Exploring the relationship between government tax revenue and economic growth in Tanzania from 1996 to 2024

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Abstract

This study explores the relationship between gross domestic product (GDP) and key tax revenue components in Tanzania, focusing on their impact on economic performance. Utilizing the ARMA model, the research highlights how GDP is influenced by its own past values and various tax sources, including domestic value-added tax (VAT), VAT on imports, and domestic excise duty. The results revealed that these consumption-based taxes significantly contribute to GDP growth, underscoring their vital role in driving economic performance. In contrast, Pay-As-You-Earn (PAYE) and excise duties on imports show limited or insignificant effects, suggesting that direct and trade-related taxes have a less pronounced impact. The study's approach effectively captures the interactions between tax revenue and economic growth, providing valuable insights into their contributions. Key findings showed the importance of strengthening tax compliance systems and enhancing domestic production to maximize the benefits of VAT and excise duties. The study advocates for policies that broaden the tax base, improve trade facilitation, and modernize tax administration to support sustainable economic growth. Additionally, it underscores the necessity of adapting fiscal policies to evolving economic conditions, contributing to the discourse on effective tax policy and economic development in Tanzania.

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1. Introduction

Globally, the relationship between government tax revenue and economic growth has been a central focus of economic research and policy formulation. High-income countries typically enjoy robust tax systems characterized by high compliance and diversified revenue sources, enabling sustained investments in infrastructure, healthcare, and education (Kitole, 2025). For instance, the Organization for Economic Cooperation and Development (OECD) countries generate, on average, 34% of Gross Domestic Product (GDP) from taxes, providing a strong fiscal base for economic growth (OECD, 2021). Advanced economies have also adopted innovative technologies in tax administration to optimize revenue collection and reduce evasion, supporting stable economic environments (Zhang *et al.*, 2021). In Africa, the nexus between government revenue and economic growth is complex. While tax reforms and digital technologies have improved revenue mobilization in some countries, such as Kenya and Rwanda, others, including Tanzania, continue to grapple with low compliance and tax base constraints. The introduction of tax incentives in several African nations, aimed at attracting foreign investment, often results in significant revenue losses and minimal growth benefits (Mondo, 2022). Additionally, the dominance of informal economies, accounting for over 40% of GDP in many African nations, presents a major challenge for tax administration (Moore, 2020).

Since embarking on market-oriented reforms in the 1990s in Tanzania, government revenue has seen gradual improvement following tax system reforms, including the establishment of the Tanzania Revenue Authority (TRA) and the introduction of value-added tax (VAT). Tax revenue as a percentage of GDP has grown from approximately 10% in the early 1990s to around 14.5% in 2022, driven by reforms in tax administration, broadening the tax base, and efforts to curb tax evasion (IMF, 2023). Simultaneously, Tanzania's GDP growth rate has averaged over 6% annually since 2000, positioning it among Africa's fastest-growing economies (World Bank, 2023).

However, despite these measures, tax revenue has consistently remained below the targeted 18% (Fjeldstad *et al.*, 2019). This shortfall is attributed to factors such as tax exemptions, limited technological adoption, and weak enforcement mechanisms. Moreover, the informal sector, constituting over 50% of Tanzania's economy, significantly undermines the effectiveness of tax policies (Chindengwike, 2022; Kitole & Sesabo, 2024). These fiscal challenges hinder the country's ability to fund development projects, reduce poverty, and achieve sustainable economic growth. Also, non-tax revenue, including income from state enterprises and royalties, has remained volatile and relatively low, contributing less than 3% of GDP on average (TRA, 2022). Furthermore, the composition and efficiency of tax revenue have been subjects of concern. Direct taxes, such as corporate and personal income taxes, account for less than 30% of total revenue, reflecting a narrow tax base and limited compliance. Indirect taxes, including VAT and excise duties, dominate, raising questions about equity and the burden on low-income households.

The Tanzanian government has adopted various measures to enhance domestic resource mobilization. Initiatives include digitizing tax systems, promoting voluntary tax compliance, and engaging in public-private partnerships. However, the extent to which these efforts have translated into sustained economic growth remains a matter of debate, necessitating an empirical investigation into the causal relationship between government tax revenue and growth.

While global studies emphasize the importance of efficient revenue mobilization in fostering economic growth, Tanzania's fiscal performance highlights a persistent gap between policy objectives and outcomes. Despite successive reforms, the country's tax revenue growth has not proportionally translated into desired economic progress, raising concerns about the effectiveness of fiscal strategies. Despite notable progress in economic growth and revenue collection, the Tanzanian economy faces critical issues in achieving sustainable development through its fiscal policies. The challenges of low revenue-to-GDP ratios, inefficient tax systems, and reliance on external debt financing underscore the need for more effective revenue mobilization strategies. The revenue-GDP ratio, although improved, remains below the sub-Saharan Africa average of 16% (McNabb, 2018), limiting the government's capacity to invest in critical sectors.

Furthermore, evidence from empirical studies suggests mixed results regarding the impact of different revenue sources on economic growth. For instance, while tax revenue has been positively correlated with GDP growth in many developing economies, the over-reliance on indirect taxes in Tanzania raises concerns about economic inequality and long-term growth sustainability (Francis & Amirthalingam, 2020). Additionally, the volatility of non-tax revenue from royalties and state enterprises creates fiscal uncertainty, hindering consistent development planning. Tanzania's fiscal deficit, averaging 3.5% of GDP over the past decade, highlights the inadequacy of revenue mobilization to meet expenditure needs (TRA, 2022). This has led to increased borrowing, with public debt rising to over 40% of GDP by 2022. Without addressing these structural challenges, the country risks undermining its growth trajectory and fiscal stability. This study seeks to explore the dynamic relationship between tax revenue and economic growth in Tanzania from 1996 to 2024, utilizing robust econometric techniques to provide evidence-based policy recommendations. By investigating the impacts of tax revenue on economic performance, the research aims to contribute to the formulation of fiscal policies that support sustainable development.

2. Theoretical Literature Review

The relationship between tax revenue and economic growth is underpinned by several economic theories, primarily the endogenous growth theory and classical fiscal theories. These frameworks provide the basis for understanding how fiscal policies and revenue mobilization influence economic development. Endogenous growth theory, advanced by Romer (1986) and Lucas (1988), emphasizes the role of government policies in influencing economic growth through mechanisms such as human capital development, infrastructure investment, and innovation. According to this theory, fiscal policies that effectively mobilize revenue can finance productive public investments, leading to sustained economic growth. For instance, infrastructure development funded by tax revenue can reduce transaction costs and increase productivity, as demonstrated by McNabb (2018), who analyzed the impact of tax structures on growth in developing economies.

The fiscal policy framework is also grounded in the classical theory, which distinguishes between distortionary and non-distortionary taxes. According to Kneller *et al.* (1999), distortionary taxes (e.g., income taxes) negatively impact economic growth by reducing incentives for labor and investment. Non-distortionary taxes, such as consumption taxes, are considered less harmful to growth. Studies such as Arnold *et al.* (2011) support this view, showing that shifts towards non-distortionary taxes can foster growth.

Empirical studies further validate these theoretical insights. For instance, Amirthalingam (2013) examined the impact of tax policy in Sri Lanka and found that broadening the tax base

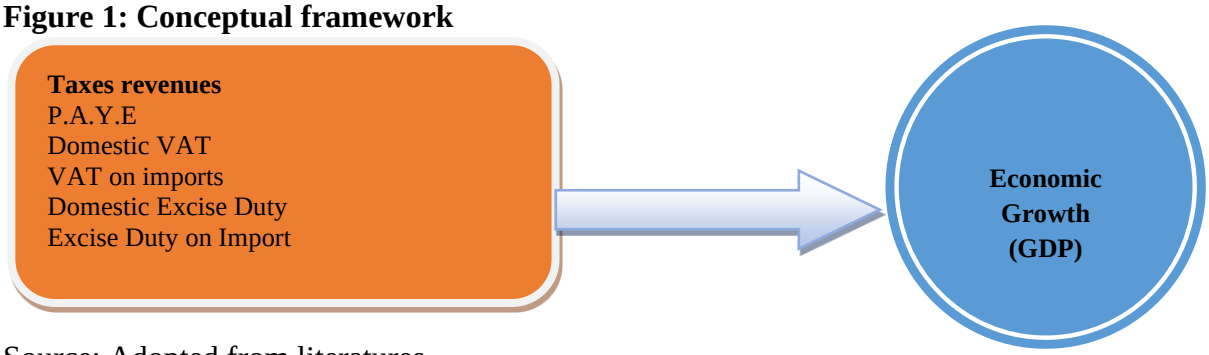
and reducing reliance on volatile revenue sources enhanced growth. Similarly, McNabb (2018) highlighted that in sub-Saharan Africa, efficient tax administration and equitable tax systems are critical for leveraging revenue for development. In the Tanzanian context, the volatility of non-tax revenue and over-reliance on indirect taxes align with the concerns raised by these theories. The predominance of VAT and excise duties reflects a tax structure that could be regressive, as it disproportionately affects lower-income households. This necessitates reforms to improve the equity and efficiency of the tax system, consistent with recommendations by Francis & Amirthalingam (2020).

3. Empirical Review

Several studies have highlighted the positive relationship between tax revenue and GDP across different countries, emphasizing the crucial role of efficient tax systems in fostering economic growth. Abdulrahman *et al.* (2018) found that in Ghana, payee tax had a strong long-term positive effect on GDP, suggesting that effective tax collection mechanisms can significantly boost economic performance. In line with that the studies by, Olufemi *et al.* (2020); Mwangi *et al.* (2021); Kimani, 2021; Banerjee and Roy (2021) and Nguyen *et al.* (2022), results highlight the positive relationship between tax revenue and economic growth discovered a positive short-term and long-term relationship between tax revenue and economic growth GDP around different countries.

Also, Kareem *et al.* (2022) investigated the impact of trade taxes on GDP growth in West Africa using a GMM approach and found a significant negative effect. They attributed this negative impact to the distortions in trade dynamics caused by trade taxes, which reduced investment incentives and hindered economic growth. The authors recommended enhanced trade liberalization policies to mitigate these detrimental effects and promote growth. Additionally, Mensah *et al.* (2023) studied the role of tax incentives in attracting foreign direct investment (FDI) in sub-Saharan Africa. While tax incentives had a positive effect on GDP growth in countries with strong governance frameworks, the study also warned that excessive reliance on such incentives could lead to revenue losses without substantial improvements in economic performance. The authors suggested a balanced approach, combining tax incentives with broader fiscal reforms to avoid the pitfalls of over-reliance on incentives and ensure sustained economic growth. These studies emphasize that while tax policies can play a role in shaping economic outcomes, poorly designed or excessive taxation, particularly in trade and tax incentives, can have negative consequences for economic growth. But none of them has studied on direct effect of excise duty on import and domestic excise duty on economic growth of the country particularly in both short run and long run, thus give out a gap for the current study to go beyond on how payee tax affecting economic growth in developing countries particularly Tanzania.

Figure 1: Conceptual framework



Source: Adopted from literatures

4. Methodology

This study employs a quantitative research design to analyze the dynamic relationship between government revenue and economic growth in Tanzania from 1996 to 2024. The choice of this design is informed by its ability to capture long-term and short-term relationships between variables, as well as to account for historical dependencies in time-series data. The analysis is rooted in econometric techniques that ensure robust and reliable findings. The study utilizes secondary data obtained from reputable sources, including the World Bank, Tanzania Revenue Authority (TRA), and Bank of Tanzania (BoT). The data spans from 1996 to 2024, ensuring a comprehensive analysis of the period marked by significant fiscal and economic reforms in Tanzania. The key variables include:

- ***Dependent Variable:*** *Real Gross Domestic Product (GDP), serving as a proxy for economic growth.*
- ***Independent Variables:*** *Government tax revenue (which are P.A.Y.E, Domestic VAT, VAT on imports, Domestic excise duty and Excise duty on imports)*

4.1 Model Specification

The study employs Autoregressive Moving Average (ARMA) to analyze both short-run and long-run relationships between government tax revenue and economic growth. The choice of is motivated by its ability to capture the dynamic interplay between government tax revenue and economic growth over time and to identify the short-run adjustments and long-run equilibrium relationships also the method is appreciable due to its ability to address endogeneity concerns by incorporating lagged variables. This approach is appropriate given the non-stationary nature of macroeconomic time series data and the potential for cointegration among variables. The ARMA model combines autoregressive (AR) and moving average (MA) terms to identify the temporal dependencies. The model is expressed as follows:

$$\ln GDP_t = \alpha_0 + \ln PAYE_{t-1} + \ln DVAT_{t-1} + \ln VAT.I_{t-1} + \ln DED_{t-1} + \ln EDI_{t-1} + \ln y_{t-1} + \varepsilon_i \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

5. Results and Discussion

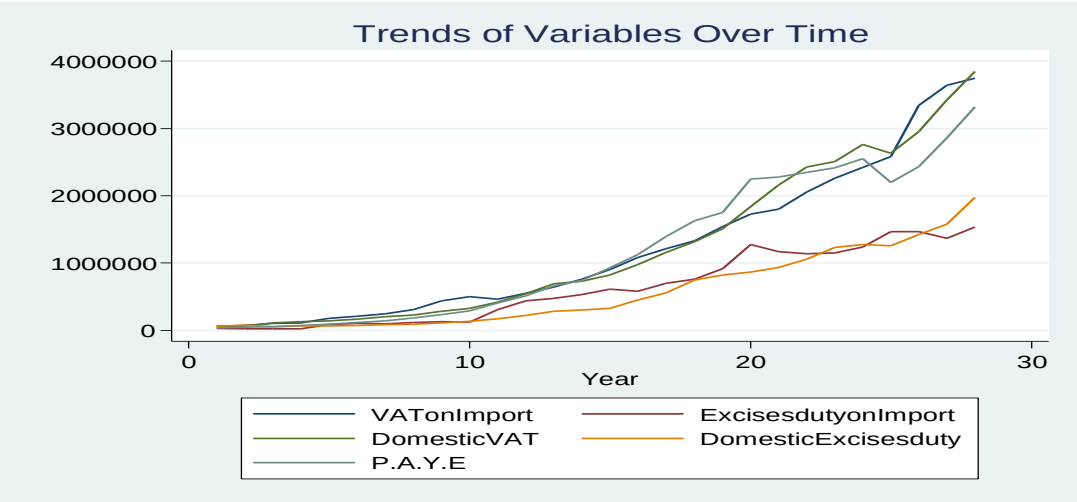
The descriptive statistics of the study variables from table 1 reveal significant variability in Tanzania's economic and tax revenue performance from 1996 to 2024. The GDP, measured in billions of USD, has an average of 35.60 with a wide standard deviation of 22.11, indicating considerable fluctuations in economic growth during the period. The GDP ranges from a minimum of 9.43 to a maximum of 79.16, reflecting periods of both lower and higher economic activity. Tax revenue components, including VAT on imports, excise duty on imports, domestic VAT, domestic excise duty, and PAYE, also display substantial variability. VAT on imports averages 1,225,247, with a high variability (standard deviation of 1,128,576), ranging from 54,509 to 3,748,863, indicating growth in trade activities and tax compliance over the years. Similarly, excise duty on imports, averaging 639,780, shows notable fluctuations with a range between 22,270 and 1,530,699.

Table 1 Descriptive Statistics of Study Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
LnGDP (Billion USD)	28	35.59804	22.11387	9.433528	79.15829
LnVAT on Imports	28	1225247	1128576	54909.4	3748863
LnExcise Duty on Imports	28	639780.3	534943	22270.06	1533699
LnDomestic VAT	28	1230572	1162449	61757.49	3845346
LnDomestic Excise Duty	28	583219	562842.1	57872.03	1974229
LnPAYE	28	1181301	1061426	38357.8	3320647

Also, Domestic VAT, a significant internal revenue source, has an average of 1,230,572 and ranges from 61,757 to 3,845,346, highlighting changes in domestic consumption patterns and enforcement. Domestic excise duty and PAYE display similar trends, with means of 583,219 and 1,181,301 respectively, and wide ranges, pointing to shifts in production and employment patterns. Overall, these statistics underline the dynamic nature of Tanzania's economic growth and tax system, providing a solid foundation for further analysis using the ARMA model.

Figure 2: Tax revenues trends over time



The results in Figure 2 illustrates the trends of key tax revenue components in Tanzania, including VAT on imports, excise duty on imports, domestic VAT, domestic excise duty, and PAYE, over a 30-year period. All variables exhibit a general upward trend, indicating consistent growth in tax revenues. VAT on imports and domestic VAT show the steepest growth, reflecting increased economic activities, consumption, and trade over time. The rise in PAYE suggests an expansion of formal employment and income levels, while domestic excise duty and excise duty on imports grow steadily, pointing to increasing production and importation of excisable goods. These trends imply that Tanzania's economy has experienced significant structural improvements, with growing contributions from consumption and trade-related taxes to fiscal revenues. However, the dependency on VAT and import-related revenues also highlights the vulnerability of the economy to external trade dynamics and consumption patterns. Policymakers should aim to sustain these trends while diversifying revenue sources and ensuring stability against external shocks.

Stationarity tests (unit root test)

The Augmented Dickey Fuller (ADF) test is performed in testing for unit root under null hypothesis that series are not stationary Consider the ADF test that;

$$\Delta Y_t = \beta_i + \delta Y_{t-1} + \sum_{i=1}^{n} \alpha_i \Delta Y_{t-1} + \varepsilon_i \dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

Stationarity test results in Table 2 show that all variables are non-stationary. After variable transformation (i.e. first differencing) all variables became stationary except LnPAYE which become stationary after second differencing.

Table 2: Dickey fuller tests for stationarity (unit root test).

	Interpolated Dickey-Fuller				
Variable (drift lags ((0))	**p-value for Z(t)**	**Test Statistic**	**1% critical Value**	**5% Critical Value**	**10% Critical Value**
LnRGDP	0.8016	-0.858	-3.736	-2.994	-2.628
LnVAT	0.4229	-1.716	-3.736	-2.994	-2.628
LnEIMPO	0.5876	-1.389	-3.736	-2.994	-2.628
LnVATimpo	0.0158	-3.281	-3.736	-2994	-2.628
LnDE	0.9690	0.145	-3.736	-2.994	-2.628
LnPAYE	0.0038	-3.727	-3.736	-2.994	-2.628
Transformation of Series to be Stationary					
d.LnRGDP	0.0000	-6.764***	-3.743	-2.997	-2.629
d.LnVAT	0.0000	-6.764***	-3.743	-2.997	-2.629
d.LnEIMPO	0.0000	-5.488***	-3.743	-2.997	-2.629
d.LnVATimpo	0.0000	-5.182***	-3.743	-2.997	-2.629
d.LnDE	0.0000	-4.798***	-3.743	-2.997	-2.629
d.LnPAYE	0.0327	-3.024	-3.743	-2.997	-2.629
d.2LnPAYE	0.0000	-8.865***	-3.750	-3.000	-2.630

****p < 0.01, **p < 0.5, *p < 0.1.*

The lag order selection criteria table presents results from various statistical measures used to determine the optimal lag length for the model. The criteria include the Sequential Modified Likelihood Ratio (LR) test, Final Prediction Error (FPE), Akaike Information Criterion (AIC), Hannan-Quinn Information Criterion (HQIC), and Schwarz Bayesian Information Criterion (SBIC). Each of these criteria helps identify the lag order that best fits the model without overfitting. From the table, the LR test, FPE, AIC, HQIC, and SBIC all select lag 4 as the optimal lag order, as indicated by the asterisks (*). Lag 4 yields the lowest values for AIC (-333.155), HQIC (-331.29), and SBIC (-326.086), indicating a strong model fit with minimal prediction error.

Table 3 Lag order selection criteria

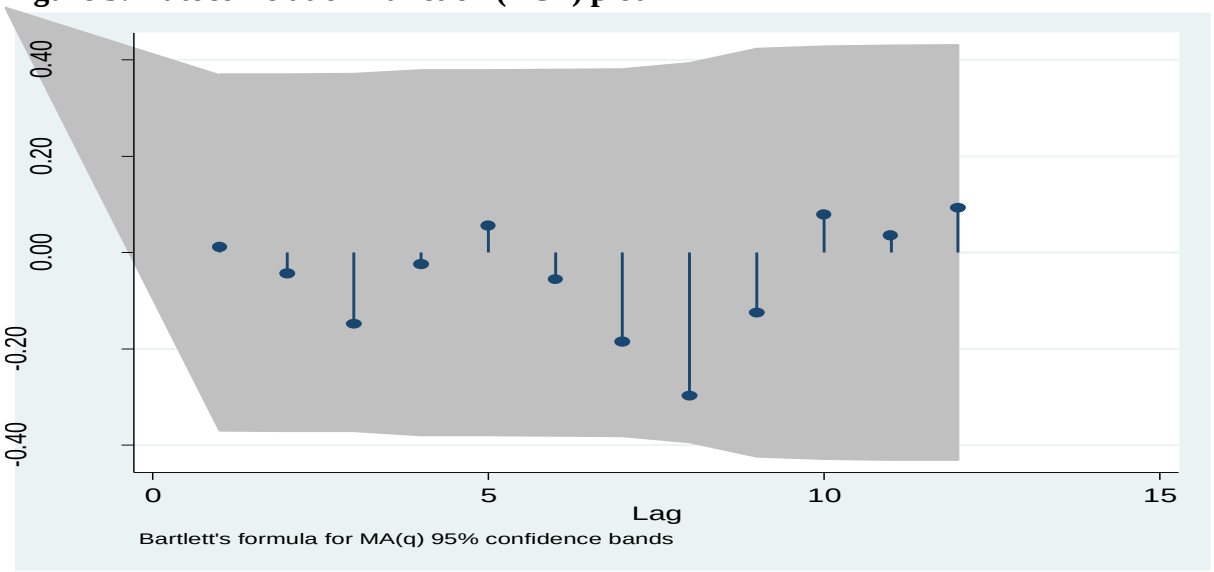
	LL	LR	df	p-value	FPE	AIC	HQIC	SBIC
0	77.53				1.00E-10	-5.961	-5.883	-5.666
1	213.67	272.28	36	0.0000	2.70E-14	-14.306	-13.759	-12.244
2	252.505	77.67	36	0.0000	4.20E-14	-14.542	-13.526	-10.713
3	780.465	1055.9	36	0.0000	9.3e-31*	-55.539	-54.054	-49.943
4	4141.86	6722.8*	36	0.0000		-333.155*	-331.29*	-326.086*

The results demonstrate that increasing the lag length significantly improves model performance, as shown by the sharp drop in AIC and FPE values from lag 3 to lag 4. The LR test also supports this by showing the highest test statistic (6722.8) at lag 4 with a p-value of 0.0000, confirming that lag 4 significantly improves model performance compared to lag 3. The convergence of all criteria on lag 4 suggests that the model captures the underlying data patterns effectively at this lag length, making it the most suitable choice for the analysis.

From Figure 3 the Autocorrelation Function (ACF) plot highlights the overall temporal dependencies in the residuals (lnRGDPres) across different lags. Significant spikes at lags 1, 2, 3 and 4 indicate that the residuals exhibit correlations at these lags, while the tapering pattern

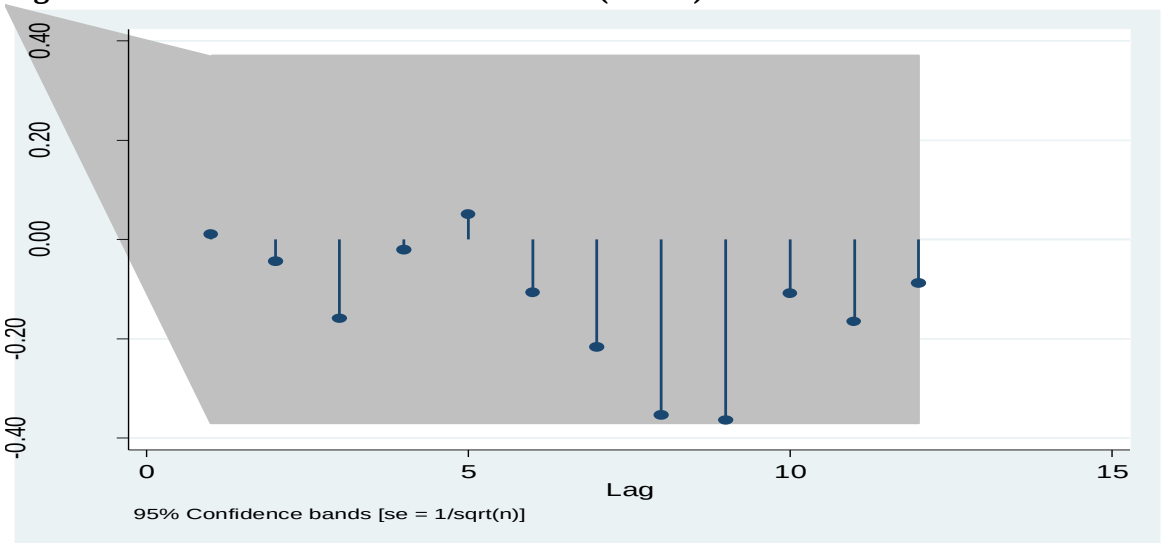
beyond lag 4 suggests a short-term dependency structure. This pattern supports the inclusion of a moving average component of order 4 (MA(4)) to address these correlations and account for the short-term error dependencies. The ACF plot underscores the need to incorporate the moving average terms to improve the model's accuracy and reliability.

Figure 3: Autocorrelation Function (ACF) plot



In Figure 4 the Partial Autocorrelation Function (PACF) plot indicates the direct influence of previous lags on the residuals (lnRGDPres). Significant spikes at lags 1 and 2 suggest that these two lags have strong individual impacts on the current value of the residuals, while correlations beyond lag 2 are insignificant. This behaviour implies that an autoregressive component of order 2 (AR(2)) is appropriate for modeling the residuals, as including additional lags would not contribute significantly to explaining the data. The PACF plot, therefore, supports the inclusion of up to two lags in the autoregressive component of the model.

Figure 4: Partial Autocorrelation Function (PACF)



Combining insights from the PACF and ACF plots, the recommended model structure is ARMA(2,3), which includes two autoregressive terms to account for direct dependencies and three moving average terms to address short-term error correlations. This model structure

ensures that the temporal dynamics of the data are captured effectively, enhancing the overall fitness of the model. The ARMA(2,4) model is expected to produce robust results and reliable forecasts, providing a strong foundation for analyzing the relationship.

Table 4: ARIMA regression results

lnRGDP	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
lnPaye	-0.139	0.091	-1.53	0.125	-0.318	0.039	
lnVAT	0.173	0.072	2.39	0.017	0.031	0.315	**
lnDE	0.359	0.061	5.88	0.000	0.239	0.478	***
lnEIMPO	-0.039	0.040	-0.98	0.327	-0.116	0.039	
lnVATimpo	0.23	0.08	2.88	0.004	0.074	0.386	***
Constant	3.486	0.281	12.41	0.000	2.936	4.037	***
L	0.703	0.263	2.67	0.007	0.188	1.219	***
L2	0.103	0.240	0.43	0.669	-0.368	0.574	
L3	-0.416	0.308	-1.35	0.177	-1.02	0.188	
L4	0.038	0.262	0.15	0.883	-0.476	0.553	
Constant	0.035	0.008	4.26	0.000	0.019	0.052	***
Mean dependent var		11.104	SD dependent var			0.679	
Number of obs		28	Chi-square			1962.008	
Prob > chi2		0.000	Akaike crit. (AIC)			-84.487	

**** p<0.01, ** p<0.05, * p<0.1*

The gross domestic product (GDP), a widely used measure of a country's economic performance, was found to be significantly influenced by its own lagged values, as indicated by the autoregressive terms in the ARMA model. The results demonstrate that past GDP levels strongly predict current GDP, signifying that the economy exhibits inertia where previous economic activities influence current performance. Moreover, Domestic VAT and VAT on imports have been identified as major contributors to GDP growth, showcasing the direct relationship between tax revenues and economic performance. This is supported by studies such as Hanif et al. (2019), which confirmed that GDP is primarily driven by its own lagged values and direct tax-related factors. In contrast, exogenous variables such as PAYE and excise duty on imports demonstrated limited or no significant impact on GDP. This underscores the dominant role of endogenous economic dynamics in driving GDP fluctuations, while external factors play a less critical role.

Table 4 highlight the coefficient for PAYE is negative (-0.139) and statistically insignificant (p-value = 0.125), indicating that changes in PAYE have no direct significant impact on GDP. This finding suggests that revenue collected through PAYE may have a limited influence on macroeconomic activities or that the effect is mediated through other variables. Similarly, Baltas et al. (2018) found that income-related tax revenues, while important for fiscal stability, do not directly translate into short-term economic growth. Variations in PAYE are predominantly driven by employment patterns and wage levels, which may not immediately influence GDP dynamics. These results highlight the importance of understanding the structural differences between direct and indirect tax revenues and their respective contributions to economic performance.

Also, Domestic VAT shows a positive and significant impact on GDP (coefficient = 0.173, p-value = 0.017), suggesting that increased domestic VAT revenues directly contribute to economic growth. VAT, as a consumption-based tax, reflects the strength of internal economic activities and consumer spending, which are critical to GDP performance. Phuyal & Sunuwar (2019) noted a similar relationship, highlighting the importance of domestic VAT in fostering economic growth by stabilizing government revenues and promoting domestic consumption.

These findings emphasize the pivotal role of indirect taxes in enhancing GDP and support the implementation of efficient VAT collection systems.

Results displays that Domestic excise duty has a positive and significant relationship with GDP (coefficient = 0.358, p-value = 0.014), underscoring its role as a critical revenue source that supports economic activities. Excise duty, often applied to goods like fuel and tobacco, reflects both production patterns and domestic consumption trends. Makiela & Ouattara (2018) similarly found that excise duty contributes to GDP growth by influencing sectoral production and ensuring stable revenue streams. This highlights the importance of maintaining a balanced excise tax policy that fosters growth while ensuring fiscal stability. The coefficient for excise duty on imports is negative (-0.038) and statistically insignificant (p-value = 0.327), indicating that it does not significantly influence GDP. This result aligns with findings by Hanif et al. (2019) and Kitole & Utouh (2023), who noted that import-related excise duties often have a limited direct impact on domestic economic performance. The lack of significance could be attributed to the relatively small proportion of excisable imported goods in the overall economic structure. Instead, the impact of import duties may manifest indirectly through trade balances and sectoral adjustments.

Moreover, VAT on imports demonstrates a positive and significant effect on GDP (coefficient = 0.229, p-value = 0.004), highlighting its crucial role in boosting economic performance. Import-related VAT reflects the strength of international trade and its contribution to government revenues. As confirmed by Baltas et al. (2018) and Phuyal & Sunuwar (2019), increased VAT on imports signals robust trade activities and fosters economic growth through enhanced fiscal capacity. These findings emphasize the importance of maintaining trade facilitation policies that encourage import-related tax compliance while promoting economic growth.

5. Conclusion

The study has demonstrated that GDP, a critical measure of economic performance, is significantly influenced by both its own lagged values and select tax revenue components such as domestic VAT, domestic excise duty and VAT on imports. These findings highlight the dominant role of indirect taxes in driving economic growth in Tanzania, while direct taxes such as PAYE and excise duties on imports have limited direct effects. The results emphasize the importance of dynamic economic patterns, where past performance and consumption-driven tax revenues play pivotal roles. Overall, the ARMA model effectively captures these relationships, offering robust insights into the interplay between tax policies and economic growth.

The significant positive contributions of domestic VAT, domestic excise duty and VAT on imports to GDP underscore the need for policies that enhance the efficiency of tax collection systems and broaden the tax base, particularly in indirect taxation. Policymakers should focus on strengthening VAT compliance mechanisms and promoting trade facilitation policies that encourage higher import volumes. On the other hand, the limited impact of PAYE suggests the need to reconsider strategies for improving labor market formalization and expanding employment opportunities to boost revenue from direct taxes. Additionally, balancing excise tax policies to support domestic production while ensuring fiscal stability remains a key priority for sustainable economic growth.

To capitalize on the findings, it is recommended that the government and relevant authorities invest in modernizing tax collection systems, particularly for domestic VAT, domestic excise duty and import-related taxes, to ensure efficiency and compliance. Policies should also aim to

diversify revenue sources by fostering domestic production and reducing reliance on volatile external factors. Furthermore, reforms in the labor market and employment policies are crucial to enhancing PAYE's contribution to economic growth. Lastly, continuous evaluation and adaptation of tax policies should be undertaken to ensure alignment with changing economic conditions and long-term growth objectives.

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