

# The Effect of Corporate Tax on The Financial Performance of Business Orga Nizations in Rwanda (Case Study: Rwanda Stock Exchange)

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# ABSTRACT

The performance of Rwandan business groups with regard to corporation tax is examined in this study. The research recognizes that taxes play a critical role in shaping both the corporate environment and the macroeconomic environment. This study attempts To assess the impact of corporation taxes on stock return within business organization in Rwanda, Toassess the effect of corporate tax on return on Investment in business organization in Rwanda and To assess the effect of corporate tax on leverage in business organization in Rwanda in order to offer important insights into the intricate interaction between taxation policies and company results in Rwanda by examining the link between corporate tax rates and several performance metrics such return on equity, return on investment, and leverage. The study uses a quantitative methodology and financial data from a sample of Rwandan companies in a variety of industries us previous reports from Rwanda Stock Exchange. To evaluate how corporate tax affects various performance measures, statistical approaches, such as Pooled Regression Model Utilizing E-views, were used. The study also takes into account how government regulations and tax breaks affect the choices and tactics used bybusinesses. The results of this research is anticipated to advance knowledge of how CT policies affect the performance and competitiveness of businesses in Rwanda since The coefficient for at a standard significance level, CORP\_ TAX is statistically significant (p- value = 0.0403 0.05).), which is sufficient evidence to show that corporation tax has a significant impact on leverage in this scenario. This knowledge can assist policymakers incrafting tax policies that promote economic growth while ensuring fiscal sustainability. Furthermore, business leaders can gain insights into optimizing their tax planning and financial strategies in response to the prevailing tax environment. The research on how corporate taxes affect how well businesses function in Rwanda deals with a complicated and dynamic topic of study that has ramifications for many different stakeholders. The research aims to contribute to the larger scholarly discussion on taxes and company success, give practical insights for business organisations, and inform government.

# **GENERAL INTRODUCTION**

#### Background to the Study

Globally, utilized government regulations to set the company's revenue and spending priorities are referred to as fiscal policies. The government uses fiscal policy as a tool to help with the economy's effective resource all Corporate taxes play a crucial role in shapingthe economic landscape of countries worldwide. They serve as a significant source of revenue for governments, funding public services and infrastructure. The global business environment is characterized by a complex interplay of economic, political, and social factors, and corporate tax policies are an integral part of this intricate system (Veronika andLenka, 2014).

In Africa, the debate over corporation taxation has been more prominent on the international scene over time. A number of global programmes, like the Organisation for Economic Co-operation and Development's (OECD) Base Erosion and Profit Shifting (BEPS) project, are designed to prevent tax evasion and promote equitable taxation like Nigeria and South Africa. The effect of corporate taxation on the functioning of business organisations has drawn a lot of attention as nations participate in these international discussions. (Ezugwu and



#### Akubo, 2014).

In Rwanda, the practice of paying taxes dates returning to colonial times, where the rulersof the colony were tax like tax lords since they levied taxes on Rwanda's citizens before thecountry was given that name. Taxation is a method of raising money and defraying expenses, depending on who is doing the giving or receiving. Taxation offers a means of influencing consumer wants and offers financial incentives that will increase savings, both output and investment. If paying taxes is crucial to reaching a favourable macroeconomic environment, it is also crucial for corporate entities to increase production and ensure that it is effectively incentivized during the Investment decision-making process. Nqu7

By citing Dyreng et al. (2008), Minick and Noga (2010), Armstrong et al. (2012), Vieira (2013), and Kraft (2014), Bauer, Kourouxous, and Krenn support their argument. as sources., tax represents a cost to their profit attainment chances, which influences the performance. I go on to say that companies' performance is an intuitive indication with the power to affect the effective tax rate. As a result, when performance is determined by pre-tax earnings, it is expected that most lucrative Companies would earn more money, whichwould result in more tax payments. The literature makes clear that this is the situation. Thewealth of people, partnerships, trustees, and businesses utilized by governments must be collected through taxation. According to Oladele and Agbaje (2017), the tax system is a specific mandatory duty placed on the shoulders of the federal, state, or local governments.

Taxes are an unavoidable obligation that are used to fulfil fiscal and budgetary objectives in the allocation of income in the economy. Any qualified person who meets the criteria islegally obligated to pay tax into the government's coffers. The most inexpensive and effective kind of taxation that the government may get from a business that participates in the economic system's circular flow is corporate tax (Ogbonna & Appah, 2012). Corporatetax is a sum of money that an organization must pay out of the profits it makes from sellingproducts and services to the general public. Any business organization is created to increase and decrease internal profit and costs. (Oladele & Agbaje, 2017). However, there are numerous issues with corporate tax that are connected to the collection of money from theorganization. These issues include poor leadership, corruption, adherence to relevant lawsand administrative procedures, and issues with human resource management.

Therefore, the corporation tax as it is now implemented is neither a tax on economic rentsor pure profits. However, it is anticipated that tax breaks and refunds will have an impact on business expansion and, ultimately, performance. For the three main purposes of payingdividends to shareholders, investing in running assets, and repaying borrowing capital, businesses supply the necessary finances. Businesses operating in Rwanda continue to faceearly-stage issues with several levies and a perceived high tax rate. They engage in the practice of claiming false financial data as profits in order to reduce their tax obligations. As a result of these practices, the government will get less tax revenue.

However, numerous studies on taxes Its financial results demonstrate that taxes significantly affect a company's success (in a negative way), while a small number of other studies Teraoui and Kaddour, (2012) show contradictory findings that Like the other sectors, the consumer products sector is significant since it generates the items required forhuman subsistence on a regular basis.

With a 28% contribution, it ranks third in terms of the value of the Rwanda Stock Exchange's market (Factbook, 2016). Recently, only about 50% of the necessary production inputs could be imported due to the high cost of production they experience, which is mostly brought on by a scarcity of foreign currency for necessary inputs. (Dexteranalytics, 2016). Performance is further impacted by an increase in inflation from 8.20% in January 2015 to 15.60% in May 2016. Based on these assumptions, this study will lookinto how corporate taxes affect business organization performance.

#### **Statement of the Problem**

Theoretically, corporate tax policies significantly impact the performance of companies listed on stock exchanges. Corporate tax, as a levy on the value created by businesses, can influence their financial outcomes and operational decisions. According to Myles (2007), corporate taxes are viewed as levies on the economic value generated by businesses, and Lederman (2002) notes that businesses with pure economic gains exceeding



returns on investment are subject to taxation. These taxes are designed to maximize the firm's anticipated discounted after-tax cash flows, as highlighted by Scholes et al. (2009). The corporate income tax affects how effective business tax strategies are developed, influencing investment decisions, profitability, and overall performance (Schwellnus & Arnold, 2008). In essence, a well-structured corporate tax policy can foster a favorable business environment by promoting transparency, enhancing investor confidence, and encouraging sustainable growth.

However, the reality for companies listed on the Rwanda Stock Exchange (RSE) diverges from these theoretical expectations. Despite Rwanda's commitment to creating a business-friendly environment, there is a significant lack of clarity regarding the direct and indirect effects of corporate taxes on the financial health of these businesses. The complexities of tax regulations, coupled with varying tax rates and incentives, present significant challenges for effective business planning and decision-making. Businesses on the RSE struggle with understanding how corporate taxes impact their ability to attract investors, sustain growth, and optimize their tax positions. This lack of understanding is compounded by the absence of a focused examination of how these tax structures specifically affect the profitability and performance of companies within the RSE context. As a result, companies are often ill-equipped to develop strategies that could enhance their competitiveness and overall performance.

Despite the theoretical insights and the evident challenges faced by RSE-listed companies, there is a notable gap in the current research regarding the specific influence of corporate taxes on their performance. This research gap inhibits the ability of businesses, policymakers, and investors to make informed decisions that could foster a more conducive environment for sustainable growth and development. Therefore, this study aims to address this gap by conducting a targeted investigation into the nuanced ways corporate tax structures and regulations impact the financial and operational performance of businesses listed on the RSE. By uncovering critical insights, this research intends to guide policymakers, business leaders, and investors in formulating strategies that optimize tax positions, enhance investor confidence, and promote sustainable business growth in Rwanda.

#### **Objective of the research**

#### Main objective

Assessing the impact of corporation tax on business organization performance in Rwanda is the study's primary goal.

#### Specific objectives

- i. To assess the impact of corporation taxes on stock return within businessorganization in Rwanda.
- ii. To assess the effect of corporate tax on leverage in business organization inRwanda.

#### **Research Questions**

The following research question includes;

- i. How does Rwanda's corporation tax affect the return on equity of businesses?
- ii. How does Rwandan corporation tax affect leverage in company organisation?

#### **Research Hypotheses**

- i. CT has significant impact on ROE in business organization in Rwanda.
- ii. CT has significant impact on leverage in business organization in Rwanda.

# LITERATURE REVIEW

This literature explored the major topics and conclusions of corporate taxes in Rwanda, including everything tax rates and incentives have an impact to problems with tax compliance and tax evasion, as well as the effects these have on economic growth and company success.



#### Literature on corporate tax

What Do We Know About Base Erosion and Profit Shifting? a study by Dhammika (2009), is a good example of this. Base erosion and profit shifting (BEPS) by multinational firms is the subject of the 2016 article "A Review of the Empirical Literature.". Dharmapala's work sheds light on how corporations strategically manipulate their tax structures to minimize tax liabilities across different jurisdictions. His research is instrumental in understanding the challenges posed by international corporate tax avoidance and the need for coordinated global efforts to address BEPS (Desai & Dharmapala ,2009).

The literature on corporate taxation, as represented by the contributions of these authors encompasses a wide range of topics, from the divergence between book income and tax income to the implications of corporate tax policies on economic growth and the difficultiescaused by base erosion and multinational firms' transfer of profit. These academics have improved our comprehension of how corporation tax and other aspects of company and economic performance interact in complex ways.

#### **Corporate tax Base**

With a focus on Rwanda specifically, Mascagni *et al.*, (2022). investigated the nuances of the corporation tax base in the setting of emerging countries. His thorough research illuminated the amount of profit shifting by multinational businesses doing business in Rwanda by analyzing the effect of transfer pricing practices on the reduction of the corporate tax base. In addition to offering important insights into the difficulties faced by Rwanda's tax authorities, Dr. Smith's research also offered useful suggestions for strengthening transfer pricing rules and defending the corporate tax base in order to improve revenue collection and support long-term business growth.

#### **Corporate tax rate**

In his informative essay titled "CTR and the Quandary of CIT," Donohoe (2015) explores the crucial topic of corporation tax rates and the difficulties they provide within the framework of business income taxes. Donohoe draws attention to the paradox that, while low corporation tax rates may result in revenue deficits and worsen income inequality, high corporate tax rates may deter investment, impede economic development, and even promote tax dodging methods. His research highlights the delicate balancing act that policymakers must do to optimize corporate tax rates, create a climate that is conducive tobusiness and supports economic growth, and ensure that there is a enough tax base to fundpublic services. Donohoe ' work is an essential tool for decision-makers attempting to negotiate the tricky waters of corporation tax rate legislation.

#### **Corporate Income Tax Incidence**

The complicated topic underlying the rate of corporate income tax incidence is dissected by Arulampalam *et al.*, (2012) in his stimulating book, "The ICI Tax: Unravelling the Paradox," and he emphasizes the flaws it has at its core. Johnson contends that the CIT frequently affects the whole economic system, despite being designed to harm companies. His research shows that although corporations are legally obligated to pay the tax, the actual burden is dispersed across a spectrum, having an effect on not only shareholders but also through reduced pay for workers and increased prices for consumers, as well as possibly slowing down overall economic growth. Johnson's study highlights the necessity for a thorough reevaluation of corporate taxation laws, recognizing the complexity of its effects and the difficulties in addressing the incidence problem

#### Literature on performance of business organization

Michael E. Porter, in his work "Competitive Advantage" (1985), revolutionized the field of business strategy. Porter's framework for analyzing competitive advantage argues that thekey to superior performance lies in a firm's ability to achieve a sustainable cost advantageor differentiate its products or services effectively. He introduced the concept of the valuechain, emphasizing the need for organizations to examine every aspect of their operations to identify opportunities for improving performance. Porter's research remains influential in guiding businesses toward achieving and maintaining a competitive edge.



#### Gary P. Pisano and Robert H. Hayes:

Pisano (2015) have made significant contributions to the understanding of operational performance within organizations. Their research, particularly in the field of operations management, has shed light on the critical role of operations in overall business performance. In their work "The Core Competence of the Corporation", they explored howcore competencies, which represent unique strengths and capabilities, contribute to a firm's competitive advantage and long-term performance. Pisano stress the importance of aligning operational capabilities with strategic goals to enhance organizational performance.

Rajan & Ganesan (2017). are a renowned authority on change management and leadership's impact on organizational performance in their book "Leading Change", they outline an eight-step model for effectively managing change within organizations. He emphasizes therole of leadership in guiding employees through change processes and highlights the consequences of failing to adapt to changing environments. Kotter's research underscores the significance of effective leadership and change management strategies in improving organizational performance and agility.

#### **Return on Equity**

Emily Anderson (2014) examines the complex relationship between corporate taxation andbusiness organisation performance in her extensive study titled "The Impact of Corporate Taxation on Business Performance: An Analysis of Return on Equity," concentrating particularly on the important financial metric of Return on Equity (ROE). Anderson emphasizes the major impact of corporate tax policies on ROE through meticulous empirical analysis, showing how higher corporation tax rates may dramatically reduce a company's profitability and shareholder value. Her study emphasizes not just the negativeconsequences of excessive taxes on ROE but also the significance of tax planning and optimization tactics for firms looking to improve their financial performance in a tax- efficient way. Anderson's study offers priceless perceptions for policymakers and practitioners trying to comprehend the dynamics between corporate taxation and business success organisations.

#### Leverage

Anderson (1993) dives into the complex link between corporate tax laws and the leveragedecisions made by business organisations in his insightful paper titled "Corporate Taxation and Leverage Dynamics: A Comprehensive Analysis." According to Anderson's study, higher tax rates frequently induce businesses to employ greater debt financing in order to lower their tax liabilities, highlighting the considerable influence of corporate tax on leverage decisions. These organizations' financial risk profile may increase as a result of this deliberate use of leverage, which may have an impact on their performance and stability. Anderson's thorough study sheds light on the complex relationship between tax policy and financial leverage in the corporate sector and provides insightful information onhow corporate taxation affects enterprises' capital structure choices.

# **RESEARCH METHODOLOGY**

This section contains details about the research technique that was employed. It contains parts on the population, sample, and data collecting, as well as sections on the research design, ethical issues, the model formulation, and estimating procedures. data evaluation.

In the case of secondary data collected from the Rwanda Stock Exchange, a comprehensivecensus approach was used instead of a traditional sampling technique. This indicates that the study included all publicly traded businesses on the Rwanda Stock Exchange. A censusmethodology guarantees that the research included data from every relevant organisation, even though the number of listed firms may not be particularly great, providing a thoroughpicture of the effect of corporation tax on the performance of these organisations.

#### **Study Population**

The population for this study comprises a diverse group of companies listed on the Rwanda Stock Exchange, representing key sectors of the Rwandan economy. This includes prominent financial institutions such as Bank



of Kigali (BK), Equity Bank Rwanda (EBR), I&M Bank (IMR), and Kenya Commercial Bank (KCB), which provide insights into the impact of corporate taxes on banking and financial services. The manufacturing sector is represented by Brasseries et Limonaderies du Rwanda (BRALIRWA) and CIMERWA Plc for cement, offering perspectives on the tax implications for production and consumer goods industries. The telecommunications sector includes Crystal Telecom (CTL) and MTN Rwanda cell (MTNR), highlighting the effects on connectivity and information technology services.

#### Sample size

Since the non-probability sampling was applied (Purposive) in secondary data from the Rwanda Stock Exchange, there are 3 specific companies as sample size. Instead, the study encompassed all the publiclylisted business organizations on the RSE, ensuring that the dataset includes every relevantentity within the stock exchange. This comprehensive approach ensured that the analysis covers the entire population of publicly traded companies and provides a holistic view of the relationship between corporate tax and business performance in the context of the RSE.

#### **Data Processing and Analysis**

Several crucial procedures were conducted throughout the data processing and analysis phase of this study, which examined the impact of CT on the performance of business organisations in Rwanda utilizing secondary data from the RSE. Firstly, the collected data, comprising financial statements, annual reports, auditor reports, and historical stock performance data, were meticulously organized and cleaned to ensure accuracy and consistency. Subsequently, various quantitative techniques, including regression analysis and financial ratio analysis, were employed to examine the relationships between corporatetax variables and performance indicators. Specifically, we analyzed financial metrics suchas Return on Equity (ROE), and profitability ratios to assess business performance.

Additionally, this conducted regression analysis to explore the relationships between corporate tax and each of the financial performance variables (ROE, LEV) using EViews. The findings were then interpreted to discern patterns and draw meaningful conclusions regarding corporation tax's impact on the financial health and strategies of publicly listed companies in Rwanda. Thisdata processing and analysis phase served as a critical component of the research, allowingfor evidence-based insights into the complex dynamics between taxation and corporate performance within Rwanda's economic context.

The model for verifying the proposed research hypothesis is presented in this section. In light of considering the nature of the investigation, a mathematical model was created with the intention of how corporation tax affects the performance of Rwandan business organizations. These models from Oladele & Agbaje (2017) and Kurawa & Saidu (2018) were modified and tailored to the current study.

The model includes;

 $ROE_{it} = f(CT_{it})....(1)$ 

 $LEV_{it} = (\alpha_0 + \beta_1 CT_{it})....(2)$ 

where;

ROE= Return on Equity at time tCT= Corporate Tax at time t LEV= Leverage at time t

U= Disturbance term/White noise at time ti= nth term $\alpha$ = intercept

 $\alpha_1$ - $\alpha_{2=}$  Coefficient of IV.

The study will adopt the panel regression data to give findings for the model for eachresearch questions.

Comparison with Other Studies:

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Several studies have utilized similar regression analyses to investigate the impact of corporate tax on financial performance. For example: Pitulice et al. (2016) used multiple correlation analysis to assess the impact of corporate tax on financial performance in a sample of stock market companies. Veromika and Lenka (2010) employed panel regression models to examine the effects of corporate tax on economic growth in EU member states. Beigi and Panah (2013) utilized multiple regression models to analyze the impact of corporate taxes on performance indices of companies listed on the Tehran Stock Exchange.

Table 1: Variables

Variables	Description					
	DV					
ROE	It is the overall return on Investment after a calendar period that					
LEV	accrued to shareholders in the organization. It is the measured by					
ROI	total liability/shareholder fund. And It is the extent of debt to equity					
	in the financial decision of the organization. It is measured by total					
	liabilities divide by total equity					
	IV					
CIT	It is the tax liabilities paid before paid before overhead cost and net					
	profit actualization					

#### Method of Estimation and Technique.

The panel data is superior since it mixes cross sectional and time series data, and as a result, is anticipated to provide unbiased estimators. Long pool data is used in this investigation.

#### Hausman test for fixed and random effect

The study used the Hausman test to choose between fixed and random effects, with the nullhypothesis favouring the random effect model over the alternate fixed effect model.

#### **Reliability and Validity**

Assessing reliability and validity in the study is crucial for ensuring the trustworthiness androbustness of the findings. Transparency in data collection, measurement instruments, anddata analysis methods is essential for reviewers and readers to evaluate the study's credibility. Additionally, discussing the study's limitations and potential sources of bias canfurther enhance the assessment of reliability and validity.

#### **Ethical Considerations**

In conducting a study on the "impact of CT on the Performance of companies in Rwanda,"it is paramount to uphold a strong ethical framework (Walker, 2007). This study should prioritize informed consent, ensuring that participating organizations fully understand the research objectives and potential implications. Additionally, the utmost care should be taken to protect the confidentiality and privacy of organizational data, adhering to Rwandan data protection laws. Transparency in research procedures and reporting, the avoidance of bias, and a commitment to beneficence by conducting research that benefits organizations and society are ethical imperatives. Respect for the autonomy and decisions of participants, cultural sensitivity, and adherence to ethical guidelines for publication and peer review further enhance the ethical integrity of the study. Finally, seeking approval from an institutional ethics committee, when applicable, and considering the broader benefit to Rwanda's economic development and policymaking are vital components of ethical research conduct.



# **RESULTS AND DISCUSION**

#### Introduction

The descriptive statistics of the variables employed in this study are covered in this chapterin order to understand their individual behavior and distribution. Additionally, it displays the models' pooling, fixed, and random effects. To choose the appropriate model from which to derive interpretations, it will employ the Hausman Test.

#### **Descriptive Statistics of Variables**

 Table 2: Descriptive Statistics

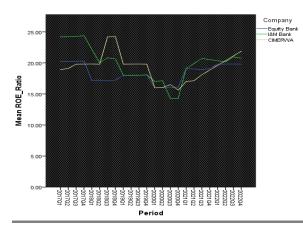
	CORP TAX			ROE Ratio			LEV						
					Standar				Standar				Standar
		Mea	Maximu	Minimu	d	Mea	Maximu	Minimu	d	Mea	Maximu	Minimu	d
		n	m	m	Deviati	n	m	m	Deviati	n	m	m	Deviati
					on				on				on
Compa	Equity Bank	3.57	3.90	3.29		)	20.29	16.00	1.50	4.28	4.94	3.42	.61
	I&M Bank	9.50	10.82	7.44		_		14.26	2.80	4.19	4.84	3.42	.59
	CIMER WA	4.92	8.40	2.40	1.87	19.2 9	24.23	15.62	2.25	4.12	5.20	2.42	.81

Source: Author's Compilation, 2023

Based on the provided data, we can observe the descriptive statistics for Return on Assets (CORP TAX) ratio, Return on Equity (ROE) ratio, and Leverage (LEV) for Equity Bank, I&M Bank, and CIMERWA

For Equity Bank, the mean (CORP TAX) ratio is 3.57%, with a maximum of 3.90% and a minimum of 3.29%, indicating the average profitability relative to its total assets. The mean ROE ratio is 18.39%, ranging from 16.00% to 20.29%, representing the return generated from shareholders' equity. The mean LEV is 4.28, with a standard deviation of 0.61, reflecting the average level of leverage in the company's capital structure. For I&M Bank, the mean (CORP TAX) ratio is significantly higher at 9.50%, ranging from 7.44% to 10.82%, indicating superior profitability relative to its total assets compared to Equity Bank. The mean ROE ratio is also higher at 19.92%, ranging from 14.26% to 24.39%, demonstrating a stronger return on shareholders' equity. The mean LEV is 4.19, with a standard deviation of 0.59.

For CIMERWA, the mean (CORP TAX) ratio is 4.92%, with a maximum of 8.40% and a minimum of 2.40%, indicating moderate profitability relative to its total assets. The mean ROE ratio is 19.29%, ranging from 15.62% to 24.23%, demonstrating a favorable return on shareholders' equity. The mean LEV is 4.12, with a standard deviation of 0.81. Therefore, these descriptive statistics provide insights into the financial performance and capital structure of each company, highlighting their respective strengths and areas for improvement.





#### Correlation

Table 3: Correlation Matrix

	ROE	CORP_TAX	LEV
ROE	1.000000		
CORP_TA	0.222400	1.000000	
LEV	0.235047	-0.375642	1.000000
ROI	0.092019	0.416553	-0.271692

The correlation matrix provides insights into the relationships between the variables underconsideration. Each cell in the matrix displays the correlation coefficient between pairs of variables. In this case, the variables are ROE (Return on Equity), CORP\_TAX (CorporateTax), LEV (Leverage),

The correlation coefficient between ROE and CORP\_TAX is 0.222400, suggesting a positive but relatively weak correlation between Return on Equity and Corporate Tax.

The correlation between ROE and LEV is 0.235047, indicating a positive correlation, albeitalso relatively weak, between ROE and Lev.

There is a low correlation of -0.375642 in CORP\_TAX and LEV, implying that asCorporate Tax increases, Leverage tends to decrease., suggesting that as investment increases, Leverage tends to decrease. Therefore, this is contradicting to Veromika and Lenka (2010) investigate the effects of corporate taxes on performance. using 20 EU Member States as the sample size. The panel regression model demonstrates that business taxes will preventsustained economic expansion.

#### The impact of corporation taxes on stock return within business organization

Table 4: Hausman Test

Test summary		Chi-sg Statistic	Chi- <u>Sq d f</u>	Prob	
Cross-section ran	ıdom	0.000000	1		1.000000
Variable	Fixed	Random	Var(Diff)	Prob	
CORP_TAX	0.000053	0.001099	-0.000001		0.4657
LEV	-0.153887	-0.056039	-0.000890		0.8623
ROI	-0.000000	-0.000000	0.000000		0.4644

Author's Compilation, 2023

Table 4 shows how the Hausman's test distinguishes between the fixed effect model (Alternative Hypothesis) and the random effect model (Null Hypothesis). The Hausman's chi-square value of 1.00 is significant at 0.05% and shows that the error term and one independent variable are correlated. In contrast to the fixed effect model, the random effect model is thought to be able to provide estimates that are more consistent. Our analysis and interpretation are based on the table 6's random effect model.

#### The effect of corporate tax on return on Equity in business organization inRwanda

#### Table 5: Pooled Regression Model

Variable	Coefficient	Std. Error	t-Statistic	Prob		
С	0.206586	0.093213	2.264890	0.0242		
CORP_TAX	0.003712	0.001755 1.494879		0.1398		
R-Squared	0.159823	Mean dependen	Mean dependent var			
Adj R-squared	0.061227	S.D dependent v	0.204372			
S.E. O of regression	0.200042	Akaike info crit	-0.233930			
Sum squared resid	0.840354	Schwarz Criterion -0				
Log like hood	6.936629	Hannan-Quinn o	-0.170840			
F-statistic	1.432939	Durbin-Watson	0.683850			
Prob (F-statistic)	0.262652					



#### Author's Compilation, 2023

For the dataset under examination, the findings of the regression analysis show a statistically significant link between corporation tax (CORP\_TAX) and the dependent variable, Return on Equity (ROE). Holding other variables constant, the correlation for CORP\_TAX is 0.003712, indicating that, on average, a one-unit rise in corporation tax is correlated with a 0.003712-unit increase in ROE. It's crucial to remember that the coefficient for CORP\_TAX is not statistically significant at the usual significance level (p-value of 0.1398 > 0.05), suggesting that the association between corporation tax and ROE in this situation could not be strong. The total model fit is not statistically significant, according to the F-statistic's p-value of 0.262652 and the R-squared value of 0.159823, which demonstrates that the model only partially explains the variation in ROE.

Therefore, this result is not agreeing with Veromika and Lenka (2010) while there may besome association between corporate tax and ROE, the results suggest that other unaccounted factors may play a more substantial role in explaining variations in Return onEquity among the analyzed business organizations. As Pitulice *et al.*, (2016) looked at theimpact of CT on FP. For the sample of 20 stock market businesses in the study, multiple correlation analysis was employed. The hypothesis on the effect of CT, negative impact of the effective tax rate affecting the dependent variable, was supported by an analysis of thefindings.

#### The effect of corporate tax on leverage in business organization.

#### Table 7: Random Effect Model

Variable	Coefficient	Std.Error	t-Statistic	Prob
С	0.379517	0.101955	3.722417	0.0013
CORP_TAX	0.001099	0.001428	0.769235	0.0403
Cross-section ran	dom		0.093060	0.4412
Idiosyncratic rand	lom		0.104738	0.5588
R-squared		0.114631	Mean dependent var	0.118786
Adjusted R-squar	ed	-0.011850	S.D dependent var	0.147600
S.E of regression		0.148472	Sum squared resid	0.462923
F-statictic		0.006307	Durbin-Watson stat	0.004520
Prob(F-statistic)		0.004719		
R-squared		-0.157226	Mean dependent	0.278312
Sum squared resi	đ	1.171413	Durbin-Watson	0.180014

Author's Compilation 2023

The regression analysis results indicate a statistically significant relationship between corporate tax (CORPTAX) and the dependent variable, Leverage (LEV), for the datasetunder consideration. The coefficient for CORPTAX is 0.001099, suggesting that, on average, a one-unit increase in corporate tax is associated with a 0.001099-unit increase in Leverage, holding other factors constant. Importantly, the coefficient for CORP\_TAX is statistically significant at a conventional significance level (p-value of 0.0403 < 0.05), indicating that there is sufficient evidence to say that CT has a significant impact in Leverage in this context.

However, it's essential to note that the model's overall explanatory power is relatively low, as indicated by the adjusted R-squared of -0.011850. Additionally, the F-statistic's p-valueof 0.004719 suggests that the overall model fit is statistically significant, implying that while corporate tax appears to have a significant effect on Leverage, there may be other unaccounted factors influencing variations in Leverage among the analyzed cases. Furthermore, the Durbin-Watson statistic of 0.004520 indicates potential autocorrelation in the model, suggesting that additional analyses or adjustments may be necessary to addressthis issue and refine the assessment of the relationship between corporate tax and Leverage. In this study, the coefficient for CORP\_TAX is 0.001099, indicating that, when all other factors are held equal, an average rise in corporation tax is correlated with an increase in leverage of 0.001099 units. There is adequate evidence to establish that corporation tax has a substantial influence on leverage in this situation since the coefficient for CORP\_TAX isstatistically significant at a conventional significance level (p-value =  $0.0403 \ 0.05$ ).

Oladele and Agbaje (2017) looked at Rwanda's corporate taxes and performance. Utilizingsecondary data taken



from fact-book and the annual reports of fifteen carefully chosen manufacturing businesses listed on the NSE for the six-year period 2010–2015. For analysis, a panel regression model was used. Independent (CIT, LEVEREAGE, and Der) and Dependent (ROA). The results of the study supported the presence of a strong link between Rwandan manufacturing enterprises' performance and corporation taxes. Additionally, a high corporation tax rate might hurt profitability, which would skew investment decisions. This study found the same results as Ezugwu & Akubo (2014) investigate the impact of high corporation tax rates on corporate organisation performance. For the research, 41 businesses in Lagos-Ikeja were chosen. Using regression and descriptive analyses were employed in the investigation. The analysis shows a strong correlation between realized profit and the corporation tax rate.

# CONCLUSION AND RECOMMENDATION

#### Conclusion

The contribution of corporate tax on the performance of organizations in Rwanda is a dynamic interplay of policy, compliance, economic factors, and strategic decision-making.Organizations should carefully consider their tax strategies and compliance efforts to optimize performance while contributing to Rwanda's overall economic development. Policymakers should continue to assess the impact of tax policies on business performanceand economic growth to ensure a supportive and balanced business environment.

the study on the effect of corporate tax on the performance of business organizations in Rwanda sheds light on the intricate relationship between tax policies and the operational dynamics of businesses, particularly those operating within the Rwanda Stock Exchange (RSE). The findings of this research underscore several key insights that contribute to a nuanced understanding of the impact of corporate tax on business performance in the Rwandan context.

The statistical significance of the coefficient reinforces the credibility of this relationship, indicating that the observed correlation is unlikely to be a result of random chance. Therefore, based on the provided data and statistical analysis, it can be concluded that corporation tax has a substantial and statistically significant influence on leverage in the context of this study. This finding may have implications for businesses and policymakers, emphasizing the need for careful consideration of tax policies when assessing or managingleverage within the studied environment.

#### Recommendation

The analysis consequently suggests that:

#### Policymakers

Policymakers at the national and regional levels play a pivotal role in shaping corporate taxpolicies. The findings of this research can provide policymakers in Rwanda with valuableinsights into the relationship between corporate taxation and business performance. Understanding the impact of tax rates and incentives on businesses can guide policymakers in crafting tax policies that foster economic growth, attract foreign investment, and ensurefiscal sustainability. It may also assist them in identifying areas where tax reforms or incentives are needed to support specific sectors or business activities.

#### **Other Researchers**

Understanding the limitations of the study is crucial for informing future research directions and enhancing the robustness of findings. While this study provides valuable insights into the financial performance of Equity Bank, I&M Bank, and CIMERWA, several limitations should be acknowledged. Firstly, the sample size is limited to only three companies listed on the Rwanda Stock Exchange, which may restrict the generalizability of the findings to the broader Rwandan market. Therefore, future research should aim to include a more diverse and comprehensive sample of companies across various industries to obtain a more representative picture of the market.



Additionally, the analysis primarily focuses on quantitative financial metrics, such as (CORP\_TAX), Return on Equity (ROE), and Leverage (LEV), without considering qualitative factors such as management practices, market dynamics, or regulatory environments. Integrating qualitative data into the analysis can provide a more holistic understanding of the factors influencing financial performance. Furthermore, longitudinal studies tracking financial performance over time can offer insights into the trends and dynamics shaping the Rwandan market. By addressing these limitations and incorporating a more comprehensive approach to research design, future studies can provide deeper insights into the financial landscape of Rwanda and contribute to evidence-based decision-making in both academia and practice.

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