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Effect of Tax Collection to the Economic Development of Rwanda; A Case of Musanze District (2019-2023)

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ABSTRACT

The general objective of this study was to analyze the effects of tax collection to the economic development of Rwanda; a case study of Musanze district (2019-2023) while the specific objectives of this study were; To evaluate the effect of income tax on economic development of Musanze district, to determine the effects of custom duties on economic development of Musanze district and to assess the effects of Value added tax on economic development of Musanze district (2019-2023). The researcher used a regression research design, where qualitative approach was used. The population of the study concerned 56 employees work in Musanze District while a sample size was 56; questionnaire, documentation and interview are instrument for this research then data was collected was analyzed by SPSS. It revealed that most of the respondents (Mean=4.03, SD=.126) supported the argument that imposing tariffs on imported goods, governments generates income to fund public expenditure. (Mean=4.01, SD=.172) answered that custom duties protects domestic industries; similarly, the respondents agreed there custom duties allows safeguard against dumping practices, (Mean=3.98, SD=.417). Correlation coefficient of X1 was β =0.166 and p<0.021) this indicates that income tax is enhanced by one unit, economic development of Musanze district will increase by of X2 was $\beta = 0.325$ and p<0.020. The findings also indicated that X3 was β =0.178, p=0.041 means that when Value Added Tax increase at single unit, the level of economic development will increase at 0.328 and when customs duties is enhanced at single unit, economic development of Musanze district will increase at 0.178. Finally the findings indicated that there is a statistically significant positive correlation between predictor variables and the independent variables; findings indicate that there is a significant positive relationship between the components of tax collection namely income tax, Value Added Tax and customs duties. Study recommended that Musanze district should Improving the tax system; the tax system may need to be improved to allow for a more efficient and equitable way of collecting taxes, educating the public; educating taxpayers on the importance of paying taxes and how the taxes are utilized by the government can go a long way in increasing compliance, enforcing compliance, combating corruption which is one of the main reasons for poor tax collection systems and reinforcing technology in tax collection.

Keywords: tax, income tax, value added tax, customs duties, economic development.

INTRODUCTION

Tax collection has been an integral part of human society since ancient times. The earliest known tax system was implemented in ancient Egypt, where people had to pay taxes in various forms, including food



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products and labor. The taxes were collected by scribes who recorded the amount collected and submitted it to the pharaoh. In ancient Greece, taxes were also levied in various forms, including property taxes, customs duties, and taxes on imports and exports. In Rome, taxes were collected by publicans, who were private contractors hired by the state (Yusuf & Kanji, (2020).

Tax collection is the process of enforcing tax laws and regulations to collect taxes from individuals and businesses. It involves identifying the tax liability of taxpayers, assessing taxes due, and collecting taxes owed. Tax collection can be carried out by a tax agency or government agency responsible for administering tax collection on behalf of a government. The process of tax collection involves several steps, including the collection of tax returns, the identification of taxpayers who are delinquent in paying their taxes, and the issuance of tax demands. In some cases, tax audits may be conducted to verify the accuracy of tax returns and assess any additional tax liability (Setyaningsih, 2021).

In Mexico tax collection plays a crucial role in the development of Mexico; the revenue from taxes is a major source of income for the government, and it is used to finance various developmental activities such as infrastructure, education, healthcare, and social welfare programs. By collecting taxes, the Mexican government can generate a significant amount of revenue that can be used to fund various public projects that boost the economy and improve people's lives. This revenue also helps the government maintain public services such as healthcare and education, which are essential for a country's development. Moreover, when citizens see that their tax money is being used to improve their communities, they are more likely to comply with tax regulations, leading to even more revenue. Generally, tax collection plays a significant role in the economic development of Mexico as it provides the necessary funds for the government to initiate developmental projects provide essential services and further incentivizes citizen compliance (Coatsworth, 1978).

Ayoub & Mukherjee, (2019) argued that ax revenue plays an essential role in the development of China. A contribution of tax revenue to the development of China include infrastructure development; tax revenue has contributed to the development of various infrastructure projects, such as highways, airports, railways, and other transportation systems. These developments have facilitated the growth of trade and commerce activities in the country, which has led to an increase in economic activities in the country. Social welfare programs; tax revenue has also contributed to the development of social welfare programs, such as healthcare, education, housing, and poverty alleviation. This has facilitated the improvement of the standard of living of the people in the country, thereby, augmenting human development. Economic growth; tax revenue has been critical to the significant economic growth of China over the past few decades. The Chinese government has reinvested a significant portion of the tax revenue back into the economy, which has led to the creation of many employment opportunities, increase in industrial production, and the rise of numerous small-scale enterprises in the country. National defense; tax revenue has also contributed to the development of the military sector in China. This has led to an improvement in the country's defense capabilities, enabling them to protect their territorial integrity and sovereignty. Tax revenues have played a crucial role in the development of China by facilitating huge investments in infrastructure, social welfare programs, national defense, and by spurring economic growth (Zeng et al., 2013).

In South Africa; Tax collection plays a significant role in the economic development of South Africa. Tax collection is a crucial source of revenue for the government. The funds collected are used to finance government expenditure, including infrastructure development, social welfare programs, and public services. This revenue helps stimulate economic growth by providing the necessary funds for investment



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and development initiatives. Tax revenue is used to fund various developmental projects, such as building and maintaining infrastructure, improving education and healthcare systems, and supporting small and medium-sized enterprises. These initiatives contribute to economic development by attracting domestic and foreign investments, creating job opportunities, and enhancing productivity levels. Redistribution of Wealth; through taxation, the government can implement policies that promote a fairer distribution of wealth and reduce income inequality. Higher tax rates on the wealthy and corporations allow for more resources to be allocated towards social welfare programs, poverty alleviation, and education initiatives. This redistribution can lead to a more equitable society, which in turn fosters economic development. Budgetary Stability; tax collection helps ensure the stability of the government's budget. Adequate tax revenue allows for greater fiscal discipline, reducing the need for excessive borrowing. With a stable budget, the government can better plan and allocate resources to support economic development strategies and address macroeconomic challenges. Efficient tax collection processes help in establishing strong governance systems and fostering transparency and accountability within the government. This promotes investor confidence and attracts both local and foreign investments, which are vital for long-term economic development (Dladla & Khobai, 2018); Babatunde, 2017).

In Rwanda tax collection serves as a major source of revenue for the government. It helps in funding development projects, maintaining infrastructure, and providing public services such as healthcare, education, and security. Effective tax collection helps in maintaining fiscal stability by ensuring a sustainable revenue flow. It reduces the reliance on external sources of financing, making the economy less vulnerable to external shocks. Tax revenue enables Rwandan government to invest in human capital development. It helps in improving education and skills training programs, which in turn enhances productivity and supports economic growth. Tax revenue is crucial for developing and maintaining infrastructure such as roads, bridges, ports, and electricity networks. These infrastructural investments attract private sector investment, stimulate economic activities, and facilitate trade (Twesige & Gasheja, 2019).

Benimana, (2020) stated that Tax revenue is used to fund poverty reduction and social programs. It allows the government to implement social safety net programs, provide healthcare services, and support vulnerable populations, ultimately reducing poverty and improving social welfare. Tax collection directs towards key sectors such as agriculture, manufacturing, and tourism, promoting their growth and competitiveness. This leads to job creation, increased productivity, and diversification of the economy. Effective tax collection contributes to better governance and transparency. It fosters a culture of compliance and accountability, ensuring that resources are allocated efficiently and corruption is minimized.

Up to now there is less specific study run to assess the effect of tax collection on economic development in Rwanda in particularly in Musanze; this is why this hodgepodge of problems motivated to run this study to examine the effect of tax collection on economic development in Rwanda; a case study Musanze district. Generally tax revenue is a vital source of revenue for governments and plays a crucial role in promoting economic growth, reducing income inequality, addressing externalities, and supporting public goods and services that contribute to the development of a country. However there are problems still persistence such as lower tax revenue, low tax Compliance and taxes evasion, inadequate enforcement mechanisms, Corruption within the tax administration and revenue collection process results in leakage of tax revenue, bribes, kickbacks, and embezzlement divert funds away from the government; this leads to a substantial tax gap between the potential revenue that could be collected and the actual amount collected (Nzabirinda,



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2021); Ofurum *et al.*, (2018). For that reason a researcher decided to run this study for describing the effects and benefits of tax collection revenue to the development of the country.

Theoretical framework

The Neoclassical Model

The Neoclassical Growth Theory is an economic model of growth that outlines how a steady economic growth rate results when three economic forces come into play: labor, capital, and technology. This theory argues that lower taxes lead to higher economic growth. It suggests that reducing taxes increases people's disposable income, which in turn promotes consumption and investment. The Neoclassical Model also proposes that lower taxes increase labour and capital supply, which results in higher output and growth. The Neoclassical model is a framework used to analyze phenomena in the market economy. The Neoclassical Model emphasizes the role of markets in efficiently allocating resources and maximizing social welfare.

Taxation, on the other hand, is a tool used by governments to raise revenue and regulate economic activity. In the Neoclassical model, taxation is seen as a distortion of the market mechanism that can lead to inefficiencies in resource allocation. When taxes are levied on goods and services, they increase the price of those goods, reducing consumer demand and causing suppliers to produce less. Similarly, taxes on labor decrease the value of work to employees and increase the cost to employers, resulting in wage reductions and reduced employment. As a result, the model suggests that excessive taxation can reduce economic growth and result in social welfare losses.

The Keynesian Model

This theory suggests that government spending and taxation can help regulate the economy. It argues that increasing government spending can stimulate the economy during recessions, while increasing taxes can help slow down overheated economies during booms. The Keynesian model suggests that the government can use fiscal policy, including taxes, to stabilize the economy. According to this model, during times of economic downturn and high unemployment, the government should increase its spending and decrease taxes to stimulate demand and encourage investment (Blanchard & Galí, 2007).

Similarly, during an economic boom, the government should decrease its spending and increase taxes to prevent inflation and avoid overheating the economy (Gabaix, 2020). Tax collection plays a significant role in implementing the fiscal policies suggested by the Keynesian model. If the government wants to increase spending and decrease taxes to stimulate demand, it must identify a revenue source to finance the spending. Similarly, if the government wants to decrease spending and increase taxes to prevent inflation, it must identify which taxes to increase to generate adequate revenue (Prasad & Deng, 2009).

Moreover, the Keynesian model highlights the importance of progressive taxation, where taxes are levied more heavily on the wealthy than the poor. Progressive taxation ensures that the government collects a larger share of its revenue from those who can afford it while simultaneously redistributing wealth and reducing income inequality (Gabaix, 2020).

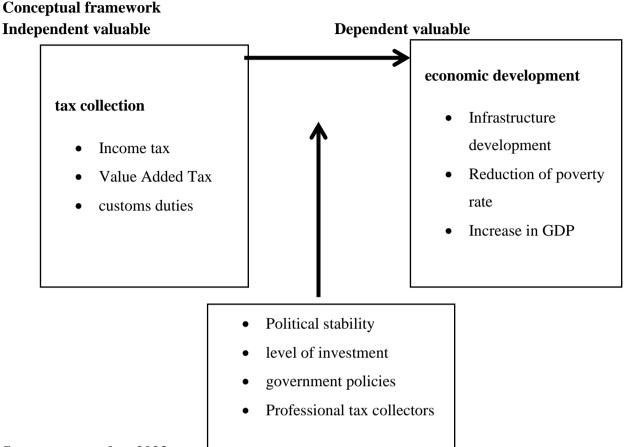
Conceptual framework

Figure 1 below shows the study intended to find out the link between independent variable which is project resource management and the dependent variable which is project performance.



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Figure 1: Conceptual framework.



Source: researcher,2023

The above figure displays the effect independent variable which is tax collection would have towards independently which is economic developments well as the intervening or mediating variable. it also shows that economic development as dependent variable depend on tax collected in Rwanda, Musanze district.

Empirical review

The effect of collecting income tax on economic development

Collecting income tax has effects on development of the country where income tax revenue is used to fund public goods and services like infrastructure, education, and healthcare, which promotes economic growth. (Johansson *et al.*, 2008) stated that a relationship between income tax collection and economic development in a country is multifaceted. Income tax is a primary source of revenue for governments, which can be used to fund public infrastructure, social programs, and investments in various sectors that contribute to economic growth. They explained that income tax collection provides governments with the necessary funds to finance public expenditure. This includes investments in areas such as education, healthcare, transportation, and research and development. By allocating these resources wisely, government creates an environment conducive to economic development.

Akanbi, (2020) argued that income tax revenues used to develop and maintain infrastructure, such as roads, bridges, airports, and communication networks. This infrastructure is crucial for attracting businesses, facilitating trade, and improving productivity all of which contribute to economic growth. Brondolo, (2009) explained that adequate income tax collection allows governments to provide essential public



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services, including healthcare, education, and social welfare programs. A healthy and educated workforce, supported by social safety nets, plays a vital role in fostering human capital development and economic progress. Income tax is used as a tool for promoting economic equality. Progressive tax systems, where higher-income individuals pay a larger percentage of their income as tax, can help redistribute wealth and reduce income disparities. A more equitable distribution of wealth can contribute to social stability and support sustainable economic development (Dzhumashev, 2014).

Contribution of custom duties on economic development of the country

Sibuea, Sibuea & Pratama, (2021) explained that Custom duties, also known as import duties or tariffs, refer to taxes imposed on imported goods and services. They play a significant role in shaping a country's economic development; custom duties serve as an important source of revenue for governments. By imposing tariffs on imported goods, governments can generate substantial income to fund public expenditure, such as infrastructure development, education, healthcare, and defence. Custom duties can protect domestic industries from foreign competition. By levying tariffs on imported goods, governments provide a level playing field for local producers, allowing them to compete with foreign companies.

This protectionist stance stimulates growth, employment, and investment in domestic industries (Redmond & Nasir, 2020). Nguyen *et al.*, (2020) argued that custom duties incentivize domestic production by making imported goods relatively more expensive. This leads to an increase in demand for domestically produced goods, stimulating local manufacturing and industrial sectors. It also reduces the country's dependency on imported goods. Creation of Employment Opportunities; Higher import duties can encourage local production, leading to the creation of employment opportunities. When domestic industries expand due to protectionist measures, they often require additional labor, contributing to job creation and reducing unemployment rates.

Nathaniel, Murshed & Bassim, (2021) explained that regulation of trade; Custom duties can serve as a regulatory tool to control imports. Governments can adjust tariffs to manage the flow of specific goods and influence import patterns. By regulating imports, countries can protect industries deemed strategically important or safeguard against dumping practices (the sale of goods abroad at prices below their production cost). Balancing trade deficits; Custom duties can be utilized to balance trade deficits by reducing imports. When a country has a persistently large trade deficit, increasing import duties on certain goods can discourage imports and promote domestic consumption.

Contribution of Value added tax on economic development of the country

Ayoub & Mukherjee, (2019); Jalata, (2014) stated that Value Added Tax (VAT) is a consumption tax levied on the purchase of goods and services. Its contribution to the economic development of a country is significant providing a steady and predictable stream of income that can be used to fund essential public services such as healthcare, education, infrastructure development, and social welfare programs. This revenue helps to finance the government's expenditure and contribute to overall economic growth. VAT helps to reduce budget deficits by increasing government revenue without resorting to excessive borrowing or increasing direct personal income taxes.

They explained that this, in turn, helps to stabilize the country's finances and creates a favourable environment for economic development. VAT incentivizes domestic production and support local industries; by imposing VAT on imports, it makes imported goods relatively more expensive, thereby encouraging consumers to buy locally produced goods. This fosters the growth of domestic industries,



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creates employment opportunities, and contributes to industrial development (Ofishe, 2015). Promotion of Tax Compliance; VAT requires businesses to maintain proper bookkeeping and regularly report their sales and purchases. This promotes transparency and accountability in the economy and encourages businesses to comply with tax regulations. Increased tax compliance not only enhances government revenue but also reduces the informal economy, fostering a more formal and organized business environment (Ayoub & Mukherjee, 2019).

Research design

According to Kothari (2008), research design is the conceptual structure within which research is conducted, it constitutes the blueprint for the collection, measurement and analysis of data as such the design includes an outline of what the researcher did from writing the hypothesis and its operational implications to the final analysis of data. The researcher used a regression research design to determine the effect of independent variable which is tax collection to dependent variable which is economic development of the country.

Study population

According to Szklo, (1998) a study population is generally a large collection of individuals or objects that is the main focus of a scientific query. According to Kenneth (1978), population is the study object, which may be individuals, groups, organizations, human and events, or the conditions to which they are exposed. Grinnell & Williams (1990) defined a population as the totality of persons or objects with which the study is concerned. The population of the study concerned 56 employees work in Musanze District from department of finance, audit, tax collection, social development officer and department of infrastructure related of the study.

Sampling and Technique

The Census Method has been used where in each and every item in the universe is selected for the data collection. Whenever the entire population is studied to collect the detailed data about every unit, then the census method is applied.

Table 1: Sampling population and their sample size

Category of employee department	Population	Sample size	Sampling technique
	size		
Mayor	1	1	Census
Vice mayor	1	1	Census
Finance unit	10	10	Census
Internal auditor	6	6	Census
Planning, Monitoring and Evaluation unit	7	7	Census
Administration unit	6	6	Census
Tax administrative unit	20	20	Census
DAF	5	5	Census
Total	56	56	Census



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Data Collection

This study adopted a correlation research design. The major purpose of correlation is to describe the relationship between independent and dependent variables which are project resource management and the project performance.

The study applied the following tools of data collection; questionnaires and documentation used to collect secondary data. Data collection was based on secondary and primary data. A Likert-scale questionnaire has been used to collect both qualitative and quantitative data.

ANALYSIS AND INTERPRETATION

Descriptive Analysis

Descriptive statistics on income tax and economic development Musanze District

Statements	Mean	SD
Income tax revenue is used to fund public infrastructure	4.01	.218
Income tax is a primary source of revenue for governments	3.97	.721
Income tax collection provides governments with the necessary funds to finance	3.87	.021
public expenditure		

Source: Primary data, 2023

It shows that most of the respondents (Mean=4.01, SD=.218) agreed that Income tax revenue is used to fund public infrastructure (Mean=3.97, SD=.721) indicated that income tax is a primary source of revenue for governments. Similarly, most of the respondents mentioned that (Mean=3.87, SD=.021) agreed that income tax collection provides governments with the necessary funds to finance public expenditure.

Regression analysis

The study also wanted to analyze the effect of income tax on economic development of Musanze district. So, a researcher used the univariate regression analysis to compute the coefficient of correlation (R) and the coefficient of determination (R square). Results are presented in the model summary, the analysis of variance, and model coefficients.

Model summary: The effect of income tax on economic development of Musanze district

Model	R	R square	Adjusted R square	Sign.
1	.512	.789	.367	.002ª

a. **Predictors**: (Constant), Income tax

b. **Dependent variable**: Economic development

The table above shows the results of the model summary which indicates that the coefficient of correlation R=.789. This implies that there is a strong positive relationship between income tax and economic development of Musanze district; this also indicates that collecting more or higher income tax, development level of the district increases as revenue increases as vice versa. The coefficient of determination (R^2) was 0.789 which indicates that the higher level of income tax effects development growth at 78.9% of the total change of income tax revenue while other factors remain constant.



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ANOVA: The effect of income tax on economic development of Musanze district

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	27.147	1	27.147	22.01	.000 ^b
Residual	17.928	33	0.326		
Total	45.075	34			

a. **Predictors**: (Constant), income tax

b. **Dependent variable**: Economic development

The above table shows that the probability value of the variable p was .000<0.005. This indicates that the relationship between income tax and economic development is statistically significant at a 5% level of significance.

Coefficients: The effect of income tax on economic development of Musanze district

			_			
Model	Unstandardized	1	Standardized	T	Sign.	
	Coefficients		Coefficients			
	В	Std.	Beta			
		Error				
(Constant)	.381	.292		2.19	.000	
income tax	.578	.182	.212	2.27	.000	

a. Predictors: (Constant), Income tax

b. Dependent variable: Economic development

Based on these results in Table 8, the regression model can be rewritten as follow:

Y = 0.381 + 0.578X1 + e

Table shows that that β =.578 and p-value=.000 <0.05. Since the p-value is less than the level of significance of 5%, this shows that income tax is a statistically effect on economic development of Musanze district. Moreover, a unit increase in income tax will result in decease in economic development by a factor at .578.

The effects of custom duties on economic development of Musanze district

The second objective of this study was to determine the effects of custom duties on economic development of Musanze district. To achieve this objective, the descriptive analysis, and regression analysis, and the results are presented in the subsequent sections.

Descriptive Analysis

Respondents were asked their level of agreement or disagreement on the statements related to tax collection and economic development of Musanze district. Responses were summarized by the mean and standard deviation. The subsequent sections present the findings.

Eeffects of custom duties on economic development of Musanze district

Leffects of custom duties on economic development of Musuize district						
Statements	Mean	Std.				
		Deviation				
By imposing tariffs on imported goods, governments	4.03	.126				
generate income to fund public expenditure						
Custom duties protect domestic industries	4.01	.172				



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.417

Custom duties allow safeguard against dumping practices 3.98

Table shows that most of the respondents (Mean=4.03, SD=.126) supported the argument that imposing tariffs on imported goods, governments generate income to fund public expenditure. (Mean=4.01, SD=.172) answered that custom duties protects domestic industries; similarly, the respondents agreed the custom duties allows safeguard against dumping practices, (Mean=3.98, SD=.417).

Regression Analysis on effects of custom duties on economic development of Musanze district

The study also wanted to establish the relationship between effects of tax collection on economic development. To do so, the researcher used the univariate regression analysis to compute the coefficient of correlation (R) and the coefficient of determination (R square). Results are presented in the model summary, the analysis of variance, and model coefficients.

Model summary on effects of custom duties on economic development of Musanze district

Model	R	R Square	Adjusted Square	R	Sign.	
1	.756	.787	.767		.001 ^a	

- a. **Predictors:** (Constant), Determinants custom duties
- b. **Dependent variable:** Economic development

The table shows the correlation coefficient R was .756. This implies that there is a positive high correlation between determinants of custom duties on economic development of Musanze district. This implies that the determinants of custom duties, the economic development. The coefficient of determination (R^2) shows that the custom duties account for a variation of 78.6% of the total variations in the economic development and the other factors outside the model only account for the remaining 21.4% of the change in the economic development.

ANOVA determinants custom duties on economic development of Musanze district

				-		
Model	Sumof	D	Mean		F	Sig
	Squares	F	Square			
Regression	7.147	1	7.147		2.0	.00
N				1		1 ^b
Residual	7.928	3	.326			
		3				
Total	15.075	3				
		4				

a. Predictors: (Constant), custom duties

b. Dependent variable: Economic development

It shows that the probability value p=0.001<0.05. This indicated that there is relationship between custom duties on economic development of Musanze district is statistically significant at a 95% level of significance.



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Coefficients: Effect of custom duties on economic development of Musanze district

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sign.
	В	Std. Error	Beta		
(Constant)	.347	.292		2.19	.501
Economic development	.381	.182	.612	2.27	.831

Predictors: (Constant), Custom duties

Dependent variable: Economic development

Based on these results in Table 11, the regression model can be rewritten as follow:

Y = 0.347 + 0.381X2 + e

Therefore, since the β =.612 and p-value=.501>0.05, this is an indication that a unit increase in custom duties will result in increase in the economic development.

The effects of Value added tax on economic development of Musanze district (2019-2022)

The third objective of this study was to determine the effects of value added tax on economic development of Musanze. To achieve this objective, the descriptive analysis, and regression analysis, and the results are presented in the subsequent sections.

Descriptive analysis on effects of VAT on economic development

Statements	Mean	Std.
		Deviation
VAT provides a steady and predictable stream of government	4.03	.126
income		
VAT helps to reduce budget deficits by increasing	5.01	.172
government revenue without resorting to excessive		
borrowing		
VAT promotes transparency and accountability in the	3.98	.417
economy and encourages businesses to comply with tax		
regulations		

Table shows that most of the respondents (Mean=4.03, SD=.126) supported the argument that VAT provides a steady and predictable stream of government income. (Mean=5.01, SD=.172) revealed that respondents answered that VAT helps to reduce budget deficits by increasing government revenue without resorting to excessive borrowing as well as respondents answered that (Mean=3.98, SD=.417) supported that VAT promotes transparency and accountability in the economy and encourages businesses to comply with tax regulations in Musanze district.

Respondents were asked their level of agreement or disagreement on the statements related to the effects of Value added tax on economic development of Musanze district. Responses were summarized by the mean and standard deviation. The subsequent sections present the findings.



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Regression analysis: Model summary on the effects of Value added tax on economic development of Musanze district

Model	R	R Square	Adjusted Square	·	
1	.956	.382	.877		.013ª

a. Predictors: (Constant), Effects of Value added tax

b. Dependent variable: Economic development

The table shows the correlation coefficient R was .956. This implies that there is a positive high correlation between effects of Value added tax and economic development. This implies that the increase of tax collected in Value added tax, the better improvement of economic development of Musanze district. The coefficient of determination (R^2) shows that the value added tax for a variation of 87.7% of the total variations in the economic development and the other factors outside the model only account for the remaining 21.4% of the change in the economic development

ANOVA of Value added tax on economic development of Musanze district

Model	Sum of	D	Mean	F	Sig
	Squares	F	Square		
Regression	7.147	1	7.147	2.0	.00
N				1	1 ^b
Residual	7.928	9	.326		
		3			
Total	15.075	6			
		4			

Predictors: (Constant), Value added tax

Dependent variable: Economic development

Table shows that the probability value p=0.001<0.05. This indicated that the relationship between determinants of internal audit effectiveness and prevention and detection of errors and frauds is statistically significant at a 95% level of significance.

Coefficients of effect of value added tax and economic development

Model	Unstandardized		Standardized	T	Sign.
	Coefficients		Coefficients		
	В	Std.	Beta		
		Error			
(Constant)	. 631	.292		2.19	.501
Economic development	. 842	.182	.612	2.27	.831

Predictors: (Constant), Value added tax

Dependent variable: Economic development

Based on these results in table above, the regression model can be rewritten as follow:

Y = 0.631 + 0.842X2 + e



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Therefore, since the β =.631 and p-value=.842>0.05, this is an indication that a unit increase of revenue collected in value added tax will result in increase in economic development

Multiple regression analysis

	Unstandardized Coefficients		Standardized Coefficients	T	Sign.
	В	Std. Error	Beta	-	
(Constant)	1.325	0.519		1.665	0.110
Income tax	0.166	0.073	0.157	2.897	0.021
Value Added Tax	0.328	0.088	0.224	3.581	0.020
Customs duties	0.178	0.094	0.152	0.640	0.041

Dependent variable: Economic development

a. X_1 : Income tax

b. X₂: Value Added Tax

c. X₃: Customs duties

d. β: Constant

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

A table above shows the regression coefficient of the model. From the table, the unstandardized betas value was used to determine combined influence of predictor variables on the dependent variable in the model as give a measure of influence of the independent variable to the model and indicate how much the dependent variable is held constant. The following regression equation was obtained.

$$Fr = 1.325 + 0.166X1 + 0.328X2 + 0.178X4 + \epsilon$$

From this equation, it is shown that, when all other factors are held constant or zero, will be equal to the constant coefficient of X1 was β =0.166 and p<0.021) this indicates that income tax is enhanced by one-unit, economic development of Musanze district will increase by of X2 was β =0.325 and p<0.020. The findings also indicated that X3 was β =0.178, p=0.041 means that when Value Added Tax increase at single unit, the level of economic development will increase at 0.328 and when customs duties is enhanced at single unit, economic development of Musanze district will increase at 0.178.

Multiple Correlation

		Income tax	Value	Customs	Economic
			Added Tax	duties	development
Income tax	Pearson	1			
	correlation				
	Sig.	56			
	(2tailed)				
	N	56			
Value Added Tax	Pearson	0.184	1		
	correlation				
	Sig.	0.115			
	(2tailed)				
	N	56	56		



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Customs duties	Pearson	0.213	0.118	1	
	correlation				
	Sig.	0.405	0.119		
	(2tailed)				
	N	56	56	56	
Economic	Pearson	0.526*	0.817*	0.623*	0.567*
development	correlation				
	Sig.	0.932	0.821	0.041	0.000
	(2tailed)				
	N	56	56	56	56

The table shows that there is a positive strong correlation between Income tax and economic development (r = 0.932, p < 0.526). The correlation results also indicate existence of a significant strong relationship between Value Added Tax and economic development (r = 0.821, p < 0.817). Furthermore, it was established that customs duties have a significant moderate and strong non- causal relationships with the economic development of economic development of Musanze (r = 0.623, p < 0.041). The statistically significant positive correlation between predictor variables and the independent variables; findings indicate that there is a significant positive relationship between the components of tax collection namely income tax, Value Added Tax and customs duties.

CONCLUSION

This study has been conducted with the main objective to analyse the effects of tax collection to the economic development of Rwanda; a case study of Musanze district while the specific objectives of this study were to evaluate the effect of income tax on economic development of Musanze district (2019-2022), to determine the effects of custom duties on economic development of Musanze district (2019-2022) and assess the effects of Value Added Tax on economic development of Musanze district (2019-2022).

The findings indicated that the income tax effects economic development of Musanze district as income tax revenue is used to fund public infrastructure, income tax is a primary source of revenue for governments and income tax collection provides governments with the necessary funds to finance public expenditure which influence economic development of the country. A researcher had objective of determine the effects of custom duties on economic development Musanze district. generally, the effects of custom duties on economic development Musanze district are that Custom duties allows safeguard against dumping practices, custom duties protect domestic industries and by imposing tariffs on imported goods, governments generate income to fund public expenditure. Based on respondents' answers the effects of value added tax on economic development Musanze district is that VAT provides a steady and predictable stream of government income, VAT helps to reduce budget deficits by increasing government revenue without resorting to excessive borrowing furthermore VAT promotes transparency and accountability in the economy and encourages businesses to comply with tax regulations

Recommendations

Based on the above findings and conclusion; the following recommendations to Musanze District as it have seen that tax collection is more essential for economic development. A study recommended Musanze district that it should improving the tax system; the tax system may need to be improved to allow for a



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more efficient and equitable way of collecting taxes, educating the public; educating taxpayers on the importance of paying taxes and how the taxes are utilized by the government can go a long way in increasing compliance, enforcing compliance, combating corruption which is one of the main reasons for poor tax collection systems and reinforcing technology in tax collection. A researcher advised a district to Simplify tax laws and regulations; Complex tax laws and regulations create confusion and increase compliance costs for taxpayers. Simplifying tax laws and regulations will make it easier for taxpayers to comply, resulting in increased revenue. Strengthen tax administration: A strong tax administration system can improve tax compliance and collection. The government can invest in training tax officials, improving technology, and implementing efficient processes to increase revenue collection. Introduce cashless payment options; encouraging cashless payment options will reduce the scope for collecting tax revenue in cash. It can help minimize the possibility of tax evasion, improve transparency in the collection process, and enhance revenue collection. Implement a tax amnesty program: A temporary tax amnesty program can help taxpayers clear their back taxes and reduce their penalties. This can encourage taxpayers to come forward voluntarily and increase revenue collection for the government. Reduce tax exemptions: The government can reduce tax exemptions to increase revenue collection. This can be done by revising the list of eligible exemptions, creating a threshold for exemptions, or eliminating them entirely

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REFERENCES

- 1. Akanbi, A. (2020). The impact of tax collection and incentives on economic growth: Evidence from Nigeria. *International Journal of Business and Economics Research*, 9(4), 170-175.
- 2. Arowoshegbe, A. O., Uniamikogbo, E., & Aigienohuwa, O. O. (2017). Tax revenue and economic growth of Nigeria. *Scholars journal of economics, business and management*, 4(10), 696-702.
- 3. Ayoub, Z., & Mukherjee, S. (2019). Value Added Tax and economic growth: An empirical study of China perspective. *Signifikan: Jurnal Ilmu Ekonomi*, 8(2), 235-242.
- 4. Babatunde, O. A., Ibukun, A. O., & Oyeyemi, O. G. (2017). Taxation revenue and economic growth in Africa. *Journal of accounting and taxation*, 9(2), 11-22.
- 5. Bâzgan, R. M. (2018). The impact of direct and indirect taxes on economic growth: An empirical analysis related to Romania. In *Proceedings of the international conference on business excellence* (Vol. 12, No. 1, pp. 114-127).
- 6. Benimana, V. (2020). The Impacts of Fiscal Policy on the Economic Growth in Rwanda. *Available at SSRN 3666901*.
- 7. Blanchard, O., & Galí, J. (2007). Real wage rigidities and the New Keynesian model. *Journal of money, credit and banking*, 39, 35-65.
- 8. Brondolo, J. D. (2009). Collecting taxes during an economic crisis: challenges and policy options. *IMF Staff Position Notes*, 2009(017).
- 9. Chuenjit, P. (2014). The culture of taxation: Definition and conceptual approaches for tax administration. *Journal of Population and Social Studies [JPSS]*, 22(1), 14-34.
- 10. Coşgel, M. M., & Miceli, T. J. (2009). Tax collection in history. *Public Finance Review*, 37(4), 399-420.
- 11. Dladla, K., & Khobai, H. (2018). The impact of taxation on economic growth in South Africa.
- 12. Dzhumashev, R. (2014). Corruption and growth: The role of governance, public spending, and economic development. *Economic Modelling*, *37*, 202-215.



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- 13. Gabaix, X. (2020). A behavioral New Keynesian model. *American Economic Review*, 110(8), 2271-2327.
- 14. Jalata, D. M. (2014). The role of value added tax on economic growth of Ethiopia. *Science, Technology and Arts Research Journal*, *3*(1), 156-161.
- 15. La Porta, R., & Shleifer, A. (2008). *The unofficial economy and economic development* (No. w14520). National Bureau of Economic Research.
- 16. Nathaniel, S. P., Murshed, M., & Bassim, M. (2021). The nexus between economic growth, energy use, international trade and ecological footprints: the role of environmental regulations in N11 countries. *Energy, Ecology and Environment*, 6(6), 496-512.
- 17. Nguyen, H. T., & Darsono, S. N. A. C. (2022). The impacts of tax revenue and investment on the economic growth in Southeast Asian countries. *Journal of Accounting and Investment*, 23(1), 128-146.
- 18. Nzabirinda, E. (2021). Impact of Tax Revenue on Economic Growth in Rwanda From 2006–2021. *Available at SSRN 4230246*.
- 19. OFISHE, O. W. (2015). The Impact of Value Added Tax on Economic Growth in Nigeria. *Research Journal of Finance and Accounting*, 6, 23.
- 20. Ofurum, C. N., Amaefule, L. I., Okonya, B. E., & Amaefule, H. C. (2018). Impact of e-taxation on Nigeria's revenue and economic growth: A pre-post analysis. *International Journal of Finance and Accounting*, 7(2), 19-26.
- 21. Olaoye, C. O., Ogundipe, A. A., & Oluwadare, O. E. (2019). Tax revenue and economic development in Nigeria. *Advances in Social Sciences Research Journal*, 6(9), 312-321.
- 22. Redmond, T., & Nasir, M. A. (2020). Role of natural resource abundance, international trade and financial development in the economic development of selected countries. *Resources Policy*, 66, 101591.
- 23. Setyaningsih, S. D., Mulyani, S., Akbar, B., & Farida, I. (2021). Implementation and performance of accounting information systems, internal control and organizational culture in the quality of financial information. *Utopía y Praxis Latinoamericana: revista internacional de filosofía iberoamericana y teoría social*, (1), 222-236.
- 24. Sibuea, M. B., Sibuea, S. R., & Pratama, I. (2021). The impact of renewable energy and economic development on environmental quality of ASEAN countries.
- 25. Twesige, D., & Gasheja, F. (2019). Effect of tax incentives on the growth of small and medium-sized enterprises (SMEs) in Rwanda: A case study of SMEs in Nyarugenge district. *Journal of Accounting and Taxation*, 11(5), 89-98.
- 26. Yusuf, M., & Kanji, L. (2020). Effect of internal audit and accounting information system on the effectiveness of internal control. *ATESTASI: Jurnal Ilmiah Akuntansi*, *3*(2), 120-125.
- 27. Zeng, K., Li, S., & Li, Q. (2013). The impact of economic growth and tax reform on tax revenue and structure: Evidence from China experience. *Modern Economy*, 2013.