THE CONTRIBUTION OF INDIRECT TAXES ON TAX REVENUE COLLECTIONS IN RWANDA. A CASE STUDY OF RWANDA REVENUE AUTHORITY (2005-2020)

Rwakunda, L., & Mpakaniye, J. P.

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com

Vol. 9, Iss. 2, pp 552 – 563. May 1, 2022. www.strategicjournals.com, ©Strategic Journals

THE CONTRIBUTION OF INDIRECT TAXES ON TAX REVENUE COLLECTIONS IN RWANDA. A CASE STUDY OF RWANDA REVENUE AUTHORITY (2005-2020)

[1] Rwakunda, L., & [2] Mpakaniye, J. P.

[1] Master of Taxation Student, Ines-Ruhengeri, Rwanda
[2] Doctor, Lecturer, Ines-Ruhengeri, Rwanda

Accepted: April 23, 2022

ABSTRACT

The research purpose was to assess the contribution of indirect taxes on revenue collection in Rwanda. Specifically the study focused on the contribution of Value Added Tax (VAT), Excise duty and Import duties on tax revenue collections in Rwanda. The researcher reviewed both theoretical and empirical literature electronic tax management on revenue collection. The researcher used descriptive method of study based on qualitative and quantitative approach in order to get better analysis of the study. The target population for this study included employees of RRA at Headquarters and Customs Services Department. The population size was tax revenue data for sixteen years from year 2005 to 2020. The study used convenience sampling method was used to select sixteen year period. Data was collected from both primary and secondary data using questionnaires and documentation. Data collected was analyzed using SPSS version 21. Data analysis involved statistical computations for averages, percentages, and correlation and regression analysis. Ordinary least squares (OLS) regression method of analysis was adopted to determine the inferential statistics. Regression analysis was used to evaluate the degree of the contribution of indirect taxes on revenue collection in Rwanda and the findings presented in tables and graphs. From the findings on descriptive analysis of various VAT accruing from the different years, the study found that mean for the Value Added Tax Revenue was Rwf. 486,043 Billion, the maximum for the Value Added Tax for the period was 241,426 Billion francs while the minimum value was Rwf. 57,746. On descriptive analysis of various Excise duty accruing from the different years, the study found that mean for the Excise duty was Rwf. 95,496 Billion, the maximum for the Excise duty for the period was 176,493 Billion francs while the minimum value of Excise duty was Rwf. 21,505. The regression coefficients revealed that there was a positive and significant relationship between Value Added Tax and employee Tax revenue collection (r=0.113, p=0.036). This was supported by a calculated t-statistic of 2.103 that is larger than the critical t-statistic of 1.96. Further, the results revealed that there was a positive and significant relationship between Exercise duty and Tax revenue collection (r=0.395, p=0.000). This was supported by a calculated t-statistic of 3.515 that is larger than the critical t-statistic of 1.96. Lastly, there was a positive and significant relationship between Import duty and Tax revenue collection (r=0.433, p=0.000). From the findings concludes that is a strong relationship between indirect taxes (Value Added Tax, Exercise duty and Import duty) on tax revenue collection in Rwanda. The study found that there was a positive association between Value Added Tax, Exercise duty and Import duty on tax revenue collection. On overall the relationship between the indirect tax sources and economic growth *was found to be significant. Against the above result, we recommended among others that the number of goods on the VAT list should be increased and the burden of custom duties should be lessened on infant industries, all aimed at boosting indirect tax revenue accruing to Rwanda and ultimately stimulating tax revenue collection. The study recommended that the government should put in place mechanism to close up the loopholes in the VAT collection system as its effect is significant. Moreover, company's remittance of VAT revenue should be addressed by the government to ensure full compliance hence an increased tax revenue collections. Lastly, the government should ensure that VAT and Exercise Duty practices encourage international business participation and investment to boost the tax collection revenue of Rwanda.*

Keywords: *Value Added Tax, Exercise Duty, Import Duty, Rwanda Revenue Authority, Tax Revenue collection.*

CITATION: Rwakunda, L., & Mpakaniye, J. P. (2022). The contribution of indirect taxes on tax revenue collections in Rwanda. A case study of Rwanda Revenue Authority (2005-2020). *The Strategic Journal of Business & Change Management,* 9 (2), 552 – 563.

INTRODUCTION

Globally, revenue generation role of the taxes has been given much attention since both developing and developed economies have been confronted with growing fiscal deficits which have been attributed to inadequate budgetary resources, wasteful budgetary process, loopholes in budgeting process, tax evasion, excessive government borrowing, weak revenue mobilization and increased public expenditure (IMF, 2013). In most countries a key policy concern is to sustain long-term economic growth, while at the same time addressing redistributive concerns and ensuring that the debt path is sustainable. To achieve these outcomes, public resources should be spent in an efficient and equitable way and tax revenues should be collected in a way that minimizes the cost of distortions to the functioning of labor, product and financial markets (Macek, 2014). The effect of public spending on long-run growth and inequality likely differs with the type and the effectiveness of spending (OECD, 2020). The public sector raises money in order to spend it**,** mostly on the day-to-day costs of providing public services, on capital investment and on cash transfer payments that support the incomes of various individuals and families.

All over the world, governments undertake huge public expenditure on behalf of their citizens for the provision of basic amenities and other social services. To meet up with these responsibilities, governments thus require substantial amount of funds (Jacobs & de Mooij, 2015). Among the various sources from which governments can generate income, taxes are the most important and most reliable; contributing much more than any other source (Jacobs, 2018).

Taxation is the inherent power of the state, exercised through the legislature, to impose financial burdens upon subjects within its jurisdiction for the purpose of raising revenues to carry out the legitimate duties of government (Gruber & Saez, 2012). Taxation also, is an imposition of compulsory levies on individuals or entities by governments. Taxes are levied in almost every country of the world, primarily to raise revenue for government expenditures, although they serve other purposes as well. Revenue from taxation and customs provides governments with the funds needed to invest in development, relieve poverty and deliver public services; and the physical and social infrastructure required to enhance long-term growth (Tanzi, 2013).

Taxes are the most important source of government revenue for most countries in the world (Obadan, 2015). Taxation refers to imposition of compulsory levies on individuals or entities by government. From income tax to Goods and Services Tax (GST), taxation applies to all levels. Taxes are levied in almost every country of the world, primarily to raise revenue for government expenditures, although they serve other purposes as well (Fasoranti, 2013).

In the system of taxation, there have commonly two types of taxes which are direct and indirect taxes (Igweonyia, 2011). In some countries, the tax revenue collected from indirect taxes such as goods and services taxes have contributed more than direct taxes such as personal income and corporate taxes (Ndunda, 2015). While in other countries, the tax revenue collected from direct taxes have contributed more than the tax revenue collected from indirect taxes to total tax revenue collections.

Indirect taxes are basically taxes that can be passed on to another entity or individual. They are usually imposed on a manufacturer or supplier who then passes on the tax to the consumer (Nmesirionye *et al.,* 2019). Indirect taxes are commonly used and imposed by the government in order to generate revenue. They are essentially fees that are levied equally upon taxpayers, no matter their income, so rich or poor, everyone has to pay them. An indirect tax is collected by one entity in the supply chain (usually a producer or retailer) and paid to the government, but it is passed on to the consumer as part of the purchase price of a good or service. The consumer is ultimately paying the tax by paying more for the product (White, 2012).

Indirect taxes constitute a significant proportion of total tax revenue raised by the government (Devos, 2014). In 2017, among countries that were not classified as “High income” by the World Bank, the share of direct tax revenue in total tax revenue ranged from a high of 60% in South Africa and Romania to a low of 16% in Kosovo (Shahzad, *et al.,* 2018). The standard deviation of the observations is 12%. Indirect taxes as a share of tax revenue varied just as widely, from 80% in Kosovo to 20% in Botswana, with a standard deviation of 11.5. Moreover, this variance is not a new phenomenon; in 1990, the direct tax share ranged from 53% in Mexico and Turkey to 9% in Guinea, and the standard deviation for the year was also 12% (Xiong, 2013).

Data published by OECD show that the average indirect tax share of total tax revenue collections for all member countries in 2018 was 32.7% with a standard deviation of 7.9%. The member country with the highest share was Chile with 53.2% and at the other end was USA with 17.6% (OECD, 2020). The general trend in direct vs indirect tax ratio in total tax revenue over past decades in developed countries shows an increase in direct tax share of total tax revenue.

Over the world, different researchers have conducted different studies on taxation in general and on two main types of taxes which are direct taxes and indirect taxes in particular. Here below are some examples: Caren Grown and Imraan Valodia edited the research entitled: Taxation and Gender Equity. A comparative analysis of direct and indirect taxes in developing and developed countries (Nasr, 2012). It developed a conceptual framework and methodology for examining and evaluating the impacts of direct and indirect taxation on different types of households, based on sex composition and employment status and suggested a set of principles and guidelines for gender-equity enhancing tax policies and tax reforms in developing and developed countries.

In European Union, according to the European Commission – Taxation and customs union’s report of Fiscal year 2007-2008, the highest shares of indirect taxes were found in Bulgaria, where the share is well over half of tax revenue collection, and Cyprus, where it is not far from the 50 % mark. Malta and Romania, too, show relatively high indirect tax shares (Nasr, 2012).

In Latin America and the Caribbean, Revenue statistics’ report shows that in 2019, the Latin America and Caribbean average tax mix was highly reliant on revenues from taxes on goods and services, which made up about half of total tax revenues (49.8%) (Ahmad *et al.,* 2018). VAT revenues were the principal source of these revenues in the Latin America and the Caribbean region in 2019, on average accounting for 27.7% of total tax revenue collections (OECD, 2021).

In Asia and Pacific, Revenue statistics' report shows that on average, taxes on goods and services were the main source of tax revenues in the Asia-Pacific region in 2019, accounting on average for 49.8% of total tax revenue collections, similar to the Africa and Latin America and the Caribbean averages (51.9%, 2018 figure and 50.3%, respectively) and higher than the OECD (32.7%, 2018 figure) (Ahmad, Sial, & Ahmad, 2018). However, within this category, the average share of value-added taxes in total revenues was lower in Asia-Pacific (22.8%) than in Africa and Latin America and the Caribbean (29.7%, 2018 figure and 28.0%, respectively) and similar to the OECD average (20.4%, 2018 figure) (OECD, 2021).

According to the Revenue statistics' report of OECD, taxes on goods and services were the main source of tax revenues among the 30 African countries, accounting for 51.9% of total tax revenues on average in 2018, with VAT alone accounting for 29.7%.

Taxes on goods and services were the principal source of tax revenues for 21 African countries in 2018, ranging from 39.7% of tax revenues in Tunisia to 76.3% in Togo. For the nine other countries (Chad, the Democratic Republic of the Congo, Equatorial Guinea, Nigeria and all countries that constitute the Southern African Customs Union (SACU) i.e. Botswana, Eswatini, Lesotho, Namibia and South Africa), taxes on income and profits accounted for the principal share of total tax revenue (OECD, 2020).

In Rwanda, according to different RRA annual reports from fiscal year 2013-2014 to fiscal year 2014-2015, indirect taxes have contributed more than 50% of total tax revenue collections. In fiscal year 2013-2014, the total indirect taxes collected were 56.0% of total tax revenue collections and in fiscal year 2014-2015, the total indirect taxes were 54.7% of total tax revenue collections (RRA, 2019).

Problem Statement

In Sub-Sahara African countries, Rwanda including, overall, indirect taxes are the dominant force in tax revenue. This is not surprising, given that since its introduction in the 1990s, VAT has met with success in the countries of the region (Hansl, *et al.,* 2020). The ease of implementation and the low economic cost of VAT have favored the mobilization of significant revenues (Doya, 2011). Thus, the share of indirect revenues in the sub-Sahara African countries studied rose from 27% in 1990 to 43% of total tax revenues in 2010. Especially in Rwanda, indirect taxes collected during the fiscal years 2013-2014 and 2014-2015 were 56% and 54.7% of total tax revenue collections respectively (Gbato, 2017).

As said above, over the world, in recent years, different researchers and analysts in public finance domain, have conducted different studies on taxation in general and on two main types of taxes which are direct taxes and indirect taxes in particular. However, few studies have been conducted especially on the contribution of indirect taxes on total tax revenue collections across the world, and nil research conducted on this subject in Rwanda.

Given that in many countries over the world, indirect taxes contribute more that 50% on total revenue collections, the study on indirect taxes in Rwanda should be conducted in order to assess its impact on tax revenue collections and advise Tax administration on how to improve it. Hence, this study seeks to evaluate the contribution of indirect taxes on total tax revenue collections in Rwanda from 2005 up to 2020. Meaning 20 years after Genocide tragedy against Tutsi perpetrated in 1994.

Over the years, it has been observed that the Rwanda tax system has inherent problems in its structure. Munezero (2020) opined that the Rwandan tax system is concentrated on Personal Income Tax (PIT) and Company Income Tax (CIT) while broad-based indirect taxes like the Value-Added Tax (VAT) and Custom and Excise Duty (CED) are neglected. According to Byiers (2009) this neglect constitutes setbacks to Rwandan tax

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

collection revenue and weakens the effectiveness of the tax system. Thus, the tax system lacks the potential of diversifying the revenue portfolio of the country to safeguard against the volatility of lower tiers of government. Hence the need of the study to assess the contribution of indirect taxes on revenue collection in Rwanda.

Research Hypotheses

- Null hypothesis ($H_{0)}$: There is no significant contribution of Indirect taxes on tax revenue collections in Rwanda.
- Alternative hypothesis ($H_{1)}$: There is significant contribution of Indirect taxes on tax revenue collection in Rwanda.

LITERATURE REVIEW

Expediency theory

The expediency theory of taxation states that every tax revenue collection proposal must pass the test of practicability, which must be the only consideration when the county government is choosing a revenue collection proposal. Proposition is that the economic and social objectives of the government should be treated as irrelevant, since it is useless to have a tax which cannot be levied and collected efficiently. However, there are pressures from economic, social and political groups. Every group tries to protect and promote its own interests and county government is often forced to reshape tax structure to accommodate these pressures (Bhartia, 2009).

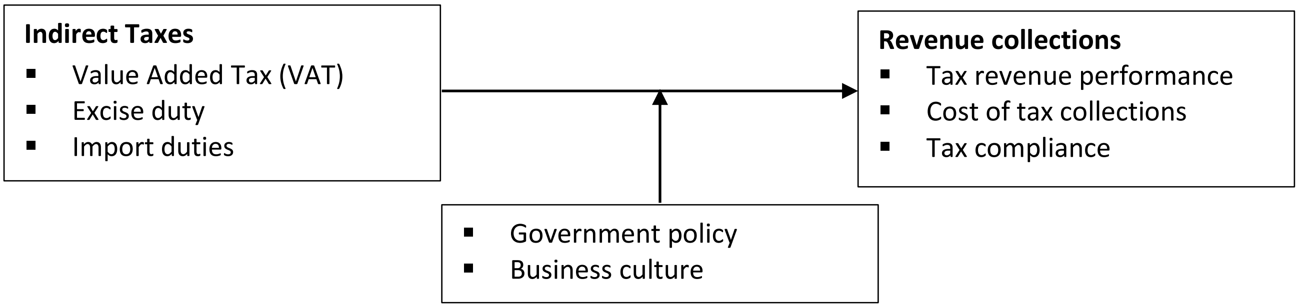
n addition, the administrative set up may not be efficient to collect the tax at a reasonable cost of collection. Taxation provides a powerful set of policy tools to the authorities and should be effectively used for remedying economic and social ills of the society such as income inequalities, regional disparities, unemployment, cyclical fluctuations and so on (Bhatia, 2009).

This study beckon on the expediency theory. This theory explains an economy's effectiveness and efficiency in tax collection instrument for enhanced economic growth. This theory further asserts that every tax proposal must pass the test of practicality. Anyanfo (1996) and Bhartia (2009) explained that the expediency theory is based on a link between tax liability and state activities. It assumes that the state should charge the members of the society for the services provided by it. This reasoning justifies the imposition of taxes for financing state activities by inferences, which provides a basis, for apportioning the tax burden between members of the society. Accordingly, a tax system should not be designed to serve individual members of society but should be used to cure the ills of society as a whole. This theory is appropriate for this study because it enable us to assess the extent to which indirect taxes have to enhance tax revenue collection in Rwanda.

This theory asserts that every tax suggestion must go by the test of practicability. It must be the only consideration when the authorities are choosing a tax proposal. Economic and social objectives of the state should be treated as irrelevant. This proposition has a truth in it, since it is useless to have a tax which cannot be levied and collected efficiently. There are pressures from economic, social and political groups. Every group tries to promote and protect its own interests and authorities are often forced to reshape tax administration structure to accommodate these pressures. In addition, the administrative set up may not be efficient to collect the tax at a reasonable cost of collection. Taxation provides a powerful set of policy tools to the authorities and should be effectively used for remedying economic and social ills of the society such as income inequalities, regional disparities, unemployment, and cyclical fluctuations and so on. Theory on Taxation (TOT) should result from a balance of the forces (Bhartia, 2009). This theory was used to analyze the economic and social objectives of the state and also the effects of a tax system in Rwanda.

Conceptual Framework

Conceptual framework is a scheme of variables which the study operationalizes in order to achieve the set objectives. A variable being the measurable characteristic that assumes different values among the subjects, independent variables are the ones that the study manipulates in order to determine their effects on another variable. Independent variable is the presumed cause of changes in the values of the dependent variable; the dependent variable is expected to be influenced by the independent variable. This is illustrated in figure 1 below: The independent variable in this study is indirect taxes while dependent variable is tax revenue collections.



Independent variable **Intervening Variables** **Dependent variable**

Figure 1: Conceptual Framework

Source: **Researcher, 2021**

METHODOLOGY

The study used descriptive research design and correlational research design. Descriptive research design was used to describe different types of indirect taxes such as Value Added Tax (VAT), Excise duty and Import duties. Also, the study used descriptive research design to describe the level of tax revenue collected in term of tax revenue performance by using either quantitative or qualitative method. The justification for the adoption of descriptive research design is based on its ability to generate the required data from the sampled employees of Rwanda Revenue Authority. The study also used correlational research design to establish the relationship between indirect taxes and tax revenue collections in Rwanda. The study used descriptive research design and correlational research design. Descriptive research design was used to describe different types of indirect taxes such as Value Added Tax (VAT), Excise duty and Import duties. Also, the study used descriptive research design to describe the level of tax revenue collected in term of tax revenue performance by using either quantitative or qualitative method. The justification for the adoption of descriptive research design is based on its ability to generate the required data from the sampled employees of Rwanda Revenue Authority. The study also used correlational research design to establish the relationship between indirect taxes and tax revenue collections in Rwanda. The target population for this study included employees of RRA at Headquarters and Customs Services Department. The population size was tax revenue data for sixteen years from year 2005 to 2020. The research covered a period of sixteen years from 2005 to 2020. Convenience sampling method was used to select sixteen year period. This is assumed reasonable to assess the contribution of indirect taxes on revenue collection in Rwanda. This research relied on secondary data. The main source of secondary data that was relied on is the statistical bulletins by the RRA, World Bank and NISR. The statistical bulletins were used to assess the contribution of indirect taxes on revenue collection in Rwanda. Secondary data was collected from RRA reports, journals, World Bank reports, African Development Bank reports and internet library to provide data on Revenue collections. An introductory letter was obtained from INES-Ruhengeri and it was presented to the Commissioner General of Rwanda Revenue

The Strategic Journal of Business & Change Management. ISSN 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

Authority, where this study was based. Only information regarding to the contribution of indirect taxes on revenue collection in Rwanda. The statistical instruments that was used for research analysis was mainly descriptive and inferential statistics such as correlation analysis and multiple linear regression model was used to analyze the data. The data in this study was computed and analyzed using Statistics and Data (SPSS) which is software for data analysis. Descriptive statistics such as mean, frequency and standard deviation was used to assess indirect taxes collected by Rwanda revenue Authority and to analyze the level of tax revenue collection by Rwanda revenue Authority for the period of 2005 up to 2020. Correlation analysis was developed to measure the strength and closeness of the relationship between each independent variable to dependent variable which is the relationship between indirect taxes and tax revenue collection. This is calculated in order to quantify the relationship between indirect taxes and tax revenue collection in Rwanda. Inferential analyses was used to make references from the data to more general conditions while descriptive statistics was used to simply describe what's going on in the data. The research model estimated was a general regression model. Multiple regression analysis was used to establish the influencing of indirect taxes such as Value Added Tax (VAT), Excise duty and Import duties as predictors on tax revenue collections by Rwanda Revenue Authority dependent variable.

RESULTS AND DISCUSSIONS

The study assumed that there is no significant contribution of Indirect taxes on tax revenue collections in Rwanda. The conceptual framework was used to guide the study and five relevant hypotheses were therefore set and tested at 95 percent confidence level (level of significance).

Table 1: Overall descriptive statistics

STATISTICS	VAT	ED	ID	% of contribution in Total Tax Revenue
Mean	2.77E+11	3.79E+11	5.704463	0.497188
Median	2.97E+11	3.65E+11	6.474458	0.492500
Maximum	5.34E+11	7.06E+11	10.44200	0.534000
Minimum	6.59E+10	1.19E+11	-1.583065	0.452000
Std. Dev.	1.48E+11	1.83E+11	3.352473	0.027223
Skewness	0.013802	0.145296	-0.618099	-0.018607
Kurtosis	1.773532	1.725401	2.624310	1.666772
Jarque-Bera	1.003324	1.139365	1.112885	1.185922
Probability	0.605524	0.565705	0.573245	0.552688
Sum	4.44E+12	6.06E+12	91.27141	7.955000
Sum Sq. Dev.	3.29E+23	5.01E+23	168.5861	0.011116
Observations	16	16	16	16

Source: *Output from EViews 7*

Note: VAT= value-added tax, ED= Excise duties, ID= Import duties.

Table 1 showed the average mean for VAT, ED, ID, and percentage of contribution in Total Tax Revenue as 2.77, 3.79, 5.71, and 0.49 respectively. It also revealed a standard deviation of 1.48, 1.83, 3.35, and 0.03 for VAT, ED, ID, and percentage of contribution in Total Tax Revenue respectively.

In the test of normality, VAT and ED revealed a normal skewness (0.01 and 0.15) with a distribution that is mesokurtic, and normal (1.77; 1.72). While ID and percentage of contribution in Total Tax Revenue showed a negative skewness (-0.62; -0.02) with a distribution that mesokurtic and normal (2.62; 1.67). The table further revealed a Jarque-Bera probability that is not significant i.e. ≥0.05 for all the variables. The study therefore, reveals that there is a significant contribution of Indirect taxes on tax revenue collections in Rwanda as the p-value was 0.005.

Multiple Linear Regression Analysis

An overall regression analysis was conducted between all the independent variables Value Added Tax, Exercise duty and Import duty on the dependent variable that was tax revenue collection.

When dealing with more than two independent variables, multiple regression analysis is used because it attempts to determine whether a group of variables together predicts a given dependent variable (Mugenda & Mugenda, 2013). Therefore, in this study, multiple regressions were done since the study had three independent variables. In understanding the result of multiple regression analysis, the R squared was used to check how well the model fitted the data. The coefficient of determination, R^2 was used in this study as a useful tool because it gives the proportion of the variance of one variable that is predictable from the other variable. It was a measure that allowed one to determine how certain it can be in making predictions from a certain model. The coefficient of determination is the ratio of the explained variation to the total variation. The coefficient of determination is such that $0<r^2< 1$, and denotes the strength of the linear association between x and y. Table 2 shows the R squared for the overall model.

Table 2: Overall Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.722	0.522	0.515	0.37816

***Source**: Secondary data, 2005 - 2020*

Results in Table 2 show that R-squared was 0.522, which means that Value Added Tax, Exercise duty and Import duty, explain 52.2% of the variations in the dependent variable that is tax revenue collection in Rwanda. The results for Analysis of Variance are shown in Table 3.

Table 3: Overall Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	41.201	3	10.300	72.029	.000
Residual	37.752	48	0.143		
Total	78.953	51			

***Source**: Secondary data, 2005 - 2020*

The results in Table 3 indicated that the overall model was statistically significant. Further, the results imply that the Value Added Tax, Exercise duty and Import duty are good predictors of strategic implementation. This was supported by an F statistic of 72,029 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. The results on regression of coefficients are shown in Table 4.

Table 4: Multiple Regression of Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.685	0.228		3.009	0.003
Value Added Tax	0.113	0.054	0.105	2.103	0.036
Exercise duty	0.395	0.059	0.358	6.740	0.000
Import duty	0.433	0.058	0.477	7.441	0.000

Dependent Variable: Tax revenue collection

The regression modes was; $Y = 0.685 + 0.113X_1 + 0.395X_2 + 0.433X_3$

Regression coefficients in Table 4 revealed that there was a positive and significant relationship between Value Added Tax and employee Tax revenue collection (r=0.113, p=0.036). This was supported by a calculated t-statistic of 2.103 that is larger than the critical t-statistic of 1.96. Further, the results revealed that there was a positive and significant relationship between Exercise duty and Tax revenue collection (r=0.395, p=0.000). This was supported by a calculated t-statistic of 3.515 that is larger than the critical t-statistic of 1.96. Lastly, there was a positive and significant relationship between Import duty and Tax revenue collection (r=0.433, p=0.000). This was supported by a calculated t-statistic of 7.441 that is larger than the critical t-statistic of 1.96.

CONCLUSION AND RECOMMENDATIONS

Various techniques of data analysis were employed, namely: descriptive statistics, multi-segment regressions and non-linear regression. The results show that: This implies that that the three indirect taxes responded positively thus contributing to tax revenue collection. From the findings concludes that is a strong relationship between indirect taxes (Value Added Tax, Exercise duty and Import duty) on tax revenue collection in Rwanda. The study found that there was a positive association between Value Added Tax, Exercise duty and Import duty on tax revenue collection.

On overall the relationship between the indirect tax sources and economic growth was found to be significant. Against the above result, we recommended among others that the number of goods on the VAT list should be increased and the burden of custom duties should be lessened on infant industries, all aimed at boosting indirect tax revenue accruing to Rwanda and ultimately stimulating tax revenue collection.

The following recommendations were made in respect to the findings of the study.

- The government should put in place mechanism to close up the loopholes in the VAT collection system as its effect is significant.
- Companies remittance of VAT revenue should be addressed by the government to ensure full compliance hence an increased tax revenue collections
- The government should ensure that VAT and Exercise Duty practices encourage international business participation and investment to boost the tax collection revenue of Rwanda.
- Government of Rwanda should emphasize on the rule of law in curbing corruption inherent in our tax system. Besides there is urgent need to put in place measures to effectively and efficiently collect all forms of indirect tax revenue to enhance economic development and growth in the country.

REFERENCES

African Economic Outlook. (2015). *Rwanda Economy.* AFDB, OECD, UNDP.

Aamir, M., Qayyum, A., Nasir, A., Hussain, S., Khan, K. I., & Butt, S. (2011). Determinants Of tax revenue: A comparative study of direct taxes and indirect taxes of Pakistan and India. In*ternational Journal of Business and Social Science, 2(19), 173-178.*

Ahmad, S., Sial, M. H., & Ahmad, N. (2018). Indirect taxes and economic growth: An Empirical analysis of Pakistan. *Pakistan Journal of Applied Economics, 28(1), 65-81*

Ahmad, E., G. Brosio and J. Jiménez (2018). "*An expanded role for property taxation in Latin America: adopting a simplified structure and digital technolog*y", paper presented at the VII Ibero-American Conference on Local Financing, Cartagena de India's, 5-6 September

Akhor, T. K. (2014). Impact of VAT on economic development of emerging Nations. *Journal Of Economics and International Finance, 3(3):2-13.*

Akhor, S.O. & Ekundayo, O.U.(2016).The impact of indirect tax revenue on economic growth: The Nigeria experience. *Igbinedion University Journal of Accounting 2:62-87*

Bahizi, K. (2013). *National Taxation Policy and Government Revenue Collection.* Kigali: Rwanda Revenue Authority

Bird, R. M. (2015). Improving Tax administration in Developing Countries. *Journal of Tax Administration , 1* (1), 23.

Byiers, B. (2009). R*wanda Industrial Capacity and Performance*. Kigali: Kgali: Ministry of Trade and Industry.

Chemouni, B. (2020) *Revenue extraction is not enough: The ambiguous effectiveness of the Rwandan Revenue Authority.* ESID Working Paper No. 157. Manchester, UK: The University of Manchester.

Delessa, D. (2014). Tax Reforms and Tax Revenues Performance in Ethiopia. Journal of Economics and Sustainable Development. Vol. 13(5): 11-19.

Devos, K. (2014). Tax Compliance Theory and the Literature. In Factors Influencing Individual Taxpayer Compliance Behaviour (p. 14). Springer Science Business Media Dordrech.

Doya, D. M. (2011). Rwanda Reported $381 million worth of investment Last Year. Bloomer: 17th February

Gashi, B., Asllani, G., & Boqolli, L. (2018). The effect of tax structure in economic growth. Inter*national Journal of Economics and Business Administration, 6(2), 56-67.*

Gbato, A. (2017). Impact of taxation on growth in Sub-Saharan Africa: New evidence based on a new data set. *International Journal of Economics and Finance, 9, 172-193.*

Gruber, J. & Saez, E. (2012). "The Elasticity of Taxable Income: Evidence and Implications," *Journal of Public Economics 84, pp. 1-32.*

Hansl, B., Niyibizi, P., Ronchi, L. and Mwumvaneza, V. (2011). Rwanda Economic Update: spring Edition 2011. Kigali: The World Bank Group

Jacobs, B. (2018). The marginal cost of public funds is one at the optimal tax system. I*nternational Tax and Public Finance, 25 (4), 883–912.*

Jacobs, B., & de Mooij, R. A. (2015). Pigou meets mirrlees: On the irrelevance of tax distortions for the second-best pigouvian tax. J*ournal of Environmental Economics and Management, 71, 90–108.*

Fasoranti, M. M. (2013). Tax productivity and economic growth. *Lorem Journal of Business Economics. 1(1):1-10*

Cooper, D. C., & Schindler, P. S. (2011). *Business research methods.(9th ed.).*New Delhi: *Tata* McGrawHill.

Gashi, B., Asllani, G., & Boqolli, L. (2018). The effect of tax structure in economic growth. *International Journal of Economics and Business Administration, 6(2), 56-67.*

Gbato, A. (2017). Impact of taxation on growth in Sub-Saharan Africa: New evidence based on a new data set. *International Journal of Economics and Finance, 9, 172- 193*

Igweonyia, Y. T. (2011). Value added tax & export: the case of selected countries around the World. *Journal of Economics and Behavioral Studies 2(2), 2-15.*

IMF. (2013). Budget deficits and macroeconomic performance in Kenya (1963-2007): An Empirical Analysis. *IMF Country Report, No. 13/20*

Macek, R. (2014). The impact of taxation on economic growth: Case study of OECD countries. Review of Economic Perspectives, 14(4), 309-328

Mehrara, M., Masoumib, M., & Barkhi, F. (2014). The effect of fiscal shock on inflation and Economic growth in developing countries. *International Letters of Social and Humanistic Sciences, 41, 184-191.*

Nasr, J. (2012). *Implementing electronic tax filing and payment in Malaysia*. Kuala Lumpur, Malaysia: Doing Business.

Ndunda,J. (2015). Analysis of factors influencing optimal revenue collection by county governments in Kenya: a case of Nakuru County. *International Journal of Economics*, 3(50, 78-94).

Ngotho & Kerongo (2014*). Tax Competencies, Compliance Costs and Income Tax Compliance among SMES in Kenya,* Jon Kenyatta University.

Nmesirionye, J. A., Jones, E., & Onuche, E. V. S. (2019). Impact of indirect taxes on economic performance of Nigeria (1994-2017). *European Journal of Accounting, Finance and Investment, 5(4), 32-39.*

OECD (2020). Revenue Statistics 2020, Chapter 1*: Tax revenue trends 1965 - 2019*, Table 1.1, last update 26-Nov-2020. Organization for Economic Co-operation and Development.

OECD/UNITED NATIONS/CIAT/IDB (2021). *Revenue Statistics in Latina America and Caribbean 2021*. Retrieved from

OECD (2021). *Revenue Statistics in Asia and the Pacific*.

OECD/ATAF/AUC (2020). *Revenue Statistics in Africa 2020.* Retrieved from

Ogundana, O. M., Ogundana, O. M., Ogundama, O. M., Ibidunni, A. S., & Adetoyinbo, A. (2017). Impact of direct and indirect tax on the Nigeria economic growth. *Binus Business Review, 8(3), 215-220.*

Owino, O. B. (2018). The tradeoff between direct and indirect taxes in Kenya: An empirical Analysis. *Journal of Economics and Development Studies, 6(4), 187-201.*

Owino, O. B. (2019). An empirical analysis of value added tax on economic growth. Evidence From Kenya data set. *Journal of Economics, Management and Trade, 22(3), 1-14*

Rahul (2015). Role of direct and indirect tax in development of Indian economy. *International Journal of Research in Finance and Marketing, 5(12).*

Rwanda Revenue Authority (2019). *Tax Statistics in Rwanda 2019 /Fiscal Year 2017-2018 (2nd Ed). – Rwanda*. Kigali, Rwanda: RRA

Rwanda Revenue Authority (2011). *Annual Activity Report for 2009/2010.* Kigali Rwanda Revenue Authority.

Rwanda Revenue Authority (2012). *Annual Activity Report for2011*. Kigali Rwanda Revenue Authority

Miles, D.A. and Scott, L. (2017) Workshop: Confessions of a Dissertation Chair Part 1: *The Six Mistakes Doctoral Students Make With the Dissertation*. Presented at the 5th Annual 2017 Black Doctoral Network Conference in Atlanta, GA on October 26-29 2017.

Obadan, B. O. (2015). The impact of taxation on investment and economic development in Nigeria. *Academic Journal of Interdisciplinary Studies, 4(3): 2-18.*

Shahzad, A.,Maqbool, H.S. & Nisar,A. (2018). Indirect taxes and economic growth: An Empirical analysis of Pakistan. *Pakistan Journal of Applied Economics 28(1):65-81*

Stoilova, D., & Patonov, N. (2012). An empirical evidence for the impact of taxation on Economy growth in the European Union. Book of Proceedings - Tourism and Management Studies *International Conference Algarve 2012 (Vol.3). Faro, Portugal: University of the Algarve.*

Strydom, H. (2015). *Writing the research report. third edition.* Pretoria: Van Schaik Publishers.

Sekaran, U. (2010). *Research methods for business: A skill building approach* (4th ed.). New Delhi: John and Sons, Inc.

Saunders, M. Lewis, P. & Tron hill, A. (2009). *Research methods for business students, (3rd Ed.),* Upper Saddle River, New Jersey: Prentice-Hall.

Tanzi, V. (2013). '*Trade liberalization and trade taxes', note prepared for meeting of the Trade and Integration Network*, 14-15th August

White, J. R. (2012). Sources of Noncompliance and Strategies to Reduce It. United States Government Accountability Office.

Wilson, (2012). *Methodology and techniques for data collection*, Philadelphia, USA: Kentler Publishing Company.

Xiong, W. (2013). *How China Restructures its Tax System. Max Planck Institute for Tax Law And Public Finance*: