Iosr Journal Of Economics And Finance (Iosr-Jef)
E-Issn: 2321-5933, P-Issn: 2321-5925.Volume 16, Issue 2 Ser. 3 (Mar. – Apr. 2025), Pp 38-48
www.Iosrjournals.Org

The Moderating Effect Of Organization Characteristics On The Relationship Between Debt Financing And Financial Performance: Evidence From Listed Non-Financial Firms In East Africa Community

John Kanji, Duncan Ochieng, Herick Ondigo, Helen Kinyua
Department Of Finance And Accounting, Faculty Of Business And Management Science, University Of Nairobi, Kenya
Senior Lecturer, Department Of Finance And Accounting, Faculty Of Business And Management Science, University Of Nairobi, Kenya
Senior Lecturer, Department Of Finance And Accounting, Faculty Of Business And Management Science, University Of Nairobi, Kenya
Lecturer, Department Of Finance And Accounting, Faculty Of Business And Management Science, University Of Nairobi, Kenya

Abstract
The purpose of this study was to investigate the moderating effect of organization characteristics on the relationship between debt financing on financial performance among East African Community-listed non-financial enterprises. To achieve this goal, secondary data was collected from four East African nations. Throughout the 2011–2020 study periods, the research employed an explanatory research design. The study operationalized debt financing by debt/assets ratio and debt/equity ratio. Financial performance was operationalized by return on assets (ROA) and earnings per share (EPS). Organization characteristics was operationalized as was operationalized as firm size, dividend payout, and management efficiency. The findings indicated that firm size moderates the association amongst debt/asset proportion and return on asset in Kenya and Rwanda. The findings were contradictory in Tanzania and Uganda, that is firm size did not control the association amongst debt/asset ratio and return on asset. Using dividend payout as a moderator, the study found out that dividend payout moderates the link amongst debt/asset ratio and return on asset in Kenya but failed to moderate the same association in Rwanda, Uganda and Tanzania. When management efficient was used as a moderating variable, the study found out that in Kenya, Rwanda and Tanzania, management efficiency mediates the association amongst debt financing and return on asset. However, in Uganda management efficiency did not mediate the association amongst debt financing and return on asset. It validates theories of financial management that suggest concepts related to organization characteristics and debt financing affect financial performance. It is suggested that future study concentrate on non-East African Community nations. By doing so, it will be possible to ascertain whether the study's conclusions apply to other parts of Africa.

Keywords: *Debt Financing, Organization Characteristics, Financial Performance, Non-Financial Firms in East Africa Community*

Date of Submission: 03-04-2025 Date of Acceptance: 13-04-2025

I. Introduction

Background

One of the most highly contested financial topics in corporations around the world is financial performance (FP). Its significance stems from the fact that the firm's immediate aim is what drives its existence (Omaliko & Okpala, 2020). Investments that require a significant outflow of cash produce financial performance (Subagyo, 2021). Consequently, in order to finance investment initiatives intended to boost financial performance, corporations are compelled to borrow money. Debt financing is an essential capital earning source for the company because the retaining of earnings may not be available or may not be sufficient to support business operations (Kose et al., 2020).

According to Adeniji (2008), WC continues to be the financial resource utilized by institutions in their institutional operations. A company's working capital details the excess of its short-term liabilities over its short-term assets (Akinsulire, 2008). Working capital, as per Finkler (2010), is a corporation's method of maximizing performance, calculated as current liabilities to current assets proportion. When determining the allocation of

financial resources within their organizations, finance managers must take into account several critical factors, including working capital (Song, Yu, & Lu, 2018). The ability of an organization to meet its operational obligations depends on its assets and liabilities (Harris, 2005). Effective management of working capital is considered vital to organizational operations, significantly influencing efficiency in both the short and long term (Akoto, et al, 2013).

Organization characteristics are specific companys' traits. This is an implication they are shared by all businesses in a particular sector (Yin & Yang, 2013). Organization characteristics are also referred as micro factors, as per Almajali (2012), since they are not experienced by the total population of enterprises in a given population or nation. The main characteristics include firm size, dividend payout, and management efficiency.

Despite the fact that firm size is usually one of the most crucial factors, it receives little to no attention in the majority of research publications because it is so frequently used as a control variable in quantitative corporate finance investigations. According to Pandey's (2004) definition of business size is an organization's total holdings of assets. According to Dittmar (2004), profit and size interact; because they frequently have more diversification than smaller organizations, larger companies have a lower bankruptcy rate. The Central Bank of Kenya measures firm size in terms of the assets. Different-sized businesses set themselves apart along several observable and unobservable parameters.

Management efficiency is another critical characteristic that will be considered in this study. The importance of management efficiency is typically acknowledged as the most crucial element in an organization's long-term performance. Management sets organizational priorities and carrying out responsibilities to effectively realize these objectives using human resources, raw materials, and capital resources. Efficiency is a term used to describe how input resources are utilized to achieve certain goals. Total asset turnover is a ratio used to measure efficiency (Barus & Leliani, 2013).

Kusa and Ongore (2013) opines that organization characteristics includes: dividend payout, size of the firm and management efficiency. According to Pandey's (2004), firm size relates to the organization's holdings of assets in terms of value. A firm is assumed to be large if it has many large values in its assets whereas a small firm has few and low value of assets. Usually, the natural logarithm of the assets or the change in assets is used to quantify this. Dividend payout is measured by the dividend payout ratio, which is the ratio of payouts to net income. Management efficiency is another critical characteristic that will be considered in this study. It relates to process of setting organizational priorities and carrying out tasks to effectively accomplish organizational goals through effective utilization of input resources. In this investigation, organization features was operationalized as firm size, dividend payout, and management efficiency.

Problem Statement

Important concepts for businesses include debt financing and financial performance. This is due to the fact that they are essential to a business' capacity to grow and increase shareholder value that continues to be a primary objective of the company. Firm managers have acknowledged this and implemented a number of initiatives to remedy the shortcomings in the working capital and debt financing of listed companies (Noreen, 2013). Businesses still struggle to reach their financial performance goals, even with the greatest debt financing arrangements and adequate working capital. Because of this, managers of the company are unable to determine how debt financing affect the company's financial performance. The inability of firm managers to establish optimal debt financing is related to the challenge of precisely figuring out the best financing arrangement for their businesses to boost financial performance (Noreen, 2013).

Globally, Vamishan (2014) examined how debt ratios affected Tehran stock market performance and concluded that there is a negative correlation between debt ratios and interest per share, there was also a significant positive correlation with firms' success. Different research by Burakat (2014) came to the conclusion that there exists an association that is inverse amongst financial performance and leverage. Doan (2020) focused on how financial performance is influenced by debt financing in 102 Ho Chi Minh Exchange listed firms, Vietnam. Debt financing had a significant impact on performance, as per the research.

In Africa, Solaboni (2013) examined how working capital and leverage affected the financial performance of 35 manufacturing companies listed on the Nigerian Stock Exchange, coming to the conclusion that both working capital and debt financing possess a favorable influence towards economic success. Ogobe, Orinya, and Kemi (2013) examined the influence by debt financing towards the profitability of Ghanaian listed companies and came to the conclusion that debt financing increases return on assets (ROA). Similar research was done in Tunisia by Hasan et al. (2014), coming to a determination that financial leverage has a detrimental effect on economic performance. The investigation used pooled panel regression analysis.

Further, as indicated above, many of the previous studies have not considered variables that moderate or mediate the association of debt financing and economic performance. This indicates that the adoption of different measures of debt financing and bringing in moderators and intervening variable in its relationship with financial performance would be crucial. This would show how the different measures bring out the relationship. Further,

the inclusion of moderating and intervening variables would add to the literature to show how the union amongst debt financing and economic performance among banks would differ from other studies that have not adopted such variables. This conceptual gap was the key gap that existed in the research area motivated the researcher into undertaking this research. This research answers the question: What is the mediating effect of working capital on the relationship between debt financing and financial performance of listed non-financial firms in East Africa Community?

II. Literature Review

Theoretical Review

Modigliani and Miller masterminded this concept (1958). It investigates into how capital structure affects how much a company is worth. The idea claims that in a perfect market transaction, expenses, taxation, and insolvency don't really exist. The main argument against the hypothesis is that a company's worth is8not determined by ratio of debt to equity or by cost of funds (Gul, et. al., 2018). Another claim is that there is no discernible causative link existent amongst an institution's debt and the adjusted costs of funding (Gul, et. al., 2018). The third claim is that a company's dividend payout does not really influence its worth (Gul, et. al., 2018).

Each company conforms to a risk level, defined by Modigliani and Miller (1958) as companies in nations with a resemblance of wealth. Stiglitz (1969) provided evidence against that notion, proving it to be unfounded and far from being real. Another criticism is an apparent lack of realism in theory because it ignores how income taxes and distress costs affect a firm's capital structure (Luigi & Sorin, 2009). Considering that the theory excludes aspects that influence a firm's worth, evaluating it is exceedingly challenging. Additionally, the theorem is unable to explain how a company's finances operate and how the job is done (Kouki, 2011).

In their preliminary irrelevance proposition, Modigliani and Miller (1958) demonstrate that in an ideal capital market, the decisions a company makes about how to structure its capital have no effect on how much it is worth, and the WACC as a whole should stay unchanged in absence of taxes and bankruptcy costs. The MM thesis, in short, states that the underlying risk for the company's assets determines its market value and its power of profits (Abdul et.al. 2017).

While the MM irrelevance theory is technically extremely good, its assumptions particularly regarding a tax-free capital market are unrealistic and unworkable in the real world. As a result, when a tax shield is there, the firm's value rises as debt does. This clarifies why the company benefits from employing loan capital and that it reduces its capital costs. Owing to its unrealistic and erroneous presumptions, MM theory has always been controversial among academics and has opened the door for other hypotheses.

According to this hypothesis, public corporations' performance will not improve regardless of any type of capital structure used. This is because financial leverage carries a threat of insolvency and equity funding has tax additional costs (Breuer & Gurtler, 2008). The relationship between performance of the company and working capital, nevertheless, would not be impacted by such notion. The M&M capital structure irrelevance theory may be utilized to leverage organizational characteristics tactics of businesses, even though it is predicated on implausible assumptions. This theory supports organizational characteristics as probable factors influencing financial performance of firms since debt financing and working capital are assumed to be irrelevance in elaborating the economic success of institutions.

Empirical Review

Research by Akben-Selculk (2016) using panel data between 2005 and 2014 was used in the study to look into the variables that affected a firm's ability to compete in Borsa Istanbul. Using panel data and a longitudinal methodology. On the other hand, leverage and R&D outflows possess a negative association with ROA. The Tobin's Q ratio was likewise higher in situations where institutional debt and institutional liquidity were both high. The research's major flaw lies with the investigation being undertaken in a developed economy, using corporate competitiveness and broadness as the dependent variables.

Study on how loan financing affects the financial performance of three Kisumu County sugar mills was conducted by Ongombe and Mungai (2018). Secondary data were gathered from public financial reports for the years 2011 to 2015. The data were statistically assessed using regression analysis, correlation, and other statistical techniques to ascertain the relative impact of each independent component in the model on the data. The results pointed out that whereas the debt/equity proportion significantly and negatively impacted the sugar production companies in Kisumu County's financial performance, there was no correlation amongst debt ratio and financial performance thus, it was insignificant. Furthermore, it was established that firm size and management efficiency positively and in a significant manner moderated the economic success of sugar firms. Context was sugar milling firms. Owing to operational variations, it is not possible to extrapolate the results across East African listed companies.

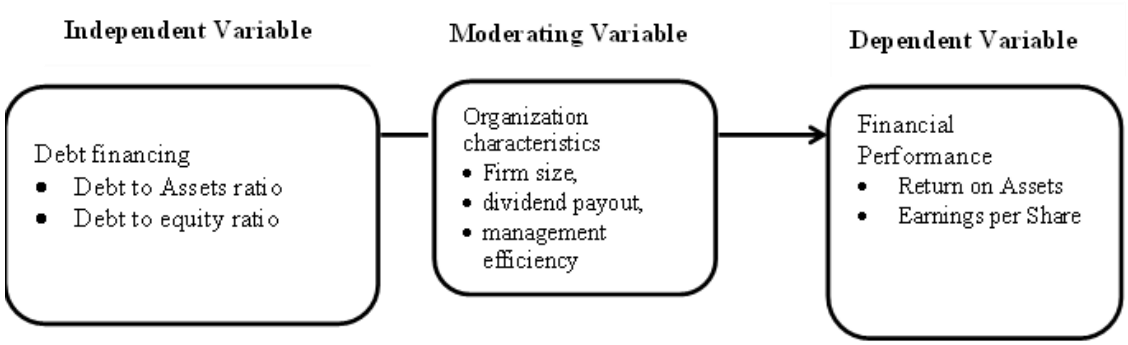
Study on how loan financing affects the financial performance of three Kisumu County sugar mills was conducted by Ongombe and Mungai (2018). The results pointed out that whereas the debt/equity proportion

significantly and negatively impacted the sugar production companies in Kisumu County's financial performance, there was no correlation amongst debt ratio and financial performance thus, it was insignificant. Context was sugar milling firms. Owing to operational variations, it is not possible to extrapolate the results across East African listed companies.

In Vietnam, Doan (2020) conducted a longitudinal study, followed 102 companies that were traded on the Ho Chi Minh Market. As ROA is used as a financial indicator, financial leverage is done using debt level as total assets percentage. This investigation identified a link around debt financing and company performance. It discovered that increased debt use lowers company performance. Therefore, businesses must exercise care while choosing to employ debt. The performance of the companies using additional equity was not demonstrated in this study. Other firm specific characteristics such as management efficiency and2dividend payout that the current study focuses on were not incorporated.

Conceptual Framework

Figure 1 presents the conceptual framework describing how the concepts as well as the variables being studied are related (Ravitch & Riggan, 2012). "From the review of literature, it was hypothesized that organization characteristics moderates the relationship between debt financing and financial performance Figure 1 shows this hypothesized relationship.



III. Methodology

Data

The research utilized secondary annual information in the form of listed East African companies' annual audited financial statements between 2011 and 2020. Debt financing data pertained to the value of long-term amortizing loan and fixed income debt. Financial performance data pertained to net income and total assets. The information was gathered from the listed financial companies in East Africa's annual financial reports. The reports were extracted from the NSE database, USE database, RSE database and DSE database and companies' websites. The data collected were in absolute figures and in millions. This data enabled the researcher to calculate the ratios for analysis.

Data Analysis

Descriptive statistics were utilized to assess the data collected on debt financing, working capital, capital structure, and financial performance (mean, standard deviation, skewness, and kurtosis). Regression analysis was used to test the proposed relationships (basic regression analysis, multiple regression analysis, stepwise regression analysis). To analyze how the predictors affect the financial performance of the banks in the various East African Community countries Kenya, Uganda, Tanzania, and Rwanda comparative analysis was conducted. A comparative analysis examines and contrasts the links between data or processes. This provided context for the study and facilitated the understanding of how the relationships between the various data sets differed and overlapped. The analysis was based on ratios calculated from the absolute figures of data gathered from East African listed companies' annual reports.

IV. Results And Discussion

Descriptive Results

The study examined the significant factors present in each of the countries analyzed. It employed descriptive statistical techniques, including means, standard deviation, and coefficient of variation. The mean, representing the central tendency, identified the most typical value within the set of scored employed in the estimating process. The standard deviation quantified the extent to which the values deviate from the mean. Additionally, the coefficient of variation assessed the variability of responses from each surveyed country.

Table 1: Descriptive Results

Indicators	COUNTRIES											
	KENYA			TANZANIA			UGANDA			RWANDA		
	Mean value	Std. Dev value	CV	Mean value	Std. Dev value	CV	Mean value	Std. Dev value	CV	Mean value	Std. Deviation value	CV
Debt/Asset ratio	.275	.490	1.780	0.216	0.204	0.944	.215	.183	0.849	.183	.111	0.605
Debt/equity ratio	-.007	44.599	-6422.925	0.611	4.859	7.950	.590	.625	1.059	.551	.358	0.649
Current Ratio	3.199	4.929	1.541	1.554	1.016	0.654	2.228	1.495	0.671	3.476	7.337	2.111
Quick Ratio	2.648	3.552	1.342	0.948	0.745	0.786	1.522	1.100	0.723	.406	.268	0.659
Firm Size	15.909	2.657	0.167	15.948	3.259	0.204	17.349	1.807	0.104	18.004	.727	0.040
Dividend payout	3.330	3.560	1.069	1.590	1.490	0.937	1.758	.931	0.530	1.360	1.406	1.034
Management efficiency	.726	.692	0.953	0.979	0.429	0.439	.840	.315	0.375	.787	.207	0.263
ROA	.005	.307	58.860	0.104	0.182	1.755	.066	.080	1.227	.073	.089	1.218
EPS	-35.720	6062.751	-169.729	0.010	0.012	1.241	.126	.294	2.332	.180	.222	1.238

The finding based on mean indicated that Kenya had the highest average debt ratio, quick ratio. Firm size and dividend payout in comparison to Rwanda, Uganda, and Tanzania. Tanzania possessed the highest ROA, efficiency of management, and debt/equity ratio. In terms of earnings on each share and current ratio, Rwanda led the pack. In terms of variability, the findings indicated that Kenya had high variability in most of the indicators used in the analysis, that is, very high values of coefficient of variation (CV).

Hypothesis Testing

The goal of the investigation set out to explore out the influence of organization characteristics on the association amongst debt financing and financial performance. Operationalization of organization characteristics was done by firm size, dividend payout, management efficiency. A corresponding hypothesis **H_{01}**: Firm size possess no substantial moderating effect towards the link amongst debt financing and financial performance.

Table 1: Moderating Effect of Firm Size Towards the Association Amongst ROA and Debt/Asset Ratio (Kenya)

Summary Of The Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.808[a]	.653	.652	.18230	.653	838.532	1	446	.000
2	.819[b]	.671	.670	.17753	.019	25.258	1	445	.000
3	.889[c]	.790	.789	.14203	.119	251.277	1	444	.000

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.867	1	27.867	838.532	.000[b]
	Residual	14.822	446	.033		
	Total	42.688	447			
2	Regression	28.663	2	14.331	454.699	.000[c]
	Residual	14.026	445	.032		
	Total	42.688	447			
3	Regression	33.732	3	11.244	557.379	.000[d]
	Residual	8.957	444	.020		
	Total	42.688	447			

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	95.0% Confidence Interval for B Upper Bound
1	(Constant)	.145	.010		14.684	.000	.126	.165
	Debt/asset ratio	-.509	.018	-.808	-28.957	.000	-.544	-.475
2	(Constant)	-.113	.052		-2.157	.032	-.215	-.010
	Debt/asset ratio	-.511	.017	-.811	-29.841	.000	-.545	-.478
	Firm Size	.016	.003	.137	5.026	.000	.010	.023
3	(Constant)	.222	.047		4.745	.000	.130	.314
	Debt/asset ratio	-1.212	.046	-1.922	-26.192	.000	-1.302	-1.121
	Firm Size	-.011	.003	-.092	-3.535	.000	-.017	-.005
	Interaction term	.066	.004	1.190	15.852	.000	.058	.074

a. Dependent Variable = ROA
b. Predictors = (Constant), Debt/asset ratio
c. Predictors: (Constant), Debt/asset ratio, Firm Size
d. Predictors: (Constant), Debt/asset ratio, Firm Size, Interaction term

The results show that in model one, 65.3 percent of the adjustments in ROA can be attributed to the adjustments in debt/asset ratio ($R^2 = 0.653$). The model of financial performance debt/asset ratio was significant in overall ($F = 838.532$, $p = 0.000$); $\beta = -0.509$, $t = -28.597$, $p = 0.000$) was significant. The coefficients implied that financial performance reduces by 0.509 units holding other factor constant for each unit increase in debt/assets proportion.

In step two, both debt/asset ratio and firm size explained 67.1 percent of the financial performance variation ($R^2 = 0.671$). It represented a major R^2 change = 0.019. In general, the model had significance ($F = 454.699$, $p = 0.000$). Beta coefficient for debt to asset ratio ($\beta = -.511$, $t = -29.841$, $p = 0.005$) and firm size ($\beta = 0.016$, $t = 5.026$, $p = 0.000$) that were each significant individually. Specifically, each one-unit increase in debt/asset ratio meant financial performance declined by 0.511 when every other factor is held constant. Further, any one-unit increment in firm size improves financial performance by 0.016 units when every factor is held constant. Conditions in step two met satisfaction; necessitating the need for a step three analysis.

In the third stage, with the interaction term's introduction, the (r) improved to 0.790, resulting in a significant R-squared change of 0.119. This implied that debt/asset ratio, firm size, and interaction term was responsible for 79% of the change in financial performance. ($F = 557.379$, $p = 0.000$) was significant.

$\beta = 0.066$, it = 15.852, $p=0.000$ was significant; meaning institutional size moderates the association amongst debt to asset ratio and financial performance amongst among the Kenyan listed non-financial firms. Thus, the hypothesis that institutional size possesses no major moderating impact towards the association amongst debt financing and financial performance was rejected.

Predictive model for financial performance was;

ROA = 0.222 – 1.212 Debt/asset ratio – 0.11 Firm size + 0.66 Interaction Term

Table 2: Moderating Effect of Firm Size on Relationship between ROA and Debt to Asset Ratio (Rwanda)

Summary of The Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	F Change	df1	df2	Sig. F Change
1	.863[a]	.745	.720	.05113	.745	29.266	1	10	.000
2	.971[b]	.943	.931	.02539	.198	31.558	1	9	.000
3	.998[c]	.996	.994	.00744	.052	96.777	1	8	.000

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.077	1	.077	29.266	.000[b]
	Residual	.026	10	.003		
	Total	.103	11			
2	Regression	.097	2	.048	75.127	.000[c]
	Residual	.006	9	.001		
	Total	.103	11			
3	Regression	.102	3	.034	615.340	.000[d]
	Residual	.000	8	.000		
	Total	.103	11			

Coefficients[a]

Model		Unstandardized Coefficients: B	Unstandardized Coefficients: Std. Error	Standardized Coefficients: Beta	t	Sig.	95.0% Confidence Interval for B: Lower Bound	95.0% Confidence Interval for B: Upper Bound
1	(Constant)	.232	.029		7.888	.000	.167	.298
	Debt ratio	-.751	.139	-.863	-5.410	.000	-1.061	-.442
2	(Constant)	3.931	.659		5.969	.000	2.441	5.421
	Debt ratio	-.383	.095	-.440	-4.023	.003	-.598	-.168
	Firm Size	-.204	.036	-.614	-5.618	.000	-.286	-.122
3	(Constant)	1.005	.355		2.833	.022	.187	1.822
	Debt ratio	-.017	.046	-.020	-.371	.720	-.124	.090
	Firm Size	-.054	.019	-.162	-2.891	.020	-.097	-.011
	Interaction term	.338	.034	.834	9.838	.000	.259	.417

a. Dependent Variable = ROA
b. Predictors = (Constant), Debt ratio
c. Predictors = (Constant), Debt ratio, Firm Size
d. Predictors = (Constant), Debt ratio, Firm Size, Interaction term

The findings in Table 5.39 showed that in model one, 74.5% of the adjustments in ROA was linked to the adjustments in debt/asset ratio (R^2 = 0.745). The model of financial performance debt/asset ratio was significant in overall (F = 29.266p = 0.000). Beta coefficient (β = -0.751, t = -5.41, p = 0.000<0.05) was significant. The coefficients implied that financial performance reduced by 0.751 units when keeping every other factor constant for each unit increase in debt/assets ratio.

In step two, both debt/asset ratio and firm size explained 94.3% of the variation in financial performance ($R^2 = 0.943$). This represented 0.198 R^2 change. In general, the model was significant with (F = 75.127, p = 0.000). Beta coefficient for debt to asset ratio (β = -.383, t = -4.023, p = 0.003) and firm size (β = -.204, t = -5.618, p-value = 0.000<0.05) were each significant individually. In essence, each one-unit increase in debt/asset ratio financial performance reduces by 0.383 units keeping every other element constant. Towards each one-unit increase in firm size, there was a reduction of financial performance by 0.204 units when every other factor is kept constant. Conditions in step two were satisfied; necessitating the need for step three analysis.

In the third stage, after the adoption of the interaction term, the coefficient of determination improved to 0.996, resulting in a significant R-squared change of 0.052. This implied that debt/asset ratio, firm size, and interaction term was responsible for 99.6% of the variation in financial performance; F = 615.34, p =0.000.

The beta coefficient of interaction term β = 0.338, t = 9.838, p=0.000) was significant; thus, firm size moderates the association existent amongst debt/asset ratio and financial performance in Rwanda. Thus, the hypothesis that Firm size possessed no major moderating impact towards the association amongst between debt financing and financial performance was rejected.

Predictive model for financial performance was;

ROA = 1.005 – 0.017 Debt/Asset Ratio – 0.054 Firm size + 0.338 Interaction Term

Where; ROA = Return on Asset

Table 3: Moderating Effect of Firm Size Towards the Link Amongst ROA and Debt/Asset Ratio (Tanzania)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.194	.026		7.494	.000	.143	.246
	Debt/asset ratio	-.420	.088	-.470	-4.793	.000	-.594	-.246
2	(Constant)	.499	.085		5.906	.000	.331	.667
	Debt/asset ratio	-.278	.089	-.312	-3.110	.003	-.456	-.100
	Firm Size	-.021	.006	-.377	-3.765	.000	-.032	-.010
3	(Constant)	.617	.136		4.530	.000	.346	.888
	Debt/asset ratio	-1.205	.845	-1.350	-1.427	.158	-2.887	.476
	Firm Size	-.028	.008	-.501	-3.330	.001	-.045	-.011
	Interaction Term	.052	.047	1.101	1.104	.273	-.042	.145

a. Dependent Variable = ROA
b. Predictors = (Constant), Debt/asset ratio
c. Predictors = (Constant), Debt/asset ratio, Firm Size
d. Predictors = (Constant), Debt/asset ratio, Firm Size, Interaction term

The results show that in model one, 22.1 percent of the changes in ROA was attributed to the changes in debt/asset ratio ($R^2 = 0.221$). The model of financial performance debt/asset ratio was significant in overall (F = 22.973, p = 0.000). Beta coefficient (β = -0.420, t = -4.793, p= 0.000) had significance. The coefficients implied that financial performance reduced by 0.420 units keeping every other factor constant for each single unit increase in debt/assets ratio.

In step two, both debt/asset ratio and firm size explained 33.8 percent of the financial performance variation in ($R^2 = 0.338$). This represented a significant R^2 change of 0.117. The model had significance in overall (F = 20.442, p = 0.000). Beta coefficient for debt to asset ratio (β = -.278, t = -3.11, p = 0.003) and firm size (β = -0.021, t = -3.765, p = 0.000) were individually significant. Basically, for each one-unit increase in debt/asset ratio financial performance reduces by 0.278 units keeping every other factor constant. It means, towards each one-unit increase in firm size, financial performance decreased by 0.021 units when every other factor is kept constant. Conditions in step two were satisfied; necessitating the next step three analysis.

In the third stage, after the adoption of the interaction term, the coefficient of determination improved to 0.348, resulting in a significant R squared change of 0.010. This implied that debt/asset ratio, firm size and interaction term is responsible for 34.8 percent of the variation in financial performance. Also, there was overall significance in the model with (F = 14.071, p =0.000).

Beta coefficient of interaction term (β i= 0.052, t = 1.104, p = 0.273) was insignificant; thus, firm size lacks any moderating effect on the association amongst debt/asset ratio and financial performance in Tanzania. Thus, the hypothesis that Firm size possesses no major moderating impact on the association amongst debt financing and financial performance among listed non-financial firms in East Africa Community was supported.

Table 3: Moderating Effect of Firm Size Towards The Link Amongst ROA and Debt/Asset Ratio (Uganda)

Summary Of The Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	Change Statistics: F Change	Change Statistics: df1	Change Statistics: df2	Change Statistics: Sig. F Change
1	.401[a]	.161	.140	.07465	.161	7.841	1	41	.008
2	.449[b]	.202	.162	.07369	.041	2.077	1	40	.157
3	.465[c]	.216	.156	.07395	.014	.717	1	39	.402

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.044	1	.044	7.841	.008[b]
	Residual	.228	41	.006		
	Total	.272	42			
2	Regression	.055	2	.027	5.062	.011[c]
	Residual	.217	40	.005		
	Total	.272	42			
3	Regression	.059	3	.020	3.590	.022[d]
	Residual	.213	39	.005		
	Total	.272	42			

Model		Unstandardized Coefficients: B	Unstandardized Coefficients: Std. Error	Standardized Coefficients: Beta	t	Sig.	95.0% Confidence Interval for B: Lower Bound	95.0% Confidence Interval for B: Upper Bound
1	(Constant)	.104	.018		5.849	.000	.068	.139
	Debt/asset ratio	-.176	.063	-.401	-2.800	.008	-.304	-.049
2	(Constant)	.312	.146		2.141	.038	.017	.607
	Debt/asset ratio	-.242	.077	-.549	-3.141	.003	-.397	-.086
	Firm Size	-.011	.008	-.252	-1.441	.157	-.027	.005
3	(Constant)	.597	.366		1.629	.111	-.144	1.338
	Debt/asset ratio	-1.074	.986	-2.440	-1.089	.283	-3.068	.920
	Firm Size	-.027	.020	-.599	-1.343	.187	-.067	.014
	Interaction term	.046	.054	1.713	.847	.402	-.064	.156

a. Dependent Variable = ROA

b. Predictors = (Constant), Debt/asset ratio

c. Predictors = (Constant), Debt/asset ratio, Firm Size

d. Predictors: =(Constant), Debt/asset ratio, Firm Size, Interaction

The outcomes captured above in Table 5.41 pointed to the model one case where 16.1 percent of the changes in ROA was detailed by the changes in debt/asset ratio ($R^2 = 0.161$). The model of financial performance debt/asset ratio was significant in overall ($F = 7.841$, $p = 0.008$); $\beta = -0.176$, $t = -2.800$, $p = 0.008$) was significant. The coefficients denoted that financial performance reduces by 0.176 units when keeping every other factor constant for each unit increase in debt/assets ratio.

In step two, both debt/asset ratio and firm size explained 20.2 percent of the financial performance variation ($R^2 = 0.202$). This represented a significant R^2 change of 0.041; $F = 5.062$, $p = 0.011$; $\beta = -.242$, $t = -3.141$, $p = 0.003$ and firm size ($\beta = -0.011$, $t = -1.411$, $p=0.157$) were individually partially significant. Specifically, each one-unit increase in debt/asset ratio financial performance reduces by 0.242 units keeping every other factor constant. It means, for any one-unit increase in firm size, financial performance will reduce by 0.011 units when every other factor is kept constant. Conditions in step two were satisfied; thus, the analysis proceeding to step three.

In third stage, after the adoption of the interaction term, the coefficient of determination improved to 0.216, resulting in a significant R^2 change of 0.014. This implied that debt/asset ratio, firm size, and interaction term was responsible for 21.6 percent of financial performance variation. There was significance in the model with ($F = 3.59$, $p =0.022$).

$\beta = 0.046$, $t = .087$, $p=0.402$ was insignificant; thus, firm size has no moderating effect towards the link amongst debt/asset ratio and financial performance in Uganda. Thus, the hypothesis that firm size possesses no substantial moderating effect towards the link amongst debt financing and financial performance among listed non-financial firms in East Africa Community was supported.

V. Conclusion And Recommendations

It is recommended that the listed non-financial firms in the East African community seek out tactics that boost their assets in light of the study's conclusions. The study's findings demonstrated that non-financial firms in the East Africa Community would considerably increase their working capital financing as their firm size (total assets) increased. Big businesses should be less likely to borrow money because they should be more financially stable and have more investments. Because there are fewer current obligations as a result of the reduced borrowing, working capital is higher because there are more current assets than current liabilities.

The findings indicated that working capital financing by non-financial firms in East Africa Community would increase significantly with an increase in asset tangibility. Businesses that are more tangibly attached to their assets borrow less. The assets can be invested in by the businesses, expanding their revenue base. Investing in assets may serve as the cornerstone for eventually growing the revenue base. Higher retained earnings, which result in less borrowing, are implied by higher revenue.

VI. Limitations

The primary goal of the research was to determine how listed non-financial enterprises in the East Africa Community's financial performance relates to debt-to-financing. The study did, however, have a few drawbacks. The study employed an explanatory research designs approach method, and data was gathered from listed East African companies' annual audited financials between 2011 and 2020. This may have biased the conclusions, as the study was conducted within a specific collection of countries with unique characteristics. This contextual limitation was mitigated by a broad approach of incorporating all listed non-financial enterprises in the East Africa Community.

The study concentrated on three characteristics in particular. However, FDI and Foreign Portfolio Investments between these nations is likely to be influenced by a number of other factors, some of which are domestic and include economic growth and the macroeconomic climate in place. Others, on the other hand, are external and include governmental meddling and the performance of international businesses. However, the study concentrated on the endogenous factors that are controllable within the listed non-financial enterprises in the East Africa Community

VII. Suggestions For Further Research

In the investigation, debt formed the independent component, financial performance was the dependent component, and organization characteristics served as moderating variables, respectively. This is anticipated to offer greater insights into the dynamic features of debt financing and financial performance of listed non-financial firms in the East Africa Community, despite the fact that it is expensive, complex, and time-consuming.

Future studies ought to concentrate on nations that are not members of the East Africa Community. By doing so, it will be possible to ascertain whether the study's conclusions apply to other parts of Africa. Future studies ought to categorize nations based on their geographical locations, including the Common Market for Eastern and Southern Africa (COMESA), among other classification schemes.

Conflict of Interest

The authors declare that they do not have any conflict of interest.

References

[1] Abdul Hadi, A. R., Pyeman, J., & Ismail, A. K. (2017). The Relevance Of Capital Structure Theories To Consumer Product Firms At Bursa Malaysia. Asia-Pacific Management Accounting Journal, 12(1), 143–158.

[2] Adeniji, A. A. (2008). An Insight Into Management Accounting (4th Ed.). Lagos: EL-Toda Ventures Ltd.

[3] Akben-Selcuk, E. (2016). Factors Affecting Firm Competitiveness: Evidence From An Emerging Market. International Journal Of Financial Studies, 1(4), 19-27.

[4] Akinsulire, C. (2008). Financial Management. Lagos: Ceemol Limited.

[5] Akoto, R.K., Awunyo-Vitor, D., & Angmor, P.L. (2013) Working Capital Management And Profitability: Evidence From Ghanaian Listed Manufacturing Firms. Journal Of Economics And International Finance, 5(9), 373-379.

[6] Almajali, Y.A., Alamro, S.H., & Al-Soub, Y.Z (2012). Factors Affecting Financial Performance Of Jordanian Insurance Companies Listed At Amman Stock Exchange. Journal Of Management Research, 4(2), 91-101.

[7] Doan, T. (2020). Debt Financing And Firm Performance: Evidence From An Emerging Country. Management Science Letters, 10(4), 849-854.

[8] Doan, T. (2020). Debt Financing And Firm Performance: Evidence From An Emerging Country. Management Science Letters, 10(4), 849-854.

[9] Finkler, S.A. (2010). Financial Management For Public, Health And Not For Profit Organizations (3rd Ed.). Washington, D.C.: CQ Press.

[10] Gul, S., Rashid, A., & Muhammad, F. (2018). The Impact Of Corporate Governance On Firm Value: The Case Of Small, Medium, And Large Cap Firms. Pakistan Business Review, 20(2), 354-375.

[11] Harris, A. (2005). Working Capital Management: Difficult But Rewarding. Financial Executive Journal, 21(4), 52-53.

[12] Hasan, B.M., Mainul, A. & Rahaman, A.M. (2014). Influence Of Capital Structure On Firm Performance. International Journal Of Business And Mnaagement,9(5), 219-234.

[13] Kose, M. A., Sugawara, N., & Terrones, M. E. (2020). Global Recessions. World Bank Working Paper.

[14] Kouki, M. (2011). A Re-Examination Of The Mm Capital Structure Irrelevance Theorem: A Partial Payout Approach. International Journal Of Business And Management, 6(10), 193-204.

[15] Kusa, G.B & Ongore V.O., & (2013). Determinants Of Financial Performance Of Commercial Banks In Kenya. International Journal Of Economics And Financial Issues, 3(1), 237-252.

[16] Luigi, P., & Sorin, V. (2009). A Review Of The Capital Structure Theories. Annals Of Faculty Of Economics, 3(1), 315-320.

[17] Modigliani, F., & Miller, M. H. (1958). The Cost Of Capital, Corporation Finance And The Theory Of Investment. The American Economic Review, 48(3), 261-297.

[18] Noreen, E. (2013). Managerial Accounting For Managers. New York: Mc Graw-Hill.

[19] Omaliko, E., & Okpala, N. (2020). Effect Of Financing Mix On Financial Performance Of Health Care Firms In Nigeria, International Journal Of Banking And Finance Research, 6(3), 63-77.

[20] Ongombe, K.O. & Mungai, J. (2018). Capital Structure Decisions And Financial Performance Of Sugar Manufacturing Firms In Kisumu County, Kenya. International Academic Journal Of Economics And Finance,3(2), 336-356.

[21] Ravitch, S. M., & Riggan, M. (2012). Conceptual Frameworks And The Analysis Of Data. Conceptual Frameworks Guide Research, 5(2), 81-106.

[22] Subagyo, H. (2021). Relationships Between Debt, Growth Opportunities, And Firm Value: Empirical Evidence From The Indonesia Stock Exchange. The Journal Of Asian Finance, Economics, And Business, 8(1), 813-821.

[23] Vamishan, T. (2014) Effect Of Debt Ratio On Firms' Performance In Tehran Stock Trade. Global Business Review, 8(2), 267-281.

[24] Yin, H. & Yang, J. (2013). Bank Characteristics And Stock Reactions To Federal Funds Rate Target Changes. Applied Financial Economics, 23(3), 1755-1764.