Institutions governance is critical to economic success: Evidence from Tanzania’s economic growth

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**ABSTRACT**
Economic performance is considered the fundamental cause of economic growth. Economic performance affects economic growth through the allocation of resources like physical and human capital. Unfortunately, there are few empirical studies showing institutions’ impact on Economic growth in Tanzania. This study aimed to examine the causal relationship between institutions and economic growth by focusing on the evidence from Tanzania Economic growth. More specifically, the study established the state or characteristics of key components of governance in economic production function of Tanzania. This is a time series study using econometric estimation to give empirical contents of the relationship between governance institutions and economic growth. Estimation techniques deployed to analyze the data were Regression approach within Ordinary Least Square (OLS), generalized Auto Regressive Distributed Lag (ARDL) and Error Correction Model (ECM) process. The results revealed that a causal relationship of institutions has a positive and significant impact on economic growth in Tanzania. The study recommends that components of governance since are critical to economic growth should be emphasized to the public institutions for raising better performance in the country. Therefore, the study concludes that institutional quality may lead to a sustainable increase in country’s income in the long run, and at the same time, success of any policy could be influenced by the soundness of institutions.

**KEYWORDS**
Economic growth; government effectiveness; Voice and Accountability; Governance; Quality of Governance

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**Introduction**
Exploring the relationship between economic performance and the quality of domestic institutions has been a major area of interest for researchers (Siddiqui & Ahmed, 2009). These scholars (Acemoglu et al., 2005; Hossein et al., 2007; Méné & Weill, 2006) indicate that better institutions lead to a higher income or higher rates of investment through improving the climate for capital creation. In essence, the contribution of economic institutions to economic growth far outweighs the availability of natural resources, the supply of factors of production and technological progress (Wanjau & Le Roux, 2017). Comparatively, the economic growth rate is much lower in sub-Saharan African (SSA) countries, and in other countries like SSA countries, than the North American countries and the European Union countries (Samarasinghe, 2018). This is because SSA countries have often been faced with political instability, a lack of rule of law, government ineffectiveness and serious difficult cases of corruption; all these are signs of poor governance, and they slow down economic progress of the countries (Fayissa & Nsiah, 2013). Therefore, in the light of the presence of these problems exploring the causality nature of the relationship between institutions and economic performance is very important.

In the past few years, from another viewpoint, however, a number of SSA countries, Tanzania being among, have made significant progress in terms of building governance institutions for economic management (Fayissa & Nsiah, 2013). This endeavor has resulted to great improvement to economic growth. For example, Tanzania sustained a relatively high economic advancement averaging 6-7% a year (World Bank, 2019) over the last decade. However, despite many development efforts pursued by the country, Tanzania is still facing countless challenges. In fact, poverty and unemployment still pose an overwhelming challenge especially among the young population (World Bank 2019). Other challenges are human resource development gaps, limited economic opportunities for businesses, restrictive and discriminatory economic policies, and a lack of meaningful participation of the youth in both political and governance processes. However, there is a little hope of these challenges being reduced because the Third and the Last Five-Year National Development (FYND) Plan 2021/22 – 2025/26 have a theme of realizing industrialization and competitiveness for human growth that purposes to increase productivity and efficiency in manufacturing with the resources accessible in profusion within the country.

Regarding relational aspects of governance institutional quality and economic growth, there is consensus that a relationship between governance institutions and economic growth exists (De Vaal & Ebben, 2011). According to the...
New Institutional Economics (NIC), country’s economic development hinges on the quality of institutions (Benali, 2016; Ferrini, 2012). This is to say, economies that have very similar natural conditions and labour force have presented differences in economic performance due to differences in efficiency and effectiveness of institutions (Assane & Grammy, 2003; Adenuga, & Evbuomwan 2013). As such therefore, any policymaking process or national development agenda has to consider and examine the characteristics of the institutions when discussing and debating about development.

Furthermore, one of the sought characteristics in economic performance of a country is governance, and this has been the focus of this study. In particular the study established the state or characteristics (efficiency and effectiveness) of key components of governance (such as rule of law, voice and accountability, corruption control, bureaucratic quality or political stability, government effectiveness) in economic production function of Tanzania. Tanzania is a lower-middle income economy that is dependent on agriculture. This economy has been changing from a command economy to a market economy since 1985. As such, a total Gross Domestic Product (GDP) has increased since the beginning of these transformations. In essence, the GDP per capita fell sharply at first, and only surpassed the pre-transition figure in around 2007. So far, there is no any comprehensive study existing in Tanzania case, that has established the contribution of governance institutions to economic growth, even when attempts have been made to analyze Tanzania’s evolving economic growth. Therefore, this study bridges that gap.

Literature review
In this part, various empirical studies related to governance institutions and economic growth, were critically reviewed.

Governance
Governance refers to the formal and informal arrangements that determine how public decisions are made and how public actions are carried out from the perspective of maintaining a country’s constitutional values (United Nations, 2007). Also, Governance has been defined as a network of private non-governmental bodies that have a role to play in the formulation and implementation of public policy and the delivery of public services. Similarly, Chotary and Stoker (2009) emphasize that governance is about the rules of collective decision making in settings with a plurality of actors or organizations and where no formal control system can dictate the terms of the relationship between these actors and organizations. According to Smith (2007) Governance means a network of government plus the private and third (not for profit) sectors, which is involved in the formulation and implementation of policies and the delivery of services. On the contrary, Fukuyama (2013) defines governance as a style that promotes the creation of strong, open, equal and free economic and political institutions. Therefore, from all these definitions of governance, it is understood that different scholars define the term Governance differently. However, in this study the definition of Fukuyama (2013) was used because according to the researchers, the scholar seems to have defined the term Governance comprehensively.

Economic Growth
Economic growth can be defined as a long-run process that occurs as an economy’s potential output increases (Rittenberg & Tregarthen, 2011). Furthermore, economic growth occurs when aggregate output is rising and job opportunities are created and expanded to permit a rise in income and mobility (Li, 2017). According to Rittenberg and Tregarthen (2011) when discussing economic growth, there are three key points to note: first, economic growth is a process, hence it is not a single event; rather, it is an unfolding series of events. Second, economic growth is defined in terms of the economy’s ability to produce goods and services, as indicated by its level of potential output. Third, economic growth suggests that the economy’s ability to produce goods and services is rising. Therefore, a discussion of economic growth is a discussion of the series of events that increase the economy’s ability to produce goods and services.

Furthermore, an increase in economic growth as a result of the high quality of institutions can be directly and indirectly explained by using the Solow model, new growth theory and social infrastructure view. In essence, better-quality institutions can contribute to the Solow model by increasing the availability of technology. It is clear that any form of bad governance, such as high political violence, terrorism and widespread corruption hurts citizens mentally and physically by decreasing their productivity. Then, it is reasonable to assume that better governance removes these physical and mental constraints. As a result, this contributes to the improvement of labour productivity. However, as Romer (2001) notes the Solow model does not explain exactly the terms of technological improvement and, therefore, this rise in labour productivity is open to similar interpretation. More importantly, improved institutions provide a conducive environment for investors and thereby bring about economic growth. Also, better institutions and government policies allocate a country’s valuable resources for production instead of diversion. Allocation of a country’s resources for investment and production causes an increase in the future output (Romer, 2001). Therefore, technological improvement increases economic growth by encouraging capital accumulation through exercising good governance of institutions.
Theoretical literature review

This section encapsulates the theoretical literature review of the study. The study is grounded within the works of neo-institutionalist economists on the relationship between economic growth and good governance, where two divergent theories of "state failure" in developing countries have emerged, as discussed hereunder.

Market-enhancing versus growth-enhancing governance theories

The good governance argument that is frequently referred to in the governance literature and in policy discussions essentially identifies the importance of governance capacities that are necessary for ensuring the efficiency of markets. The assumption is that if states can ensure efficient markets, (in particular by enforcing property rights, a rule of law, reducing corruption and committing not to expropriate) private investors will drive economic development. This approach is one that implicitly stresses the priority of developing market-enhancing governance and is currently the dominant paradigm supported by international development and financial agencies (North, 1990; Kauffman, et al, 1999). An extensive academic literature has tested the relationship between what we have described as market enhancing governance conditions and economic performance. This literature typically finds a positive relationship between the two, supporting the hypothesis that an improvement in market-enhancing governance conditions will promote growth and accelerate convergence with advanced countries. There are good theoretical reasons to expect market-enhancing governance to improve as per capita incomes increase (as more resources become available in the budget for securing property rights, running democratic systems, policing human rights and so on). This reverses the direction of causality between growth and governance.

These governance capabilities required for ensuring an effective implementation of growth-enhancing strategies are what we describe as growth-enhancing governance capabilities. According to this view, the role of governance reform is to achieve these critical growth-enhancing governance capabilities. In the support of these arguments, scholars (North, 1990 & Kauffman, et al, 1999) point to the evidence of the successful East Asian developers of the last five decades, where state governance capacities typically amounted to a lot more than the capacities necessary for ensuring conditions for efficient markets. In fact, in terms of the market-enhancing conditions prioritized by the good governance approach, East Asian states often performed rather poorly (Khan, 2007). Instead, they had effective institutions that could accelerate growth in conditions of technological backwardness and high transaction costs.

Theories on relation between governance and development

The straightforward concept of a “developmental state” is frequently traced to the analysis of Japan’s post-World War II economic achievement (Johnson, 1982), with further modifications based on another East Asian knowledge (Wade, 1990; Amsden, 1989). The modern conceptualization and generalization of this method can be accredited to Evans (1995), with his action of South Korea, India, and Brazil, and the introduction of the idea of “embedded autonomy.” This adapts the Weberian concept of a capable, independent bureaucracy as the key implementer of national development policies to highlight that this group should also be “embedded” in a community in ways that improve information streams and “negotiation and re-negotiation of policies and goals” (Evans, 1995).

The intellectual impact of Weber also retells us that there has been a much older custom of recognizing the role of the government in development, in European cases, for example, Germany (Boldrin et al., 2012) France (for instance, Loriaux, 1999) and, as well as the earlier history of Japan (Horie, 1937). In this narrative, the primary role of independence is conversant, avoiding political capture through the private industrial leaders. Thus, it may be that the outline of extractive and inclusive institutions, while classifying and cataloging a contact between politics and economics that is wanted for development (the creation and delivery of economic rents), may leave out significant factors or not be logically shrewd enough. Although Acemoglu (2012) brings more emphasis on the “primitives” of the delivery of power, they may not adequately address the specifics of institutions, for example, the bureaucracy, and may overemphasize the importance of inclusive political institutions over economic institutions - the opposite causality from economic growth to political inclusiveness may not be recognized enough. For example, north et al., (2009) emphasize on a method similar in many respects to that of Acemoglu (2012). They frame their study in terms of “social orders.” A social order is a steady coalition of clusters, or each leader. Leaders, in the dominant alliance, have access to resources, and their group members are their customers. Privileged admission makes economic rents, which leaders disperse. The main characteristic of any social direction is the control of violence in society. This explicit importance on control of violence is one discriminator from other theories of governance. However, it is reliable with the Weberian view of the state.

Suppose Khan’s method is a good mixture. There is considerably additional fruitfulness in Khan’s design. In some kinds, it can also be seen as a link between the “developmental state” writings and the “institutional economics” entrenched in the game theory of Robinson and Acemoglu. In that case, it is also worth observing that many other influences are applicable as constructing blocks for governance and development theories beyond the four encircling approaches drawn here. These include Olsson’s (1965) groundbreaking work on joint action, Ostrom (1990) at a more micro level, and several formal models of state-society interactions or social conflicts, such as Skaperdas (1992), Acemoglu et al. (2011), and Besley and Persson (2009) that provide slices of an overall understanding of the contact between political and economic institutions.
Conceptual framework

The conceptual framework is known as the approach/model that shows the important variables to be studied in the research either in graphical or narrative form as given by Fellows and Liu (2003). According to Kenneth (2005), a conceptual framework is structured from a set of broad ideas and theories that help a researcher to properly identify variables that he/she is looking at, frame his/her questions and identify the relevant literature. A conceptual framework helps the researcher to clarify his research hypotheses/questions and aims. In backdrop of the literature review, conceptual framework is developed as shown in Figure 1.1 below to reflect the stated objectives of the study. Thus, this study was guided by this conceptual framework.

Regarding relational aspects of governance institutional quality and economic growth, there is consensus that a relationship between governance institutions and economic growth exist (De Vaal & Ebben, 2011). Thus, aided by the National Framework for Good Governance (NFGG) of the United Republic of Tanzania (URT, 1999), the conceptual model for this study is developed from the concept that various elements of governance significantly influence economic growth. This conceptual framework provides a causal link that exists between two main variables namely; Governance being the independent variable and economic growth being the dependent variable.

In the literature, various kinds of indicators stand in as proxy variables for governance. Recent studies (PUT HERE THE SOURCES OR THE STUDIES) have predominantly used the WGIs. These indicators observe the six different dimensions of governance such as voice and accountability, political stability and absence of violence/terrorism, regulatory quality, government effectiveness, control of corruption and the rule of law. Owing to data availability, proxy variables for governance in this study include: government effectiveness index, rule of law index, political rights index, corruption perception indices.

Methods

Data sources and sampling

This study uses time series data from Tanzania spanning 25 years from 1996 to 2021. The data are collected from secondary sources whereby, the main variables: dependent (economic growth) and independent (governance institutions) are reflected. It was a time series study because it shows in terms of trends, seasonal fluctuations, irregular cycles, and sporadic changes in level or variability in the domains of business, economics, environment, medical, and other sciences (Löwe, Madras, Zemel & Welling, 2022).

Research design

This research is a time series study designed to permit a statistical estimation (econometric estimation) to give empirical contents of the relationship between governance institutions and economic growth in Tanzania (Box, Jenkins, Reinsel & Ljung, 2015). The study used Correlation research design; the design establishes a relationship between two related variables. Over time, the researcher observes the variables and then draws conclusions based on them. Therefore, with reference to this study the two variables were institutional characteristics or institutional governance and economic growth.

Model specification

The statistical technique of the multiple regression model is employed for time series data in estimating all the models developed in this study. The sub-sample regression detects various political regime impacts on what is studied (King, Sokolsky & Lee, 2013).

Model for determinants of governance quality

The model specification for the determinants of quality governance is presented hereunder as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \ldots + \beta_n X_n + \epsilon \]

Notes:

- \[ Y \] = the dependent variable
- \[ \beta_0 \] = Constant
- \[ X_1, X_2, X_3, \ldots, X_n \] = the independent variables
\[ \beta_1, \beta_2, \beta_3, \ldots, \beta_n = \text{determining the contribution of the independent variable} \]
\[ \epsilon = \text{error term} \]

Data are retrieved from various sources: governance indices in the World Bank’s worldwide governance indicators (from WGI website), Tanzania National Bureau of Statistics and International Data Base (IDB).

**Data Analysis**

To test for unit root, the study is using Augmented Dickey-Fuller (ADF) test and Phillips Perron (PP) unit root test. Akaike Information Criterion (AIC) is used for selecting the number of lags to be used in the model. Therefore, the generalized ARDL \((p, q_1, q_2)\) can be measured by the formula:

\[ \Delta \text{ingdp}_t = a_0 + \sum_{i=1}^{p} \beta_i \Delta \text{ingdp}_{t-i} + \sum_{j=0}^{q_1} \beta_2 \Delta \text{GG}_{t-j} + \sum_{k=0}^{q_2} \beta_3 \Delta \text{CF}_{t-k} + \epsilon_t \ldots \ldots (2.1) \]

**Results**

The results suggest that voice and accountability of the government and its people have a positive and significant impact (at 10 percent level) on economic growth in Tanzania. The positive coefficient implies that when all other factors remain constant, a one percent increase in the voice and accountability increases economic growth in Tanzania by 1.36. The results correspond with the priori hypothesis of the study and other studies (Teke, 2012; Afolabi, 2019; Adenuga, 2013) whereby they found that political stability, voice and accountability, rule of law and government effectiveness are positively associated to development. Also, the government effectiveness has a positive and significant impact (at 5 percent level) on economic growth in Tanzania. The positive coefficient implies that when all other factors remain constant, a one percent increase in the government effectiveness increases economic growth in Tanzania by 1.485. The results correspond with the priori hypothesis of the study and other studies (Al-Naser, 2021; Fayissa &., 2013; Adzima, 2019; Afolabi, 2019; Azimi, 2020) which found that government effectiveness is positively associated to development.

**Exclusion Restrictions test on Causality**

The OLS exclusion restriction estimate for causal relationship between national income (real GDP) and public expenditure variables is basically carried out. To determine the fact that between the two variables namely economic growth and governance, which one drives the other, the study used the OLS exclusion restricted test. A test of “if excluding national income (GDP) in the governance (GG) equation” is reported in table below:

| GDP, \(_1\) | @ | GG |
| GDP, \(_2\) | @ | GG |
| GG, \(_1\) | @ | GG |
| GG, \(_2\) | @ | GG |

Subset \(\chi^2(11) = 1315.6 [0.0000]^{**} \)

A test for “if excluding Governance (GG) in the national income (GDP)” equation is reported in table below.

| GG, \(_1\) | @ | GDP |
| GG, \(_2\) | @ | GDP |
| GDP, \(_1\) | @ | GDP |
| GDP, \(_2\) | @ | GDP |

Subset \(\chi^2(11) = 1627.9 [0.0000]^{**} \)

Under this approach, a Chi-square statistic is used to draw conclusion on what is tested. Smaller the p-value will reject the null hypothesis and support the alternative hypothesis. The data support the null hypothesis if the p-value is large. A p-value of 0.05 or 5% is conventionally regarded as too small and is sufficient to reject the null hypothesis. If the p-value is larger than 0.05, thus it fails to reject the null hypothesis.

The computed Chi-square value in tables above is highly significant both at 0.1 percent and 1 percent levels of significance, confirming very strong evidence to reject the null of no causation. The excluded lags predict the dependent variable and thus we reject the null of no causality between governance and economic growth. The findings infer that, excluded lags are strongly important in predicting the dependent variable in both equations (GDP and GG), and thus neither lags of national income (GDP) cannot be removed or excluded in Governance (GG) equation nor lags of Governance (GG) cannot be removed or excluded in national income (GDP) equation.
Discussion

Drawing from these computations, it can be said that the OLS exclusion restriction estimation reported a feedback causation and periodic relationship between the two variables: national income responds to its own lagged values as well as to lagged variable of governance. Equally, governance responds to its own lagged values as well as to lagged variable of national income. This increase in the national income often seems to be associated with increases in the percentage of good governance to national income and conversely. This means that, there is a bi-directional link between economic growth (GDP) and governance in the form of good governance causing growth in the national income and national income causing good governance.

Furthermore, this bi-directional link which was found to exist between economic growth (real GDP) and good governance may suggest that, good governance can be used to encourage economic growth. In other words, this is to say, good governance has a significant positive effect on real GDP. Also, an improvement in income leads to better governance too. As reported by other similar studies, bi-causal relationships are common in most countries in which policy-makers with different preferences for fiscal policy alternate in office as a result of democratic elections. Kaufmann et al. (2005), found a significantly positive relationship between income per capita growth rates and the improvement of components each indicator of good governance. More precisely that the researchers concluded that better governance has a significant positive effect on per capita income, which is an improvement in income leading to better governance. Also, Hamid et al. (2017) found that governance is highly positively associated with economic development in developing countries regardless of their level of income. Moreover, while the scholars conclude that voice and accountability, political stability, and rule of law are positively and significantly related to economic development of low-income economies, they also suggest that political stability, government effectiveness, regulatory quality, and control of corruption make a great deal of economic development of Lower Middle-Income countries. Again, their study indicates that voice and accountability, government effectiveness, regulatory quality, and rule of law are highly positively correlated with economic growth of Upper Middle-Income Economies.

Conclusion

This study aimed at analyzing empirically the impact of governance on economic growth in Tanzania. The results are divided into three parts basing on specific objectives. Starting with Ordinary Least Squares estimation (OLS) in the first column, the results suggest that governance indicators have a positive and significant impact on economic growth in Tanzania. This is the case for Ordinary Least Square (OLS) with control variables and Ordinary Least Square (OLS) with stationary variables. This result abides with the hypothesis and other empirical literature.

Shifting to the ARDL model, the results suggest that governance indicators have a positive and significant impact on economic growth in Tanzania. This is the case for Autoregressive Distributed Lag model (ARDL) with control variables. This result abides with the hypothesis and other empirical literature. Shifting to the Error Correction Model (ECM), the results suggest that governance indicators have a positive and significant impact on economic growth in Tanzania. This result abides with the hypothesis and other empirical literature.

Based on these findings of the study it is recommended for policy makers to consider various governance institutions as critical to economic success, since the results of the study indicate that a good and strong governance has a positive and significant impact on economic growth in Tanzania. Also, it is recommended that policy outline on thorough public governance (hereafter the framework) goals to deliver governments at all levels with a combined diagnostic, leadership, and benchmarking tool to help. Furthermore, it is urged to design and execute public governance alterations that can lead to the enhancements in, and the sustainability of, affluence for their country and the welfare of their citizens, and lastly, it is recommended to design and chase a public-governance reorganization agenda that allows governments to move closer to Organisation for Economic Co-operation and Development (OECD) values and practices in this area.

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