Innovations

Tax Revenue Collection in Ethiopia: Does Institutional Quality Matter?

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Abstract

Taxation is a significant source of finance for governments, allowing them to invest in human resources, infrastructure, and delivery of services to societies and businesses. The main aim of this study is to estimate the impact of institutional quality (political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality) on tax revenue collection in Ethiopia The study used a quantitative research approach, Ex post facto research design and time series data set from 1996 to 2020. Following the unit root test, this study uses the Autoregressive Distributed Lag (ARDL) model and bound test to determine the presence of co-integration. The findings revealed that the coefficient of the rule of law, government effectiveness, and political stability has a positive and significant impact on Ethiopian tax revenue collection in both the short and long- run. However, only voice and accountability had a significant positive association in the long -run. Furthermore, in both the short and long- run, corruption and regularity quality have a significant negative impact on tax revenue collection. Consequently, efforts to combat corruption and improve governance must begin as soon as possible to obtain optimal tax income in the future. The findings of this study add empirical evidence to assist the Ethiopian government's plans to develop and amend tax policies in the coming period to ensure the effects of institutional quality on the tax-to-GDP ratio.

Keywords: *1.Corruption; 2.Government Effectiveness; 3.Political Stability; 4Regulatory Quality; 5.Rule of Law; 6.Tax revenue; 7. Voice and Accountability*

1. Introduction

Taxes are defined as mandatory contributions made by citizens for the government. The taxes are unrequited, meaning that the benefits are rarely commensurate with the amount paid in the taxes. The goal of taxes is to provide social welfare by funding governmental services, property protection, defense costs, and economic infrastructure. The revenue generated from tax is of vibrant significance for the sustainability of development in both advanced and emerging nations. It is an extensive portion of the government budget to finance public goods and services such as infrastructure, education, health, and other social activities (Macek, 2014). Developing countries, however, face multitude of challenges in producing tax revenue for their budgets. In

developing countries, there are specific limits to obtaining the necessary resources and providing public goods and services as well as the implementation of social programs for human development. Many developing countries have made significant progress, but weak tax administration capacity, corruption, dealing with difficult-to-tax sectors, poor governance, and the lack of a reciprocal link between tax and public and social expenditures remain challenges (IMF, OECD, 2011) and (Castellano & Sánchez, 2018). For example, a typical developing economy collects only 15% of GDP in taxes, compared to 40% in a typical advanced economy. This is barely enough for governments to carry out their most fundamental governmental functions. Thus, the low level of tax collection in these countries puts economic development at risk (Akitoby, 2018).

Tax collection can be a crushing burden in low-income countries. Half of the countries eligible to borrow from the World Bank's International Development Association (IDA) and are at a high risk of debt distress (Estevão, 2019). The lack of strong institutions, appropriate infrastructure, and effective relations between the central government and subnational governments are obstacles to raising revenue from tax sources. To overcome these problems, a tax policy can directly facilitate development by encouraging (or at least, not unduly deterring) investment and enterprise and avoiding excess burden on the poor while simultaneously shaping distributional outcomes to directly combat poverty (Pöschl et al., 2018).

Ethiopia's government has set long-term goals to eradicate poverty, ensure long-term economic growth, and attain a middle-income status by 2025. These goals are unattainable unless tax issues are addressed, tax administration is improved, and adequate revenue is generated. Ethiopia's tax revenue has recently shown a promising trend, but its share of GDP has remained low, indicating that policymakers should prioritize increasing tax revenue (Gobachew et al., 2017). The gap between local revenue and government spending has grown in recent years. Ethiopia's tax-to-GDP ratio is low compared to the average tax revenue of African countries (16.3 percent) and Sub-Saharan African countries (10.2%). For example, in Ethiopia, the tax revenue-to-GDP ratio was 8.08 percent in 2016, 7.6 percent in 2017, and 7.5 percent in 2018 (WB, 2019). This implies that the Ethiopian government had difficulty collecting the required level of tax revenue. As a result, this study was conducted in Ethiopia with the overall goal of examining the effects of institutional quality factors on tax revenue collection from 1996 to 2020.

1.1. Statement of the Problem

Tax revenue is an essential source of funding for public infrastructure, education, schools, judicial systems, etc. A well-functioning revenue-generating system is required for strong, long-term inclusive economic growth (Carnahan, 2015). Several empirical studies have examined on the significant contribution of tax revenue to financing development, mainly in emerging countries. However, the establishment of efficient tax systems and collection of tax revenues are enormous challenges for these countries. First, agriculture and informal businesses employ the vast majority of employees in these countries. Second, without a well-educated and well-trained team, it is difficult to build efficient tax administration. Third, many developing nations have an informal economy, and statistical and tax departments struggle to generate tax revenue because of financial constraints (Tanzi & Zee, 2001). Similarly, in developing countries, inadequate tax collection is attributed to both economic growth and institutional quality (Lien, 2015).

Quality of governance is recognized as one of the most important factors influencing poor countries' prospects (Rocha Menocal & Sharma, 2009). Improved governance in any economy denotes government stability, law and order, and a low level of internal and external conflict. A higher level of governance may indicate that economic activities and tax revenue collection perform well. (Hassan et al., 2021). Furthermore, improvements in the quality of institutions, such as in control of corruption, government effectiveness,

regulatory quality, and accountability, would significantly contribute to tax revenue mobilization. The fight against corruption, availability of adequate and better social services, and improved government accountability would give the taxpayer confidence that tax revenue is being used for the right cause (Rehema & Sunday, 2020). However, the tax revenue capacity in Sub-Saharan Africa is dwindling, and countries are becoming increasingly reliant on external capital inflows as a major source of funding for their budgets (Kitessa & Jewaria, 2018). This is best exemplified by a lack of tax revenue collection capability, which includes significant tax exemptions, corruption, and lack of tax and customs administration capacity. Furthermore, the existing structural, institutional, and policy characteristics in Sub-Saharan African countries do not allow for adequate tax collection(Feger, 2014).

According to empirical evidence, little research has been conducted on the factors that influence tax revenue collection in Ethiopia. Previous studies have focused on structural factors such as (Gobachew et al., 2017); (Kumari, D. T. H., & Nene, G, 2017) and (Ayenew, 2016). Furthermore, (Daniel, 2021) tried to incorporate some institutional quality factors such as control of corruption and government effectiveness but found an insignificant correlation with tax revenue. Despite the limited studies conducted on the factors influencing tax revenue collections in Ethiopia, their findings are inconsistent. Furthermore, the variables previously used to analyze the effects of tax revenue-to-GDP ratio in Ethiopia are nearly identical across studies. Therefore, the researcher was motivated to conduct this study by incorporating all institutional quality factors (corruption, political stability, government effectiveness, rule of law, regulatory quality, and voice and accountability). As a result, this study is intended to answer "How institutional quality affects tax revenue collection in Ethiopia?"

2. Empirical Literature Review

The key objectives of any government are to collect sufficient revenue from taxes and establish good institutional systems to shape the optimum tax structure for their economic development. Epaphra and Massawe (2017) conducted their study on corruption, governance, and tax revenues using a panel data set for 30 African countries from 1996 to 2016. They applied random effects (RE) models to analyze the association between corruption and tax revenues. According to the study's findings, corruption has an impact on tax administration, tax audits, and institutional credibility. Furthermore, when there is significant corruption, taxpayers may be encouraged to participate in the informal economy. Similarly, (Ajaz and Ahmad, 2010) evaluated the impact of corruption and governance on tax revenues in 25 developing nations using a panel data set from 1995 to 2005. According to their study findings, corruption has a negative impact on tax income, whereas good governance has a positive impact. Moreover, when a country's economy is full of corruption, a major portion of the business community prefers to work behind the shadows and pay bribes to avoid paying excessive revenue taxes (Javid & Arif, 2012).

Imam and Jacobs, (2007) analyzed the impact of corruption on the Middle East's revenue-generating capability for various tax categories. According to their findings, due to corruption, the Middle East countries collect little tax revenue as a percentage of GDP when compared to other middle-income regions, and certain taxes are more affected than others.

Using time-series data from 1980 to 2010, Amin et al. (2014) empirically reveal numerous factors involved in direct and indirect tax collection in Pakistan. They examined the relationship between the tax-to-GDP ratio, corruption, political instability, trade openness, real per capita income, and inflation using empirical data. According to their findings, tax collection decreases as corruption, inflation, and political instability increases, while trade openness and real per capita income increase tax revenue.

Aghion et al. (2016) analyzed the correlation between tax revenue, corruption, and economic growth. Their results shows that corruption has a negative and significant impact on taxes. Increased corruption dampens

the good effect of taxation by simply removing available resources that could have been used to improve the infrastructure for growth. For instance, by eliminating corruption, the optimal tax revenue would increases to 42.5 percent, boosting growth to 3.3 percent.

Hassan et al., (2021**)** investigated the impact of governance on tax revenue in Pakistan by employing the Autoregressive Distributed Lag (ARDL) co-integration technique from 1976 to 2019. Their findings show that government stability, law and order, and internal and external conflicts have positive and significant long-term and short-term impacts on tax revenue. Using the panel autoregressive distributed lag, (Rehema et al., 2019) examine the impact of governance quality on tax revenue in East African countries from 1996 to 2016. According to their results, improved governance has a positive long-run impact on tax revenue but has a negative short-run impact.

Soro (2020) examined the determinants of tax revenues in Côte d'Ivoire by employing the autoregressive distributed lag model from 1984 to 2016. His findings indicate that low institutional quality and a substantial percentage of the informal economy are among the variables causing Côte d'Ivoire's low tax revenue mobilization. His findings also show that GDP per capita, official development aid, percentage of GDP devoted to services, income distribution among the population, and population education level all have a positive impact on tax collections. On the contrary, trade openness has a negative impact on tax collections. Furthermore, using the Stata tool and a three-stage regression model, Hung et al. (2020) examined the concurrent relationship between government quality, economic growth, and income inequality in Vietnam from 2006 to 2017. According to the findings, higher government quality increase economic development and reduces regional inequality.

Johnson and Omodero (2021) investigate the impact of political (political stability), institutional (corruption), and bad governance on tax revenue mobilization in Nigeria. According to their findings, corruption and political insecurity have a positive and significant impact on tax revenue mobilization. Surprisingly, the impacts of institutional quality are quite heterogeneous, with corruption control and the rule of law having a significant negative impact in the short run, and political stability having a significant negative impact in the long-run (Canh et al., 2021). Furthermore, Arora and Chong (2018) found that a greater level of institutional quality increases positive perceptions of the quality of public services while moderating the view of taxes as a barrier to growth.

Through an empirical analysis of ASEAN countries, Syadullah and Wibowo (2015) examine the impact of governance on tax revenue using indicators such as political stability, government effectiveness, quality of regulation, law enforcement accountability, and corruption control in the tax area. Their study's findings show that controlling for corruption, voice and accountability, and political stability has significant negative effects on the tax ratio, whereas the rule of law and regulatory quality have a positive impact on the tax ratio.

Lien (2015) addresses the impact of institutional quality on tax revenue in developing countries from 1996 to 2013. The author finds a significant positive association between institutional quality and tax revenue. Similarly, (Sarwar & Ashraf, 2016) examined the role of institutions on tax buoyancy in a set of developing nations from 1996 to 2013. They indicate that institutional factors such as bureaucratic efficiency, rule of law, and corruption negatively influence tax revenue collection.

Ouma (2019) uses annual data from 1964 to 2016 to examine the impact of tax reforms, economic growth, and the political environment on total taxes, direct taxes, and indirect tax revenues. The findings indicate that all taxes were responded positively to each of the tax reforms; changes in all taxes affected by the reforms because GDP was also growing, economic growth had positive significant effect on all categories of taxes, and government effectiveness has a positive impact on indirect taxes. On the other hand, control of corruption has

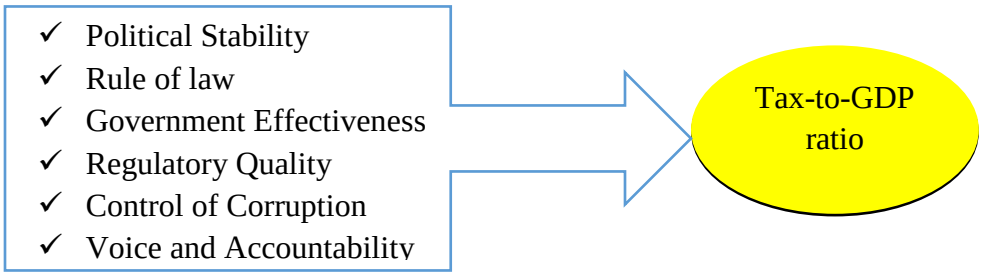
a statistically insignificant effect on tax revenues; it may promote revenue generation more than economic growth.

Daniel, (2021) examined tax revenue determinants and tax efforts in Ethiopia from 2000 to 2019 using the ARDL Approach. The findings of his study show that both government effectiveness and control of corruption have no significant relationship, whereas regulator quality has a significant but negative impact on tax revenue in Ethiopia.

2.1. Conceptual Framework

This conceptual framework describes the relationship between tax revenue and political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality. Based on the conceptual and empirical review in the previous section, the following conceptual framework was developed to guide this study.

Figure 1: The Study's Conceptual Framework



Source: ***Author***

3. Research methodology

3.1. Research approaches and Design

The principal aim of the current research is to examine the impact of institutional quality on tax revenue collections in Ethiopia. This study used a quantitative research approach and ex post facto research design to achieve the stated goal.

3.2. Data Type, Source, and Method of Collection

This study employed secondary data collected from Ethiopia Revenue and Customs Authority (ERCA), Ministry of Finance (MoF), National Bank of Ethiopia (NBE), World Governance Indicators (WGI), and the World Bank (WB) for a period of twenty-five years, from 1996 to 2020, for Ethiopia. The sample period was limited by the availability of basic data used in this study.

3.3. Model Specification

To examine the impact of institutional quality on tax revenue collection in Ethiopia, this study employed an Autoregressive distributed lag (ARDL) model. The vector error correction model or Johansson co-integration analysis could not be employed due to the small sample size, so the autoregressive distributed lag (ARDL)

model was used instead. Furthermore, there are some advantages of using the ARDL model rather than the vector error correction model (VECM). For example, when the order of integration of variables is mixed, the ARDL model is utilized, and it provides more accurate and unbiased estimates than the VEC model. In addition, the ARDL model estimates both the short and long -run models simultaneously. A bound test was performed in the ARDL model to determine whether there was co-integration between the outcome variable, tax revenue, and all covariates. An ARDL (p, q) model with a p lag of the outcome and a q lag length of the covariate is given as follows.

$$y_t = \alpha_0 + \sum_{i=1}^{p} \varphi_i \, y_{t-i} + \sum_{i=0}^{q} \beta_i \, x_{t-i} + u_t \quad (1)$$

where y_t is the outcome variable, which is tax revenue; x_t is a vector of the independent variables (political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality), u_t and is the error term, p≥1 and q≥ 0. However, the ARDL model in the error correction model (ECM) or ARDL model, which presents both the short and long -run models in one equation, is given as follows:

$$\Delta y_t = \alpha_{10} - \gamma(y_{t-1} - \theta x_{t-1}) + \sum_{i=2}^{p} \mu_1 \, \Delta y_{t-i} + \sum_{i=1}^{q} \delta_1 \, \Delta x_{t-i} + v_t \quad (2)$$

$$\theta = \frac{\sum_{i=0}^{q} \beta_i}{\gamma} \quad (3)$$

$$\gamma = 1 - \sum_{i=1}^{p} \varphi_i \quad (4)$$

Where θ is a vector of long-run coefficients that indicatte the independent variables' equilibrium effects on the dependent variable, γ is the speed-of-adjustment coefficient, μ_i and δ_i the short-run coefficients that show the short-run fluctuations.

3.4. Variable measurement

Table 1: Description and measurements of the variables

Variable	Description	Measurement	Source
TGDP	Tax GDP	Tax to-GDP ratio	
RULOFL	Rule of Law	Rule of law Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
VOACC	Voice & Accountability	Voice & accountability Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
RQUALITY	Regulatory Quality	Regulatory quality Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
GOVEFF	Gov't Effectiveness	Gov't Effectiveness Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
POLSTAB	Political Stability	Political stability Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
CCORR	Control of corruption	Corruption Index: Ranges from -2.5 (weak) to 2.5 (strong)	(Kunawotor et al., 2020); (Sarwar & Ashraf, 2016)
Source: **Autho**r			

4. Analysis of data, results, and findings discussion

4.1. Descriptive Statistics

This section presents the findings of the study on the impact of institutional quality variables on tax revenue collection in Ethiopia. This study was conducted in Ethiopia by using secondary data from 1996 to 2020. The mean, maximum, minimum, standard deviation, and observation numbers of each variables are listed in the Table 2.

Table 2: Descriptive Statistics

	TAX	CCORR	GOVEFF	PS	RQUALITY	RULEOFL	VOACC
Mean	8.6759	-0.58399	-0.702	-1.3813	-1.0548	-0.71461	-1.2015
Median	8.7244	-0.58103	-0.64695	-1.4086	-1.048	-0.73952	-1.2037
Maximum	11.262	-0.36239	-0.39673	-0.63029	-0.86012	-0.39779	-0.98925
Minimum	6.5812	-0.93055	-1.2076	-1.8034	-1.2968	-0.96579	-1.4322
Std. Dev.	1.1891	0.13211	0.22563	0.3268	0.11581	0.18723	0.13252
Skewness	0.34729	-0.4615	-0.38995	0.68698	-0.084822	0.30789	0.068763
Kurtosis	2.7275	3.1232	2.1902	2.4982	2.1825	1.6962	1.8158
Jarque-Bera	0.57989	0.90323	1.3167	2.2287	0.7261	2.1657	1.4805
Probability	0.7483	0.6366	0.51769	0.32812	0.69555	0.33864	0.477
Observations	25	25	25	25	25	25	25

Source: ***Eviews 12***

In the above table, the mean, maximum, and minimum values for the tax-to-GDP ratio in Ethiopia from 1996 to 2020 were 8.68, 11.26, and 6.58, respectively. The minimum value of the tax-to-GDP ratio was recognized in 2019 (6.58 %), whereas the maximum value was achieved in 1998 (11.26%). Thus, the maximum value of the Ethiopian tax-to-GDP ratio is below the overall average of African countries. Furthermore, the average values for government effectiveness, political stability, rule of law, voice and accountability, corruption, and regulatory quality are -0.70, -1.38, -0.71, -1.20, -0.58 and -1.05, respectively while their minimum value are-1.21 -1.80, -0.97, -1.43, -0.93 and -1.30, respectively. Moreover, the maximum value for these variables are -0.40, -0.63, -0.40, -0.99, -0.36 and -0.86, respectively. The average, minimum and maximum value of Ethiopian institutional quality are still below the international standards.

4.2. Unit Root Test

The unit root test used for this particular study is provided in Table 3. The present study used both Augmented Dickey-Fuller and Phillips-Perron unit root tests to check for the stationarity of the data. All variables were integrated of order 0 or 1 according to both ADF and Phillips-Perron tests.

Table 3: Unit Root Test

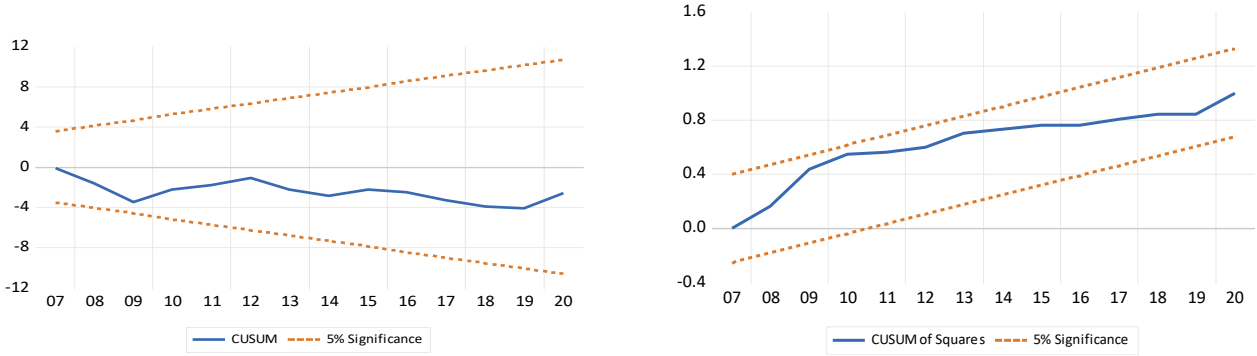
Variable	Augmented Dickey-Fuller		Phillips-Perron		t-critical ADF & PP	Order of integration
	t- statistics at level	t- statistics at 1st difference	t- statistics at level	t- statistics at 1st difference		
ΔTGDP	-1.773313	-5.131633***	-1.773313	-5.461291***	-3.752946	I(1)
ΔRULOFL	-0.909908	-5.125010***	-0.644375	-6.814011***	-3.752946	I(1)
ΔVOACC	-1.359116	-3.955053***	-1.516193	-3.891477***	-3.752946	I(1)
ΔRQUALITY	-2.514046	-6.077550***	-2.480529	-6.077550***	-3.752946	I(1)
ΔGOVEFF	-2.392792	-6.068136***	-2.407837	-6.083374***	-3.752946	I(1)
ΔPOLSTAB	-1.384523	-3.938432***	-1.297347	-3.745785***	-3.752946	I(1)
CCORR	-3.124603**	-	-3.197595**	-	-2.991878	I(0)
Source: Eviews 12						

Note: The lag length is determined using the first difference operator and the Schwarz information criterion (SIC). The symbols *** and ** represent significance levels of 1% and 5%, respectively.

4.2.1. Stability Test

In this study, the stability of the model was tested using methods proposed by (Brown et al., 1975), such as cumulative sum of recursive residuals (CUSUM) and cumulative sum of square recursive residuals (CUSUM) (CUSUMSQ). The model was considered unstable when the blue line crossed or deviated from the red line. The results of the CUSUM and CUSUMSQ blue lines in both approaches lie between the two red lines at the 5% significance level, implying that both long -run and short-run coefficients are stable in this study.

Figure 2: Stability Test



Source: ***Eviews 12***

4.3. Result and Discussion

Table 4 shows the findings of the regressions of the impacts of political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality on tax revenue collections in Ethiopia. The percentage of dependent variability was explained by the independent variables in the regression model identified by the adjusted R-squared value. The adjusted R-squared of 75.7 percent in Table 4 shows a 75.7 percent variation in the total tax revenue explained by the explanatory variables. Furthermore, the Fisher test is significant, demonstrating a substantial linear connection between the explanatory and explained variables as well as the overall goodness of fit.

The ECM (Error Correction Model) term represented here by CointEq (-1), is negative, with a coefficient estimate of -1.041115. Thus, the negative signs of the error correction coefficient model confirm the existence of a convergence trend towards equilibrium. This means that any disequilibrium movement will be corrected approximately in one year and four weeks.

4.3.1. Empirical Findings

The results of the current study reveal a positive association between government effectiveness and tax revenue collections in both the short and long-run. The provision of appropriate and enhanced social services, as well as greater government accountability, would provide taxpayers with the confidence that taxpayer funds are being spent wisely. Moreover, a good and effective government provides a good tax system that increases tax revenue collections This result is consistent with (Rehema & Sunday, 2020), Ahmad & Ajaz (2010), (Ouma, 2019), and (Hussain et al., 2016)

The study also demonstrates that increase in rule of law results in an increase in tax revenue in both the short and long -run. This implies that the higher the society's compliance with the law, enforcement of contracts, strong trust in the police and prosecutors, and low levels of violence, the higher the tax revenue collection. The favorable outcomes of the current study is consistent with (Rehema & Sunday, 2020), (Syadullah & Wibowo, 2015) and (Hussain et al., 2016). Furthermore, the results of the voice and accountability show positive and significance in the long -run. This finding is in line with (Bird et al., 2008); (Hussain et al., 2016); (Houssa & Megersa, 2017) and (Awotomilusi et al., 2019).

Regarding regulatory quality and tax revenue collection, the study found a negative and significant association in both the short-run and long- run. This result implies that poor regulatory quality results in a decrease in tax revenue. The negative findings of this study are in line with (Syadullah & Wibowo, 2015); (Daniel, 2021) and (Sarwar & Ashraf, 2016).

The coefficient of control of corruption is a negative and significant in both the long and short run. This implies that a one-point increase in corruption leads to a decrease in the tax-to-GDP ratio by 8.11 and 10.61 percentage points in the short and long run, respectively. This result is consistent with prior studies Thornton (2008); Amin et al. (2014); Ajaz & Ahmad (2010); Syadullah & Wibowo (2015), and Epaphra & Massawe (2017). The other study found a positive association between corruption and tax revenue such as (Rehema et al., 2019).

Table 4: Short Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CCORR)	-8.110064***	2.490809	-3.255995	0.0057
D(GOVEFF)	2.608618*	1.375322	1.896733	0.0787
D(PS)	3.100519***	0.742188	4.177540	0.0009
D(RQUALITY)	-9.582751***	2.826559	-3.390254	0.0044
D(RULEOFL)	5.551383**	1.933447	2.871236	0.0123
D(VOACC)	-3.273550	2.141880	-1.528353	0.1487
CointEq(-1)	-1.041115***	0.186650	-5.577912	0.0001

R-squared	0.852146	Mean dependent var	8.664378
Adjusted R-squared	0.757097	S.D. dependent var	1.213269
S.E. of regression	0.597962	Akaike info criterion	2.103758
Sum squared resid	5.005820	Schwarz criterion	2.594614
Log likelihood	-15.24509	Hannan-Quinn criter.	2.233982
F-statistic	8.965340	Durbin-Watson stat	2.467240
Prob(F-statistic)	0.000193		

Source: **Eviews 12**

Note: The symbols * and ** represent a significance level of 1%, and 5%, respectively.**

Table 5: Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CCORR	-10.605065***	2.534444	-4.184376	0.0009
GOVEFF	2.505601*	1.296493	1.932599	0.0738
PS	2.978076***	0.677410	4.396270	0.0006
RQUALITY	-9.204317***	2.258642	-4.075155	0.0011
RULEOFL	5.332152**	1.862716	2.862569	0.0125
VOACC	3.117462*	1.655195	1.883441	0.0806
C	6.337559**	2.375447	2.667944	0.0184

Source: **Eviews 12**

Note: The symbols * and ** represent a significance level of 1%, and 5%, respectively.**

The coefficient of political stability is positive and significant in both the short and long run. This result implies that a one-unit increase in political stability leads to a 3.10 percent and 2.98 percent increase in tax

revenue collection in the short and long run, respectively. Our findings are consistent with those of Chaudhry and Munir (2010), Epaphra and Massawe (2017), Akintoye et al. (2019), Dioda (2012), Hussa and Megersa (2017), and Elbahnasawy (2017). (2020). According to Estrada et al. (2012), there is no doubt that political reform has significant implications for socioeconomic systems, including tax revenue. Furthermore, the positive relationship between tax revenue and political stability implies that political instability reduces tax collection by affecting the work environment (Amin et al., 2014). This finding is inconsistent with (Syadullah & Wibowo, 2015), who discovered a negative relationship between tax revenue and political stability.

5. Conclusion

This study analyzed the impacts of institutional quality (political stability, corruption, government effectiveness, rule of law, voice and accountability, and regulatory quality) on the collection of tax revenue in Ethiopia, using a time-series data set from 1996 through 2020. All estimates are based on the autoregressive distributed lag (ARDL) bound test approach. This study employed an ex post facto research design to investigate the effects of institutional quality on tax revenue collection in Ethiopia.

The results of the ARDL co-integration show that, in the short-run rule of law, government effectiveness, and political stability have a positive and significant impact on Ethiopian tax revenue collection. Corruption and regulatory quality, on the other hand, have a negative and significant impact on Ethiopian tax revenue collection. Furthermore, in the long -run, the results revealed that the rule of law, government effectiveness, voice and accountability, and political stability have a positive significant impact, while economic growth, inflation, corruption, and regularity quality have a negative significant impact on Ethiopia's tax revenue collection.

5.1. Recommendation

- ✓ The government should made efforts to enhance the tax system and mobilize greater domestic revenues by paying attention to political reforms that improve democracy and political inclusion and reduce political instability and conflict.
- ✓ To reduce opportunities for corruption, the government should employ technology that reduces face-to-face interaction between taxpayers and taxing authorities (Bird & Zolt, 2008).
- ✓ Tax policies should be transparent and effective, with specific rules for implementation, and each rule and regulation should be implemented by a tax expert
- ✓ Improving governance and respecting the rule of law are the primary efforts that must be implemented to encourage the rate of tax revenue
- ✓ Boosting economic activity: Policies that increase economic activity, income, and wealth can increase revenue. Building infrastructure, education, and innovation; trying to reform the rules of social programs that frustrate some people from working; and restructuring the tax system to stimulate domestic investment.

5.2. Contribution of the study

This study contributes to Ethiopian tax income collection issues. First, it contributes to the limited number of academic studies on institutional quality and its effects on Ethiopia's tax revenue-generating capacity for development. Apart from previous studies in Ethiopia, this research utilized only institutional-quality variables, and it is hoped that the authority will find it helpful in analyzing the impact of institutional quality on tax revenue generation, thereby encouraging improvements in the quality of their service to the people. Second, this study adds to the current knowledge by investigating the quality of institutions and tax revenue

collection in Ethiopia. Finally, a review of the literature reveals that no research has been conducted on the impact of institutional quality on tax revenue collection in Ethiopia. Therefore, this study was considered for inclusion of the impacts of quality of institutions on tax revenue collection in Ethiopia.

5.3. Limitation to Study

This study examined the impact of institutional quality on tax revenue collections in Ethiopia from 1996 to 2020, including political stability, corruption control, rule of law, regulatory quality, government effectiveness, and voice and accountability. Furthermore, although the study measures a variable using estimates ranging from -2.5 to +2.5. Therefore, additional relevant proxies can be considered useful.

5.4. Suggestions for Further Studies

A follow-up study should be conducted to improve the findings of the present current study. Instead of focusing on Ethiopia, the researcher suggests that more research should be conducted in other countries. In future, researchers may incorporate moderator issues into new research models in the upcoming period. Other factors that influence Ethiopian tax revenue collection, such as urbanization, population growth, economic growth, and literacy rate, can be considered in future studies.

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