conducted (the Sargan test for over-identifying restrictions and the Arellano-Bond test) for the absence of second-order serial correlation.

Presentation and Discussion of Results

A discussion on the estimated models reveals that the findings of the study are in line with the research problems, objectives and methodology using descriptive statistics, correlation results, Sargan test and test for second serial correlation.

Descriptive statistics

A preliminary step to the analysis is the descriptive analysis presented in Table 1 below for all the variables used in the model.

Table 1: Summary Statistics

| Variables | Mean | Standard deviation | Minimum | Maximum |
|-----------|----------|--------------------|----------|----------|
| PPR | 35.3153 | 14.3812 | 10 | 78.4 |
| GINT | 30.7232 | 10.6016 | 10 | 67. |
| GS | 75.1138 | 17.1881 | 0 | 97.1773 |
| BF | 52.4300 | 11.7879 | 23.3 | 83.7 |
| IF | 49.8018 | 14.7652 | 15 | 90 |
| VOICE | -0.4778 | 0.6620 | -1.7246 | 0.9742 |
| POLSTB | -0.5215 | 0.8679 | -2.6992 | 1.2010 |
| PTY2 | 3.1977 | 4.5736 | -5 | 10 |
| REGCON | -0.5889 | 0.5167 | -1.5848 | 1.1969 |
| RLAW | -0.6194 | 0.6076 | -1.8415 | 1.0239 |
| EMPTY | 61.2675 | 12.4365 | 35.979 | 85.866 |
| INFL | 6.2504 | 6.3824 | -16.8597 | 44.3567 |
| TO | 72.6067 | 35.8555 | 16.3522 | 235.8202 |
| EDUC | 47.7422 | 26.1329 | 10.2827 | 115 |
| GDPPC | 2208.786 | 201.548 | 170.7069 | 16851.12 |
| LEXP | 2208.786 | 2901.548 | 170.7069 | 16851.12 |

The average mean of the GDP per capita from 2007-2021 across the 37 Sub-Sahara African countries is 2208.786 with a standard deviation of 201.548. a minimum of 170.706 and a maximum of 16851. The highest GDP per capita rate was found in the Democratic Republic of Congo. Political institution variables which are voice, political stability, regulatory control, polity2 and rule of law have an average rate of -0.5 per cent, -0.5 per cent, -0.6 per cent, 3.2 per cent and -0.6 per cent respectively with the minimum and maximum rates of -1.7 per cent, -2.7 per cent, -2.1 per cent, 0.9 per cent, 1.2 per cent and 1.2 per cent respectively recorded in the Democratic Republic of Congo and Botswana. The inflation rate measured with the consumer price index (CPI) has an average rate of 6.3 per cent across the 37 Sub-Sahara African countries with minimum and maximum rates of 16 per cent and 44 per cent recorded in Lesotho (2009) and the Democratic Republic of Congo. Educational attainment has an average rate of 47 per cent with the minimum and maximum rates of 10 per cent and 115 per cent being recorded in Niger and Gambia in 2021. Trade openness has an average rate of 73 per cent with the minimum and maximum rates of 16 per cent and 236 per cent recorded in Burundi and Seychelles respectively. The employment rate has an average of 61 per cent with a minimum of 36 per cent and a maximum of 86 per cent employment rate experienced in Mauritania and Madagascar respectively.

Correlation analysis

The correlation measures the degree of relationship between two variables. The correlation results in Table 2 show that some variables are correlated but these variables will be estimated separately or individually.

Table 2: Correlation test results

| | PPR | GINT | GS | BF | IF | VOICE | POLSTB |
|--------|---------|---------|---------|---------|---------|---------|---------|
| PPR | 1.0000 | | | | | | |
| GINT | 0.7752 | 1.0000 | | | | | |
| GS | -0.1821 | -0.2189 | 1.0000 | | | | |
| BF | 0.6065 | 0.6390 | -0.1882 | 1.0000 | | | |
| IF | 0.5885 | 0.6188 | -0.0170 | 0.4465 | 1.0000 | | |
| VOICE | 0.6716 | 0.6752 | -0.2297 | 0.5291 | 0.5911 | 1.0000 | |
| POLSTB | 0.5788 | 0.6624 | -0.2633 | 0.5281 | 0.4479 | 0.6761 | 1.0000 |
| PTY2 | 0.4596 | 0.4175 | -0.2659 | 0.3423 | 0.4220 | 0.7986 | 0.4095 |
| REGCON | 0.7709 | 0.8092 | -0.1507 | 0.7522 | 0.6952 | 0.7645 | 0.7080 |
| RLAW | 0.8047 | 0.8571 | -0.2345 | 0.7170 | 0.6214 | 0.8106 | 0.7780 |
| EMPYT | -0.1895 | -0.3241 | 0.1844 | -0.2074 | -0.6854 | -0.1360 | -0.3488 |
| INFL | -0.0576 | -0.1622 | -0.0451 | 0.0728 | -0.1550 | -0.1044 | -0.1555 |
| TO | 0.2396 | 0.3439 | -0.4835 | 0.2531 | 0.0359 | 0.3095 | 0.4558 |

| | POLSTB | REGCON | SOG | EMPLT |
|--------|---------|---------|---------|---------|
| PTY2 | 1.0000 | | | |
| REGCON | 0.4873 | 1.0000 | | |
| RLAW | 0.5105 | 0.9081 | 1.0000 | |
| EMPYT | -0.1173 | -0.2242 | -0.2584 | 1.0000 |
| INFL | -0.0685 | -0.0826 | -0.0908 | 0.2512 |
| TO | 0.2904 | 0.2366 | 0.2944 | -0.4117 |

Regression results: Dynamic Panel system GMM estimation

The regression results are presented in Table 3 through Table 8. Table 3 shows the relationship between GDP per capita and the five indicators of economic institution which are property rights (PR), government integrity (GINT), government spending, business freedom (BF) and investment freedom (IF).

Table 3: GDP per capita and economic institution

| VARIABLES | (1) Model1 | (2) Model2 | (3) Model3 | (4) Model4 | (5) Model5 | (6) Model6 |
|-----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| L.GDPPC | 0.736*** (0.00507) | 0.749*** (0.00378) | 0.758*** (0.00331) | 0.729*** (0.00678) | 0.744*** (0.00901) | 0.696*** (0.00635) |
| EMPYT | -47.14*** (2.902) | -47.56*** (3.542) | -52.55*** (3.778) | -49.89*** (3.222) | -48.15*** (3.195) | -51.51*** (3.658) |
| INFL | 5.701*** (0.782) | 5.407*** (1.094) | 5.333*** (0.931) | 5.896*** (1.158) | 5.091*** (1.275) | 6.301*** (1.159) |
| TO | 14.73*** (0.623) | 13.81*** (0.643) | 13.83*** (0.682) | 12.77*** (0.561) | 14.08*** (0.653) | 14.66*** (0.426) |
| PPR | 9.448*** (0.466) | | | | | |
| GINT | | 3.158*** (1.082) | | | | |
| GS | | | 4.778*** (0.834) | | | |
| BF | | | | 17.89*** (1.259) | | |
| IF | | | | | 7.773*** (1.547) | |
| ECOINST | | | | | | 47.58*** (1.832) |

| | | | | | | |
|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|
| Constant | 2,078*** (177.5) | 2,433*** (188.3) | 2,412*** (245.5) | 1,763*** (154.1) | 2,123*** (160.7) | 118.7 (216.4) |
| Sargan | 0.4402 | 0.3372 | 0.3416 | 0.3229 | 0.4321 | 0.5281 |
| AR2 | 0.149 | 0.1488 | 0.1123 | 0.1383 | 0.1434 | 0.1311 |
| Observations | 476 | 476 | 476 | 476 | 476 | 476 |
| Number of SSAID | 34 | 34 | 34 | 34 | 34 | 34 |

Standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

Property rights, business freedom, investment freedom and financial freedom have a significant and positive impact on the standard of living which indicates that the standard of living will improve as property rights, business freedom, investment freedom and government spending increase. The result also shows that economic institution is positively significant on GDP per capita indicating that, a strong economic institution will help to improve the standard of living in Sub-Saharan Africa.

Table 4: GDP per capita and political institution

| VARIABLES | (1) Model7 | (2) Model8 | (3) Model9 | (4) Model10 | (5) Model11 |
|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| L.GDPPC | 0.676*** (0.00625) | 0.711*** (0.00544) | 0.740*** (0.00664) | 0.623*** (0.00407) | 0.653*** (0.00813) |
| EMPYT | -64.28*** (3.181) | -50.03*** (2.539) | -66.99*** (5.356) | -64.50*** (2.520) | -53.88*** (3.281) |
| INFL | 6.420*** (1.083) | 6.126*** (0.603) | 3.391*** (1.083) | 10.06*** (1.316) | 6.911*** (1.057) |
| TO | 13.29*** (0.767) | 11.21*** (0.673) | 8.172*** (1.214) | 11.59*** (0.482) | 13.08*** (0.639) |
| VOICE | 563.8*** (52.13) | | | | |
| POLSTB | | 351.5*** (25.54) | | | |
| PTY2 | | | 25.82*** (3.066) | | |
| REGCON | | | | 1,094*** (34.43) | |
| RLAW | | | | | 847.2*** (56.04) |
| Constant | 3,986*** (163.4) | 3,062*** (181.0) | 4,086*** (306.1) | 4,509*** (118.4) | 3,637*** (194.9) |
| Sargan | 0.2321 | 0.3327 | 0.2322 | 0.3216 | 0.4410 |
| AR2 | 0.1177 | 0.1866 | 0.1262 | 0.1121 | 0.1406 |
| Observations | 476 | 476 | 363 | 476 | 476 |
| Number of SSAID | 34 | 34 | 33 | 34 | 34 |

Standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

As regards the political institution and the GDP per capita as demonstrated in Table 4, voice and accountability, political stability, regulatory control, polity2 and rule of law all have a significant and positive impact on the standard of living. This shows that the standard of living will improve as voice and accountability, political stability, regulatory control, polity2 and rule of law improve.

Table 5: Life expectancy and economic institution

| VARIABLES | (1) Model12 | (2) Model13 | (3) Model14 | (4) Model15 | (5) Model16 | (6) Model17 |
|-----------------|-------------------------|-------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| L.LEXPECT | 0.932*** (0.00571) | 0.891*** (0.00518) | 0.933*** (0.00952) | 0.905*** (0.00808) | 0.888*** (0.00802) | 0.908*** (0.00761) |
| EMPYT | 0.0311*** (0.00414) | 0.0808*** (0.00637) | 0.0751*** (0.0114) | 0.0426*** (0.0110) | 0.0555*** (0.00994) | 0.0443*** (0.0115) |
| INFL | -0.0153*** (0.00267) | -0.0128*** (0.00218) | -0.0125*** (0.00261) | -0.0168*** (0.00442) | -0.0159*** (0.00419) | -0.0159*** (0.00398) |
| TO | 0.0176*** (0.00109) | 0.0175*** (0.00206) | 0.0122*** (0.00173) | 0.0204*** (0.00232) | 0.0192*** (0.00215) | 0.0201*** (0.00227) |
| PPR | -0.0235*** (0.00229) | | | | | |
| GINT | | 0.0454*** (0.00237) | | | | |
| GS | | | -0.0225*** (0.00287) | | | |
| BF | | | | -0.00809*** (0.00106) | | |
| IF | | | | | 0.0113*** (0.000801) | |
| ECOINST | | | | | | -0.00877*** (0.00297) |
| Constant | 2.282*** (0.546) | -0.430 (0.527) | 0.876 (1.394) | 2.591** (1.128) | 1.915* (1.006) | 2.369** (1.128) |
| Sargan | 0.6100 | 0.5406 | 0.4756 | 0.4867 | 0.4823 | 0.4712 |
| AR2 | 0.1036 | 0.1526 | 0.1637 | 0.136 | 0.1428 | 0.1379 |
| Observations | 476 | 476 | 476 | 476 | 476 | 476 |
| Number of SSAID | 34 | 34 | 34 | 34 | 34 | 34 |

Standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

The result in Table 5 shows the impact of economic institutions on life expectancy. Property rights, business freedom and government spending have a significant but negative impact on life expectancy while government integrity and investment freedom are shown to have a positive impact on life expectancy which indicates that life expectancy will improve as government integrity and investment freedom improve. The result indicates that the economic institution has a positive significant on life expectancy which shows that, a strong economic institution will improve life expectancy in Sub-Sahara Africa.

Table 6: Life expectancy and political institution

| VARIABLES | (1) Model18 | (2) Model119 | (3) Model20 | (4) Model21 | (5) Model22 |
|-----------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|
| L.LEXPECT | 0.904*** (0.00808) | 0.919*** (0.00777) | 0.952*** (0.00738) | 0.905*** (0.00349) | 0.904*** (0.00642) |
| EMPYT | 0.0464*** (0.00984) | 0.0555*** (0.00641) | 0.0300*** (0.00692) | 0.0513*** (0.00706) | 0.0554*** (0.00815) |
| INFL | -0.0176*** (0.00401) | -0.0159*** (0.00372) | -0.00183 (0.00181) | -0.0165*** (0.00334) | -0.0164*** (0.00352) |
| TO | 0.0200*** (0.00214) | 0.0182*** (0.00157) | -0.000432 (0.00116) | 0.0185*** (0.00143) | 0.0183*** (0.00160) |
| VOICE | 0.113* (0.0660) | | | | |
| POLSTB | | 0.259*** (0.0346) | | | |

| | | | | | |
|-----------------|--------------------|------------------|-------------------------|----------------------|----------------------|
| PTY2 | | | -0.00711** (0.00325) | | |
| REGCON | | | | 0.370*** (0.0643) | |
| RLAW | | | | | 0.436*** (0.0538) |
| Constant | 2.103** (1.051) | 0.872 (0.739) | 1.572* (0.870) | 2.039*** (0.562) | 1.886** (0.754) |
| Sargan | 0.5650 | 0.4448 | 0.4850 | 0.4689 | 0.4547 |
| AR2 | 0.1492 | 0.1481 | 0.1358 | 0.1375 | 0.1326 |
| Observations | 476 | 476 | 363 | 476 | 476 |
| Number of SSAID | 34 | 34 | 33 | 34 | 34 |

Standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

The results in Table 6 show the impact of political institutions on life expectancy. Voice and accountability, political stability, regulatory control and rule of law indicated a significant and positive impact on life expectancy, whereas polity2 indicates a negative impact on life expectancy. This shows that life expectancy will improve as voice and accountability, political stability, regulatory control and rule of law improve. This result also shows that political institution has a positive and significant impact on life expectancy in Sub-Saharan Africa.

Table 7: Education Attainment and Economic Institution

| VARIABLES | (1) Model23 | (2) Model24 | (3) Model25 | (4) Model26 | (5) Model27 | (6) Model28 |
|-----------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| L.EDUC | 0.884*** (0.0145) | 0.873*** (0.0153) | 0.863*** (0.0176) | 0.899*** (0.0183) | 0.846*** (0.0199) | 0.845*** (0.0175) |
| INFL | 0.0376*** (0.00869) | 0.0357** (0.0149) | 0.0473*** (0.0144) | 0.0357*** (0.00724) | 0.0402** (0.0198) | 0.0328* (0.0177) |
| TO | -0.0268*** (0.00370) | -0.0210*** (0.00307) | -0.0322*** (0.00596) | -0.0246*** (0.00373) | -0.0215*** (0.00406) | -0.0186*** (0.00481) |
| EMPYT | -0.114*** (0.0237) | -0.0868*** (0.0259) | -0.114*** (0.0127) | -0.0824*** (0.0202) | -0.0998*** (0.0269) | -0.102*** (0.0263) |
| PPR | -0.0313*** (0.00924) | | | | | |
| GINT | | -0.000152 (0.0110) | | | | |
| GS | | | -0.0590*** (0.00741) | | | |
| BF | | | | 0.0745*** (0.0129) | | |
| IF | | | | | 0.0241** (0.0110) | |
| ECOINST | | | | | | 0.171*** (0.0401) |
| Constant | 15.81*** (2.210) | 13.25*** (1.932) | 20.55*** (1.111) | 7.931*** (2.294) | 14.08*** (1.945) | 5.495 (3.493) |
| Sargan | 0.4983 | 0.2321 | 0.2323 | 0.4939 | 0.4112 | 0.3441 |
| AR2 | 0.1467 | 0.2111 | 0.112 | 0.1389 | 0.1188 | 0.1176 |
| Observations | 476 | 476 | 476 | 476 | 476 | 476 |
| Number of SSAID | 34 | 34 | 34 | 34 | 34 | 34 |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 7 shows the impact of economic institutions on education attainment. Property rights, business freedom, government spending and investment freedom all have a significant and positive impact on education attainment while government spending shows a negative impact on life expectancy. This also indicates that educational attainment will improve as property rights, business freedom; government spending and investment freedom will improve the lives of people in Sub-Saharan Africa.

Table 8: Education Attainment and Political Institution

| VARIABLES | (1) Model29 | (2) Model30 | (3) Model31 | (4) Model32 | (5) Model33 |
|-----------------|-------------------------|-------------------------|----------------------|-------------------------|-------------------------|
| L.EDUC | 0.859*** (0.0145) | 0.872*** (0.0157) | 0.863*** (0.0221) | 0.863*** (0.0158) | 0.862*** (0.0183) |
| INFL | 0.0481*** (0.0159) | 0.0403*** (0.0114) | 0.0325** (0.0143) | 0.0370*** (0.0122) | 0.0285** (0.0125) |
| TO | -0.0230*** (0.00357) | -0.0228*** (0.00381) | -0.0142 (0.0113) | -0.0186*** (0.00382) | -0.0217*** (0.00496) |
| EMPYT | -0.111*** (0.0239) | -0.0916*** (0.0270) | -0.0620* (0.0325) | -0.0940*** (0.0243) | -0.0839*** (0.0279) |
| VOICE | 0.859*** (0.331) | | | | |
| POLSTB | | 0.576*** (0.186) | | | |
| PTY2 | | | 0.0804** (0.0396) | | |
| REGCON | | | | -0.699 (0.588) | |
| RLAW | | | | | 1.051** (0.522) |
| Constant | 15.80*** (1.659) | 13.93*** (2.049) | 11.32*** (3.160) | 13.53*** (1.889) | 14.27*** (2.011) |
| Sargan | 0.2287 | 0.2344 | 0.3341 | 0.3256 | 0.5422 |
| AR2 | 0.1131 | 0.1277 | 0.1102 | 0.1222 | 0.1547 |
| Observations | 476 | 476 | 363 | 476 | 476 |
| Number of SSAID | 34 | 34 | 33 | 34 | 34 |

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 8 highlights the impact of political institutions on education attainment. It is observed that voice and accountability, political stability, polity2 and rule of law are all positive and significant on educational attainment. This indicates that education attainment will improve as voice and accountability, political stability, polity2 and rule of law improve. The result of the study also reveals that political institutions have a positive significance on educational attainment, which is an indication of strong political institutions that will help to improve education in Sub-Saharan Africa. Reforms and proper implementation of the various components of political institutions would make the institutions generally inclusive. This will create enabling political ground for citizens to hold politicians accountable, and ensure they do not use their political power to promote narrow interests.

Specification, diagnostic and fitness of result test

Sargan test of over-identifying restriction and Arelleno-Bond test for zero autocorrelation in the First Differenced error. The null hypothesis indicates that the instruments are valid and uncorrelated from the error term, and the excluded instruments are correctly excluded from the estimated equation. Therefore, from the result, we can see the probability values greater than 10 per cent significant level for all the

estimates, and hence, the null hypothesis cannot be rejected which implies that the models are well specified.

The probability value of the Autocorrelation (R2), is a test for autocorrelation. The null hypothesis is that no second-order autocorrelation and from the results above, we cannot reject the null hypothesis as shown by the estimate AR2, since the probability values are all greater than 0.05, our study concluded that there is no second-order autocorrelation.

Conclusion

This study investigates the impact of economic and political institutions on quality of life using a sample of thirty-seven Sub-Saharan African countries. Five economic institution variables and four governance indicators were considered in the analysis. The result of the study shows the important role that institutions play in shaping the quality of life in Sub-Sahara Africa. All the economic institution variables show a significant influence on quality of life in Sub-Saharan Africa. Similarly, four of the political institution variables have a significant impact on the quality of life in Sub-Sahara Africa. The key conclusion from the empirical analysis shows that proper and inclusive political and economic institutional reforms are relevant in achieving a better quality of life in Sub-Saharan African countries. Quality institutions will create a conducive environment for economic activities to thrive, minimise transaction and information costs, and protect property rights and equitable application of the rule of law, which directly or indirectly create conditions that promote human development.

In addition, they should provide a sound regulatory framework that will deliver an enabling environment for businesses and investments to thrive, thereby generating consequently higher human development. Since people live and function in a ‘world of institutions’ that sharpens their opportunities, prospects and freedom, therefore, the existence of quality institutions that would curtail the mismanagement of resources, control corruption and promote efficient allocation of resources for essential projects should be paramount.

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