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THE EFFECT OF FINANCIAL LEVERAGE ON FINANCIAL PROFITABILITY: A STUDY OF NON-FINANCIAL INSTITUTIONS LISTED ON THE INDONESIAN STOCK EXCHANGE

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ABSTRACT

This study aims to reveal the effect of Financial Leverage on Financial Profitability in non-financial companies listed on the Indonesia Stock Exchange. The population of this study is non-financial companies listed on the Indonesia Stock Exchange that attach their financial reports publicly from 2018-2023. The data used in this study comes from Bloomberg data from the Faculty of Economics and Business, Diponegoro University, Semarang. The number of samples based on the purposive sampling method is 68 companies and with a sample of 408. The analysis in this study is multiple linear regression analysis using IBM SPSS 25. The findings in this study indicate that Equity Multiplier, Interest Coverage ratio, Degree of Financial Leverage, have no effect on ROA and ROE, Fixed Charge Coverage ratio and Capitalization Ratio have a positive effect on ROA and ROE, Debt to EBITDA has a negative effect on ROA and ROE.

Keywords: Financial Leverage, Profitability, Indonesia Stock Exchange

INTRODUCTION

Capital structure decisions are one of the main factors influencing an entity's financial performance and shareholder value through the cost of capital. Capital structure decisions require an understanding of the factors that influence the costs and benefits of debt and equity (Kalash, 2023). Companies that have debt in their capital structure are said to have leverage (Dakua, 2019). Leverage is used to assess a company's ability to utilize debt financing as a form of leveraging other investment opportunities. A company can finance its investments using debt, equity, and preferred stock. Financial leverage is part of an entity's capital structure, consisting of fixed-cost financing mechanisms such as debt and preferred stock compared to owner (shareholder) equity (Arhinful & Radmehr, 2023a) . Debt reflects a company's loans that must be repaid within a certain period, while equity represents the owner's (shareholders') source of funds. Companies can use both to align with their planned strategies. Different industries have very different capital structures (Rahayu, 2018).

During the Covid-19 Pandemic, companies' internal funding sources begin to decline, creating a need for external capital. The availability of liquidity funding during these "weak economic" periods is a key determinant of the severity of the recession. However, if many companies simultaneously face issues that are detrimental to profitability and difficult to quantify, this is likely to lead to increased information friction, making it more difficult to raise external capital. The COVID-19 pandemic creates an opportunity to understand how debt and equity issuance activity is affected by external demand, leading to a reduction in internal funding (Halling et al., 2020). Study findings (Gopalakrishnan et al., 2020) found that overall debt financing increased by about 2 percentage points for companies worldwide during the second and third quarters of 2020 compared to the pre-covid-19 period.

Changes in a company's funding structure, particularly those related to the use of financial leverage, have significant implications for profitability. Theoretically, the use of leverage is expected to increase profitability through tax savings and capital structure optimization. However, in empirical practice, the relationship between financial leverage and profitability often shows mixed and inconsistent results across periods and indicators. Therefore, to obtain an initial overview of the dynamics of this relationship in non-financial companies listed on the Indonesia Stock Exchange, this study presents the empirical phenomenon of the development of various financial leverage and profitability indicators during the 2018–2023 period as follows.

Table 1. Gap Phenomenon

Variables	2018	2019	2020	2021	2022	2023
Equity Multiplier	2,1049	2,0646	2,0294	2,0161	2,0113	1.9955
Interest Coverage Ratio	53,281	28,1202	15,1859	21,3262	30,6323	23,7434
Fixed Charge Coverage Ratio	7,5039	7,0234	6,6946	9,1301	10,5788	9,3575
Degree of Financial Leverage	2,4692	0.1881	71,1307	2,7187	1.2269	115,026
Debt to EBITDA	2,5018	2,7079	2,9002	2.4834	2,2213	2,5331
Capitalization Ratio	0.2334	0.2287	0.2315	0.2117	0.2068	0.1960
Return on Asset	0.0704	0.0613	0.0508	0.0671	0.0780	0.0643
Return on Equity	0.1414	0.1214	0.1020	0.1340	0.1556	0.1279

Source: Bloomberg, 2024

Table 1 shows that company profitability, as measured by Return on Assets (ROA) and Return on Equity (ROE), fluctuated during the 2018-2023 period, not always in line with changes in various financial leverage indicators. Several leverage ratios, such as the Equity Multiplier, Interest Coverage Ratio, Fixed Charge Coverage Ratio, Degree of Financial Leverage, Debt to EBITDA, and Capitalization Ratio, exhibited varying dynamics, but were not accompanied by a consistent pattern of profitability changes. In some periods, decreases in leverage ratios were accompanied by increases in ROA and ROE, while in other periods increases in leverage correlated with decreases in profitability. This unstable and contradictory relationship pattern indicates a gap phenomenon, namely an inconsistent direction of the relationship between financial leverage and the profitability of non-financial companies. This condition indicates that the effect of financial leverage on profitability is not linear and still requires further empirical testing by considering various dimensions of leverage simultaneously.

The difference in the direction of the relationship between the Independent Variables or free variables (Equity Multiplier, Interest Coverage Ratio, Fixed Charge Coverage Ratio, Degree of Financial Leverage, Debt to EBITDA, Capitalization Ratio) and the Dependent Variables or bound variables (Return on Assets, Return on Equity) indicates the existence of a gap phenomenon presented in the table below.

Table 2. Research Gap

Research Gap	Research result	Researchers
There is an inconsistency between the influence of the Interest Coverage Ratio on Return on Assets	Positive	1. Zelal em (2020) 2. (Ajmera, 2019)
	No effect	1. Henny, 2021
There is an inconsistency between the influence of the Interest Coverage Ratio on Return on Equity	Positive	1.(Zelal em, 2020)
	No effect	1.(Lestari, 2021a)
There is an incoherence between the influence of the Equity Multiplier on Return on Equity	Positive	(Altahtamouni, 2024)
	Negative	(Raza Nemati et al., 2021)
There is an incoherence between the influence of the degree of financial leverage on return on equity.	Positive	1.(Asraf & Mia Muchia Desda, 2020)
	Negative	1. (Arhinful & Radmehr, 2023a)
There is an inconsistency between the influence of the Capitalization Ratio on Return on Assets	Positive	1.(Syed, 2013a)
	Negative	1.(Arhinful & Radmehr, 2023a) 2.(Arhinful et al., 2023a)
Regarding the Incosistency between the Influence of Capitalization Ratio on Return on Equity	Positive	1.(Alma & Muchtar, 2024a) 2.(Dey et al., 2018a)
	Negative	1.(Arhinful & Radmehr, 2023a) 2.(Ghardallou, 2022)

Table 2 shows that the relationship between financial leverage and corporate profitability continues to show inconsistent empirical results across various previous studies. For the Interest Coverage Ratio variable, several studies found a positive effect on Return on Assets (ROA) and Return on Equity (ROE), indicating that a company's ability to cover interest expenses can improve profitability (Zelal em, 2020; Ajmera, 2019). However, these findings contradict the results of other studies that state that the Interest Coverage Ratio has no significant effect on ROA or ROE, thus its role in increasing profitability remains debated (Henny, 2021; Lestari, 2021a).

Inconsistent research findings also concern the effect of the equity multiplier on return on equity. Some studies indicate that increasing the equity multiplier can increase shareholder returns due to the optimization of debt-based capital structures (Altahtamouni, 2024). Conversely, other studies have found a negative effect, indicating that increasing equity-based leverage can increase financial risk and depress corporate profitability (Raza Nemati et al., 2021).

Regarding the Degree of Financial Leverage variable, previous research also shows conflicting relationships with Return on Equity. Some studies conclude that increasing the Degree of Financial Leverage can increase shareholder profits (Asraf & Mia Muchia Desda, 2020). However, these findings are inconsistent with other research, which shows that high financial leverage actually negatively impacts profitability due to increased risk burden and financial costs (Arhinful & Radmehr, 2023a).

Regarding the Capitalization Ratio variable, previous research has shown differences in findings for both Return on Assets and Return on Equity. Several studies have found a positive effect, reflecting the effectiveness of capital structure in supporting corporate financial performance (Syed, 2013a; Alma & Muchtar, 2024a). However, other studies have reported a negative effect of the Capitalization Ratio on profitability, indicating that the dominance of debt financing can increase financial stress and reduce corporate performance (Arhinful & Radmehr, 2023a; Arhinful et al., 2023a; Dey et al., 2018a; Ghardallou, 2022).

Novelty This study examines the effect of financial leverage on financial profitability using a multidimensional approach in non-financial companies listed on the Indonesia Stock Exchange during the 2018-2023 period. Unlike most previous studies, which generally use only one or two conventional leverage indicators, this study integrates six financial leverage indicators Equity Multiplier, Interest Coverage Ratio, Fixed Charge Coverage Ratio, Degree of Financial Leverage, Debt to EBITDA, and Capitalization Ratio to more

comprehensively capture the complexity of a company's funding structure. This study provides empirical evidence that not all dimensions of financial leverage have a uniform effect on company profitability, as measured by Return on Assets and Return on Equity. These findings indicate that the effect of leverage on profitability is not linear, but rather depends on the characteristics of each leverage indicator, particularly those related to the efficiency of meeting fixed liabilities and the composition of the capital structure. Thus, this study enriches the financial management literature by offering a more nuanced perspective on the relationship between leverage and profitability, while simultaneously criticizing the common assumption in capital structure theory that views leverage as a factor that has a homogeneous impact on financial performance.

FORMULATION OF THE PROBLEM

Based on the research formulation above, the research questions that can be taken are as follows:

1. Does interest coverage have an impact on profitability?
2. Does equity multiplier have an impact on profitability?
3. Does fixed charge coverage ratio have an impact on profitability?
4. Does the degree of financial leverage have an impact on profitability?
5. Does debt to EBITDA have an impact on profitability?
6. Does the capitalization ratio have an impact on profitability?

LITERATURE REVIEW

The Effect of Equity Multiplier on ROA and ROE

Through Static Trade-Offs, companies are expected to find a balance between using debt to increase profitability and managing risk. The Equity Multiplier can serve as an indicator for business management to understand the extent of potential losses resulting from poor asset management (Nasution, 2022). The measurement of assets owned by shareholders is measured by comparing total assets with total shareholder equity. The Equity Multiplier is defined as the percentage of total assets owned by shareholders. The equity multiplier also helps calculate the level of debt financing used to purchase assets and support continued operations (Raza Nemati et al., 2021)A high ratio indicates that fewer assets are funded by equity, meaning a portion is funded by debt. This means that the proportion of debt in the company's capital structure is increasing. With a high debt burden, the company also has high debt servicing costs (interest), thus reducing net income and impacting Return on Assets (ROA) and Return on Equity (ROE), as net income is the divisor of ROA and ROE. A low ratio is considered more profitable, as a company with a low ratio indicates a low dependence on debt funding and does not have high debt servicing costs. In line with research, (Raza Nemati et al., 2021), where the Equity multiplier has a negative influence on ROA and ROE.

H1a: Equity Multiplier has a negative influence on ROA

H1b: Equity Multiplier has a negative influence on ROE

The Influence of Interest Coverage Ratio on Company Profitability

The trade-off theory and the interest coverage ratio are related in the context of capital structure management and its impact on corporate profitability. The trade-off theory focuses on the balance between the benefits and costs of debt, while the interest coverage ratio (ICR) reflects a company's ability to repay interest on its debt. Dynamic trade-offs encourage companies to adjust their debt levels and adapt to economic changes, such as fluctuations in interest rates.Because companies pay interest expenses before deducting taxes, a key indicator of a company's ability to pay interest on loans is by comparing interest expenses with operating profit (Diana, Tjiptono, 2022). A higher interest coverage ratio (ICR) indicates a high total operating income, effectively covering the company's interest expense. This means the company's ability to generate substantial profits from interest after EBIT increases, leading to an increase in ROA. With substantial profits, the company can allocate more profits for reinvestment, thereby increasing net income and ultimately ROE. The company's ability to meet its obligations is a positive signal for investors, potentially attracting more equity investment. A low Interest Coverage Ratio (ICR) indicates a company's lack of an optimal capital structure and can negatively impact profitability. This is in line with research (Zelalem, 2020)And(Ajmera, 2019), where the findings show that interest coverage has a negative influence on ROA and ROE.

H2a: Interest Coverage has a positive influence on ROA

H2b: Interest Coverage has a positive influence on ROE

The Influence of Fixed Charge Coverage Ratio on Company Profitability

The trade-off theory provides an overview of the optimal balance between the benefits and costs of debt, while the Fixed Charge Coverage

Ratio (FCCR) is a measure of a company's ability to cover fixed costs (debt payments, interest expenses, and equipment rental costs). As a measure, the FCCR illustrates how a company's capital structure can affect its ability to meet its fixed obligations. The FCCR is expected to adequately cover fixed costs based on revenue. A high FCCR indicates that the company can manage its debt effectively, indicating that operating profit is sufficient to cover fixed obligations. When a company can manage its debt effectively, it indicates the company is able to meet its fixed obligations without affecting cash flow available to shareholders. This means the company does not need to use equity capital to increase excessive debt, thereby increasing net profits distributed to shareholders. Therefore, the higher the FCCR value, the better the company's profitability. In line with research (Yanti Lorenza & Alfriadi Dwi, 2021a),(Osamor et al., 2023a) And (Alma & Muchtar, 2024a), where FCCR has a positive influence on ROA and ROE.

H3a: Fixed Charge Coverage Ratio has a positive influence on ROA

H3b: Fixed Charge Coverage Ratio has a positive influence on ROE

The Effect of Degree of Financial Leverage on Company Profitability (Static Trade-Off)

The relationship between trade-offs and Debt-to-Finance (DFL) focuses on managing an optimal capital structure that can increase a company's value. Trade-offs can help companies determine how much debt to use to achieve optimal DFL without sacrificing the company's financial stability. Degree of Financial Leverage (DFL) shows the change in earnings per share as a result of changes in EBIT (Earnings Before Interest Tax). The level of financial leverage indicates the percentage change in a company's revenue compared to the percentage change in EBIT (Earnings Before Interest Tax). In trade-off theory, companies seek optimal debt levels to utilize DFL while maintaining acceptable risk. If debt is too high, it risks reducing profitability, and if it is too low, it makes it impossible to maximize profit potential. When a company increases debt, DFL also increases. A high degree of financial leverage indicates high net income after EBIT. This indicates a company's ability to pay financial obligations, which can increase net income and significantly increase the company's profits. If a company has the ability to generate high profits from debt costs, then the use of debt can increase net income compared to existing equity. This can increase Return on Equity (ROE). In line with research (Asraf & Mia Muchia Desda, 2020), where the findings show that DFL has a positive influence on ROA and ROE.

H4a: DFL has a positive influence on ROA

H4b: DFL has a positive influence on ROE

The Effect of Debt to EBITDA on Company Profitability

With a dynamic trade-off, Debt to EBITDA helps companies and investors evaluate and adjust their capital structure as market conditions and finances change. By dynamically monitoring Debt to EBITDA, companies can identify risks early. The Debt to EBITDA ratio indicates a company's ability to use available revenue to repay its debt. A high ratio indicates a company with a high debt burden. A high debt burden can reduce net income, thereby lowering ROA. This also results in a decrease in ROE, due to the lower level of net income compared to invested equity. The higher the Debt to EBITDA ratio, the lower the company's profitability, indicating the possibility of the company being unable to repay its debt or debt exceeding its profits. In line with research, (Arhinful & Radmehr, 2023a) And (Arhinful et al., 2023a), where Debt to EBITDA has a negative influence on ROA and ROE.

H5a: Debt to EBITDA has a negative influence on ROA

H5b: Debt to EBITDA has a negative influence on ROE

The Effect of Capitalization Ratio on Company Profitability

The Capitalization Ratio is a financial indicator used to evaluate the level of debt in a company's capital structure. This ratio calculates total debt and compares it to shareholder equity. This ratio provides an overview of how much debt and equity a company incorporates into its day-to-day operating capital. A high capitalization ratio indicates a high level of leverage. When the capitalization ratio increases, the interest expense on debt also increases, reducing the company's ability to generate optimal net income from its assets, resulting in a decrease in ROA. A decrease in net income can lower ROE because the net income level is lower than the tax benefits. The higher the capitalization ratio, the lower the profitability value, because the use of high external debt leads to decreased profitability. In line with research, (Arhinful & Radmehr, 2023a) & (Ghardallou, 2022), where the capitalization ratio has a negative influence on ROA and ROE.

H6a: Capitalization Ratio has a negative influence on ROA

H6b: Capitalization Ratio has a negative influence on ROE

Research Framework

Based on the discussion regarding the theoretical basis and previous research, the following is a framework of thought according to the following diagram:

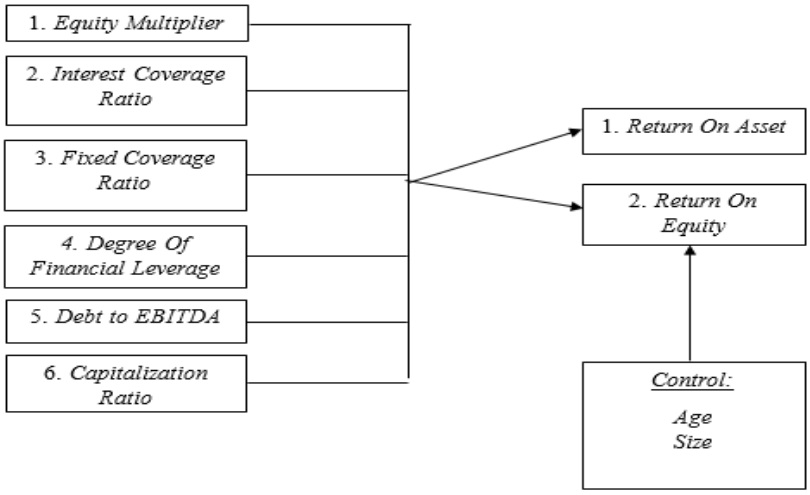

Figure 1 Framework of Thought

Source: Developed with modifications by the author, 2025

RESEARCH METHODS

Research Design

This study uses a quantitative approach with a causal research design, which aims to examine and analyze the effect of financial leverage on corporate financial profitability. This causal design was chosen because this study focuses on the causal relationship between the independent variables, which are various financial leverage indicators, and the dependent variable, which is corporate profitability.

Types and Sources of Research Data

The type of data in this research is quantitative data, secondary in nature and obtained from non-financial annual reports listed on the Indonesian Stock Exchange.

Population and Sample

The research population consists of non-financial companies listed on the Indonesia Stock Exchange (IDX) and uses financial leverage and profitability data from 2018 to 2023. The population in this study amounted to 883 companies and a sample of 68 companies. The research sample came from the Bloomberg data center of the Faculty of Economics and Business, Diponegoro University and annual reports using a purposive sampling method as can be seen from the following criteria:

1. Non-financial companies listed on the Indonesia Stock Exchange.
2. Non-financial companies that publicly attach financial reports for the observation period 2018-2023.
3. Have complete information regarding research variables in the form of financial leverage and financial profitability.

Method of collecting data

The data collected utilized pre-existing data (secondary data) observed through indirect observation and document review. Information from the observational study was not collected directly through financial reports filed with the Indonesia Stock Exchange (IDX). The literature review method gathered data by examining and studying relevant documents.

RESEARCH RESULT

The descriptive statistics table presents the characteristics of the research data, including the minimum, maximum, average, and standard deviation values of all variables used in the analysis.

Table 3.Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
Interest Coverage Ratio	408	.36	1450.00	29,055	112,273
Equity Multiplier	408	1.08	5.93	2,036	.779
FCCR	408	.44	126.25	8.4256	13,169
DFL	408	-20270.97	60418.48	179.75	3226.878
DEBIT DA	408	.01	12.34	2,550	2,247
CR	408	.01	.71	.217	.180
ROA	408	.02	33.76	6.56	5.153
ROE	408	.11	66.49	13.18	8,888
AGE	408	10.00	72.00	37.82	13,165
SIZE	408	26.83	33.73	30.02	1,587

Based on the descriptive statistics above, the number of observations in this study was 408 data from non-financial companies listed on the Indonesia Stock Exchange during the 2018-2023 period. The Interest Coverage Ratio variable has an average value of 29.06 with a relatively high standard deviation of 112.27, indicating variations in companies' ability to cover interest expenses between companies. The very high maximum value indicates that some companies have a much stronger interest payment capacity than others.

The Equity Multiplier variable shows an average value of 2.04 with a standard deviation of 0.78, indicating that the funding structure of non-financial companies is generally still dominated by moderate levels of debt. Meanwhile, the Fixed Charge Coverage Ratio has an average value of 8.43 with a fairly high level of variation, reflecting differences in companies' abilities to meet fixed cost obligations.

The Degree of Financial Leverage (DFL) shows an average value of 179.75 with a very large standard deviation of 3,226.88. This indicates extreme data dispersion and high heterogeneity in the level of financial leverage between companies, reflecting differences in financing strategies and earnings sensitivity to changes in EBIT.

The Debt to EBITDA variable has an average value of 2.55 with a standard deviation of 2.25, indicating that the company is generally able to cover its debt within a relatively reasonable timeframe based on its ability to generate operating profit. Meanwhile, the Capitalization Ratio has an average value of 0.22, indicating that the proportion of debt in the company's capital structure is relatively controlled.

In terms of profitability, the average Return on Assets (ROA) of 6.56 and Return on Equity (ROE) of 13.18 indicate that non-financial companies are generally able to generate sufficient profits from their assets and equity, although there are significant variations in profitability between companies.

For the control variables, company age (Age) had an average value of 37.82 years, reflecting that the study sample was dominated by operationally mature companies. Meanwhile, company size (Size) had an average value of 30.02, indicating that the majority of sample companies fall into the medium to large company category.

Classical Assumption Test

Normality Test

The data normality test aims to detect whether or not a group of research data is normal. If the significance value is 0.05 ($\alpha > 0.05$), then the distribution is normal. If the significance value is less than 0.05 ($\alpha < 0.05$), then the data is not normal, as presented below.

Table 4. Data Normality Test

Kolmogorov-Smirnov Test (ROA)		
		Unstandardized Residual
N		408
Normal Parametersa,b	Mean	.0000000
	Standard Deviation	.67561730
Test Statistics		.048
Monte Carlo Sig. (2-tailed)	Sig.	.275d

Kolmogorov-Smirnov Test (ROE)		
		Unstandardized Residual
N		408
Normal Parametersa,b	Mean	.0000000
	Standard Deviation	.91059626
Test Statistics		.050
Monte Carlo Sig. (2-tailed)	Sig.	.245d

Source: Research Data Test, 2025

Based on Table 4, the normality test shows that the significance value for all research variables on ROA is 0.275 and on ROE is 0.245. Both values are greater than 0.05. Therefore, it can be concluded that all variables in the study have normally distributed data.

Heteroscedasticity Test

According to Ghozali (2018), heteroscedasticity testing is conducted to determine whether there is an unequal variance between the residual variance of one observation and another. If the probability is <0.05, then the result is rejected, if the probability is >0.05, then the result is accepted or there is no heteroscedasticity.

Table 5. Heteroscedasticity Test

Model		Sig.
1	(Constant)	.428
	EM	.184
	FCCR	.629
	DFL	.595
	DEBIT DA	.947
	SIZE	.591
	CR	.613
	ICR	.062
	AGE	.053

Dependent: ROA

Model		Sig.
1	(Constant)	.405
	EM	.153
	FCCR	.277
	DFL	.365
	DEBIT DA	.785
	SIZE	.552
	CR	.063
	ICR	.073
	AGE	.358

Dependent: ROE

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The test results in the table above show that the values of the independent and control variables for both ROA and ROE have a significance level > 0.05. This means that the probability value for each variable exceeds the significance level, thus concluding that the research regression model meets the heteroscedasticity test assumptions.

Multiple Regression Analysis Results

Results of Multiple Regression Analysis Model I

Based on the Multiple Regression Analysis Model I Without Control of ROA, the following regression equation occurs:

$$ROA = 3{,}342 - 0{,}115\,EM + 0{,}00\,ICR + 0{,}135\,FCCR - 0{,}002\,DFL - 1{,}247\,DE + 1{,}609\,CR$$

Table 6. Results of Independent Regression Analysis Without Control on ROA

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	3,342	.117	.000
	EM	-.115	.088	.190
	FCCR	.135	.017	.000
	DFL	-.002	.001	.080
	CR	1,609	.116	.000
	DEBIT DA	-1.247	.030	.000
	ICR	.000	.005	.985

Results of Multiple Regression Analysis Model II

Based on the Multiple Regression Analysis Model I with Control for ROA, the following regression equation occurs:

$$ROA = 2{,}206 - 0{,}139EM + 0{,}000ICR + 0{,}146\,FCCR - 1{,}200\,DFL - 0{,}002\,DEBITDA + 1{,}445\,CR + 0{,}307\,AGE - 0{,}302\,SIZE$$

Table 7. Results of Independent Regression Analysis with Control for ROA

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	2,206	.642	.001
	EM	-.139	.087	.109
	FCCR	.146	.017	.000
	DEBIT DA	-.002	.001	.076
	CR	1,445	.125	.000
	DFL	-1,200	.031	.000
	ICR	.000	.006	.962
	AGE	.307	.118	.010
	SIZE	-.302	.079	.000

Results of Multiple Regression Analysis Model III

Based on the Multiple Regression Analysis Model I Without Control of ROE, the following regression equation occurs:

$$ROA = 1{,}841 + 1{,}907\,EM - 0{,}017\,ICR + 0{,}170\,FCCR - 0{,}003DFL - 1{,}669\,DE + 2{,}312\,CR$$

Table 8. Results of Regression Analysis of Variables Without Control on ROE

Model		Unstandardized Coefficients B	Std. Error	Sig.
1	(Constant)	1,841	.201	.000
	EM	1,907	.151	.000
	FCCR	.170	.029	.000
	DFL	-.003	.002	.068
	CR	2,312	.200	.000
	DEBIT DA	-1,669	.052	.000
	ICR	-.017	.009	.066

Results of Multiple Regression Analysis Model IV

Based on the Multiple Regression Analysis Model I with Control over ROE, the following regression equation occurs:

$$ROA = -1{,}920 + 1{,}894EM - 0{,}021\,ICR + 0{,}189\,FCCR - 0{,}003\,DFL - 1{,}586\,DEBITDA + 1{,}910\,CR - 0{,}459\,AGE + 0{,}842\,SIZE$$

Table 9. Results of Regression Analysis of Variables with Controls on ROE

Model		Unstandardized Coefficients B	Std. Error	Sig.
1	(Constant)	-1,920	1,094	.080
	EM	1,894	.148	.000
	FCCR	.189	.029	.000
	DFL	-.003	.002	.059
	CR	1,910	.212	.000
	DEBIT DA	-1,586	.053	.000
	ICR	-.021	.009	.026
	SIZE	.842	.202	.000
	AGE	-.459	.134	.001

The first regression equation shows that a constant value of 3.342 indicates that the company's ROA increased by 3.342% when all financial leverage variables are excluded. The Equity Multiplier has a negative effect on ROA with a coefficient of -0.115, meaning that every one unit increase in the Equity Multiplier decreases ROA by 0.115%. The Interest Coverage Ratio has a coefficient of 0.000, indicating no change in ROA due to the increase in the ratio. Conversely, the Fixed Charge Coverage Ratio has a positive effect with a coefficient of 0.135, while the Degree of Financial Leverage and Debt to EBITDA have negative effects of -0.002 and -1.247, respectively. The Capitalization Ratio shows the largest positive effect on ROA with a coefficient of 1.609.

In the second regression equation, by including the control variables Age and Size, the constant value was recorded at 2.206, which indicates that ROA increased by 2.206% when all independent variables were not taken into account. The Equity Multiplier still had a negative effect on ROA with a coefficient of -0.139, while the Interest Coverage Ratio again showed a coefficient of 0.000. The Fixed Charge Coverage Ratio had a positive effect with a coefficient of 0.146, while Degree of Financial Leverage and Debt to EBITDA had a negative effect of -1.200 and -0.002, respectively. The Capitalization Ratio still had a positive effect on ROA with a coefficient of 1.445. The control variable Age had a positive effect on ROA of 0.307, while Size had a negative effect of -0.302.

The third regression equation shows that a constant value of 1.841 indicates an increase in ROE of 1.841% when all financial leverage variables are excluded from the model. Equity Multiplier has a positive effect on ROE with a coefficient of 1.907, while Interest Coverage Ratio has a negative effect of -0.017. Fixed Charge Coverage Ratio also has a positive effect on ROE with a coefficient of 0.170, while Degree of Financial Leverage and Debt to EBITDA have negative effects of -0.003 and -1.669, respectively. Capitalization Ratio shows a fairly strong positive effect on ROE with a coefficient of 2.312.

In the fourth regression equation, by including control variables, a constant value of -1.920 indicates that ROE decreases by 1.920% when all independent variables are not taken into

account. Equity Multiplier still has a positive effect on ROE with a coefficient of 1.894, while Interest Coverage Ratio has a negative effect of -0.021. Fixed Charge Coverage Ratio and Capitalization Ratio each have a positive effect with coefficients of 0.189 and 1.910, respectively. Conversely, Degree of Financial Leverage and Debt to EBITDA have a negative effect of -0.003 and -0.002. The control variable Age has a negative effect on ROE with a coefficient of -0.459, while Size has a positive effect with a coefficient of 0.842.

DISCUSSION

The Effect of Equity Multiplier on Company Profitability

The results of this study indicate that hypotheses H1a and H1b are rejected, meaning that the Equity Multiplier has no significant effect on ROA and ROE. From the perspective of Static Trade-Off Theory, leverage is expected to improve profitability only up to an optimal level, where the marginal benefits of debt (tax shields) equal the marginal costs (financial distress and agency costs).

The insignificance of the Equity Multiplier on ROA suggests that, in non-financial firms, asset profitability is primarily driven by operational efficiency and asset utilization, rather than by funding structure. Although the Equity Multiplier reflects the proportion of assets financed through debt, Trade-Off Theory explains that excessive leverage beyond the optimal point may not enhance asset returns due to rising interest expenses and risk premiums.

Similarly, the lack of effect on ROE indicates that increased leverage does not automatically translate into higher shareholder returns. According to Trade-Off Theory, higher debt increases financial risk and interest obligations, which can offset potential gains from leverage. As a result, the benefits of leverage are neutralized by its associated costs, leading to no significant improvement in ROE. This finding implies that the sampled firms may already operate near or beyond their optimal capital structure (Muthohharoh, 2021).

The Effect of Interest Coverage Ratio on Company Profitability

The findings show that hypotheses H2a and H2b are rejected, indicating that the Interest Coverage Ratio (ICR) has no significant effect on ROA and ROE. Within the Trade-Off Theory framework, ICR reflects a firm's ability to service debt rather than its ability to generate profits from assets or equity.

A high ICR signals that interest obligations can be comfortably met, thereby reducing the probability of financial distress. However, Trade-Off Theory suggests that once financial distress risk is controlled, further improvements in debt-servicing capacity do not necessarily enhance profitability. As long as operating profits sufficiently cover interest expenses, variations in ICR do not materially affect asset efficiency or shareholder returns.

Therefore, the insignificant relationship implies that ICR functions more as a risk mitigation indicator than as a profitability driver. This result supports prior studies suggesting that debt-servicing capability alone does not directly translate into higher ROA or ROE when firms have already achieved stable financial conditions (Nurendra & Muchtar, 2020). This test is in line with research (Lestari, 2021b).

The Effect of Fixed Charge Coverage Ratio on Company Profitability

The results indicate that hypotheses H3a and H3b are accepted, demonstrating that the Fixed Charge Coverage Ratio (FCCR) has a positive effect on both ROA and ROE. From the perspective of Static Trade-Off Theory, FCCR reflects a firm's ability to balance the benefits of debt usage with the costs of fixed financial obligations.

A high FCCR indicates that operating income is sufficient to cover fixed charges such as interest and lease payments, thereby reducing financial distress costs. Trade-Off Theory explains that when firms successfully manage fixed obligations, they can enjoy the benefits of leverage—such as tax shields—without incurring excessive financial risk.

This condition allows firms to allocate more operating profits toward productive assets and shareholder returns, resulting in higher ROA and ROE. The findings suggest that firms with strong FCCR operate closer to their optimal capital structure, where leverage enhances rather than erodes profitability. These results are consistent with prior empirical evidence (Alma & Muchtar, 2024b; Osamor et al., 2023b; Yanti Lorenza & Alfriadi Dwi, 2021b).

The Influence of Degree of Financial Leverage on Company Profitability

The study finds that hypotheses H4a and H4b are rejected, indicating that the Degree of Financial Leverage (DFL) has no significant effect on ROA and ROE. In the context of Trade-Off Theory, DFL captures earnings sensitivity to changes in operating income rather than the firm's efficiency in utilizing assets or generating shareholder returns.

The insignificance of DFL on ROA suggests that asset profitability is determined primarily by operational performance rather than by fluctuations in leverage-induced earnings sensitivity. Trade-Off Theory implies that unless additional debt leads to productive investment and higher operating income, increased leverage will not improve asset returns.

Similarly, the absence of an effect on ROE indicates that higher financial leverage does not necessarily benefit shareholders when interest expenses and financial risk rise proportionally. According to Trade-Off Theory, leverage enhances ROE only when firms remain below the optimal debt level. Beyond that point, increased financial risk and debt costs offset potential gains, resulting in no observable improvement in shareholder profitability (Yang et al., 2018).

The Effect of Debt to EBITDA on Company Profitability

The results show that hypotheses H5a and H5b are accepted, indicating that Debt to EBITDA has a negative effect on ROA and ROE. From a Dynamic Trade-Off Theory perspective, Debt to EBITDA reflects a firm's long-term debt sustainability and its ability to adjust capital structure in response to changing financial conditions.

A high Debt to EBITDA ratio signals excessive leverage relative to earnings capacity, increasing financial distress costs and limiting financial flexibility. Trade-Off Theory predicts that when debt exceeds the firm's optimal threshold, the costs of leverage dominate its benefits, leading to declining profitability.

Consequently, high debt burdens reduce net income available for both asset utilization and equity holders, resulting in lower ROA and ROE. This finding supports prior studies emphasizing the adverse effects of excessive leverage on firm performance (Arhinful et al., 2023b; Arhinful & Radmehr, 2023b)

The Effect of Capitalization Ratio on Company Profitability

The results indicate that hypotheses H6a and H6b are rejected, as the Capitalization Ratio is found to have a positive effect on ROA and ROE. From the Trade-Off Theory standpoint, this finding suggests that firms are operating below their optimal leverage level, allowing them to benefit from debt-related tax advantages.

An increase in the Capitalization Ratio implies greater reliance on debt financing, which provides tax shields by reducing taxable income through interest expenses. Trade-Off Theory explains that when financial distress costs remain manageable, these tax benefits can enhance net income and overall profitability.

Thus, the positive effect on ROA and ROE indicates that debt is effectively utilized to improve firm performance without triggering excessive risk. This result aligns with empirical evidence suggesting that moderate leverage can enhance profitability when firms maintain optimal capital structure levels (Alma & Muchtar, 2024b; Dey et al., 2018b; Syed, 2018b)

CONCLUSION

This study aims to analyze and reveal the effect of financial leverage on financial profitability. This study used a sample of public companies listed on the Indonesia Stock Exchange for the observation period 2018-2023. Based on the results of the tests conducted, the following research findings were obtained:

1. Equity Multiplier has no influence on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.
2. Interest Coverage ratio has no influence on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.
3. Fixed Charge Coverage ratio has a positive influence on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.
4. Degree of Financial Leverage has no influence on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.
5. Debt to EBITDA has a negative effect on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.
6. Capitalization Ratio has a positive effect on ROA and ROE of non-financial companies listed on the Indonesia Stock Exchange.

There are several limitations in this study, namely:

1. There are still several Financial Leverage variables that do not affect profitability.
2. The research sample was deliberately only taken from companies listed on the Indonesian Stock Exchange.

The use of debt to finance a company's activities can impact its financial performance. However, excessive use and reliance on debt can result in an inability to pay interest and principal. Companies are expected to manage debt effectively. Companies can also consider internal funding sources first, followed by debt financing, and finally, debt. The research agenda and suggestions that can be given for further research are: Adding other Financial Leverage variables and Researching Companies other than those listed on the Indonesian Stock Exchange, for example

Companies listed on Stock Exchanges in ASEAN Countries.

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