The Nexus between Degree of Commercialization, Trade Openness and Tax Revenue Performance in Tanzania

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ABSTRACT

The study was mainly focused on evaluating the nexus between degree of monetization and tax revenue performance in Tanzania. Specifically, the study intends to examine the share of broad money (M2) to GDP and how it influences tax revenue performance in Tanzania. Time series research design was employed, and purposive sampling was used here and has opted for a quantitative research approach while time series data research design was employed. The study used secondary data obtained from the Bank of Tanzania (BoT), International Monetary Fund (IMF) and World Bank (WB). The data ranges were from 1970-2020. Findings from the study revealed that agriculture shares were positively related to the tax revenue performance, foreign aids were positively related to the tax revenue performance, political stability were positively related to the tax revenue performance Finally trade openness influenced tax revenue performance. The study concluded that degree of commercialization was positively related to the tax revenue performance. Therefore, this study recommends that policy makers may enact good policy, laws and regulations that will enhance the government to improve the overall tax revenue performance in Tanzania. Also, the study recommends that the government to encourage the exportation to increase tax revenue performance in Tanzania.

1. Introduction

To improve people's living conditions, the government must raise cash to finance social and economic activities in the country, such as health care, infrastructure, and education (Hasan et al., 2023). Consequently, both taxes and non-taxes create revenue for the government (Akitoby, 2018). Most countries see tax revenue as their principal source of revenue (Akitoby, 2018; Boukbech, 2018 (a); Kim and Kim, 2018; Ndoye, 2014), because it is the only realistic means of acquiring funds to support social and economic activities of the country.

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It aids the government in stabilization of national economy, the allocation of money, and the distribution of income and wealth among the people (Al-Qudah, 2021, Amirthalingam, 2020). Tax income supports citizens through providing social services such as schools, hospitals, roads, housing, and transportation, in addition to being a key source of revenue for the government (Hasan *et al.,* 2023). Although tax revenue is important, it varies by region (World Bank, 2020). According to Akitoby (2018), wealthier countries gather more tax revenue than developing ones. According to data from the International Monetary Fund (IMF) and World Bank (WB), industrialized countries collect 40% of GDP on average, which is greater than developing countries. Developed countries collect higher tax revenue because they employ their tax bases more effectively (Sharma, 2015). In impoverished countries, they collect an average of 16.5% (Al-Qudah, 2021). The average tax income to GDP ratio in SSA nations is less than the UN's (UN) 20% objective for funding social and economic activities (Amirthalingam, 2020). Tax revenue in developing nations is insufficient to support social and economic activities.

Low tax revenue collection in underdeveloped countries is attributable to a limited tax base, economic structural anomalies, and inefficient tax administration (Epaphra & Massawe, 2017). They have enacted several tax changes, including the development of a Taxpayer Identification Number (TIN), broadening tax bases, and the installation of Value Added Tax (VAT), which replaced sales tax in order to increase tax revenue (Ayenew, 2016). Despite the implementation of tax administration legislation, they do not collect sufficient tax revenue. East African Community countries collect 13.1% of GDP on average, which is lower than the UN standard (Hasan *et al.,* 2023). Tanzania, like other developing countries, has struggled to collect appropriate tax revenue through various means since 1970 in order to increase the tax base and enhance the effectiveness of the tax collecting system (Osoro, 1993). These measures include the reconstruction of the tax system, the establishment of a department for large taxpayers, the streamlining of the customs tariff structure, the application of VAT, and the passing of a new Income Tax Act in 2004 (Kim & Kim, 2018; Epaphra & Kaaya, 2020). The economy of Tanzania is a lower-middle income economy that is overwhelmingly dependent on agriculture. Therefore, the trade openness, agriculture share, foreign aids and political stability act as controlling variables. These variables play a major role as determinants of tax performance. Furthermore, valid justification for selecting trade openness, agriculture share, foreign aids and political stability as controlling variables for the study is because Tanzania depend on grants, assistance and debts to support the deficit budget. Despite tax changes, the government continues to collect little revenue, now at 11.46% of GDP (Bank of Tanzania, 2019), which is lower than the UN average (Hasan *et al.,* 2023). Several studies have been undertaken on the variables that impact tax revenue collection in developing and developed nations, with an emphasis on structural drivers such as GDP per capita, trade openness, agricultural proportion of GDP, industrial percentage of GDP, and industrial share of GDP. For example, Alabede (2018) discovered a negative relationship between per capita income and tax revenue collection in Nigeria due to a larger informal sector, whereas Nguyen and Liu (2014) discovered that per capita income increases tax revenue in China and Vietnam because most countries rely more on income tax, so an increase in per capita income may result in an increase in tax revenue collection.

Mwakalobo (2015) discovered a favorable association between trade openness and tax revenue collection in Tanzania, however Shubita and Warrad (2018) discovered a negative relationship between trade openness and tax revenue in Middle Eastern and North African (MENA) nations. Alabede (2018) discovered that agricultural GDP share is strongly and favourably connected with tax revenues in low and middle-income countries, however Epaphra and Kaaya (2020) discovered a negative association in Tanzania. The findings' inconclusiveness might be attributed to the fact that nations differ in many ways, including their economic structure, trading regime, macroeconomic environment, political economy, and protective policy mix (Ndoye, 2014). Most of this research employed cross-section or panel data analysis. Some research in Tanzania, for example, employed time series data analysis over a short time (Epaphra & Kaaya, 2020). According to Castañeda (2018), the goal of boosting tax revenue collection is long-term since

tax revenue collection is mostly affected by economic variables that require time to resolve. According to Hasan *et al.,* (2023) Tanzania has seven (7) major types of tax revenue: income tax charged to individuals, partnerships, and corporations, import duty charged to importers, VAT charged to final consumers, excise duty charged to suppliers, capital gains tax charged to individuals, partnerships, and corporations, and property tax charged to owners.

According to the Amirthalingam (2020) study, VAT is the first kind that contributes 40.9% of GDP, followed by income tax at 35.5%, property tax, import duty, excise duty, and capital gains tax at 5%, 4%, and 3%, respectively. Furthermore, most of this research did not consider the degree of commercialization as propo sed by the theory. Limited research has focused on the influence of degree of monetization on structural factors and tax revenue collection performance, with conflicting results (Al-Qudah, 2021, Amirthalingam, 2020). A good knowledge of each sector's capability is critical since certain areas of the economy are simpler to tax than others, but their tax base is limited. Agriculture, for example, is tough to tax.
Along with the aforementioned structural and composition variables, there is an ongoing discussion in the research about the influence of aid finance on tax collections. The relationships between assistance finance (public debt and grants) and tax income are too hazy (Terefe, 2017). The empirical findings have been varied, owing to their sensitivity to the choice of nations and the time under consideration. Aid financing is connected to tax revenue when funds are utilized for projects that yield returns on loan costs; as investment grows, the government has the opportunity to broaden the tax base and hence enhance tax revenue collection (Hasan *et al.,* (2023). However, just a few research on subject have been conducted in Tanzania. Tanzania depends the funds from donors since the government budget is deficit, the tax collection is low compared to government expenditure, so the gap exists in such scenario, so there is need to examine the association between degree of commercialization and tax revenue performance in Tanzania as Tanzania is middle economy country depends on foreign aids, agriculture share and political stability. Various findings highlight the need of investigating the impact of commercialization on Tanzania's tax collecting performance. The majority of previous study concentrated on the relationship between sectoral compositions. The influence of fiscal agreements, assistance money, and composite determinants channel on tax revenue was not examined in this research. The purpose of this study is to investigate the link between Tanzania's level of commercialization and tax revenue performance. By examining the impact of monetization on tax revenue performance in Tanzania, this study fills literature gap. The paper is organized, including sections about introduction, literature review, research methodology, discussion of results, and conclusion.

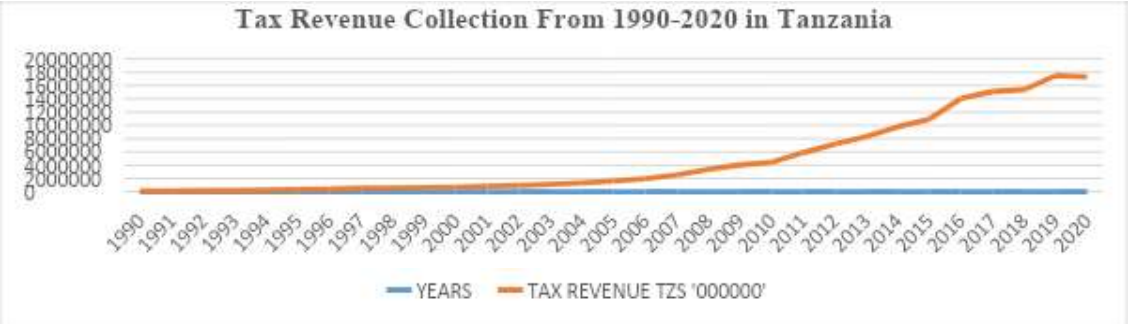

Figure 1.1: Trend of Tax Revenue in Tanzania
Source: World Bank Database, 2022

Research Questions:

i. What is the relationship between trade openness and tax revenue performance in Tanzania?
ii. What is the relationship between foreign aids and tax revenue performance in Tanzania?
iii. What is the relationship between agriculture shares and tax revenue performance in Tanzania?
iv. What is relationship between political stability and tax revenue performance in Tanzania?

2. Literature Review

In his 1976 book, Taxation in Fiscal Exchange, Buchanan J.M. introduced fiscal exchange theory, which analyses the relationship between government expenditure and tax income. According to fiscal exchange theory, the fiscal contract in terms of supplying people with public services is critical in encouraging individuals to pay taxes. Fiscal exchange is a contract between the people and the government since the people's interest is in what they get from the government in exchange for what they pay (Syadullah, 2015). Taxes are considered as a cost that must be paid to the government in exchange for goods and services. Individuals would never notice taxes if there was no relationship between the tax and benefit sides. The application of the theory to the study is when the people expect to get the benefits from the government after paying taxes. These benefits include provision of social services like water supply, education, health service and construction of roads and other infrastructures.

Existing studies also found the relationship between degree of monetization and tax revenue. A study conducted by Shubita and Awad-Warrad (2018) pointed out that financial intermediation influences economic growth and therefore tax bases. It is assumed that tax administration would more easily identify people who escape to pay tax when financial corporations report the peoples' transactions. Several academics support this idea. Governments want to spend more money, but people are unwilling to pay more taxes, according to Nguyen and Liu, 2014), who supports the idea, and governments need to focus on people's desires in order to increase tax revenue. Tax revenue may increase if the government delivers high-quality social services to the public, because people are more likely to pay taxes after getting government assistance (Syadullah, 2015). People's motivation to pay taxes may increase if they receive favorable government benefits. Moore (2004) discovered that fiscal contracts compel individuals to pay taxes.

A more recent study by Kira (2017), also reports the degree of monetization measured by broad money (M2) could affect tax revenue collection because of the larger volume of money-based transactions and a more efficient way of quantifying the size of various tax bases. On the other hand, Mahdavi, (2008) found that degree of monetization is associated with lower tax to GDP ratio.

Tax revenue performance is critical not just for assistance purposes, but it may also inspire governments to engage into a fiscal contract with their population in which they pay taxes in exchange for high-quality goods and services (Mascagni, 2013). According to one viewpoint, the government's capacity to provide public services to the people leads to a higher willingness to pay taxes Boukbech *et al.,* (2018a) this is known as a fiscal contract or quid pro quo (Castañeda and Rodríguez, 2018). Tax revenue performance may be achieved when the government offers outstanding services and efficient public spending using tax revenues given by taxpayers rather than coercive tactics (Mourre *et al.,* 2017). Existing research looked at the impacts of government spending on tax revenue (Mawejje and Munyambonera, 2016; Terefe, 2017; Epaphra and Kaaya, 2020; Al-Qudah, 2021). These studies focused on recurrent and development spending but did not disaggregate the influence of fiscal contract (quality services and efficient use of public funds) on tax revenue performance. The exception is Boukbech *et al.,* (2018a) study in Zambia, which focused on the influence of fiscal contracts on effective service delivery (human capital investment) on tax income. This study will vary from prior studies in that it will investigate the impact of human capital and physical investment expenditure.

2.1 Conceptual Framework

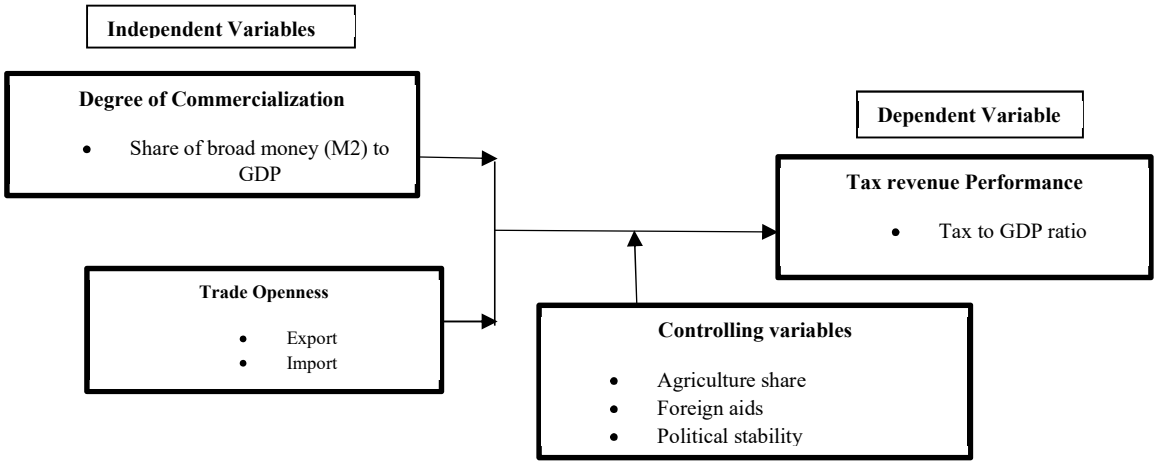

Figure 2.1: Conceptual Framework
Source: Constructed by Literature Review and Modified through fiscal exchange theory

The conceptual framework is adopted from literature review and modified from theories. Independent and dependent variable relationships are described in the conceptual framework below (Figure 2.1). Independent variable is degree of monetization and dependent variable is tax revenue collection performance. The dependent variable is tax revenue performance which was measured by tax to GDP ratio, while the degree of commercialization and trade openness stands as independent variables while agriculture shares, foreign aids and political stability stands as controllable variables.

2.2 Research Hypothesis

i. There is no relationship between trade openness and tax revenue performance in Tanzania.
ii. There is no relationship between foreign aids and tax revenue performance in Tanzania.
iii. There are no relationship agriculture shares and tax revenue performance in Tanzania.
iv. There is no relationship between political stability and tax revenue performance in Tanzania.

3. Research Methodology

Time series research design was employee and purposive sampling was used in this study. The study opted for a quantitative research approach while time series data research design was employed. The study used secondary data obtained from the Bank of Tanzania (BoT), International Monetary Fund (IMF) and World Bank (WB). The data ranges were from 1970-2020.

$$TR = f(AS, FA, PS, TO, DM) \quad (1)$$

whereby:

$TR = Tax\ revenue\ performance,$
AS=Agriculture Share,
FA=Foreign Aids,
PS= Political Stability,
$TO = Trade\ Openess,$ *and*
$DM = Degree\ of\ Monetazition.$

Econometrically, an economic model (i) is converted into the following regression.

$$TR_t = \beta_0 + \beta_1 AS_1 + \beta_2 FA_2 + \beta_3 PS_3 + \beta_4 DM_4 + \mu_t \quad (2)$$

whereby:

$TR = Tax\ revenue\ performance,$
AS=Agriculture Share,
FA=Foreign Aids, PS= Political Stability,
$TO = Trade\ Openess,$
$DM = Degree\ of\ Monetazition, \beta_0 = Constant\ Term$, and $\mu_t = Error\ Term.$

4. Results and Discussion

4.1 Descriptive Statistics

Descriptive Statistics analysis was done so as to obtain summaries about samples and measures as a basis for quantitative analysis of data. It was used to find out the fundamental features of the research findings and give a simple summary and graphical presentation of the data. Descriptive statistics is the first procedure in time series analysis. This step helps the researcher to know the dispersion of the data collected.

Table 4.1 shows that the standard deviations are large proportional to their mean respectively. This may indicate a high variability in five variables including trade openness, degree of commercialization and tax revenue performance, the extent of deviation whether high or low will depend on the application of study. The test static is less than the critical value at the 5%, hence the variance is not significantly different in all three variables. Furthermore, the results show a normality test because the null hypothesis suggests that the data was normally distributed. Since the value for Skewness/Kurtosis tests for normality test was greater than 0.05, the null hypothesis is not rejected. This implies that the data follow normal distribution.

4.2 Lag Tests

When observing the data to determine whether they are stationary or non-stationary, it is essential to look at the maximum lag for each variable in order to include it in the unit root tests (Ndoye, 2014). The lag length selection criteria evaluated is presented as follows:

$$AIC_p = -2T\left[ln\left(\sigma_p^2\right)\right] + 2p \quad (3)$$

$$SBIC_p = ln\left(\sigma_p^2\right) + [pln(T)]/T \quad (4)$$

$$HQC_p = ln\left(\sigma_p^2\right) + 2T^{-1}Pln[ln(T)] \quad (5)$$

$$FPE_p = \sigma_P^2(T-p)^{-1}(T+p) \quad (6)$$

whereby:

AIC= Akaike Information Criterion,
SBIC= Schwarz Bayesian Information Criterion,
HIC= Hannan-Quimm criterion,
FPE= Final Prediction Error.

Table 4.2 shows that the maximum lag for revenue was lag 1 and lag 2 since AIC has the lowest value compared to all other values. Moreover, the maximum lag for variables was found at lag two (2) since it has the lowest AIC. This AIC is the superior criterion under study in a case of a small sample (Ndoye, 2014).

4.3 Unit root tests

Before estimating the Autoregressive distributed lag model and Error Correction Model (ECM), it is always recommended to assess the time series properties of the data in order to determine whether or not the data are stationary. Therefore, both Phillips - Perron (P-P) and Augmented Dickey - Fuller (ADF) tests were checked to determine the presence of the unit root. Therefore, the hypotheses below were considered and the time series Y_tY_t nonstationary has a unit root if $\rho = 1\ \rho = 1.$

$$y_t - y_{t-1} = \alpha + \rho y_{t-1} - y_t + v_t \quad (7)$$

$$\Delta y_t = \alpha + (\rho - 1)y_{t-1} + v_t \quad (8)$$

4.3.1 Augmented Dickey-Fuller (ADF) Test

Table 4.3 shows the ADF and PP test results for structural determinants and tax revenue performance. All variables were non stationary in level form at 5% levels of significance. This is to say, after first differences, all variables were stationary at 5% levels of significance. Therefore, these variables were integrated at order one 1(1).

4.4 Lag Test for Cointegration

Before determining whether they have long term relationship (co-integrated) or they do not have the long-term relationship (not co-integrated), it is essential to determine the maximum number of lag for overall variables in order to include it in the test

Table 3.1
Operationalization of Variables

S/n	Variables	Definition	Proxy &Unit of Measurement (Tshs)	Expected signs of the coefficients	Source
1	Agriculture share	The sector accounts for around 28% of the country's GDP and approximately 24% of its exports.	Agriculture shares to GDP	+	BoT, 2023
2	Foreign aids	Any sort of aid that one country freely sends to another, which might take the form of a gift, grant, or loan.	Foreign aids to GDP	+	BoT, 2023
	Political stability	A situation characterized by specific political conditions such as wars, governance challenges, or government transitions.	No conflicts	+	BoT, 2023
3	Trade openness	The value of export and import in the country	Trade volume (import plus export) to GDP	+	BoT, 2023
4	Degree of commercialization	Is a currency in circulation outside banks and total deposits held by commercial banks, excluding foreign currency deposits.	Share of broad money (M2) to GDP	+	BoT, 2023

Table 4.1
Descriptive Statistics

	Obs	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
TO	50	3.4300	1.1500	3.900	3.999	-0.4000	-0.4400
DC	50	3.0700	1.2400	3.700	3.801	-0.1900	-0.8300
AS	50	3.5624	1.7856	3.236	3.685	-0.8562	-0.6580
FA	50	3.2859	1.2856	3.265	3.256	-0.3568	-0.6357
PS	50	3.8799	1.8652	3.426	3.535	-0.5360	-0.8652
Tax revenue to GDP	50	2.95	0.2300	2.960	2.980	-0.568	-0.85562

Table 4.2
Lag Length Test

Variables Lag Tax revenue to GDP		FPE	AIC	HQIC	SBIC
	0	0.000256	-3.0458	-5.12152	-5.99359
	1	0.000973	-4.21211	-4.98323*	-4.92834*
	2	.000143*	-5.1517*	-5.86232	-5.8885
TO					
	0	0.000974	-2.0512	-5.02034	-4.4357
	1	0.000261	-4.02223	-4.98545*	-5.82835*
	2	.000783*	-4.04517*	-5.93937	-5.8885
DC					
	0	0.000234	-3.0156	-3.02052	-6.36520
	1	0.00962	-5.01122	-5.98225*	-4.92835*
	2	.000528*	-7.01233*	-3.96934	-3.9801
AS					
	0	0.000532	-3.035	-3.00001	-6.32500
	1	0.00658	-5.0000	-5.0055*	-4.922358*
	2	.000528*	-7.0000*	-3.0005	-3.98010
FA					
	0	0.0005236	-3.0750	-3.0000	-6.99332
	1	0.006235	-5.0001	-5.0020*	-4.23500*
	2	.000056*	-7.0000*	-3.0002	-3.9801
PS					
	0	0.0000235	-3.0000	-3.00001	-6.99332
	1	0.00320	-5.0002	-5.00325*	-4.035562*
	2	.000005*	-7.0023*	-3.0025	-3.93000

of Johannes's co - integration test (Hill *et al.,* 2011).

Table 4.4 shows that the maximum lag for all variables was lag one since at that lag it has the lowest FPE, AIC, HQIC and SBIC compared to all other values at different numbers of lags. This different approach helps the researcher to know the best way of interpreting the econometric model. This approach helps to know the maximum number of lag for overall variables in order to include it in the test of Johannes's co - integration test.

4.5 Co- Integration tests

This test is always performed after testing the stationarity and determining the optimum number of lags for all overall variables. This is the cointegration test which is always performed in order to suggest the appropriate model to be adopted between error corrections models (ECM), long run equation with least squares and

Table 4.3
Test for Stationarity both Augmented Dickey Fuller Test and Phillips Perron

ADF Test					
Variables	Level		First difference		Order of integration
	Test statistics	Critical value	Test statistics	Critical value	
Tax revenue to GDP	-1.278	-2.989	-4.902	-2.955**	I (1)
TO	-1.741	-2.098	-5.909	-2.952**	I (1)
DC	-1.971	-2.901	-4.090	-2.955**	I (1)
AS	-1.256	-2.230	-5.930	-2.9000**	I (1)
FA	-1.658	-2.368	-4.037	-2.9000**	I (1)
PS	-1.865	-2.111	-5.39	-2.000**	I (1)
The PP Test					
Tax revenue to GDP	-1.582	-2.930	-6.908	-2.952**	I (1)
TO	-2.290	-2.250	-7.267	-2.852**	I (1)
DC	-1.482	-2.032	-6.230	-2.752**	I (1)
AS	-1.000	-2.032	-6.358	-2.752**	I (1)
FA	-1.302	-2.3022	-6.250	-2.520**	I (1)
PS	-1.037	-2.235	-6.350	-2.356**	I (1)

Table 4.4
Lag test for Overall variables (Per Capita Income, Trade openness and Degree of Commercialization

Lag	FPE	AIC	HQIC	SBIC
0	3.60E-06	-6.87	-6.84	-6.79
1	4.1e-07*	9.04*	-8.95*	-8.89*
2	4.30E-07	-8.99	-8.73	-8.56
3	4.90E-07	-8.90	-8.66	-8.28
4	5.20E-07	-8.16	-8.52	-8.05

autoregressive distributed lag model. In this case, the Johansen's test for Co - integration was employed since all variables were integrated at order one which implies that the order of integration was I (I) homogeneous for all variables. The following are the equations for λtrace and λmax statistics respectively in equation (10) and equation (11). If r = 1, 2, 3… n

$$\lambda_{trace}(r) = -T\sum_{i=r+1}^{k} log\,(1-\lambda_i) \quad (9)$$

$$\lambda_{trace}(r) = -T\log(1-\lambda_{r+1}) \quad (10)$$

whereby:

λ: Eigen-value, and

T: Observations.

The essence of Johansen's test for Cointegration is to know the long relationship between variables based on critical values and hypotheses. The results in Table 4. 5 show that the variables were not co-integrated since the test statistics for trace statistics

Table 4.5
Johansen's test for cointegration (long run relationship)

Null Hypothesis	Trace Statistics	Critical Value	Max Statistics	Critical Value
r = 0	11.1365*	15.41	9.901	14.07
r <= 1	1.2355	3.76	1.2355	3.76

H_0= No cointegration test

and max statistics was less than their critical values and so the null hypothesis was accepted. Hence, there is no co - integration. This implies that, there is no long - term relationship that exists to the degree of commercialization and tax revenue performance because p values are greater than 0.05. This is to say, tax revenue performance has a positive relationship with the previous year tax revenue performance but not with the degree of commercialization.

4.6 ARDL Model

The autoregressive distributed lag model was further used to assess the impact of degree of commercialization tax revenue performance in Tanzania. To illustrate the ARDL modelling approach, the following simple model can be considered:

$$y_t = \alpha + \beta x_t + \sigma z_t + e_t y_t = \alpha + \beta x_t + \sigma z_t + e_t \quad (11)$$

The error correction version of the ARDL model is given by:

$$\Delta y_t = \alpha_0 + \sum_{i=1}^{p} \beta_i \Delta y_{t-i} + \sum_{i=1}^{p} \sigma_i \Delta x_{t-i} + \sum_{i=1}^{p} \in_i \Delta z_{t-i} + \lambda_1 y_{t-1} + \lambda_2 x_{t-1} + \lambda_3 z_{t-1} + u_t \quad (12)$$

The first part of the equation with β, δ and ε presents the short run dynamic of the model. The second part with λs represents a long run relationship. The null hypothesis in the equation is λs + λs + λs = 0, which means non- existence of long run relationship.

The essence of using the autoregressive distributed lag model to this study is to test the long run relationship between variables. The long run relationship depends on the level of significance. The expected coefficients reveal that the volume of GDP in the last one year may accelerate the current growth rate in Tanzania. Coefficients of all variables are statistically significant. Lag one GDP significantly (P < 0.01) affects the current GDP with coefficient of 0.873. This implies that there is a positive relationship between lag tax revenue performance and current tax revenue performance. So, for each percent increase in lag tax revenue performance, the tax revenue performance by 0.873 percent. Furthermore, Trade openness was significantly at (P < 0.05) affecting the GDP with a coefficient of 0.0735. This implies that for each percent increase in Trade openness, the GDP increases by 0.0735 percent.

Similarly, Degree of commercialization is positively related with tax revenue performance in Tanzania. This implies that the coefficient of Degree of commercialization on the selected sectors are significant and positive with the value of 0.0735 for trade openness. It is estimated from the result that, when everything is kept constant, each percent increase in Degree of commercialization leads to an increase in the rate of economic growth by 0.0735%. Generally, trade openness and degree of commercialization are very important stimulates tax revenue performance in Tanzania. The predictor variable (Digital commercialization) was significant in Tanzania and the lag Digital commercialization there was also statistically significant to influence the GDP in Tanzania. One percent increase in current Digital commercialization increases economic growth by 0.0735. This implies that Digital commercialization improves human capital in Tanzania and leads to enhancement of economic growth. This finding was supported by Salim (2017) in Zanzibar. He suggests that the government should increase recurrent and capital expenditure including expenditure on education. It should also make sure that the money budgeted for development in these sectors are correctly managed and controlled. Boukbech *et al.,* (2018a)

reveals that the Digital commercialization has the highest impact on GDP of a country of Sri Lanka and suggested to increase more investment in Digital commercialization. However, other study including Mourre *et al.,* (2017), done in Kenya revealed that digital commercialization on investment, physical infrastructure, education, health care, public debt servicing, economic affairs, general administration and services, define, public order and national security and government consumption has an effect on tax revenue performance. This study also found the positive relationship between digital commercialization and tax revenue performance.

5. Conclusion and Recommendations

Trade openness has a negative impact on tax revenue performance in the long run, although the degree of commercialization has a positive impact. The agriculture share was positively related to the tax revenue performance, foreign aids were positively related to the tax revenue performance, political stability was positively related to the tax revenue performance Finally trade openness influenced tax revenue performance. Trade openness has a negative impact on tax revenue performance in the long run, although the degree of commercialization has a positive impact. So, all two independent variables influence tax revenue performance. According to the study's findings, the researcher suggests that future studies include other crucial areas of social services, such as health and education, and that the number of observations be increased. The study concluded that degree of commercialization was positively related to the tax revenue performance. Therefore, this study recommends that policy makers may enact good policy, laws and regulations that will enhance the government to improve the overall tax revenue performance in Tanzania. The research recommends that policymakers develop effective policies, rules, and regulations to assist the government in improving Tanzania's overall tax income performance. According to the research, the Tanzania Revenue Authority should promote voluntary tax compliance in order to boost revenue collection. Furthermore, the research recommends that Tanzania improve its efficiency in order to enhance money collection.

The study will add new knowledge about the degree of commercialization and tax revenue performance since the economy of Tanzania is a lower-middle income economy that is overwhelmingly dependent on agriculture. Future studies may consider the effect of tax assumptions on performance. To enhance the number of observations, the researcher suggests that future studies include other significant areas of social services, such as health and education. Future studies may consider the effect of tax assumptions on performance.

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