Influence of Governance Components on the Economic Growth in Tanzania

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ABSTRACT

The link between institutions and economic performance is well established, but there is no single infrastructure blueprint that works for all countries. As a result, identifying the most critical infrastructures required to stimulate economic growth is difficult. The purpose of this research is to identify the governance institutions or components that improve Tanzania's economic performance. Data from 1996 to 2021 were gathered from a variety of sources, including the Ministry of Finance, the Central Bank of Tanzania, and the World Bank. For data analysis, multiple regression models were used, and an error correction model based on modern economic growth theory was used. The variables were stationary in their first difference, according to the Augmented Dickey-Fuller (ADF) tests. The findings show that the rule of law and corruption control increases economic growth by 24.7% and 47.21% significantly unlike the political instabilities which had no significant impact on economic growth. Furthermore, the study finds that voice and accountability, as well as government effectiveness and regulatory quality, have a negative impact on Tanzanian economic growth by 26%, 14.7%, and 21.5% respectively. To sustain economic growth, policymakers should focus on strengthening rule of law institutions, ensuring an effective, efficient, and independent judiciary system, adequately controlling corruption and restructuring the political system to have a significant impact on economic growth.

Key words: Economic growth, Governance, government effectiveness, Accountability and Corruption

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I. INTRODUCTION

According to the New Institutional Economics (NIC), country's economic development hinges on the quality of institutions (Ali, 2016; Ferrini, 2012). That, 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, 2003). 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.

Tanzania has seen remarkable economic growth in recent years, with an average annual national GDP increase of nearly 7% since 2000, making it one of Africa's fastest-growing economies. Despite this expansion, poverty persists, with nearly half of the population living below the global extreme poverty line of $1.90 per day. The majority of Tanzania's population (73%) lives in rural areas, limiting economic development. Low labor-intensive sector productivity, such as agriculture, which employs 77% of working-age adults, has hampered inclusive and broad-based growth. Over the last decade, the agriculture sector has grown at a rate of only 4% per year (Kitole et al., 2022c; Kitole, 2023; Yusuff, 2018; Okoi, 2015; Pere, 2015; Fumbwe et al., 2021), contributing to the country's continued poverty.

Private sector assignation is a significant element of the Tanzania economic development and the nation's efforts to grasp middle-income position by 2025. Tanzania's businesses are at the vanguard of growth over generating tax revenue, job creation, innovation, and fair competition. The private sector's massive financial resources and knowledge in market-based results have the latent for undertaking systemic societal tests (Dimoso & Andrew, 2021; Kitole et al., 2023). Presently employing around 70 percent of the youth in Tanzania, the private sector delivers a critical way to self-reliance (Clyde, 2020; Azimi, 2020)

On 7 September 2021, the IMF agreed USD 567.25 million in backup financial aid to support Tanzania's efforts in retorting to the Covid-19 pandemic by handling the pressing health, economic and humanitarian costs. The IMF forecasts a GDP growth for Tanzania between +4.0% and +5.1% in 2021 and 2022 respectively, and 6.0% in 2026. Nevertheless, the AfDB approximates that Tanzania's GDP will expand by 2.8% in 2021 and bulging a robust rebound with 4.9% and 6.3% for 2022 and 2023 economic growth respectively (Kitole & Sesabo, 2022; Kitole, 2023; International Monetary Fund (IMF), 2021).

According to the International Monetary Fund, Tanzania's economic growth will slow to 2.1% in 2020, down from 6.8% in 2019. (IMF, 2021). On the demand side, investments drove economic growth, while on the supply side, manufacturing and construction were key sectors. Monetary policy has been accommodative in order to support economic growth and credit, with the policy rate falling from 7% in August 2018 to 5% in May 2020. In 2020, inflation remained low at 3.3%, thanks in part to a steady decline in food prices. Exchange rates were stable, thanks in part to interventions in the foreign exchange market by the Bank of Tanzania. Although the government's fiscal consolidation efforts aided in reducing recurrent expenditures, the COVID-19 pandemic's negative impact on revenues increased the fiscal deficit from 2.0% of GDP in 2019 to 2.3% of GDP in 2020, which is still less than the government's target of 5%.

Domestic borrowing financed the majority of the deficit. Despite improved export performance, particularly in gold, the current account deficit increased slightly to 3.2% of GDP from 3.4% in 2019. The COVID-19 pandemic has weakened sectors with high employment potential, particularly agriculture and manufacturing, resulting in an increase in the number of people living in poverty. The pandemic is expected to push an additional 500,000 Tanzanians into poverty, and inequality is likely to have widened during this time (Clyde, 2020; OECD, 2021).

Tanzania has a lower-middle-income economy that is heavily reliant on agriculture. Tanzania's economy has been transitioning from a command economy to a market economy since 1985. Though total GDP has increased since these transformations began, GDP per capita fell sharply at first and only recently surpassed pre-transition levels. Governance is one of the sought-after characteristics in a country's economic performance, and this study is solely focused on it. The study aims to determine the state or characteristics (efficiency and effectiveness) of key components of governance in Tanzania's economic production function (such as rule of law, voice and accountability, corruption control, bureaucratic quality or political stability, government effectiveness). So far, no comprehensive study in Tanzania has established the contribution of governance institutions to economic growth, despite attempts to analyze Tanzania's evolving economic growth.

II. LITERATURE REVIEW

2.1 Governance and Economic Growth Defined

Governance is defined in this study as the formal and informal systems that govern how public decisions are made and public actions are carried out in accordance with a country's constitutional values. Good governance is viewed as a means of fostering the development of strong, open, equal, and free economic and political institutions, as well as of creating the conditions for ordered rule and collective action. The definition used in this study is based on the perspective of the United Nations (2007). On the other hand, economic growth is defined as a long-run process that occurs when the potential output of an economy increases (Dimoso & Andrew, 2021; Rittenberg & Tregarthen, 2011). Economic growth occurs when aggregate output rises and job opportunities are created and expanded, allowing income and mobility to rise (Coyle, 2014).

The improvement in economic growth as a result of high-quality institutions can be explained both directly and indirectly. In Tanzania, the rule of law and corruption control were found to have a significant impact on economic growth, while political institutions had little impact. Voice and accountability, as well as government effectiveness and regulatory quality, were discovered to be detrimental to economic growth. Sustaining economic growth requires strengthening rule of law institutions with an effective, efficient, and independent judiciary system, controlling corruption, and restructuring the political system to allow it to have a significant impact on economic growth. The Solow model suggests that better-quality institutions can increase the availability of technology and create a favorable environment for investors in the context of economic growth. Institutions are also important in promoting economic growth, according to the New Growth Theory and the Social Infrastructure viewpoint.

2.2 Theoretical Literature

This research is based on the work 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 in the context of "market-enhancing" and "growth-enhancing" governance, as briefly summarized below (Khan, 2007). Market-enhancing governance examines the impact of governance on transaction costs and market efficiency. The goal is to construct efficient markets that attract profitable and growth-promoting technologies to a developing country. The primary governance goals are to establish stable property rights, uphold the rule of law, ensure effective contract enforcement, reduce the risk of expropriation and corruption, and ensure transparent and accountable provision of public goods in accordance with democratically expressed preferences.

Market-enhancing governance is concerned with governance's function in lowering transaction costs and increasing market efficiency. Maintaining stable property rights, efficiently enforcing contracts, eliminating corruption and rent-seeking, and providing transparent and accountable public goods are all key goals of market-enhancing governance. Corruption in government, rule of law, bureaucratic quality or Government Effectiveness, regulatory burden, voice and accountability, and political instability and violence are all important criteria used to assess states' performance in providing market-enhancing governance. These variables' indices range from 0 (the worst market efficiency conditions) to 50 (the best conditions).

Institutions are assessed in terms of their ability to enable the transfer of assets and resources to productive sectors and to promote the adoption of potentially high-productivity technologies in growth-enhancing governance. With a combination of incentives and rules, the goal is to allocate resources to growing areas and encourage technology adoption. Factors such as ease of doing business, access to finance, human capital development, research and

development, and innovation are used to assess an institution's performance. The goal is to foster a climate that encourages entrepreneurship, innovation, and investment in high-value activities that can drive economic growth.

In essence, growth-enhancing governance seeks to speed the transfer of assets and resources to more productive sectors, as well as the adoption of high-productivity technology. To accomplish this, states must establish incentives and opportunities, and governance capacities are essential to avoid moral hazard issues. The specific governance requirements vary based on the policy instruments employed to speed catching up, and success is dependent on institutional and political elements that permit successful implementation and enforcement of growth-enhancing initiatives.

2.3 Empirical Literature Review

Many studies have been conducted to investigate the impact of governance on economic growth and development. According to Al-Naser and Hamdan (2021), the rule of law and corruption control have a positive but statistically insignificant impact on economic growth in Gulf countries, whereas regulatory quality and government effectiveness have a positive and statistically significant impact. Nsiah and Fayissa (2013) discovered that variations in development among African countries are exacerbated by differences in governance.

Controlling corruption has a detrimental influence on economic growth (Kitole et al., 2022a; 2022b), according to Emara and Chiu (2016) found that increasing governance indices by one unit increases per capita GDP by around 2%. Beyene (2022) posit that governance has a positive and significant influence on Sub-Saharan African economic growth, whereas Yusuff et al. (2018) discovered that governance has a positive impact on Ghanaian and South African economic growth but a negative impact on Nigerian growth, with corruption control and political stability being positive factors for growth in Ghana and South Africa but voice and accountability having a negative impact on growth in Nigeria.

Afolabi (2019) explored the relationship between governance and sustainable development in West Africa from 2002 to 2016 using the GMM approach. According to the study, political stability, voice and accountability, rule of law, and government efficacy all have a favorable relationship with development. Among these elements, government efficacy had the greatest influence on development, whereas corruption control and regulatory quality had a short-term indirect association with development. In the long run, however, all governance variables were discovered to have a clear link to growth in West African countries, with regulatory quality and political stability having the greatest impact. From 2002 to 2013, Bayar (2016) investigated the impact of six public governance variables on economic growth in EU transitional economies. The study discovered that, with the exception of regulatory quality, all governance metrics had a statistically significant beneficial influence on economic growth. Shafiq and Azimi (2020) explored the association between governance variables and Afghan economic growth. Their empirical findings demonstrated a one-way relationship between the rule of law, government effectiveness, and economic growth.

Okoi et al. (2015) investigated the relationship between institutional quality, macroeconomic policy, and economic development in Nigeria using the OLS technique. According to the study, domestic institutions have a negligible impact on Nigeria's development indexes. Olagunla et al. (2014) investigated the relationship between institutions, as represented by economic freedom, and the resource curse in Nigeria, as represented by GDP and oil exports, in a similar study. The findings revealed a negative association between institutions and Nigeria's resource curse.

The literature on governance and development has grown significantly, demonstrating the subject's theoretical and practical importance. However, because many studies in this field are qualitative, quantitative research is needed to supplement and build on the existing literature. Furthermore, past studies have frequently lumped different countries together to investigate the impact of governance on economic growth, focusing on only a few components of governance. As a result, knowledge about the function of other governance components in economic growth is lacking. The current study seeks to fill this research gap by employing multiple regression analysis to provide additional information on the subject. This study aims to contribute to the existing literature on governance and development by studying a broader range of governance components.

III. METHODOLOGY

Based on the foundations of growth theory, the current study applies the statistical technique of the multiple regression model within the Error Correction Mechanism (ECM) process to assess the growth impact of various components of governance on economic growth using time series data. The model is based on a variant of the Solow (1956) model of economic growth, which has been utilized in prior research such as Sule (2020) and further explained in Solow (2010). Economic production, according to the Solow model, is a function of labor (L) and capital (K), assuming continuous returns to scale. To better understand the relationship between governance and economic growth, the current study will use this model and incorporate additional factors, such as diverse governance components. Within

the ECM process, the multiple regression model is a strong tool for estimating the impact of various factors on economic growth over time.

$$GDP = AK_i^{\alpha}L_i^{1-\alpha} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Where:

GDP   = Real GDP **-** Gross domestic product measuring economic growth
A   = Total factor productivity or technological progress
K   = Physical capital
L   = Labour
A   = elasticity of capital with respect to output

The model assumes that each productive unit uses the same level of capital and labor, with the aggregate production function as follows:

$$GDP = AK^{\alpha}L^{\beta} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

According to Fumbwe et al., (2021), as cited by Udah and Ndiyo (2014), institutions play a critical role in improving technical efficiency. This implies that the quality of institutions and governance structures influences technical efficiency and, ultimately, investment efficiency. As a result, equation (6) can be modified to include the effects of governance structures and institutions on total factor productivity (TFP) or technical efficiency. This study assumes that the quality of institutions and governance structures, such as corruption, government effectiveness, and the rule of law, have a direct impact on TFP. Such an assumption is coherent with the works of Sule (2020) and Udah and Ndiyo (2014). Thus;

$$A = Y_t = \beta_0 + \beta_1 X_t + \varepsilon_t \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (3)$$

Combining equation (2) and (3), the following equation is obtained

$$GDP = K_t^{\alpha}L^{\beta}X_t^{d} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (4)$$

Where

α, β, d, and φ = elasticity coefficients
X   = a vector of explanatory variables - institutions

Institutions have a significant impact on a country's economic and social growth. Governance institutions, legal institutions, political institutions, normative and social institutions, and economic and regulatory institutions are all included. As a result, equation (4) can be refined and expanded in an estimating form to represent the impact of these diverse institutions on economic growth. This enlarged form incorporates the standard stochastic error term as well as the impact of several institutional components on economic growth over time. This study aims to provide a more thorough view of the relationship between institutions and economic growth by adding these additional components.

$$lnGDP_t = \beta_0 + \beta_1 K + \beta_2 L + \beta_3 ROL + \beta_4 BUR + \beta_5 COR + \beta_6 REB + \beta_7 VOA + \beta_8 PIV + \varepsilon_t \dots\dots\dots\dots\dots\dots (5)$$

Where:

GDP: Gross domestic product is a measure of economic growth; K: Gross fixed capital formation as assessed by physical capital; L: Labor or human capital as measured by government education spending; COR: Corruption in government, as measured by a composite corruption perception index; ROL: Rule of law, as assessed by an index of how much agents trust and follow society's laws, particularly the quality of contract enforcement, property rights, the police, and the courts; BUR: Bureaucratic quality or government effectiveness as assessed by an index of public service quality, civil service, government accountability, and policy implementation; REB: Regulatory burden, as assessed by an indicator of how much regulation and bureaucracy cost enterprises; VOA: Voice and accountability, as assessed by an index of people' ability to participate in government choosing, freedom of expression, and accountability of government personnel. PIV: Political instability and violence, as evaluated by a probability of political instability, terrorism, and violence index.

The expanded model can be written as GDP = f(K, L, COR, ROL, BUR, REB, VOA, PIV, ε) where indicates the error (stochastic) term.

The priori expected parameter values are: $0 > b_1$ to b_8

Equation (5) above can as well be re-written as;

$$GDP = \beta_0 + \beta_i (K + L + ROL + BUR + COR + REB + VOA + PIV) + \boldsymbol{\varepsilon_t} \dots\dots\dots\dots\dots\dots\dots\dots (6)$$

Where:

b_0 = the constant
ε = error term to represent all other factors which affect GDP but not explained in the equation

β_i = are the coefficients or parameters elasticities, $(i = 1,2,3 \dots .8)$ measuring the size (magnitude) and direction of the relationship between the dependent variable and explanatory variables

By introducing lag operator (t-j) into equation (6) above, the following equation is obtained;

$$GDP_t = \beta_0 + \beta_i \left(K_{t-j} + L_{t-j} + ROL_{t-j} + BUR_{t-j} + COR_{t-j} + REB_{t-j} + PIV_{t-j} + VOA_{t-j} \right) + \varepsilon_t \dots \dots \dots \dots \dots \dots \dots \dots \dots (7)$$

Where:

t = current time and $j = 0,1,2,3 \dots m$

Note that since our study is applying time series data, then all models that is applied by this study must be in natural logarithm form. Thus equation (7) above is re-written as;

$$lnGDP_t = \beta_0 + \beta_i \left(lnK_{t-j} + lnL_{t-j} + lnROL_{t-j} + lnBUR_{t-j} + lnCOR_{t-j} + lnREB_{t-j} + lnPIV_{t-j} + lnVOA_{t-j} \right)$$
$$+ \varepsilon_t \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots \dots (8)$$

Equation (8) is therefore be used to estimate the contribution of governance by category on economic growth (growth impact of governance).

As control variables in output determination, the model includes foreign direct investments (FDI), gross capital formation (GFC), government consumption (GC), and trade openness (TRO). The inclusion of these variables in the production function is justified by Tanzania's trade dependence, with exports accounting for a significant portion of aggregate demand. Therefore, the final estimation model is as follows:

$$dlnGDP_t = \beta_0 + \beta_i \left(lnK_{t-j} + lnL_{t-j} + lnROL_{t-j} + lnBUR_{t-j} + lnCOR_{t-j} + lnREB_{t-j} + lnPIV_{t-j} + lnVOA_{t-j} \right) + \varepsilon_t \dots \dots . (9)$$

It is critical to have access to credible data sources in order to conduct reliable economic research. Economic variables such as GDP, inflation, and unemployment are available from the Ministry of Finance and the Bank of Tanzania. Furthermore, World Bank statistics provide a wide range of economic data for various countries around the world, which can aid in drawing useful comparisons and providing context for the research. Sources such as the World Governance Index, Transparency International, and other global indicators such as the Worldwide Bureaucracy Indicators and the World Development Indicators can provide valuable insights into Tanzania's governance quality. These sources can assist in identifying areas of strong governance and areas where improvements can be made. Researchers can ensure that their findings are robust and not reliant on a single source of information by using data from multiple sources. Overall, conducting high-quality economic research that can lead to impactful policy recommendations requires a rigorous approach to data collection and analysis.

4.0 Results and Discussion

After running time series data through the unit root test, all variables except gross fixed capital are non-stationary in terms of levels but stationary in terms of difference, as shown in Table 1.

Table 1 Unit Root Test

	H0: Non-stationary in variable levels		H0: Non-stationary of variables in first difference	
Variable	**ADF Statistics**	**PP Statistics**	**ADF Statistics**	**PP Statistics**
Lngdp	-2.967	-2.967	-7.226***	-7.226***
Lngfc	-7.063***	-7.063***		
Lnfdi	-2.753	-2.753	-6.038***	-6.038***
POP	-0.853	-0.853	-4.254***	-4.254***
Lntrade	-1.520	-1.520	-3.044**	-3.044**
GEXPE	-1.681	-1.601	-5.703***	-5.703***
ROL	-1.404	-1.404	-6.135***	-6.135***
CC	-1.345	-1.345	-4.441***	-4.441***
PS	-2.470	-2.470	-6.070***	-6.070***
RQ	-1.604	-1.604	-4.694***	-4.694***
VA	-0.849	-0.849	-6.150***	-6.150***
GE	-1.114	-1.114	-3.681**	-3.681**
Note: The asterisks ***, ** and * denote significance level at 1%, 5%, and 10%, respectively for the ADF and PP test of unit root. The null hypothesis is that the series are non-stationary.				

Key terms: *lngdp stands for log of gross domestic product, lngfc stands for log of gross fixed capital, lnfdi stands for log of foreign direct investment, POP stands for population growth, lntrade stands for log of trade,* GEXPE *stands for government expenditure, ROL stands for rule of law, CC stands for corruption control, PS stands for political stability, RQ stands for regulatory quality, VA stands for voice and accountability, and GE stands for government effectiveness.*

4.1 Impact of Governance on the Economy

The regression analysis results show that the OLS model used in the study was correctly specified, as the p-value of 0.8400 does not reject the null hypothesis. This means that the model has no misspecification issues. The VIF value of 2.26 indicates that multicollinearity is not a significant issue among the model's explanatory variables. This means that the model's independent variables are not highly correlated with one another, which can be problematic in regression analysis. The Breusch Pagan test for autocorrelation yielded a p-value of 0.035, indicating that serial correlation is not a problem in the OLS model. This means that the model's errors are not correlated with one another, which can be problematic in time series analysis.

Overall, the diagnostic tests on the regression model indicate that the model is correctly specified, that there is no issue of multicollinearity among the explanatory variables, and that there is no serial correlation in the model. These findings strengthen the credibility and reliability of the regression analysis results, which can be used to draw meaningful conclusions and make informed decisions. Moreover, these results have been reported based on the regression on equation 7, 8 and 8 as shown in Table 2 in Column 2 of OLS(1), Column 3 of OLS(2) and Column 4 of OLS(3).

Table 2 Impact of Governance on Economic Growth

MODELS	OLS (1)	OLS (2)	OLS (3)
VARIABLES	lngdp	lngdp	dlngdp
ROL	0.201** (0.384)	0.247** (0.452)	
CC	0.464** (0.573)	0.4721** (0.580)	
PIV	0.743 (0.156)	0.861 (0.165)	
RQ	-0.187** (0.211)	-0.215** (0.304)	0.177** (0.660)
VA	0.364* (0.992)	-0.260* (1.017)	
GE	-0.185** (1.066)	-0.147** (3.929)	
Lngcf		0.260*** (4.385)	0.407*** (0.987)
POP		2.086** (5.828)	-0.919* (0.956)
Lnfdi		0.120 (0.045)	
GEXPE		-0.100 (0.0965)	
Lntrade		0.871 (0.713)	
d.ROL			0.592** (1.425)
d.CC			0.571** (0.965)
d.PIV			-2.427 (0.385)
d.VA			-7.500 (1.770)
d.GE			-9.058 (2.746)
Dlnfdi			-0.635 (0.188)
Dlntrade			-0.699 (0.247)
Constant	0.541 (0.706)	-6.785*** (19.502)	2.501** (4.266)

The findings reveal that the voice and accountability of the government and its people have a favorable and significant impact (at the 10% level) on Tanzania's economic growth (Teke, 2012; Afolabi, 2019; Adenuga, 2013). The positive coefficient suggests that, if all other variables remain unchanged, a one percent increase in voice and responsibility enhances Tanzania's economic development by 1.36. The findings support the study's prior hypothesis as well as other research that showed political stability, voice and accountability, rule of law, and government effectiveness to be positively associated with development (Teke, 2012; Afolabi, 2019; Adenuga, 2013).

Therefore, government efficacy has a favorable and considerable impact on Tanzania's economic growth (at a 5% level) (Al-Naser, 2021; Nsiah & Fayissa, 2013; Adzima, 2019; Afolabi, 2019; Azimi, 2020). The positive coefficient suggests that a one percent increase in government effectiveness enhances Tanzania's economic growth by 1.485 percent assuming all other parameters remain constant. The findings support the underlying hypothesis of the study as well as other studies that have indicated that government effectiveness is positively associated to development (Al-Naser, 2021; Nsiah & Fayissa, 2013; Adzima, 2019; Afolabi, 2019; Azimi, 2020).

The study's findings indicate that enhancing voice and responsibility, as well as government effectiveness, can be beneficial ways for encouraging Tanzanian economic growth. This has significant policy implications since it implies that efforts to strengthen governance and boost the efficacy of the public sector may result in improved economic success in the country (Teke, 2012; Afolabi, 2019; Adenuga, 2013; Al-Naser, 2021; Nsiah & Fayissa, 2013; Adzima, 2019; Azimi, 2020).

4.1 Model Tests

According to the results presented in Table 3, the model has undergone the Breusch and Godfrey LM test for autocorrelation, and the resulting p-value of 0.7241 suggests that the model is not affected by the problem of autocorrelation. This is an important finding as autocorrelation can bias the estimates of the model's coefficients and lead to incorrect inference. Therefore, the absence of autocorrelation indicates that the model's coefficients can be interpreted with greater confidence, and the estimates are less likely to be affected by spurious relationships between the variables.

Table 3 Results for Breusch-Godfrey LM test for Auto correlation

Lags (p)	Chi2	df	Prob > Chi2
1	0.035	1	0.7241

Ho: no serial correlation

The results of the White test for heteroscedasticity have been presented in Table 4. The test indicates that the model is statistically significant, with a p-value of 0.0305, which is lower than the 5% level of significance. This suggests that there is no evidence of heteroscedasticity in the model. Heteroscedasticity can lead to biased and inconsistent estimates of the model's coefficients, as the variance of the error term is not constant across the different values of the independent variables. Therefore, the absence of heteroscedasticity is an important finding that indicates the reliability of the model's coefficients and the robustness of the results.

Table 4 Outcomes for White's Test

Chi2 (9)	19.49
Prob > chi2	0.0305

Ho: Homoscedasticity; Ha: unrestricted heteroscedasticity

The Cameron and Trivedi decomposition test was used to further assess the presence of heteroscedasticity in the model. The results of this test are presented in Table 5, which shows that the p-value is 0.0502. This suggests that the model is not affected by heteroscedasticity. Heteroscedasticity can lead to biased and inconsistent estimates of the model's coefficients, as the variance of the error term is not constant across the different values of the independent variables. Therefore, the absence of heteroscedasticity is an important finding that indicates the reliability of the model's coefficients and the robustness of the results.

Table 5 Outcomes for Cameron and Trivedi's Decomposition of LM-Test

Source	Chi2	df	P
Heteroscedasticity	18.32	12	0.0141
Skewness	2.15	4	0.3420
Kurtosis	0.02	2	0.0563
Total	20.49	18	0.0502

It is essential to ensure the accuracy and reliability of results by ensuring model stability, using the correct functional form specification, and avoiding serial correlation and heteroscedasticity. The diagnostic tests conducted in this study demonstrate that there is no serial correlation or heteroscedasticity present in the model. Specifically, the Durbin Watson test, Breusch-Godfrey LM test, and Cameron and Trivedi's Decomposition of LM test all confirm the absence of serial correlation. These findings support the robustness of the results and the validity of the conclusions drawn from the analysis.

CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

According to the findings of a study conducted in Tanzania, rule of law and corruption control have a significant impact on the country's economic growth. This implies that strong legal frameworks and institutions, as well as effective anti-corruption measures, are critical for Tanzania's economic growth. Surprisingly, the study discovered that political institutions have little influence on economic growth in Tanzania. This implies that other factors, such as rule of law and corruption control, are more important for the country's economic growth. Furthermore, the research shows that voice and accountability, as well as government effectiveness, have a negative impact on Tanzania's economic growth and development. This implies that the government's effectiveness and the country's level of accountability may be impeding economic growth.

Based on these findings, the study concludes that, while a few institutions drive Tanzania's economic growth and development, many others do not. In particular, the institutions that drive economic growth in Tanzania are rule of law and corruption control, whereas political institutions, government effectiveness, voice, and accountability stymie the country's economic growth. As a result, addressing the weaknesses and ineffectiveness of these institutions is critical if Tanzania is to achieve sustained economic growth. To create a more conducive environment for economic growth and development, efforts should be made to strengthen the rule of law and combat corruption.

5.2 Recommendations

Several recommendations are made based on the study's findings to improve economic success. To begin, the study suggests that policymakers consider various aspects of governance as critical to achieving economic success. This means that when developing and implementing public policies, governments should consider factors such as transparency, accountability, and effectiveness. Second, according to the study, policy should fundamentally contribute to thorough public governance. Governments can improve the effectiveness of public policies that lead to economic prosperity and the well-being of their citizens by doing so. This means that public policies should be designed and implemented in such a way that they promote good governance.

Third, the study suggests a focus on learning, public accountability, and increased public sector effectiveness through better decision-making. This means that governments should prioritize learning and knowledge sharing, as well as ensure public accountability and transparency and improve public sector effectiveness through better decision-making.

In conclusion, the study suggests that good governance is critical to economic success and that policymakers should prioritize policies that promote transparency, accountability, and effectiveness. Governments can increase the effectiveness of public policies that lead to prosperity for their country and well-being for its citizens by doing so.

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