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Influence of Firms Profitability on Financial Leverage from Non-Financial Companies Listed at the Dar es Salaam Stock Exchange, Tanzania

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By: James Daniel Chindengiwke [1]

Abstract

This research was mainly focused on evaluating the influence of firm's profitability on financial leverage from non-financial listed firms at DSE. This research based on trade off theory. Eleven (11) non-financial companies from different industry listed in DSE were used. Panel data research design, and purposively sampling was used in the study. The study found that, it was show that profitability was adversely connected with financial leverage. This suggests that the engaged incomes and other current assets have mainly been paying to interior basis of money for purchasing original reserves. Consequently, businesses must rise income to guarantee them revenue more from their actions, as profit donates meaningfully to the financial leverage of firm. The study concludes that profitability had significant influence on leverage of non-financial firms listed at DSE practice inside produced funds to support their reserves before choosing for outside funds. The study endorses that, supervisors should reimbursement consideration, cost-effectiveness and scope of their firms in the development plan of the association. Also consideration must be assumed on the 'macroeconomic setting in which these companies were employed was vital to notifying their achievement and henceforth their combination of financial leverage.

Keywords: *Dar es Salaam Stock Exchange, Financial Leverage, Profitability, Tanzania*

Introduction

Financial leverage has been a contentious aspect of 'financial management' since Modigliani and Miller's ground breaking work in 1958. Several debates have erupted in the corporate finance literature on whether a given equity-debt ratio promotes business profitability, as well as the criteria that determine the optimal capital structure (Myers & Majluf, 1984). A company's capital structure refers to how it decides to fund its investments through a mix of debt and equity. The act of distributing shares to the public or private sector in order to establish partial ownership of a corporation in which equity holders own a portion of the company and are entitled to dividends. Borrowing money from a third party, such as a loan, with the intention of returning the obligation at a later period with interest (Olufemi, Abu, and Olugbenga, 2018; Swanson, Srinidhi, and Seetharaman, 2003; Ng'habi 2012).

Manufacturing, agriculture, mining, telecommunications, and aviation all contribute to the national economy and play an important role in both developed and developing countries' economic growth; therefore, capital structure decisions in these industries should be made with extreme caution (Haragusi, Chend, and Smeet, 2016). A bad capital structure decision may lead to excessive capital expenditures,

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reducing shareholder equity (Sheikh and Wang, 2011). Effectively balancing and managing money when it comes to the organization's capital requirements is critical in today's competitive environment (Kurniasari, Murhadi, and Utami, 2016). However, whether the ideal capital structure is practical is debatable. Concerns have been expressed concerning the impact on a company's worth and capital. However, whether the optimum capital structure is practicable remains a point of contention. The problems include whether changing the fund mix impacts a firm's value and capital costs (Brigham & Houston, 2012).

The economic and financial systems of established nations are more sophisticated than those of new ones. As a result, capital structure formation differs in developed countries, and their improved system allows non-financial companies to access long-term debt at a lower cost, whereas in developing countries, access to short-term debt is limited (Sakr and Bedeir et al., 2018; Yousef, 2019; Karadaghli 2012; Al bahs, Alattar, and Yusuf et al., 2018).

The Dar es Saalam stock exchange has grown rapidly since its inception in 1996 and the beginning of operations in 1998. This is illustrated by the astounding number of companies that have gone public on the stock exchange, which presently stands at 28 (DSE, 2021). Tanzania's single capital market, the DSE, is made up of many non-financial firms from diverse sectors such as agriculture, tourism, mining, communications, aviation, and industrial, therefore capturing one industry with several sectors catches many actors in the economy (DSE, 2021). TBL, TCC, TOL, TPCC, TATEPA, TTP, EABL, TCCL, SWALA, PAL, KA, SWIS, USL, and NMG are among the DSE's 15 non-financial entities (DSE, 2021). Non-financial enterprises in developing nations unleash robust and long-lasting economic forces that generate employment and profits, attract foreign cash, and allow for the productive use of capital, hence accelerating poverty reduction and shared prosperity.Tanzania's government sees the industrial sector, agriculture, and mining as key drivers of economic development, including growth and poverty reduction, and has taken steps to ensure their success. This is demonstrated through the development and implementation of the 2020 Sustainable Industrial Growth Strategy (SIDP). The policy's goal is to guarantee that the manufacturing sector prioritises human development and job creation, economic transformation through sustainable economic growth, environmental protection, and egalitarian development. Mwang'onda et al., 2018; Mwaseba et al., 2016). Long-term loans are excessively expensive, while short-term loans are unavailable (Ng'habi 2012, Ntogwa 2015).

Tanzania's services, agricultural, and industrial industries are ranked first, second, and third in terms of significance to the Tanzanian economy. It employs skilled and unskilled employees and produces commodities for internal and export usage (Kapaya, Ngatuni, and Katunzi 2018; Chalu, Richard, and Ngohelo 2019; Wangwe, Mmari, Aikaeli, Rutatina, Mboghoina, and Kinyondo 2016). Investing in these companies demands a significant long-term commitment to improve the financial structure. However, the industry remains financially challenged, with little internal finance and restricted access to long-term capital from commercial banks (Papadavid 2017; Tyson 2017; Chalu et al, 2019; Mwang'onda et al, 2018; The Citizen, 2019).

During their investigation, several specialists determined that both internal and external money contribute to the capital basis. Capital structure is influenced by profitability, tangibility, and liquidity ratios (Nadeem & Zongjun, 2011; Chen, Jiang, and Lin, 2014; Teddy, 2015; Kurniasari et al., 2016; Chipeta & Deressa, 2016; Hailegebrealand Wang, 2019). Kapaya et al. (2018) used profitability ratio, size, and growth potential in the local environment in their examination of capital structure drivers of public firms on the DSE.

Several studies on the determinants of capital structure for businesses have been conducted (Hailegebrealand Wang, 2019; Chalu, et al, 2019; Mwang'onda et al., 2018;Nalurita, 2019; Al bahsh et al., 2018), but the findings are still insufficient in forming a clear inference on the capital structure determinants. This study sought to fill a research gap by investigating the impact of company profitability on financial leverage in Tanzanian Stock Exchange-listed non-financial enterprises.

Literature Review

Firms can boost loans to take advantage of loan tax benefits, according to Trade-off Theory. A firm, on the other hand, may be perceived to have the choice of incurring debt because the rise of annual income allows debt tax shields to extend (Serrasqueiro & Caetano, 2015). According to the hypothesis, business executives strive to weigh the current value of future financial loss repercussions against the current value of interest-tax benefits. Financial loss may be significant enough to necessitate bankruptcy. This concept may be traced back to Kraus and Litzenberger's (1973) paper, which incorporated debt-related interest-tax protections as well as future costs of financial instability into the state choice model. Financial instability refers to the costs of bankruptcy or reorganisation, as well as business expenses incurred when a company's creditworthiness is put into doubt. In trade-off theory, many assumptions are made. To begin, the idea

suggests that enterprises would endeavour to strengthen their capital structure before eventually adjusting to the intended result. Second, the theory predicts that successful companies with smaller non-debt tax shelters would incur more debt to balance their tax benefits.

According to the statistics, size, age, productivity, profitability, and tangibility are important leverage characteristics for Nigerian businesses. In order to provide an optimal funding mix for their firms, financial managers of listed Nigerian organisations should deploy and properly examine the companies' size, age, expansion, viability, and tangibility when making debt financing decisions, according to the research.

Umer (2014) used a panel of 37 listed businesses to investigate the capital structure aspects of key taxpayer share enterprises in Ethiopia from 2006 to 2010. The nine factors evaluated in the study were profitability, size, age, tangibility, liquidity, non-debt tax shield, growth, dividend pay-out ratio, and profits volatility. According to the statistics, leverage is positively connected to a company's size, age, tangibility, liquidity status, and non-debt tax shield, while leverage is negatively related to profitability, earnings performance, and dividend pay-out ratio. In terms of affecting the influence of Ethiopia's enormous taxpayer shareholdings, the growth vector was determined to be statistically negligible.

Gómez, Rivas, and Bolaos (2014) performed the research to investigate the variables that influence the amount of debt held by Peruvian businesses. From 2004 to 2008, a sample of 64 Peruvian enterprises registered on the Lima Stock Exchange was chosen. A panel data approach was used to contrast the model and emphasise the components that impact capital structure. According to the study, the parameters influencing the amount of long-term debt held by these Peruvian enterprises were profitability, duration, capital value of assets, and non-debt tax defences.

Köksal and Orman (2015) investigated 'trade-off and pecking order theories' in manufacturing, non-manufacturing publicly traded, and private growth using a large firm-level dataset from Turkey. In contrast to the pecking order theory, their empirical findings demonstrated that the trade-off hypothesis gave a more complete account of capital systems across all company types. Furthermore, it revealed that the trade-off technique was best suited for evaluating the financing choices of large private firms in the non-manufacturing economy. Their research also found that pecking order theory is still the most effective when it comes to small publicly traded companies.

Kurniasari et al. (2016) discovered that profitability and liquidity were negatively associated to capital structure leverage in their analysis of variables impacting capital structure on the Uganda stock exchange. Wangwe et al. (2014) observed that profitability is inversely associated to leverage in their study on the drivers of capital structure of Kenyan manufactured beverage firms.

Chipeta and Deressa (2016) revealed in their research that firm and country-specific characteristics have a significant effect on the optimal debt financing approach. Furthermore, statistics reveal that profitability is the most commonly used major specific element in capital structure development.

Hailegebreal et al. (2019) investigated the capital structure determinants on African firms and discovered that firm-specific factors such as asset tangibility, financial distress costs, and profitability have a strong influence on capital structure formation, whereas GDP growth and tax rates are the most country-specific capital structure determinants.

Fred (2015) investigated the effects of capital structure, especially on the profitability of DSE-listed industrial enterprises, and found inconsistencies in the composition of capital structure in this sector. Key organisational performance factors were shown to be adversely linked with leverage, indicating that enterprises relied heavily on internal capital. According to the study, other firms' profitability revealed a good relationship with leverage in addition to the use of external debt to support their capital structure.

Research Methodology

Eleven (11) non-financial companies from different sectors listed in DSE were used. Panel data research design, and purposively sampling was used in the study. The regression model was extracted from (Fauzi, Basyith, & Idris, 2013; Gómez et al., 2014; Umer, 2014) specified as follows:

$$CS_{it} = \beta 0 + \beta 1 PROF_{it} + \beta 2 SF_{it} + \varepsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Whereby:

FLit = Financial Leverage of firm i at time t as expressed by debt

β 0= intercept, β 1- β 3 = Coefficients of Parameters

$PROF_{it}$ = Profitability of firm i at time t

SF$_{it}$ = Tangibility of firm i at time t

ε_{it} = error term

Fixed Effect Model

Fixed Effect model investigates the interaction within an entity between the independent and dependent variables. Each object has its own unique features which may or may not affect the independent variables. When using the Fixed Effect model, it is presumed that the independent or dependent variables can be influenced or skewed by something within the person and a filter must be in place for this. Additional significant assumption of the Fixed Effect model is that those fixed features are exceptional to the specific individual and should not be connected with other separate individual features. The equation for the fixed effects model is:

$$Y_{it} = \beta_1 X_{it} + \alpha_i + \mu_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots (2)$$

$$FL_{it} = \alpha_i + \beta 1 PROF_{it} + \beta 2 FL_{it} + \mu_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots. (3)$$

Where:

Y_{it} – is dependent variable, where **i** = entity, and **t** = time

β 1- β 3– are Coefficients of independent variables X_{it} – represents one independent variable

α – is the unknown intercept for each entity

U_{it} – is the error term

FLS_{it} – represents Financial Leverage

Random Effects Model

The reasoning for the model of random effects is that, contrasting the model of fixed effects, the variance between entities is believed to be unpredictable and there is no relation to the dependent or independent variables used in the model. If the variations between individuals affect the dependent variable significantly, random effects are used. Random effects presume that the error term of the object is not related to the independent one which enables fixed variables to play an explanatory role (Al Bahsh et al 2018; Sakr et al 2018, &Yousef, 2019)

The random effects model is given by:

$$Y_{it} = \beta_1 X_{it} + \alpha_i + \mu_{it} + \varepsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.. (4)$$

$$FL_{it} = \alpha_i + \beta 1 PROF_{it} + \beta 2 FL_{it} + \mu_{it} + \varepsilon_{it} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots.. (5)$$

Where

μ_{it} –Between entity errors

ε_{it} – Within entity error

α – is the unknown intercept for each entity

β_1- β_3– are Coefficients of independent variables

FL_{it} – represents Financial Leverage

Results and Discussions

Listed non-financial companies in Tanzania, eleven companies were used: TBL, TCC, TTP, TPCC, TOL, EABL, TCCL, PAL, KA, SWIS and USL. Response and explanatory variables were acquired from the relevant firms' published annual financial reports from 2000 to 2020. This chapter comprises descriptive analysis, diagnostic testing, and regression analysis.
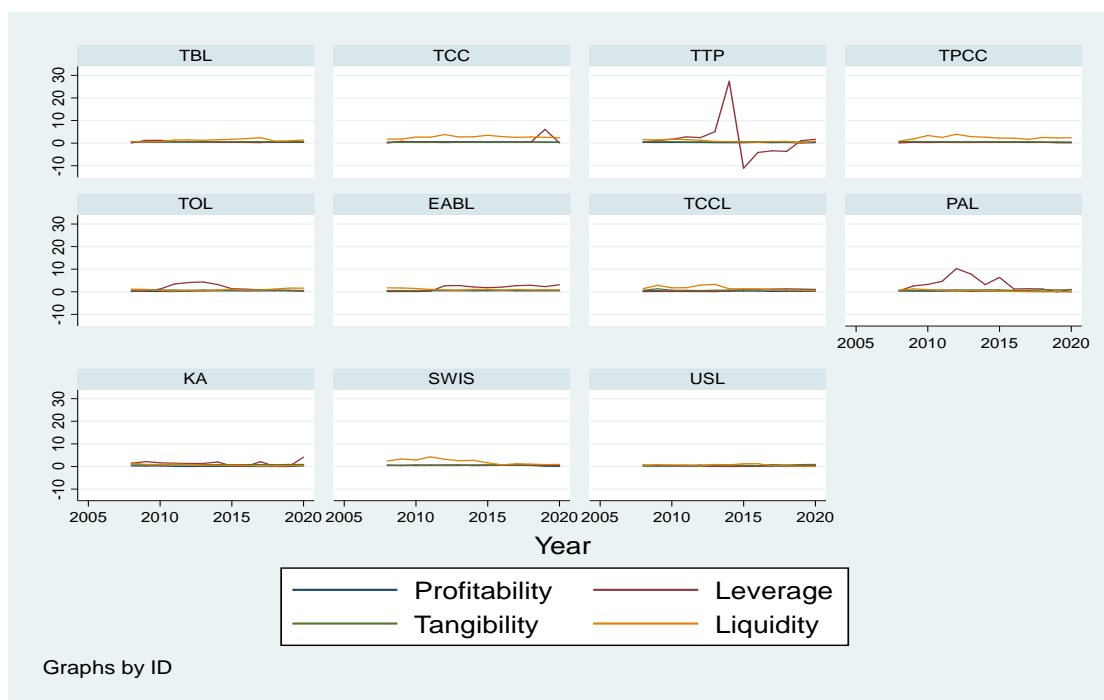

Figure 4.1: Time Series Plot for Listed Non-Financial Companies in DSE

Source: STATA, OUTPUT, 2023

Time series data should be provided before estimating to identify distinct traits or features such as trend, seasonality, and stationarity (Wagofya, 2019). As demonstrated in Figure 4.1, both variables were stationary since the movement around the constant mean and variation in asset profitability, tangibility, leverage, and liquidity ratio increased with time.

Descriptive Analysis

This provided an overview of summary statistics and pair-wise correlation. It was utilized to identify the most essential elements of the study results, as well as to provide brief explanations of the sample and the measurements used in the analysis, as well as a graphical presentation that was easily accessible.

Table 4.1: Descriptive Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations	
ID	overall	6	3.17	1	11	N =	143
	between		3.31	1	11	n =	11
	within		0	6	6	T =	13
Year	overall	2014	3.75	2008	2020	N =	143
	between		0	2014	2014	n =	11
	within		3.75	2008	2020	T =	13
LEV	overall	1.18	2.96	-11.09	27.38	N =	143
	between		0.91	0.27	3.35	n =	11
	within		2.83	-11.57	26.90	T =	13
LEV	overall	1.18	2.967	-11.09	27.38	N =	143
	between		0.91	0.27	3.35	n =	11
	within		2.83	-11.57	26.90	T =	13
PROF	overall	0.35	0.16	0.00	0.68	N =	143
	between		0.13	0.10	0.56	n =	11
	within		0.09	-0.059	0.52	T =	13
FS	overall	0.65	0.14	0.33	1.36	N =	143
	between		0.11	0.40	0.79	n =	11

Source: Study Findings (2023)

The average leverage for this sample group was 1.181906 with a standard deviation of 2.967432. "Leverage is the ratio of total debts to total equity, and it is used to gauge the debt capacity of the firms". This means that the companies in this study were primarily debt-financed. Because of the high standard deviation, there is a lot of diversity in the leverage levels maintained by the companies in our study. To fund their assets, some corporations utilized a high amount of debt, while others used a low level of debt. 27.3828 is the highest leverage, while -11.0942 is the lowest. The profitability variable employed in this study refer as the

ratio of gross profit to sales. Profitability was 0.355639 on average, with a maximum value of 0.6808 and a minimum of 0.0059. Because the standard deviation was 0.161916, the profitability of the companies in this study did not differ considerably.

Pair Wise Correlation

A pairwise correlation between leverage, profitability, tangibility, and liquidity was undertaken to determine how these parameters were related. Pair wise correlation was used to assess correlation from a specific observation with missing values for some variables. Table 4.2 displays the pairwise correlation value for each variable.

Table 4.2: Pairwise Correlations

Variables	(LEV)	(PROF)	(FS)	(L_LEV)	(L_PROF)	(L_FS)
LEV	1.000					
PROF	-0.06**	1.000				
FS	-0.15**	0.620***	1.000			
L_LEV	0.075	-0.076	-0.151*	1.000		
L_PROF	-0.061	0.868***	0.620***	-0.065	1.000	
L_FS	-0.130	0.555***	0.844***	-0.143*	0.620***	1.000

Source: Study Findings (2023)

Table 4.2 show that the pairwise correlation for the variable included in the model. It is one among of the method that is mostly employed to detect if there is any presence of multi collinearity. The findings in table 4.2 show that the profitability has negative association with leverage since the coefficient of correlation between leverage and profitability was negative even though weak but the p-value was less than 0.05. Furthermore, for the relationship between firm size and leverage there is also the negative relationship between them.

Panel Unit Root Test

Before estimating fixed effect model and random effect model for those panel data with more than 10 times observation over the time its recommended to assess, (Deb & Mukherjee, 2008). From then on, the Levin-Lin-Chu unit-root test which comprises the unadjusted t and adjusted t performed to check the presence of the panel unit root. The findings in table 4.3 show that all the variables included in the models were stationary since the p-value for all variables were less than 0.05. This implies that the normal fixed effect model, ordinary least square regression and Random effect model for those panel data is appropriate to be employed.

Table 4. 3: Panel Unit Root Tests for the Variables at Level

Variable	Statistic	P-Value
Leverage		
Unadjusted t	-6.1619	0.0030
Adjusted t*	-2.7475	
Profitability		
Unadjusted t	-7.3776	
Adjusted t*	-2.0046	0.0082
Firm Size		
Unadjusted t	-6.4769	
Adjusted t*	-4.0304	0.0000
L_LEV		
Unadjusted t	-6.3546	
Adjusted t*	-3.0853	0.0010
L_PROF		
Unadjusted t	-5.4262	
Adjusted t*	2.3595	0.0040
L Firm Size		
Unadjusted t	-5.8027	
Adjusted t*	-3.4449	0.0003

Source: Study Findings (2023)

Multicollinearity Test

Kim (2019) defines multicollinearity as "a high degree of linear intercorrelation between explanatory variables in a multiple regression model that leads to incorrect regression results." The variance inflation factor (VIF), as shown in Table 4.4, is one of the diagnostic techniques for multicollinearity. The results of the multicollinearity test are shown in Table 4.4. The purpose of this test was to determine whether one independent variable in the model affected another independent variable in the model. According to the rule of thumb, there is no multicollinearity if the variance inflation factor is smaller than 10. As a result of the data in table 4.4, the mean value for variance inflation factor was 3.27, which is less than 10. This demonstrates that there is no multicollinearity. This suggests that the model's independent variables had no influence on the model's other variables.

The pairwaise has been linked to the performance of the firms' tangibility, profitability, liquidity, and capital structure. This idea is backed by other scholars who claim to have found a link between business size and profitability and financial leverage performance in non-financial firms.

Table 4. 4: Multicollinearity Test

Variable	VIF	1/VIF
L_PROF	4.63	0.216025
PROF	4.55	0.220007
SF	4.14	0.241674
L_SF	3.98	0.25156
L_LEV	1.03	0.97105
Mean VIF	3.66	

Source: Study Findings (2023)

Normality Test

To evaluate if the data in this study had a normal distribution, the normality test was utilised. In this study, which used pooled panel data, the normality assumption had no effect on pooled panel regression. To confirm normality, a skewness/Kurtosis test was utilised.The data is considered to be consistently dispersed if its probability is greater than 0.05.

Table 4.5: Skewness/Kurtosis Tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
LEV	143	0.9115	0.0445	2.93	0.0680
PROF	143	0.1877	0.0394	5.79	0.0553
SF	143	0.7529	0.5634	2.11	0.0740
L_LEV	132	0.2012	0.0797	4.71	0.0951
L_PROF	132	0.1947	0.0251	6.34	0.0419
L_SF	132	0.0720	0.5911	3.74	0.1543

Source: Study Findings (2023)

H_0= Normality

H_1= non-normality

Before proceeding with the parametric estimating technique, the normality assumption test, presented in Table 4.5, is employed to establish whether or not the data are normally distributed. Table 4.5 shows that the null hypothesis was rejected for all variables since the p-values were greater than 0.05. This indicates that the variables utilised had a regular distribution, or that the distribution of all variables was normal.

Autocorrelation
Table 4.6: Serial autocorrelation test Model 1 (Profitability on Leverage)

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F (1, 4) =   0.897
Prob > F =   0.4890

Source: STATA Output (2021)

Autocorrelation, often known as serial correlation, is a common issue in the analysis of time series data. Serial correlation tests are used in pooled or panel data with long time series observations and short individuals. Because of the short number of years, this is not a concern with panel data. When there is serial correlation, the coefficient standard errors are lower and the R-squared is higher. Table 4.6 of the findings shows that the data are not prone to serial correlation because the P-value (0.4890) is more than 0.05, the significance level used in this investigation. This shows that the null hypothesis is not rejected at that level of significance, implying that no first order autocorrelation exists.

Heteroscedasticity

Using the variance of the independent variables to get the error term (it) from the regression model may indicate heteroscedasticity. The requirement to test for heteroscedasticity derives from the fact that such mistake words will have varying variance, which may result in contradictory results. When the constant error lacks a constant variance, i.e. var (it) =2, heteroscedasticity results (Akiwande, Dikko, and Agboola, 2015). As a result, the test for heteroscedasticity is required in order to ensure consistency in findings and meaningful interpretations of results. The robust standard errors estimate was created to account for heteroskedasticity.

The Influence of Firm's Profitability on Leverage

The study's original purpose is to investigate the influence of company profitability on leverage, as profitability is thought to have an impact on corporate capital structure due to its participation in supporting various operations. More prosperous firmt- and interest-bearing commitments, lowering the likelihood of bankruptcy.It was predicted that more prosperous firms would employ leverage more efficiently, taking advantage of leverage tax benefits. Highly profitable businesses are more likely to be able to satisfy their debt- and interest-bearing commitments, which adds to a lower risk of bankruptcy.

Selection between Fixed Effect Model and Random Effect Model

The model to be used is resolute before assessing the impact of profitability on a firm's leverage by assessing the Hausman test and the Breusch and Pagan Lagrangian multiplier to control whether a fixed or random effect model must be used, tracked by a final regression analysis to display the belongings of explanatory variables on the response variable.

Table 4.9: Breusch and Pagan Lagrangian Multiplier Test

Estimated results:		
	Var	Sd
Leverage	0.0282933	0.168206
E	0.0239426	0.154734
U	0	0
Var(u)=0		
Test:	chibar2(01) =	12.56
	Prob>chibar2=	0.000

Source: Study Findings (2021)

The null hypothesis in the LM test is that the variation among entities is zero. This indicates that no statistically significant difference exists between the units (i.e., no panel impact). Because the p-value (0.000) in table 4.9 is less than 0.05, showing that there is a substantial difference between the two units (the panel effect exists), the null hypothesis is rejected and the alternative hypothesis is accepted. In other words, the panel model, such as the random effect model or the fixed effect model, is more suited for examining the impact of corporate profitability on firm leverage than ordinal (pooled) regression analysis.

Table 4. 10: Hausman (1978) Specification Test

Variable	Coefficient		Difference	Standard error
	B	B	b-B	Sqrt(diag(V_b-V_B))
	Fixed	Random		S.E.
PROF	0.6538568	-0.0312322	0.6850890	1.128467
L_PROF	-0.7771812	-1.0594800	0.2822991	1.986990
Chi-square test value	1067.838			
P-value	0.000000			

Source: Study Findings (2021)

The Hausman test, shown in Table 4.10, is used to evaluate which model is optimal for assessing the link between profitability and leverage ratio. The Hausman residual is always used to assess if endogeneity exists, in which case the fixed effect model should be used, or whether endogeneity does not exist, in which case the random effect model should be used. The fixed effect model is adequate, as shown in Table 4.10, because the probability (Prob>chi2 = 0.00) was less than the level of significance (0.05).

Fixed Effect Model Regression Analysis

The findings of the fixed effect model used to investigate the association between profitability and corporate leverage are shown in Table 4.11. Table 4.11 reveals that the leverage ratio of the model's independent variables was enough. The explanatory factors in the model explained about 54.6% of the variance in leverage ratio. The results also showed that when the explanatory variables in the model were combined, they had a substantial influence on the leverage ratio (P 0.001).

Profitability and lag profitability were important predictor factors for leverage ratio in non-financial enterprises listed on the DSE.

Table 4.11: Table 4.11: Regression Results for Fixed Model

Leverage	Coef.	St.Err.	T-value	P-value	[95% Conf	Interval]	Sig
Profitability	-0.049	0.017	-2.82	0.005	-0.015	0.083	***
Lag Profitability	0.010	0.004	2.57	0.010	0.002	0.017	**
Constant	1.219	0.279	4.37	0.000	0.672	1.766	***
Mean dependent var		0.674	SD dependent var			0.168	
R-squared		0.545	Number of obs			2182.000	
F-test		8.126	Prob > F			0.000	
Akaike crit. (AIC)		-1549.266	Bayesian crit. (BIC)			-1523.849	

*** p<.01, ** p<.05, * p<.1

Source: Study Findings (2021)

With a regression coefficient of -0.049, profitability showed a statistically significant (P 0.01) negative influence on leverage ratio, meaning that for every one percentage point rise in profitability, leverage reduces by 0.049 percentage points. Lag profitability was statistically significant (P 0.05) and had a positive effect on leverage ratio with a regression coefficient of 0.010, meaning that a 1% rise in lag profitability increases leverage by 0. 010 percentage points. Because of the inverse link between profitability and debt, publicly traded non-financial companies prefer to fund their investments with retained earnings. According to the findings of the research, wealthy firms borrow less and prefer to use their retained earnings to fund new initiatives.

The study's findings are consistent with the pecking-order theory, which states that the more affluent a corporation grows, the more likely it is to switch its loan funding to internally created money. "If the firm's internal funds are insufficient to meet its financial obligations, the firm prefers debt financing over equity financing. "According to the study's results, non-financial enterprises listed on the DSE prefer to fund their investments through retained earnings. The study's findings support the pecking-order theory's assumption that there is a "negative relationship between profitability and leverage for non-financial companies listed on the DSE." The study's findings contradict the trade-off theory's notion of a positive link between profitability and leverage. The majority of research found a negative association between profitability and

debt, supporting the pecking order hypothesis (Arsov & Naumoski, 2016; Güner, 2016; M'ng et al., 2017; Sofat & Singh, 2017).

The findings contradict "trade-off theory," which holds that there is a positive link between profitability and debt. Non-financial enterprises listed on the DSE, according to the study, are reticent to borrow to support new projects. Due to the funding expenses connected with share issue and the limited operational performance of enterprises seeking new equity issuance, retained profits are the cheapest and quickest source of capital for most organisations. Furthermore, because the bulk of new equity is issued by share allotment, new issues typically result in a decrease in the firm's stock price. Profitability is the ideal method of gaining new funds, according to pecking-order theory." The findings of this study contradict those of Afza and Hussain (2011) and Chandrasekharan (2012), who found a positive relationship between profitability and debt ratio and supported the trade-off theory.

Table 4. 18: Summary of Hypotheses Tested

Hypotheses	Result
Hypothesis 1: There is a negative relationship between profitability and leverage	Accepted

Conclusions and Recommendations

According to the study, profitability has a significant impact on the leverage of non-financial enterprises listed on the DSE that use domestically produced cash to finance their investments before relying on foreign financing. Managers should consider the profitability and size of their activities when developing an organization's development strategy, according to the paper. Furthermore, the macroeconomic climate in which these firms operated had a significant impact on their success and, as a result, the capital structure mix.

Based on the study's limitations, the researcher recommends more research on the financial leverage of all publicly traded and unlisted companies. Tanzania's whole economic sector will be adequately represented in this approach, particularly in terms of capital structure determinants, because it will comprehensively include small and medium enterprises, from which the bulk of non-financial companies arise.

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