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Impact of Capital Structure on Profitability of Commercial Banks in Tanzania

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ABSTRACT

This paper aims to examine the impact of capital structure on the profitability of commercial banks in Tanzania using panel data from 2017 to 2021. Specifically, the study wants to investigate the impact of debt and equity in capital structure on the profitability of commercial banks in Tanzania. The study employed panel data research design and used secondary data which were extracted from audited financial statements of commercial banks. Return on assets was used as the dependent variable while independent variables were debt and equity capital as well as the debt-equity ratio. Results from the analysis indicate that initially the variables were not normally distributed, which necessitates normalization of variables. Correlation analysis was performed and there was no multicollinearity problem between the variables. Based on the Hausman test, the fixed effect model was selected as the appropriate model. The results from the analysis showed that a 1% increase in debt capital increases the profitability of a commercial bank by 16.79%. The positive debt-profitability coefficient implies opportunities for enhancing the profitability of a commercial bank through debt financing. Results further revealed that a 1% increase in the debt-equity ratio is associated with an 18.07% decline in profitability, which implies a negative relationship between the debt-equity ratio and profitability. On the other hand, an increase in equity finance is associated with a decline in profitability, holding other factors constant. However, the study recommends a comprehensive assessment and consideration of situational factors while carrying out capital structure decisions. An inverse relationship between the debt-equity ratio also implies that excessive debt may pose financial risk and make the company less attractive to potential investors.

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1. Introduction

The composition of capital is a critical choice within the realm of corporate finance and pertains to the method a company uses to fund its assets, particularly when it involves a blend of debts and equity (Gul & CHO, 2019). The significance of this topic arises from the fact that capital structure has a direct impact on the profitability of corporations, regardless of their specific industry. Capital structure can be succinctly described as the mix of debt and equity that is tailored to achieve the management's objective of maximizing shareholder profitability or wealth. Shareholders' wealth can be gauged by the present profitability of the

company's stock and to attain this goal financial management of the firm particularly financing decisions must be made with a great care to lower the company's cost of capital (Goyal et al., 2013). The blend of debt and equity that accomplishes the aforementioned objective (lowering overall cost of capital) is referred to as the optimal capital structure. Companies are in need of funds in order to satisfy their daily targets and meet their daily obligations (Myers, 2001). These funds could be obtained from either internal or external sources that generate either long-term or short-term financial commitments. The owner's funds (equity, share capital, and retained earnings) and long-term debts are the two primary sources from which a firm might raise the long-term capital that it requires (Myers, 2001).

Capital structure has evolved into one of the most extensively examined areas in both theoretical and empirical finance literature (Uddin et al., 2022). Pham, Hoang & Pham (2022) conducted a study on the impact of capital structure on the profitability of commercial banks in Vietnam. The study used 30 commercial banks during the critical moment of restructuring of banking system in the country 2018-2018. Findings revealed that non-deposits liabilities have positive impact of the bank's profitability unlike deposits liabilities. In other studies the results were different. For example, the study conducted by Mukhiya (2024) in Nepal on the impact of leverage ratio on the profitability of commercial banks. The study employed 12 commercial banks and net interest margin was used (as proxy measure of the bank's profitability). Finding reveal negative impact of leverage ration on the profitability of commercial banks.

These studies varied in their focus, with some giving relatively less attention to the determinants of capital structure (Endang et al., 2020) and others concentrating more on the impact of capital structure on the profitability of publicly traded companies (Ayalew, 2020); (Okeke, 2023). The Government of Tanzania has been implementing various improvement in operation of banking system to ensure sustainability of banking sector, such improvements include but not limited to minimum required capital, improvement of corporate governance, improvement of anti-money laundering measures, establishment of secured transaction law and collateral registry, and issuance of the revised agent banking for banks and financial institutions, in an effort to revitalize banking service delivery (BOT, 2021).

Despite Government attempts to strengthen and creating an ideal atmosphere for banking operations and commercial banks in particular, the number of commercial banks in the banking sector has decreased from 40 in 2018 to 34 in 2021. This decrease is the result of regulatory capital requirements not being met, which hinders the economic growth (BOT, 2021).

In light of the points raised previously, the general purpose of this study is to analyze the impact of capital structure on the profitability of licensed commercial banks in Tanzania from 2017 to 2021. Specifically the study aims to:

- i. To determine the effect of utilization of equity capital on the return on assets of commercial banks in Tanzania.
- ii. To determine the impact of debt capital utilization on the return on assets of commercial banks in Tanzania.
- iii. To determine the influence of the debt-to-equity ratio on the return on assets of commercial banks in Tanzania.

The remaining parts of this paper consists of four sections, *section two* covers review of empirical and theoretical literature. *Section three* covers research methodology, which involves data and model used in the analysis. *Section four* covers findings and discussion, which also involves comparison with findings of the previous similar studies while conclusion, implication and recommendations are presented in *section five*.

2. Literature Review

Different studies have been conducted on the relationship between the capital structure and profitability of commercial banks. For example, Pharm, Hoang and Pharm (2022) examined the relationship between capital structure and profitability of commercial banks in Vietnam, using 30 private commercial banks in panel data analysis (2012-2018). Findings revealed positive impact of deposits and non-deposits liabilities on the profitability. Mukhiya (2023) examined the relationship between the banks’ profitability and capital structure in Nepal, using 12 banks and net interest margin (NIM) as measure of profitability. Findings revealed that leverage ratio of the banks have significant positive impact on the profitability of the banks.

In Ethiopia, Ayalew (2020) investigated the relationship between capital structure and bank’s profitability using 16 private banks in panel-fixed effect, study period covers 2013/14-2018/19. Findings revealed that both short run and long run debt ratios tend to be associated with banks’ profitability. Gohar, Rehman and Muhammad (2016) examined impact of capital structure on bank performance in Pakistan, whereby ROA, ROE and EPS were used as measure of banks’ performance while long term debt-capital ratio, short term debt-capital and total debt-capital ratio were used as determinants of capital structure, the study covered 2009-2013. Findings revealed positive relationship between determinants of capital structure and banking performance.

In Nigeria, Okeke (2023) examined the impact of financial leverage on the recapitalized bank’s profitability from 2010 to 2021, the study used multiple regression analysis. Findings revealed significant negative impact on the recapitalized banks profitability. Arhinful, Mensah & Owusu-Sarfo (2023) studied the impact of capital structure affect the firm performance of financial institutions in Ghana, the study used the panel random as appropriate method. Findings revealed that the use of debt has significant impact on the profitability compare to equity financing.

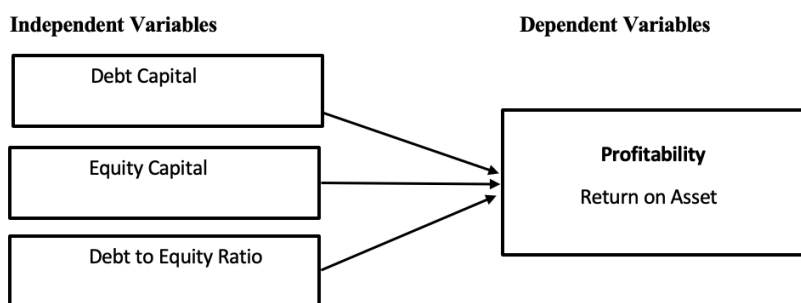


Figure 1: Conceptual Framework
 Source: Researcher’s own work (2023)

The relationship between the variables makes up the conceptual framework (Figure 1). The variables are broken down further into those that are independent and those that are dependent. According to Flannelly et al. (2020) independent variables will typically accept changes in the effect that are exerted on dependent variables.

This study is built on the *Trade-Off theory* which was proposed by Myers (1984), the theory suggests that firms face a trade-off when determining their optimal capital structure. This theory takes into account the benefits of tax shields provided by debt, which lower the overall cost of capital, and the financial distress costs associated with high debt levels. In essence, the trade-off theory posits that firms aim to strike a balance between the tax advantages of debt and increased financial risk that comes with higher leverage. According to this theory, as a firm increases its debt, it can benefit from interest expense tax deductions, leading to a reduction in the firm's tax liability. However, there's a point at which the costs of financial distress, including potential bankruptcy and associated legal and agency costs, start to outweigh the tax advantages of debt. Firms aim to find the level of debt that optimizes their overall cost of capital and minimizes these financial distress costs while still reaping the benefits of tax shields (Myers, 1984).

3.0. Methodology

3.1. Data and variables selection

This study made the use of panel data which involved 23 commercial banks for the period of 5 years from 2017 to 2021. The study employed secondary data which were extracted from commercial banks financial reports and selection of the commercial banks was based on the availability of the data and main objective of the study. Variables used included the Return on asset which stood as the dependent variable. Return on Assets (ROA) is a financial ratio which measures a company's profitability in relation to its total assets. It provides insight into how efficiently a company utilizes its assets to generate profits (Petersen & Schoeman, 2008). It is calculated by taking net profit divided by total assets. On the other hand, independent variables used include debt capital, equity capital and the debt-to-equity ratio.

3.2. Model selection and Analysis

Since the analysis of the relationship at hand involved the use of panel data, the following model explains the relationship between the variables involved.

3.2.1. Random Effects Model

The random effects model operates under the assumption that the independent variables are not correlated with the unobserved heterogeneity, also known as individual-specific effects. This suggests that there is no systematic relationship between the explanatory variables and the randomness of the individual-specific effects. While taking into consideration individual variations, the random effects model computes the mean correlation between variables across all entities. A random effects model assumes that the entity-specific effects are random and uncorrelated with the independent variables. Random model can be specified as follows:

$$ROA_{it} = \alpha_i + \beta_1 EQUITY_{it} + \beta_2 DEBT_{it} + \beta_3 (DEBT-EQUITY)_{it} + u_i + \epsilon_{it} \dots \dots \dots 1$$

Where: ROA_{it} is the Return on Assets for entity i at time t , α is the overall intercept. $\beta_1, \beta_2, \beta_3$ are the coefficients for the independent variables. u_i is the random effect specific to entity i . ϵ_{it} is the idiosyncratic error term. $EQUITY_{it}$ is the equity for entity i at time t . $DEBT_{it}$ is the debt for entity i at time t . $DEBT-EQUITY_{it}$ is the debt-equity ratio for entity i at time t . β_1 represents the change in ROA for a one-unit change in $EQUITY$, holding other factors constant. β_2 represents the change in ROA for a one-unit change in $DEBT$, holding other factors constant. β_3 represents the change in ROA for a one-unit change in the $DEBT-EQUITY$ ratio, holding other factors constant.

3.2.2. *Fixed Effects Model:*

Individual-specific effects are assumed to be correlated with the independent variables in the fixed effects model. Incorporating an individual fixed effect for each entity, this model adequately accounts for all time-invariant unobserved heterogeneity. A fixed effect model can help account for unobserved heterogeneity when this heterogeneity is constant over time and correlates with independent variables. In this study we have Return on Assets (ROA) as the dependent variable and three independent variables: EQUITY, DEBT, and DEBT-EQUITY. The model can be specified as follows:

$$ROA_{it} = \alpha_i + \beta_1 EQUITY_{it} + \beta_2 DEBT_{it} + \beta_3 (DEBT-EQUITY)_{it} + \epsilon_{it} \dots \dots \dots 2$$

Where: ROA_{it} is the Return on Assets for entity i at time t , α_i is the entity-specific intercept capturing fixed effects. $\beta_1, \beta_2, \beta_3$ are the coefficients for the independent variables. ϵ_{it} is the error term. $EQUITY_{it}$ is the equity for entity i at time t . $DEBT_{it}$ is the debt for entity i at time t . $DEBT-EQUITY_{it}$ is the debt-equity ratio for entity i at time t . β_1 represents the change in ROA for a one-unit change in $EQUITY$, holding other factors constant. β_2 represents the change in ROA for a one-unit change in $DEBT$, holding other factors constant. β_3 represents the change in ROA for a one-unit change in the $DEBT-EQUITY$ ratio, holding other factors constant. In order to determine which estimation to use (fixed effect or random effect), the Housman test was applied. The test examined the null hypothesis that the random effect was more suitable. As a general principle, when the probability profitability is significant ($P < 0.05$), the null hypothesis is rejected in favor of the alternative that random effect estimation is suitable.

4.0 Results and Discussions

4.1. *Normality test and Correlation Analysis*

We started by testing normality of the variables and find that variables are not normally distributed, we normalize the variables by subjecting them into logarithm form. Hence, we tested the null hypothesis that variables follow normal distribution against the alternative that variables do not follow normal distribution. Findings indicate that variables are normally distributed since we fail to reject the null hypothesis (since probability is greater than 0.05). To quantify the strength and direction of the relationship between two or more variables, correlation analysis was performed. It is a fundamental technique in data analysis, providing insights into the patterns of association between different variables (Gogtay & Thatte, 2017). The result of the correlation analysis is shown below. From Table 1 (correlation matrix table) result indicate that correlation between four financial variables: Return on Assets (ROA), Debt-to-Equity ratio (DEBT-EQUITY), Total Debt (DEBT), and Total Equity (EQUITY) does not exhibit problem of multicollinearity. The problem of multicollinearity if the correlation between the variables exceeds 80 percent.

Table 1: Results of Correlation analysis

	ROA	DEBT-EQ- UITY	DEBT	EQUITY
ROA	1.0000			
DEBT-EQ- UITY	-0.3011	1.0000		
DEBT	-0.3630	0.6363	1.0000	
EQUITY	-0.1509	-0.0185	0.5890	1.0000

4.3. The Hausman Specification Test

In order to justify the correct specification of our econometric model, the Durbin – Wu – Hausman test was conducted with the intention of justifying the usage of either the fixed effect or the random effect estimation. Under this test, the null hypothesis is that the random effect was appropriate. The results of the Hausman test showed a probability of 0.0323 ($P < 0.05$), this implies that we can reject the null hypothesis in favor of the alternative that the fixed effect is appropriate. The Hausman test is a statistical test used in econometrics and panel data analysis to determine whether a model with random effects (RE) or fixed effects (FE) is more appropriate for a given dataset (Kelley Pace & LeSage, 2008). It helps in deciding whether the individual-specific effects (unobserved heterogeneity) in panel data should be treated as random (RE) or fixed (FE) across individuals. The results of the Hausman test are shown Table 2.

Table 2: Hausman fixed random test

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt (diag (V_b-V_B))
	Fixed	Random	Difference	S.E.
EQUITY	214.9198	-61.52003	-153.3998	65.36682
DEBT	16.7862	4.788449	11.99775	5.163013
DEBT-EQUITY	-18.06747	-5.271277	-12.79619	5.568598
<i>b = consistent under Ho and Ha; obtained from xtreg</i>				
<i>B = inconsistent under Ha, efficient under Ho; obtained from xtreg</i>				
Test: Ho: difference in coefficients not systematic				
$chi2 (3) = (b-B)'[(V_b-V_B)^{-1}](b-B)$				
= 6.43				
Prob>chi2 = 0.0323				

The test involves comparing the coefficients obtained from the fixed effects (b) and random effects (B) models. The independent variables in the model are EQUITY, DEBT, and DEBT-EQUITY. Coefficients: For the variable EQUITY the coefficient in the fixed effects model is -214.9198, and in the random effects model, it is -61.52003. For the variable DEBT the coefficient in the fixed effects model is 16.7862, and in the random effects model, it is 4.788449. For the variable DEBT-EQUITY, the coefficient in the fixed effects model is -18.06747, and in the random effects model, it is -5.271277. Difference in Coefficients: The "b-B" column shows the differences between the coefficients obtained from the fixed and random effects models.

Standard Errors: The "sqrt (diag (V_b-V_B))" column represents the square root of the diagonal elements of the difference in covariance matrices between the fixed and random effects models.

Hausman Test Results: The Hausman test statistic is 6.43 and the associated probability (Prob>chi2) is 0.0323. The test is based on a chi-square distribution with 3 degrees of freedom (chi2 (3)). The null hypothesis (Ho) of the Hausman test is that the difference in coefficients between the fixed effects and random effects models is not systematic, meaning that either model can be used without a significant difference. The alternative hypothesis (H1) is that the difference is systematic, suggesting that one model is consistently better than the other. Since the probability (0.0323) is less than the significance level of 0.05 (assuming a common significance level of 5%), we reject the null hypothesis. This implies that there is evidence to suggest that the difference in coefficients between the fixed and random effects models is systematic, and one of the models is more appropriate for the data than the other. In this case, the fixed effects model seems to be preferred over the random effects model based on the results of the Hausman test.

4.4. Fixed effect model

To accounts for individual-specific or group-specific effects that are constant over time but vary across different entities, and based on the results of Hausman test, a fixed effect regression model was used for analysis. The result is shown below.

Table 3: Fixed effect regression analysis

Fixed-effects (within) regression			Number of obs = 115		
Group variable: id			Number of groups = 23		
R-sq:			Obs per group:		
within = 0.1013			min = 5		
between = 0.2334			avg = 5.0		
Overall = 0.8913			max = 5 F (3, 89) = 3.34		
Corr (u i, Xb) = -0.8546			Prob > F = 0.0227		
ROA	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
EQ- UITY	-214.9198	75.23881	-2.86	0.005	-364.4177 -65.42186
DEBT	16.7862	6.058615	2.77	0.007	4.747863 28.82454
DE/EQ	-18.06747	6.401452	-2.82	0.006	-30.78702 -5.347921
_cons	328.5208	114.1831	2.88	0.005	101.6414 555.4001
Sigma u 2.6097831					
Sigma e 1.5621304					
rho .7362238 (fraction of variance due to u_i)					
F- test that all u i=0: F (22, 89) = 3.66			Prob > F = 0.0000		

Based on the fixed effect estimation result from Table 3, shows that the sample characteristics is as follows: number of observations (cases) = 115, number of groups (individuals or entities) = 23.

Coefficient of EQUITY -214.9198 suggests that for a given firm, a one-unit increase in equity is associated with a decrease of 214.9198 units in ROA, holding all other factors constant. The negative coefficient indicates an inverse relationship between equity and ROA. The t-value of -2.86 and p-profitability of 0.005 imply that this relationship is statistically significant at the 1% level. Coefficient of DEBT 16.7862 indicates that for a given firm, a one-unit increase in DEBT is associated with an increase of 16.7862 units in ROA, holding all other factors constant.

The positive coefficient signifies a direct relationship between DEBT and ROA. The t-value of 2.77 and probability of 0.007 suggest that this relationship is statistically significant at the 1% level. On the other hand, coefficient of DE/EQ -18.06747 shows that for a given firm, a one-unit increase in the debt-to-equity ratio (DE/EQ) is associated with a decrease of 18.06747 units in ROA, holding all other factors constant. The negative coefficient indicates an inverse relationship between DE/EQ and ROA. The t-value of -2.82 and probability of 0.006 implies that this relationship is statistically significant at the 1% level. Constant coefficient of 328.5208 implies intercept term which represents the expected ROA when all independent variables are zero. The t-value of 2.88 and probability of 0.005 indicate that the intercept is statistically significant at the 1% level. Within R-squared probability indicates that about 10.13% of the variability in ROA within firms over time is explained by the independent variables, meanwhile the between R-squared probability indicates that about 23.34% of the variability in ROA between different firms is explained by the independent variables. The overall R-squared probability indicates that about 89.13% of the total variability in ROA is explained by the independent variables, considering both within and between variations. F-statistic (3, 89) = 3.34, Prob > F = 0.0227: This indicates that the model is statistically significant overall at the 5% level, meaning that the independent variables jointly have a significant effect on ROA. Correlation (u_i, Xb) = -0.8546: This shows a high negative correlation between the fixed effects and the predicted profitability, suggesting that the unobserved individual effects are strongly correlated with the predictors. sigma (2.6097831) and sigma (1.5621304): These represent the standard deviations of the unobserved individual effects and the idiosyncratic error, respectively. rho (0.7362238): This indicates that approximately 73.62% of the variance in ROA is due to differences across firms (between variance). F test that all $u_i=0$: F (22, 89) = 3.66, Prob > F = 0.0000: This test indicates that the firm-specific effects (u_i) are significant, confirming the need for a fixed-effects model.

The result findings is consistent with the findings from Pharm, Hoang and Pharm, (2020) in Vietnam where there was positive relationship between profitability and both total deposits and non-deposits liabilities. Implying that as commercial banks mobilize capital through non-deposits financial leverage increases which eventually increase impact on profitability. Negative relationship between the use of equity capital and profitability of commercial banks in Tanzania can be associated with the trade-off theory of capital structure. According to this theory, firms aim to find an optimal balance between the advantages of debt financing, including tax benefits, and the associated costs, particularly those related to financial distress. In the Tanzanian context, the negative relationship suggests that commercial banks may rely more on equity capital, potentially leading to suboptimal capital structures. This approach might be driven by a desire to avoid the increased financial distress costs associated with higher debt levels, in line with the theory's emphasis on risk management. The negative relationship underscores the importance of making informed trade-offs between the benefits and costs of different sources of capital and highlights the relevance of The Trade-Off Theory in explaining the capital structure decisions and profitability outcomes of Tanzanian commercial banks.

This means that the level of debt a firm has in its capital structure plays a crucial role in determining its overall profitability. Several studies, including those conducted by Atta Mills & Mwasambili (2020), Doorasamy, (2021), Alghifari et al.,(2022), Cheng et al., (2010), Hung et al., (2021), and Cuong & Canh, (2012), have supported this finding. Also aligns with the principles of The Trade-Off Theory of capital structure. The theory suggests that firms aim to balance the benefits of debt financing, including tax advantages, with the associated costs, particularly financial distress costs. The positive relationship indicates that Tanzanian commercial banks are actively seeking this balance, leveraging the tax benefits of debt, optimizing their capital structure, and effectively managing financial distress costs. In essence, this consistency highlights the relevance of the trade-off theory in explaining how commercial banks in Tanzania make capital structure decisions and how these decisions impact their profitability.

The coefficient for DE/EQ is -18.06747 , indicating that a one-unit increase in the Debt-to-Equity ratio is associated with a decrease of approximately 18.07 units in the ROA. The negative coefficient suggests an inverse relationship between the Debt-to-Equity ratio and ROA. The t-profitability (-2.82) and probability (0.006) indicate that the coefficient is statistically significant at a 0.05 significance level. The 95% confidence interval suggests that the true profitability of the coefficient is likely to fall between -30.79 and -5.35 . The debt-to-equity (DEBT-EQUITY) ratio has a negative relationship with the firm's profitability. This means that as the DEBT-EQUITY ratio increases, indicating a higher proportion of debt relative to equity in the capital structure, the firm's profitability tends to decrease.

The finding that higher DEBT-EQUITY ratios are associated with lower firm profitability is consistent with the findings of a previous study conducted by (Rayan, 2008). Study likely explored the relationship between capital structure and firm profitability and found that higher debt levels were linked to lower firm profitability.

The negative relationship between the DEBT-EQUITY ratio and firm profitability suggests that excessive debt may pose financial risks and reduce the company's attractiveness to investors. High debt levels can increase the firm's financial leverage and interest expenses, making it more vulnerable to economic downturns and changes in interest rates.

Constant coefficient represents the intercept term in the model. In this case, it is 328.5208 , indicating the probability of the dependent variable ROA when all independent variables are zero. The t-value (2.88) and probability (0.005) indicate that the intercept term is statistically significant at a 0.05 significance level. The 95% confidence interval suggests that the true profitability of the intercept is likely to fall between 101.64 and 555.40 . Overall, the fixed-effects regression indicates that the independent variables have a strong explanatory power within each group, and the model as a whole is statistically significant.

5. Conclusion and Recommendations

The study found a significant relationship between capital structure and profitability of commercial banks in Tanzania and results from the analysis showed that 1% increase in debt capital increases commercial bank profitability by 16.79%. The positive DEBT-ROA coefficient implies opportunities for enhancing profitability of commercial bank through debt, but a comprehensive assessment of risks and situational factors is crucial for informed decision-making. This implies that debt capital can be strategically employed by banks to enhance their overall profitability, emphasizing the need for a balanced mix of equity and debt in financial strategies. However, this also underscores the importance of prudent risk management practices to mitigate potential risks

associated with increased leverage. As far as equity is concerned, there is negative relationship between equity capital and firm profitability implies that a higher reliance on equity financing in the capital structure of commercial banks may have adverse effects on the bank's overall profitability. This finding implies that increasing equity capital at the expense of debt capital may not necessarily lead to an increase in profitability of commercial banks in Tanzania. Debt-to-equity ratio has a negative relationship with the firm's profitability. This implies that as the Debt-to-equity ratio increases, indicating a higher proportion of debt relative to equity in the capital structure, the firm's profitability tends to decrease. Generally, results call for the proper optimal combination of capital structure to handle the risk associated with composition of debt and equity in the capital structure of the commercial banks in Tanzania.

Regulatory authorities should closely monitor and oversee the composition of the equity and debt contained in the capital structure of commercial banks as this may pose challenges of risk management in banking sector. Financial regulations should reflect changes that occurs over time regarding the debt and equity size to safeguard the sector's stability. Banks should be attentive to interest rate fluctuations and their impact on the cost of servicing debt to manage the trade-off between increased profitability and debt-related expenses. Diversifying the sources and types of debt, such as bonds, loans, and other financial instruments, can reduce dependence on a single source and enhance risk management. Additionally, optimizing the debt-to-equity ratio for each bank's specific context is essential, taking into account their risk tolerance, business model, and market conditions. These recommendations aim to help banks in Tanzania effectively utilize debt capital to drive profitability while maintaining financial stability and regulatory compliance.

Further studies in the context of the relationship between capital structure and the profitability of commercial banks in Tanzania can offer valuable insights. First, examining the long-term effects of capital structure on bank performance, considering changing economic conditions and market fluctuations, will provide a more comprehensive understanding of this relationship over time. Second conducting bank-specific analyses to understand how the relationship between capital structure and profitability varies based on factors like bank size, market competition, and regional economic conditions is crucial for tailored decision-making.

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