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Capital Structure and Firm's Financial Performance; A Case of Sanlam Insurance Company (2010-2018)

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Abstract

This study examines the influence resulted in structure or arrangement of capital towards the financial performance of the firm. The SANLAM Ltd was taken as a case of study of eight years from 2010 to 2018 to assess the importance of the capital structure for a firm to better performance resulted in chosen finance companies in Rwanda. On other hands, the specific objectives are firstly, to assess the benefits of using the capital structure in selected finance company. Secondary, to assess the link connecting the capital structure and the performance of SANLAM Ltd. By using both quantitative and qualitative approaches, this study used aregression model to demonstrate the link between through by Return on Asset and Return on Equity. The researcher used Secondary data to attain objective stipulated in the study. The study employed both the Return on Equity and Return on Asset like dependent as estimator variables in variables under the study. The findings through regression analysis showed that debt ratio and the variable like tangible were accounted to be statistically were significant parameters impact the performance of obtained through return on asset; for loan to the ratio of the deposit, size and debt, are not significant with performance .The results obtained through regression showed that tangible is negative and statistically associated with return about asset and has a positive statistically for the return towards equity and has the probability value of 0.088 and 0.416. The implication is that debt level stimulate the return on asset and reduce the loss due to extent that high use of leverage has to impose high interest rate. Finally, this study recommends that the firm has to develop new strategies and target in order to use more equity. On the side of government of Rwanda as well as policy makers have to minimize any rigidity measures that could prohibit the use ling term financial resources.

Keywords: *Capital Structure, Firm's Financial Performance, Sanlam Insurance Company, Rwanda*

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1. Introduction

Inefficiency outcome or poor performance accompanied with an expected closure of finance companies has attracted more questions which require some solution questions to researchers as well as some practitioners. The outcome from the firms in Rwanda was blamed to be inefficient and low performance. Furthermore, some companies in Rwanda which are facing the challenge of insufficient financial resources are said to have a negative connotation of financial performance.

As for example, finance companies operating like insurance companies in Rwanda have been struggling to cope with a problem of staggeringly low money liquidity. For instance, as Minecofin report of 2017/2018, short-term deposits have faced with a big problem of limited access to long-term debt financing, which makes capital structure decisions even more challenging while the capital structure used by the firm should influence their financial performance. Despite the importance of capital structure decision especially in an environment with high cost of borrowing and underdeveloped capital structure, the relationship between the capital structure and financial performance has not attracted so much attention in Rwanda. Even though many studies have tried to evaluate different determinants financial performance and capital structure, there is no popular study in Rwanda that have attended to explore if there is any relationship between capital structure and financial performance particularly in insurance sector. Therefore, this study attempted to fill this gap by exploring with a reasonable conclusion on whether there is any significant effect played by capital structure on their business financial performance. Therefore, it is this issue pushed the researcher to focus the study and to assess the impact of capital structure on firm's financial performance with particular reference to SANLAM LTD for the years up from 2010 to 2018.

1.2 Objectives of the study

1.2.1General Objective

The overall objective of this research is capturing the importance of capital structure on firm's financial performance of Sanlam insurance company.

1.3.2 Specific objectives

(i) To assess the benefits of capital structure towards financial performance in Sanlam
(ii) To evaluate the relationship resulted between capital structure and firm performance of Sanlam
(iii) To assess the outcome of capital structure on Sanlam financial performance as well to the country of Rwanda.

1.3 Research Questions

(i) What are the benefits of capital structure towards financial performance in Sanlam?
(ii) What is the relationship existing between capital structure and firm financial performance of Sanlam?
(iii) What are the outcomes of capital structure on Sanlam financial performance and the country of Rwanda?

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2.1 Empirical Review

2.1.1 Corporate Governance and the effects to capital structure

The research done by (Saad, 2006) to evaluate the level at wich public comply with list company in the best way of implementation of corporate governance code as well as best practice in Malaysia, the result demonstrate that a company has a link with the code and statistically associated with the firm's capital structure. This study was carried out by using the company annual report as well as Thomson data for a sample of 120 firms or companies over a period of 1998 to 2006.

2.1.2. Capital structure and corporate performance

The research of San (2007) studied on Capital Structure and Corporate Performance of Malaysian Construction Sector. This journal shows the link existant between capital structure and corporate governance. His result showed that a link between then exist and the results indicated there is a non-relation between variable examined.

2.2 Research Gap

While existing literature extensively explores the relationship between capital structure and firm performance, there is a noticeable research gap. Previous studies mainly focus on corporate governance and its impact on capital structure, overlooking the comprehensive link between capital structure and corporate performance, particularly financial performance. Additionally, the existing research predominantly emphasizes debt-based investment options, leaving room for further exploration of other determinants, such as equity. This research aims to bridge these gaps by providing a more holistic understanding of the dynamics between capital structure and firm performance.

2.3 Conceptual Framework

A conceptual framework is a diagram that can be used by researcher to show the independent and dependent variables of a study. The conceptual framework in this study shows the capital structure as the independent variable and financial performance as the dependent variable.

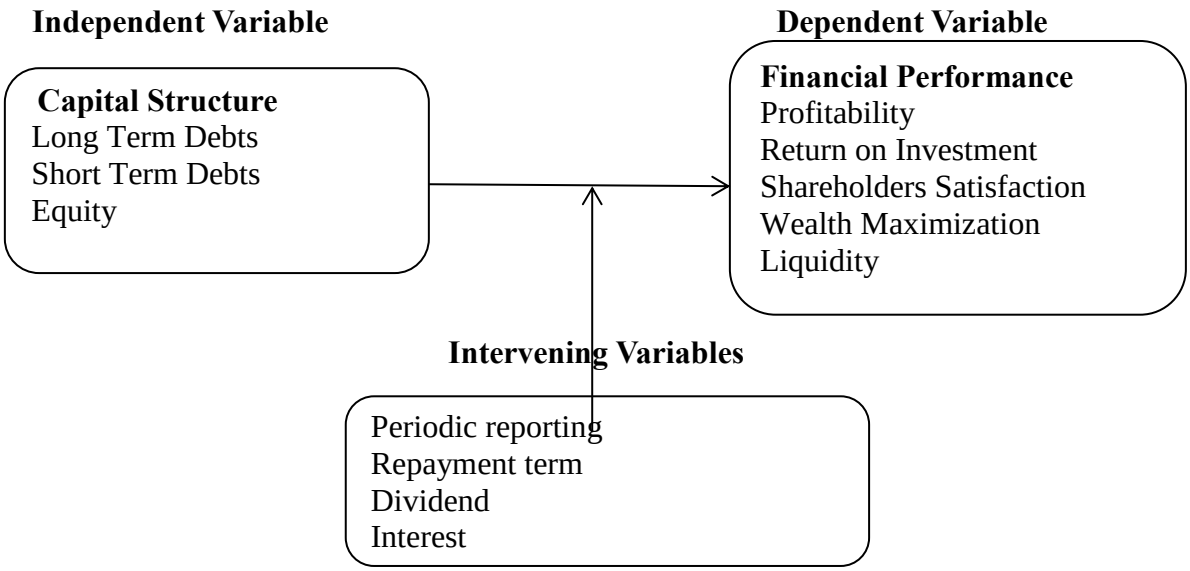

Figure 1: Conceptual Framework

Source: Researcher 2021

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Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

This study aimed to examine the impact of capital structure on financial performance, with capital structure as the independent variable and financial performance as the dependent variable. The conceptual framework illustrates how elements such as firm size, age, tangibility, risk, and growth influence financial performance indicators like profitability, return on investment, shareholders' satisfaction, wealth maximization, liquidity, and firm value. Intervening variables, including periodic reporting, repayment terms, and dividend and interest payments, further contribute to the achievement of financial performance.

3. Materials and Methods

The research design of this study incorporates analytical, historical, statistical, and comparative research methodologies, primarily relying on secondary data collected from SANLAM Ltd. The quantitative elements, such as graphs, tables, and charts, enhance data analysis and interpretation. Data collection methods primarily focus on secondary data derived from financial records of SANLAM Ltd. Secondary sources include textbooks, journals, magazines, reports, dissertations, and internet materials related to capital structure and firm financial performance.

Reliability and validity were ensured through pre-testing with a sample of respondents, and clear instructions were provided during data collection. The study employed qualitative analysis, specifically a survey through structured review documents for a selected commercial bank over a five-year period. Regression analysis was used to estimate coefficients for variables like return on assets (ROA) and return on equity (ROE). Data obtained underwent sorting, editing, and coding using relevant software.

The econometric model used in the study is represented as $Yit = \beta 0 + \beta 1X1it + \beta 2X2it + ... + \beta kXkit + \varepsilon it$, where Yit is the dependent variable in time period t, β represents coefficients to be determined, X represents independent variables, and ε is the error term. Two specific models were applied, one for ROA and another for ROE, including variables like debt ratio (DR), debt to equity ratio (DER), loan to deposit ratio (LD), firm size, and tangibility of assets. Ethical considerations were diligently observed throughout the study. The researcher obtained an introduction letter from Mount Kenya University to clarify the academic intent, and an authorization was sought from SANLAM to conduct data collection. The use of hard copies and email communications for sharing financial reports ensured compliance with ethical standards.

4. Presentation of findings

4.1. Descriptive Statistics

In the table number one, it displays mean, median, standard deviation, minimum and maximum. The result shows that return on equity (ROE) has1.795668, ROA is about 1. 449379. The value of minimum and asset are -0.809887and 0.845776correspondingly. The value of them are 8.997680 and 2.123457in that order. Mean for the total debt (DR) is 0.530112, indicating that the maximum as well as the minimum are 0. 0.668346and 0.456987 respectively. Debt to equity ratio (DER) has a minimum and maximum value of 0.140049 and 0.011426 in the same order with a mean of 0.079367. On the side of loan in relation to deposits known as LD had has obtained the mean of0.455127with the notation mentioned above of 0.569907and 0.320060. For the case of Bank Size, the values of the maximum and minimum are19.82244 with maximum of 26.89000 and minimum value of 15.20000. The rest variable terms as Tangible assets have the value of0.038976 and 0.004000 as maximum and minimum accordingly with a mean of 0.015143.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
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Table 1: Descriptive Statistics

STATISTICS	LD	DER	DR	ROA	ROE	SIZE	TANG
Mean	0.455127	0.079367	0.530112	1.449379	1.795668	19.82244	0.015143
Median	0.450435	0.082189	0.499789	1.411130	0.905444	20.05000	0.010120
Maximum	0.569907	0.140049	0.668346	2.123457	8.997680	26.89000	0.038976
Minimum	0.320060	0.011426	0.456987	0.845776	0.809887	15.20000	0.004000
Std. Dev.	0.068291	0.045134	0.067314	0.384493	2.701009	3.164850	0.012040
Skewness	-0.337433	-0.230002	1.038015	0.170013	2.473972	1.015949	1.010457
Jarque-Bera	0.214515	0.761669	1.619338	0.162972	15.55382	2.059464	1.564992
Observations	9	9	9	9	9	9	9

Source: Secondary data (2018)

Test for autocorrelation using Breusch-Godfreys test.

H0: No autocorrelation (up to the specified lag-order)

H1: Autocorrelation

In this study, the researcher used the probability values and also the p- value shows the significance level at which value of a H0 should be rejected. Once the value of p has been determined, we know that the H0 is not holds for any $\alpha >$ P- value, while the H0is not retained when$\alpha < p$-value.

Interpretation:

Table 2 Correlation analysis

Correlations

		ROA	ROE	DR	DER	LD	SIZE	TANG
ROA	Pearson Correlation	1	.801**	.899**	.964**	-.077	.929**	.844**
	Sig. (2-tailed)		.009	.001	.000	.844	.000	.004
	N	9	9	9	9	9	9	9
ROE	Pearson Correlation	.801**	1	.806**	.917**	-.362	.813**	.877**
	Sig. (2-tailed)	.009		.009	.000	.338	.008	.002
	N	9	9	9	9	9	9	9
DR	Pearson Correlation	.899**	.806**	1	.933**	-.172	.901**	.969**
	Sig. (2-tailed)	.001	.009		.000	.659	.001	.000
	N	9	9	9	9	9	9	9
DER	Pearson Correlation	.964**	.917**	.933**	1	-.192	.936**	.931**
	Sig. (2-tailed)	.000	.000	.000		.621	.000	.000
	N	9	9	9	9	9	9	9
LD	Pearson Correlation	-.077	-.362	-.172	-.192	1	-.170	-.266
	Sig. (2-tailed)	.844	.338	.659	.621		.663	.489

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Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
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	N	9	9	9	9	9	9	9
SIZE	Pearson Correlation	.929**	.813**	.901**	.936**	-.170	1	.886**
	Sig. (2-tailed)	.000	.008	.001	.000	.663		.001
	N	9	9	9	9	9	9	9
TANG	Pearson Correlation	.844**	.877**	.969**	.931**	-.266	.886**	1
	Sig. (2-tailed)	.004	.002	.000	.000	.489	.001	
	N	9	9	9	9	9	9	9

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Secondary data (2018)

Since the p-value is less than 5%, we fail to reject the null hypothesis and conclude that there is no autocorrelation.

Test of The Means Between Variables

The result from the table below show that there is no different between means series because the probability of Anova F-test is below 0.05.

Table 3: Test for Equality of Means Between Series

Test for Equality of Means Between Series
Included observations: 9

Method	df	Value	Probability
Anova F-test	(6, 56)	189.5853	0.0000
Welch F-test*	(6, 22.14)	192.3047	0.0000

*Test allows for unequal cell variances

ANALYSIS OF VARIANCE

Source of Variation	df	Sum of Sq.	Mean Sq.
Between	6	2839.056	473.1760
Within	56	139.7675	2.495848
Total	62	2978.823	48.04554

Category Statistics

Variable	Count	Mean	Std. Dev.	Std. Err. of Mean
RF	9	0.455127	0.068291	0.022764
RFDER	9	0.079367	0.045134	0.015045
RFDR	9	0.530112	0.067314	0.022438
ROA	9	1.449379	0.384493	0.128164
ROE	9	1.795668	2.701009	0.900336
SIZE	9	19.82244	3.164850	1.054950
TANG	9	0.015143	0.012040	0.004013
All	63	3.449606	6.931489	0.873286

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Test of normality

The normality test in statistics show is used to show if the data is well distributed and compute how the data fit the model. In normality test, the null hypothesis is data the data are not normal distributed. The use of Jarkc Berra tand kolmogrov tests can show the fitness of data. This test also can show that if the variables under the study are correlated at some level.

Table 4: Normality test result

Estimated Distribution Parameters

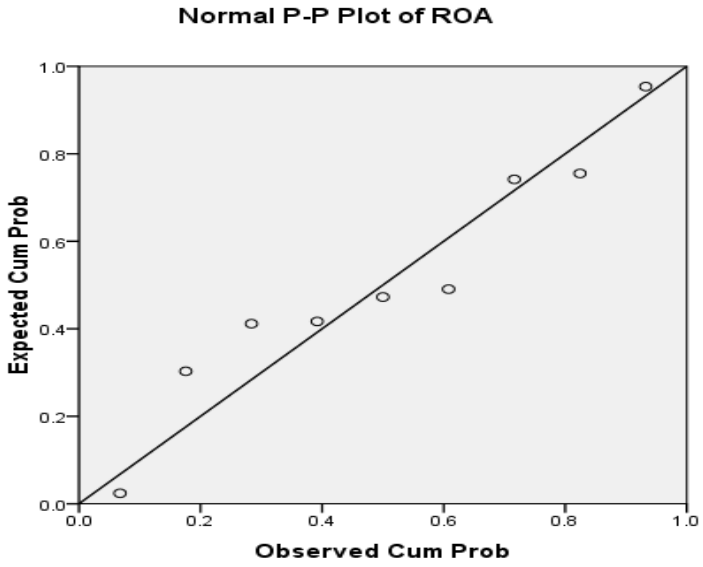
		ROA	ROE	DR	DER	LD	SIZE	TANG
Normal Distribution	Location	.4551	.0802	.5301	1.4494	1.7957	19.8224	.0151
	Scale	.06829	.04817	.06731	.38449	2.70101	3.16485	.01204

The cases are unweighted.

The test about variables show that all parameters are normal distributed

Trend in Normal Distribution

The lists of the following tables show variation in data variables by using a covariance as well as seasonality. The analysis of this give the powerful and significance trends among parameters.



Source: Secondary data (2018)

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
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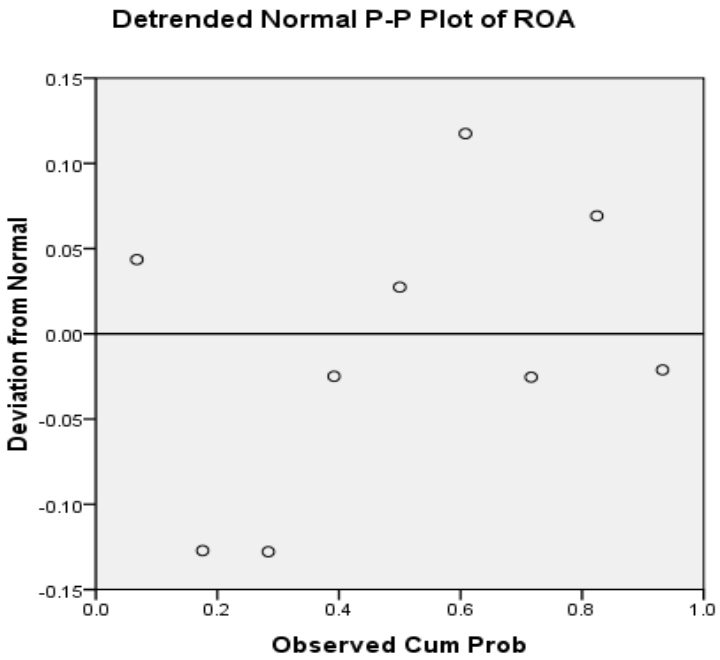
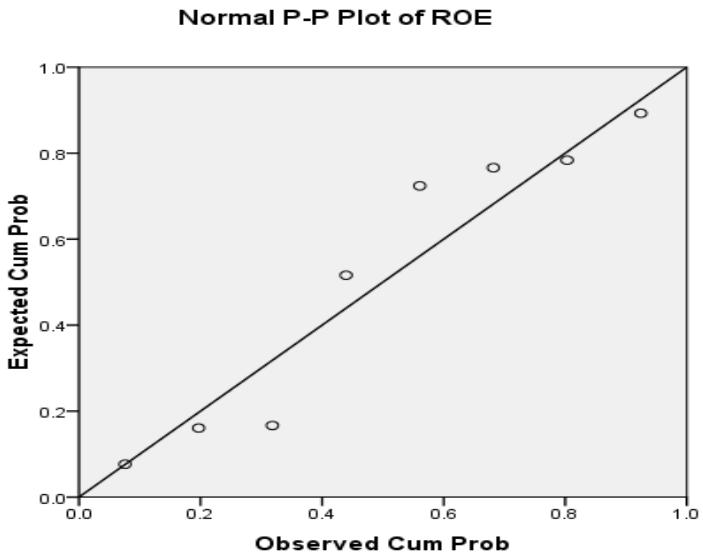
The fact that project data meet all assumption requirement towards linearity about regression, the residuals are normal distributed as well as independent. As conclusion, the variance of residuals are constant.



Source: Secondary data (2018)

After testing when the data is not confined with normal distribution, a test based on Man-Kendal may be applies. This test shows that if the variable Y tend to increase or decrease. The use of this test also show the sign for the significance level among parameters.

This test declares some missing variables to be great or equal to another values. The use of this test does not require to use log transformation of data.



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Volume 7||Issue 11||Page 198-217 ||November||2023|
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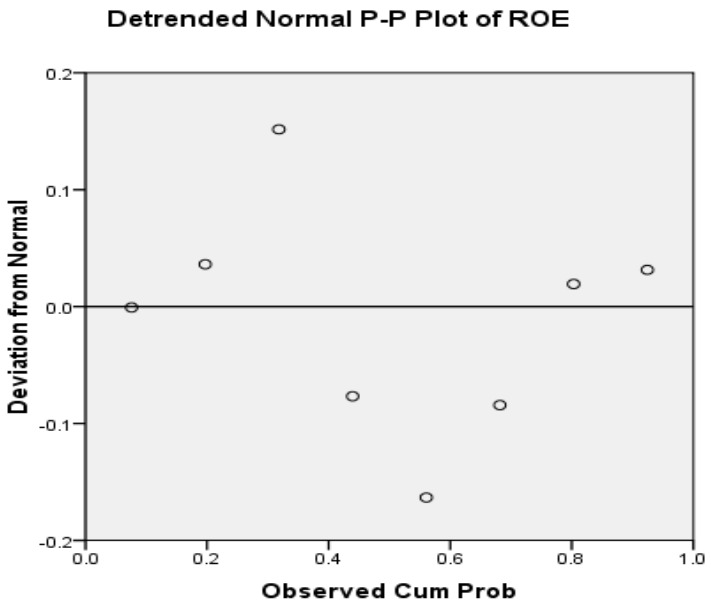
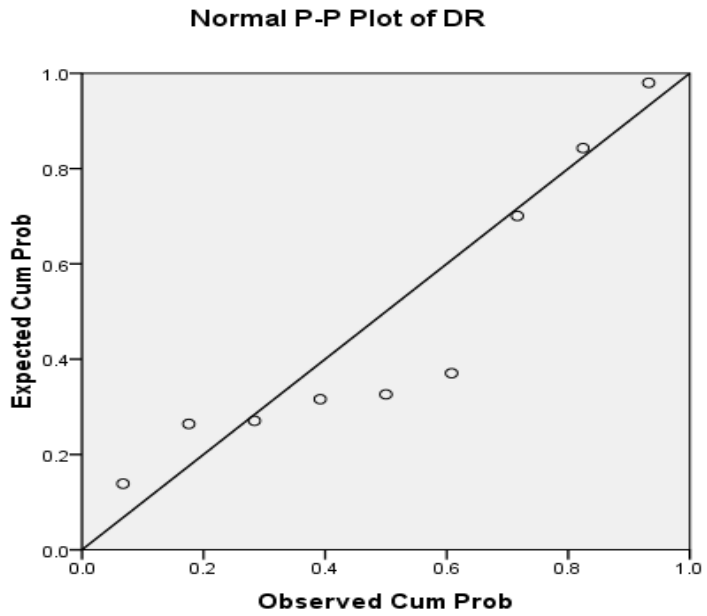


Source: Secondary data (2018)



Source: Secondary data (2018)

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Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
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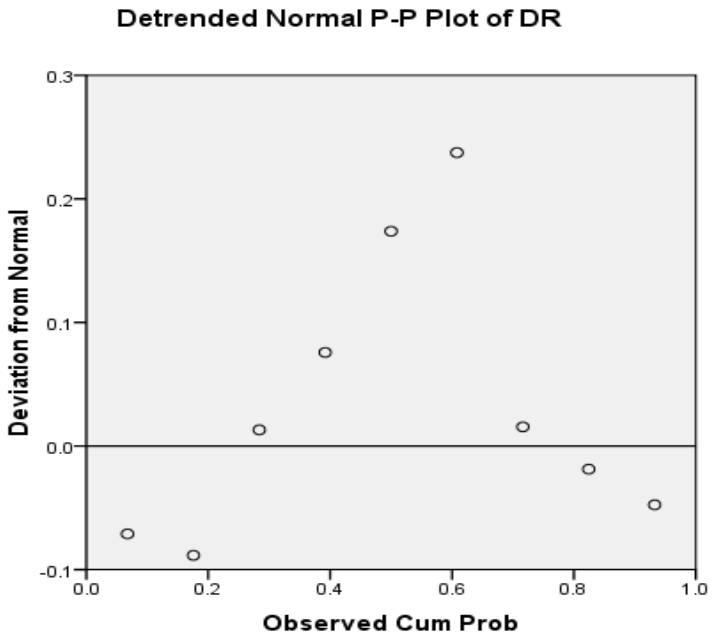
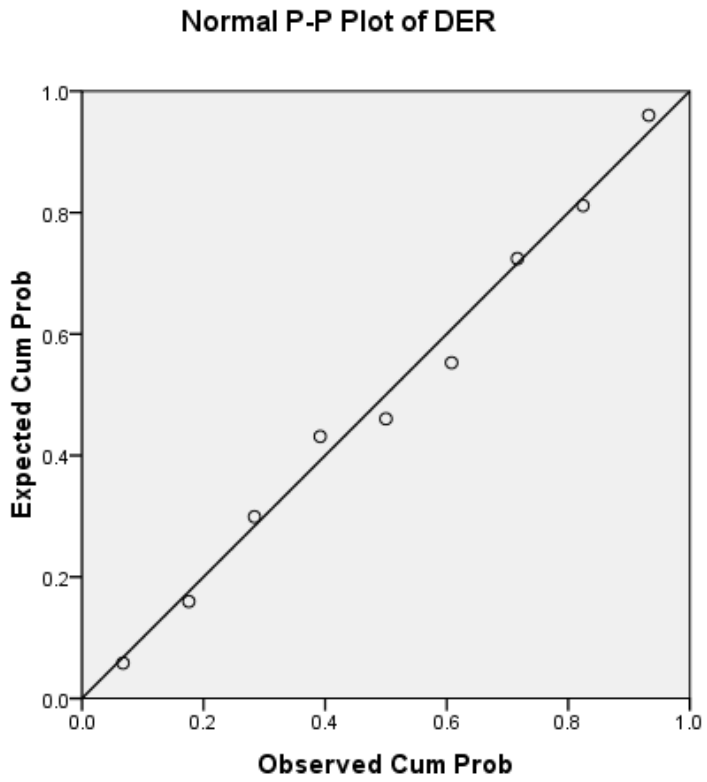


Source: Secondary data (2018)



Source: Secondary data (2018)

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Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
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4.2. Correlation analysis

Correlation analysis revealed the level at which two or more variables are associated with to the rest ones. Findings from this research show that ROE is negatively correlated to LD, DER and DR.

Consequences of Autocorrelation

The main issue of autocorrelation is to make a model look better that it actually is.

Table 5 Partial correlation results

VARIABLES	LD	DER	DR	ROA	ROE	SIZE	TANG
LD	1						
DER	0.801274	1					
DR	0.898915	0.798629	1				
ROA	0.963662	0.919751	0.933228	1			
ROE	-0.07711	-0.3772	-0.17163	-0.19159	1		
SIZE	0.929427	0.80793	0.900992	0.936287	-0.16968	1	
TANG	0.843934	0.8679	0.968755	0.930876	-0.26577	0.885718	1

Source: Secondary data (2018)

The test of correlation portrays if a bivariate analysis shows the strength of link between 2 variables. In this study, the use of Pearson correlation showed that variables under the study have no correlation.

Table 6 Regression analysis

One-Sample Test

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
ROA	19.993	8	.000	.45513	.4026	.5076
ROE	5.136	8	.001	.07799	.0430	.1130
DR	23.626	8	.000	.53011	.4784	.5819
DER	11.309	8	.000	1.44938	1.1538	1.7449
LD	1.994	8	.081	1.79567	-.2805	3.8718
SIZE	18.790	8	.000	19.82244	17.3897	22.2552
TANG	3.773	8	.005	.01514	.0059	.0244

Source: Secondary data (2018)

If the study assumes that other assumption are meet, heteroscedasticity does not provide

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

biased result in parameter estimated and OLS results are no longer BLUE.

Additionally, the standard errors occurred when heteroscedasticity is occurred. In this case, it leads to the bias in the test statistical as well as confidence interval.

Table 7 Reliability test

Reliability Statistics

Cronbach's Alpha	N of Items
.002	7

Table 8 Proximity calculation matrix

Proximity Matrix

	Euclidean Distance								
	1	2	3	4	5	6	7	8	9
1	.000	2.701	8.714	3.445	4.885	5.194	5.303	5.537	11.765
2	2.701	.000	8.120	.779	2.189	2.502	2.619	2.859	9.066
3	8.714	8.120	.000	8.101	8.271	8.435	8.370	8.420	11.780
4	3.445	.779	8.101	.000	1.451	1.757	1.859	2.094	8.326
5	4.885	2.189	8.271	1.451	.000	.330	.476	.721	6.881
6	5.194	2.502	8.435	1.757	.330	.000	.231	.443	6.574
7	5.303	2.619	8.370	1.859	.476	.231	.000	.247	6.475
8	5.537	2.859	8.420	2.094	.721	.443	.247	.000	6.250
9	11.765	9.066	11.780	8.326	6.881	6.574	6.475	6.250	.000

This is a dissimilarity matrix

Source: Secondary data (2018)

d) THE NEWEY–WEST METHOD OF CORRECTING THE OLS STANDARD ERRORS

This method is used to provide a covariance matrix between parameters by using A **Newey–West estimator**. The assumption towards the model is that the residuals of panel model are assumed to be correlated within and no correlated between the group of individuals. According to the result, the data are not correlated.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

NORMALITY TEST

Table 9One-Sample Kolmogorov-Smirnov Test

		ROA	ROE	DR	DER	LD	SIZE	TANG
N		9	9	9	9	9	9	9
Normal Parameters[a]	Mean	.4551	.0780	.5301	1.4494	1.7957	19.8224	.0151
	Std. Deviation	.06829	.04556	.06731	.38449	2.70101	3.16485	.01204
Most Extreme Differences	Absolute	.192	.196	.296	.114	.512	.286	.217
	Positive	.176	.168	.296	.114	.512	.286	.217
	Negative	-.192	-.196	-.153	-.098	-.358	-.160	-.177
Kolmogorov-Smirnov Z		.575	.587	.888	.341	1.537	.857	.652
Asymp. Sig. (2-tailed)		.895	.881	.409	1.000	.018	.454	.789

Source: Secondary data (2018)

According to Kolmogrov –smirnov, P-value should be big for data distribution to be normal distributed. Level significance for all variables are greater than 5% for significance level. Since the different between all significant levels are greater enough to assume that there is normality.

Table 10 Test distribution is normal.

One-Sample Kolmogorov-Smirnov Test 2

		ROA	ROE	DR	DER	LD	SIZE	TANG
N		9	9	9	9	9	9	9
Uniform Parameters[a]	Minimum	.32	.01	.46	.85	.81	15.20	.00
	Maximum	.57	.14	.67	2.12	9.00	26.89	.04
Most Extreme Differences	Absolute	.288	.202	.426	.154	.872	.423	.381
	Positive	.159	.161	.426	.154	.872	.423	.381
	Negative	-.288	-.202	-.111	-.111	-.111	-.119	-.111
Kolmogorov-Smirnov Z		.865	.606	1.277	.463	2.617	1.268	1.142
Asymp. Sig. (2-tailed)		.443	.856	.076	.983	.000	.080	.147

Stratford Peer Reviewed Journals and Book Publishing
Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Table 11 Test distributions is Uniform.

One-Sample Kolmogorov-Smirnov Test 3

	ROA	ROE	DR	DER	LD	SIZE	TANG
N	9[a]	9[b]	9[c]	9[d]	9[e]	9[f]	9[g]
Poisson Mean Parameter[h]	.4551	.0780	.5301	1.4494	1.7957	19.8224	.0151

Source: Secondary data (2018)

The results from this table shows that all data are normal distributed.

Table 12 One-Sample Kolmogorov-Smirnov Test 4

One-Sample Kolmogorov-Smirnov Test 4

		ROA	ROE	DR	DER	LD	SIZE	TANG
N		9	9	9	9	9	9	9
Exponential parameter.[a]	Mean	.4551	.0780	.5301	1.4494	1.7957	19.8224	.0151
Most Extreme Differences	Absolute	.505	.230	.578	.442	.479	.536	.232
	Positive	.286	.166	.283	.231	.479	.258	.082
	Negative	-.505	-.230	-.578	-.442	-.363	-.536	-.232
Kolmogorov-Smirnov Z		1.515	.689	1.733	1.326	1.438	1.607	.696
Asymp. Sig. (2-tailed)		.020	.729	.005	.059	.032	.011	.717

Source: Secondary data (2018)

Table 13Grange causality test

Test Distribution is Exponential.

The test based on the Paiwise Granger causality
Sample: 2010 2018
Lags: 2

The null hypothesis test	Obs	F-Statistic	Prob.
DR did not Granger affect DER	7	5.35836	0.1573
DER did not Granger affect DR		1.48762	0.402
LD did not Granger affect DER	7	1.72542	0.3669
DER did not Granger affect LD		0.08794	0.9192
ROA did not Granger affect DER	7	0.22629	0.8155
DER did not Granger affect ROA		8.16733	0.1091
ROE did not Granger affect DER	7	0.06579	0.9383
DER did not Granger affect ROE		1.94446	0.3396

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Journal of Finance and Accounting
Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

SIZE did not Granger affect DER	7	20.4917	0.0465
DER did not Granger affect SIZE		14.5310	0.0644
TANG did not Granger affect DER	7	46.8784	0.0209
DER did not Granger affect TANG		0.94011	0.5154
LD did not Granger affect DR	7	53.2264	0.0184
DR did not Granger affect LD		0.59854	0.6256
ROA did not Granger affect DR	7	0.21358	0.824
DR did not Granger affect ROA		0.33649	0.7482
ROE did not Granger affect DR	7	1.22076	0.4503
DR did not Granger affect ROE		0.42982	0.6994
SIZE did not Granger affect DR	7	1.95791	0.3381
DR did not Granger affect SIZE		2.80152	0.2631
TANG did not Granger affect DR	7	1.52555	0.396
DR did not Granger affect TANG		0.88942	0.5293
ROA did not Granger affect LD	7	5.89591	0.145
LD did not Granger affect ROA		1.69223	0.3714
ROE did not Granger affect LD	7	0.49749	0.6678
LD did not Granger affect ROE		11.3433	0.081
SIZE did not Granger affect LD	7	0.31626	0.7597
LD did not Granger affect SIZE		2.85696	0.2593
TANG did not Granger affect LD	7	10.2175	0.0891
LD did not Granger affect TANG		0.64046	0.6096

Did not Granger Affect?

All the variables have significant causal effect on the dependent variable at 5% percent level of significance. The p-values of these three variables is greater than 5%, we do not reject the null hypothesis and conclude that at 5% level of significance these variables have no causal effect on the dependent variable.

ROE does not Granger Cause ROA	7	0.00000	0.012809
ROA does not Granger Cause ROE		0.00000	0.022300
SIZE does not Granger Cause ROA	7	0.00000	0.030000
ROA does not Granger Cause SIZE		0.00000	0.011000
TANG does not Granger Cause ROA	7	0.00000	0.040034
ROA does not Granger Cause TANG		0.00000	0.008700
SIZE does not Granger Cause ROE	7	0.00000	0.008901
ROE does not Granger Cause SIZE		0.00000	0.049100
TANG does not Granger Cause ROE	7	0.00000	0.000457
ROE does not Granger Cause TANG		0.00000	0.006983
TANG does not Granger Cause SIZE	7	0.00000	0.00120
SIZE does not Granger Cause TANG		0.00000	0.01180

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Volume 7||Issue 11||Page 198-217 ||November||2023|
Email: info@stratfordjournals.org ISSN: 2616-4965

Test if each individual variable has a statistically significant causal effect on the dependent variable for both models:

If we have 5 % level of significance => H0 is rejected if the p-value for the test statistic is less than five percent (p-value<0.05). => We believe in H1.

If we have 5 % level of significance => H0 is not rejected if the p-value for the test statistic is larger than five percent (p-value>0.05). => We do not believe in H1.

GRANGE CAUSALITY TEST

H0: No impact of ROA to ROE

H1: There is impact of ROA to ROE

If we have 5 % level of significance => H0 could be rejected when the p-value of test is less than five percent (p- value <0.05). => We believe in H1.

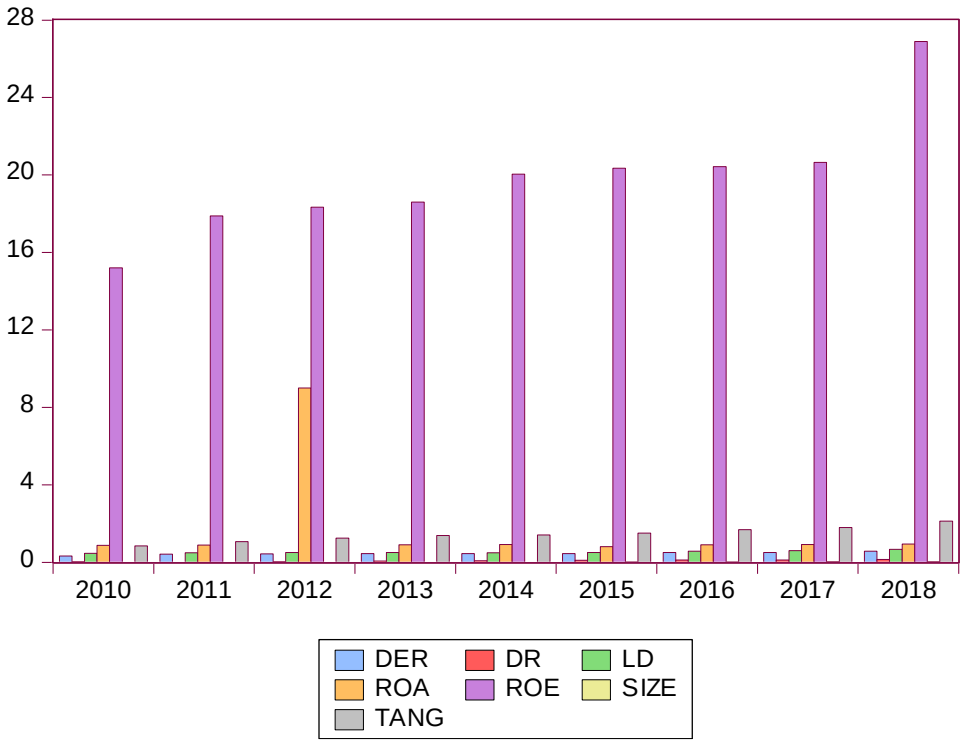
If we have 5 % level of significance => H0 is not retained or no rejected when p-value for the test statistic is larger than five percent (p- value >0.05). => We do not believe in H1.

Collectively, all the coefficients are statistically significant, since the value of the ROA statistic are less than 5%or a *p* value of 0.000000. Since p-value is for the test statistic is less than five percent (p-value<0.05). => We believe in H1: 0.000000<5% . This means that Looking at the LR test results the model is significant in overall sine the p-value is less than 5%

GRAPHICAL REPRESENTATION OF DATA DISTRIBUTION OF VARIABLES

Graphical methods

As demonstrated above, the data are well distributed and there is no autocorrelation among parameter under the study.



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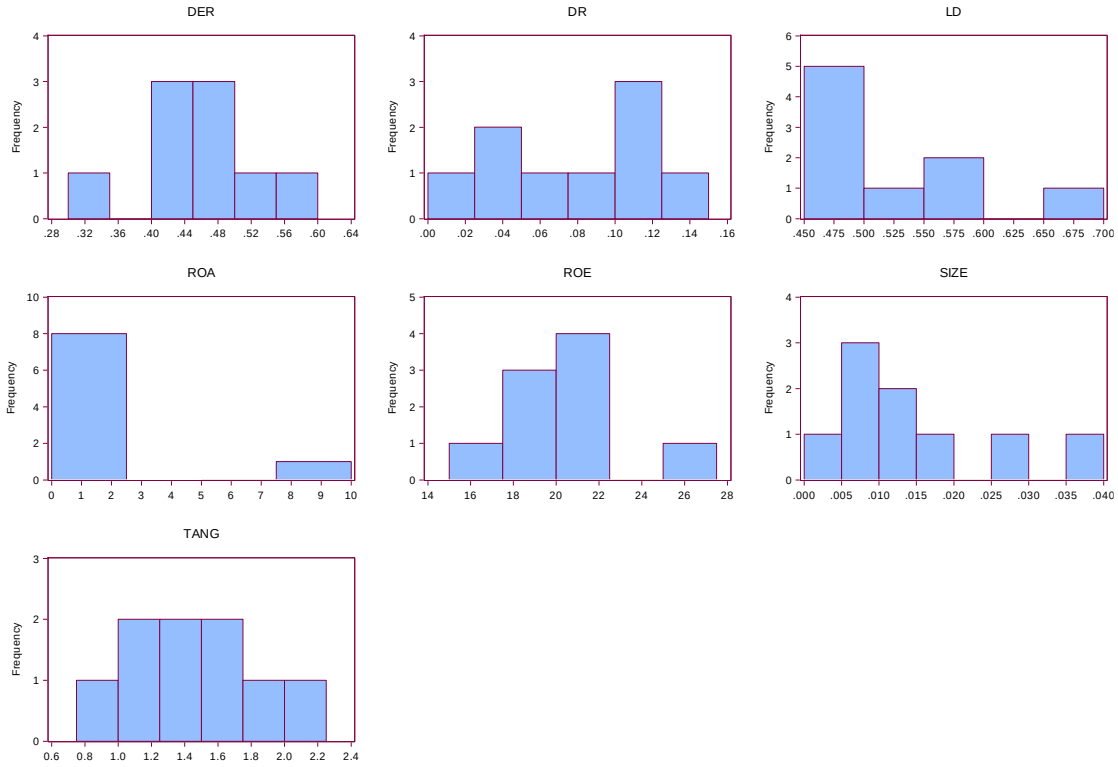

4.3. Heteroskedasticity test

This method also show how the error term is constant for a long time period. The correlation among parameter also can be revealed. The result from table lustrates that heteroskedasticity case is not manifested as a result of P-values of ROA and ROE which are above 5%.

Table 4: Test based on heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.180542	Prob. F (6,2)	0.9566
Obs*R-squared	3.162003	Prob. Chi-Square (6)	0.7883
Scaled explained SS	0.217202	Prob. Chi-Square (6)	0.9998

Dependent Variable: RESID^2

Method: Least Squares

Included observations: 9

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000114	0.001016	0.111968	0.9211

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RFDER	-0.001262	0.002781	-0.453623	0.6946
RFDR	-0.000370	0.002610	-0.141747	0.9003
ROA	0.000354	0.000513	0.688783	0.5621
ROE	-9.32E-06	1.23E-05	-0.756708	0.5282
SIZE	-1.23E-05	2.69E-05	-0.458018	0.6919
TANG	-0.002851	0.013040	-0.218657	0.8472

4.4. Regression analysis of the results

Table 5: Regression Analysis

Variable	COEFFICIENTS		Std.Error		T-statistics		Prob.	
	ROA	ROE	ROA	ROE	ROA	ROE	ROA	ROE
C	-0.154	0.24	0.149	0.186	-1.036	1.288	0.376	0.327
DR	0.649	-0.662	0.358	0.448	1.813	-1.478	0.167	0.278
DER	0.182	0.17	0.05	0.067	3.659	2.535	0.035*	0.127
LD	0.001	-0.002	0.002	0.003	0.298	-0.86	0.785	0.48
SIZE	0.004	-0.005	0.005	0.006	0.8	-0.754	0.482	0.529
TANG	-4.99	2.664	1.996	2.62	-2.5	1.017	0.088**	0.416
R-Square	99%	95.9%						

Source: Secondary data (2018)

The findings of this study revealed that TANG is accountable to be negative and statistically negative associated with the return on asset (ROA and on other side it is statistically positive linked to the return with the probability value of P-value of 0.088 as well as 0.416. This outcome revealed that for the bank when the level of debt increases its, asset is assumed to decrease due to the high application of leverage. This leverage has to impose high interest ratio.

The positive result emanated between ROA and DER and demonstrates that as the ratio of equity goes up, the result will occur in increase in return on asset. The tangible of bank which give the measure of log for total asset which has a positive as well as significant to impact the performance of finance of the bank at 5% level of significance level for the ROA.

5.1 Conclusion

In conclusion, the study's findings suggest that the capital structure of commercial companies in Rwanda significantly contributes to financial performance, particularly through the utilization of debt for investment in fixed assets. The impact of capital structure on firm performance varies across different metrics, with a negative effect on tangible assets and no significant impact on return on equity and return on assets. Additionally, factors like firm

size, age, and internal characteristics do not significantly influence firm performance in the Rwandan context. Corporate managers, investors, and lenders should carefully consider the effects of leverage on performance before making decisions.

5.3 Recommendations

Based on the study findings, it is recommended that firms in Rwanda focus on optimizing their debt ratio to maximize financial performance, with an emphasis on long-term debt over short-term debt. Policymakers should consider removing rigidity to facilitate effective resource utilization. For further research, exploring the impact of capital structure on other Rwandan companies, considering tax rates, interest rate ratios, and GDP in conjunction with inflation, studying ownership structure effects, and evaluating non-listed firms are suggested avenues for investigation.

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