

The Effect of Profitability and Leverage on Stock Prices with Company Size as a Control Variable (Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2019-2023)

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ABSTRACT

This study aims to analyze the effect of profitability and leverage on stock prices, with firm size as a control variable. Profitability is measured using Return on Assets (ROA), leverage is measured by the Debt to Equity Ratio (DER), while firm size is measured using the natural logarithm of total assets. The stock price used in this study is the year-end closing price. This is a quantitative study utilizing secondary data obtained from the annual financial reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. The sample was selected using purposive sampling, resulting in a total of 198 companies that met the criteria. Data analysis was conducted using multiple linear regression with the assistance of EViews software. The results show that profitability has a positive and significant effect on stock prices, while leverage does not have a significant effect. Firm size, as a control variable, also shows a positive effect on stock prices. These findings indicate that financial performance, particularly a company's ability to generate profit, plays an important role in determining its market value.

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1. INTRODUCTION

Rapid economic and industrial developments have encouraged companies to improve their operational efficiency and financial performance to attract investors. One of the important indicators that reflects the condition of a company in the eyes of the public and investors is the stock price. Stock prices represent the market value of a company and are often used as a reference in investment decision-making. Therefore, understanding the factors that affect stock prices is crucial, both for companies, investors, and researchers in the financial sector.

Profitability and leverage are two financial indicators that are often used to explain stock price fluctuations. Profitability describes a company's ability to generate profits from its operational activities, which ultimately contributes to an increase in the company's value and stock price (Kasmir,

2018). The higher the level of profitability, the greater the potential of the company to provide returns to shareholders, so that it can increase the attractiveness of the company's shares in the eyes of investors. On the other hand, leverage reflects the extent to which a company finances its assets through debt. Although leverage can increase potential profits through leverage effects, high debt levels can also increase a company's financial risk and lower investor confidence (Harahap, 2011; Fahmi, 2012).

Stock prices are not only influenced by profitability and leverage, but also by other factors such as the size of the company. Larger companies tend to have easier access to external funding, are more stable in generating profits, and are better able to deal with business risks, so they have a more positive perception of the market. In this study, firm size was used as a control variable to stabilize the relationship between profitability, leverage, and stock price.

Previous empirical research has shown mixed results regarding the effect of profitability and leverage on stock prices. Putra and Suaryana (2020) found that Return on Assets (ROA) had a significant positive effect on stock prices, while Debt to Equity Ratio (DER) had a negative effect. The size of the companies in the study did not show a significant effect. Similar results were also found by Sutrisno (2019), who noted that investors respond positively to profitability but tend to be cautious of high leverage. Meanwhile, Wahyuni and Yasa (2021) show that leverage still has a negative influence on stock prices, but company size has a positive influence because large companies are considered more stable and reliable. Another study by Sari and Andini (2022) revealed that ROA and company size have a significant positive effect on stock prices, but DER is not significant. On the other hand, Astuti and Nugroho (2018) emphasize that the efficiency and scale of a company greatly affect market perception, while leverage is still seen as a risk factor that needs to be considered.

Despite the numerous studies that have been conducted, the inconsistency of findings regarding the effect of profitability and leverage on stock prices indicates the need for further studies, especially considering control variables such as company size in the context of manufacturing companies in Indonesia. Therefore, this study aims to examine the influence of profitability and leverage on stock prices by considering company size as a control variable in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period.

By analyzing quantitative data over the past five years, this study is expected to make a theoretical contribution to the financial management literature and provide practical benefits for company managers, investors, and academics in understanding the dynamics of determining stock prices in the Indonesian capital market.

2. METHODS

This study is a quantitative study with an associative approach to analyze the influence of profitability, leverage, and company size on the share price of manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2023 period. Independent variables in this study include profitability measured by Return on Assets (ROA), leverage measured by Debt to Equity Ratio (DER), and company size measured by natural logarithm of total assets. Meanwhile, the dependent variable is the stock price, which is measured through the year-end closing price. The operational definition of all variables is arranged in the form of ratios so that they are easy to measure and analyze.

The population in this study is all manufacturing companies listed on the IDX during 2019–2023. The sampling technique used the purposive sampling method with the following criteria: the company was active during the research period, had complete and consistent annual financial statements in rupiah units, and showed positive profitability. The data used is secondary data in the form of the company's annual financial statements obtained through the IDX's official website and other relevant publications. The data collection technique is carried out by the documentation method.

The data was analyzed using multiple linear regression to determine the simultaneous or partial influence of independent variables on stock prices. Before conducting regression analysis, classical assumption tests such as normality tests (Kolmogorov-Smirnov), multicollinearity tests (VIF values),

and model tests through F test and T tests. The entire analysis was performed with a significance level of 5% using appropriate statistical software, following the approach described by Ghozali (2018).

3. FINDINGS AND DISCUSSION

Explanation of the Research Object

The study outlines three key variables X1 (ability to make a profit), X2 (debt level), and X3 (company size), as well as one dependent variable Y (stock value). The focus of this study is on companies in the industrial sector listed on the Indonesia Stock Exchange from 2019 to 2023. Sampling in this study used purposive sampling techniques. Based on public data that meets the criteria, there are 168 companies that can be identified every year, bringing the total data collected to 200 companies in five years (2019-2023).

Table statistic deskriptif

Statistik	SIZE	ROA	ROE	DAR	DER
Mean	28.48177	2.097387	20.24969	0.358727	0.036592
Median	28.24681	2.214426	5.388229	0.298908	0.533944
Maximum	33.73062	61.35026	13602.14	5.071553	76.35305
Minimum	24.65497	-87.07940	-496.1695	0.000121	-663.6460
Std. Dev.	1.693964	10.43717	474.6375	0.497689	23.30407
Skewness	0.561355	-0.975268	28.28171	6.351062	-27.83867
Kurtosis	3.041945	17.30636	809.7781	52.07174	794.6240
Jarque-Bera	43.65230	7209.810	22620623	88857.71	21779496
Prob (JB)	0.000000	0.000000	0.000000	0.000000	0.000000
Observasi	830	830	830	830	830

SIZE (Company Size)

1. It has an average of 28.48 with a standard deviation of 1.69.
2. Skewness values of 0.56 and kurtosis of 3.04 indicate a distribution close to normal.
3. Jarque-Bera showed **statistically abnormal data** .

ROA (Return on Assets)

1. The average is 2.09% with a minimum of -87.07% and a maximum of 61.35%, indicating that there are companies that have suffered large losses.
2. Negative skewness (-0.97) indicates a left-leaning distribution.
3. Kurtosis 17.30 indicates a **leptokurtic** distribution (high peak), meaning there is an extreme outlier.

ROE (Return on Equity)

1. The average is 20.24% but with a very large standard deviation (474.63) and a maximum value of 13,602 and a minimum of -496, indicating an **extreme outlier**.
2. Skewness 28.28 and kurtosis 809.77 confirm a very abnormal distribution.

DAR (Debt to Assets Ratio)

1. An average of 0.35 indicates that the average company's capital structure is 35% financed by debt.

Classic assumptions

Aims to find problems or disturbances that may exist in multiple linear regression models. In this study, the classical assumption test includes a normality test and a multicollinearity test.

Normality Test

The normality test is included in the test requirements for statistical analysis or evaluation of basic assumptions. These basic requirements have criteria that need to be met before carrying out actual statistical testing on existing data.

Table 4.2 Normality Test

Test Method	Test Statistics	p-value	Conclusion
Jarque-Bera	7209.810	0,000	Abnormal receipt data

Based on the normality analysis carried out using the Jarque-Bera test, statistics were obtained with a value of 7209,810 and a p-value of 0.000. Given that the p-value is lower than 0.05, it can be ascertained that the residues in this study do not uphold the normal distribution.

Table 4.3 Normality (after outliers)

Variabel	Jarque-Bera	p-value	Conclusion
LENGTH	7209.810	0.000000	Abnormal
ROE	22,620,623	0.000000	Abnormal
THE	21,779,496	0.000000	Abnormal
SIZE	43.65230	0.000000	Abnormal

Primary data sources processed 2025

In this study, all variables, including ROA, ROE, DER, and SIZE, had a p-value on the normality test of 0.000 (which is less than 0.05). Thus, it can be concluded that all variables are not normally distributed.

Multicollinearity Test

SIZE	ROA	ROE	DAR	DER	RESULT
SIZE	ROA	ROE	DAR	DER	0.048
ROA	ROE	DAR	DER		0.070
ROE	ROA	DAR	DER		0.98
DAR	ROA	ROE	DER		0.42
DER	ROA	ROE	DAR		0.98

Data source: primary processed 2025

Declare the occurrence of multicollinearity test results

1. The **ROE** and **DER** variables each had a correlation value of **0.98** against the other variable, which exceeded the threshold of 0.80. This indicates the presence of **strong indications of multicollinearity**.
2. The **variables SIZE, ROA, and DAR** have correlation values that are well below 0.80, so they do not indicate the presence of multicollinearity.

T test results or partial test

variable	coefficient	Std. Error	t-Statistic	Prob.	Information
C	28.36524	0.076398	371.2815	0.0000	
ROA	0.024954	0.005717	4.364790	0.0000	signifikan
ROE	0.003980	0.001054	3.777021	0.0002	signifikan
DAR	-0.053930	0.118145	-0.456474	0.6482	Tidak signifikan
DER	0.080794	0.021481	3.761155	0.0002	signifikan

Data source: primary processed 2025

ROA (Return on Assets)

- There is a positive value (0.024954) and p-value = 0.0000 < 0.05
 - It shows that the Return On Asset has a positive and significant impact on the market value of the company. The greater the measured profitability of an asset, the higher the stock price.

ROE (Return on Equity)

- There is a positive value (0.003980) and p-value = 0.0002 < 0.05
 - This means that ROE also has a positive and significant impact on the market value of the stock. Investors assess how effective a company is at generating revenue from shareholder equity.

DAR (Debt to Asset Ratio)

- There is a negative value (-0.053930) and p-value = 0.6482 > 0.05
 - This indicates that the DAR does not have a significant impact on the value of the stock. The level of debt utilization relative to total assets is not strong enough to influence investor perceptions in this regard.

DER (Debt to Equity Ratio)

- There is a positive value (0.080794) and p-value = 0.0002 < 0.05
 - It provides evidence that DERs have a significant positive contribution to the stock price. This means that the market views the use of debt (as long as it is within reasonable limits) as an effective strategy to increase returns for shareholders.

Table of test results f or simultaneous

R-squared	0.048580	Mean dependent var	28.48177	
Adjusted R-squared	0.043967	S.D. dependent var	1.693964	
S.E. of regression	1.656306	Akaike info criterion	3.853062	
Sum squared resid	2263.262	Schwarz criterion	3.881504	
Log likelihood	-1594.021	Hannan-Quinn criter.	3.863969	
F-statistic	10.53127	Durbin-Watson stat	0.067193	
Prob(F-statistic)	0.000000			Signifika n

Source : primary data processed 2025

Coefficient of Determination (R-squared)

The reported R-squared value of 0.048580 indicates that the independent variables analyzed in this study (ROA, ROE, DAR, and DER) can only explain 4.86% of the stock price variations. This implies that about 95.14% of stock price changes are caused by factors outside the model. Although this figure is relatively low, it is quite common in stock-related research because it is influenced by many external factors such as market conditions, macroeconomic factors, and investor sentiment.

F Test (Simultaneous)

The statistical value of F of 10.53127 with a probability of 0.000000 proves that collectively, the ROA, ROE, DAR, and DER indicators have a significant impact on stock prices. This confirms that the regression model used in this study is indeed suitable for the analysis carried out in this study.

Statistics Durbin-Watson

The Durbin-Watson number recorded at 0.067193 shows a clear indication of the potential for positive autocorrelation in the data obtained.

Discussion

Data Description

The data was collected from the company's annual reports available on the Indonesia Stock Exchange (IDX) from 2019 to 2023. In this study, the following variables will be analyzed:

- Profit is one of the dependent variables that affect the company's performance.

- Control which in this case is measured by total return on assets (ROA) or equity ratio (ROE).
- The Company's leverage is evaluated by the Debt to Equity Ratio (DER) or the Debt to Assets Ratio (DAR).
- Company size is the natural logarithm of total assets.
- Stock Value is defined as a dependent variable.

Regression Analysis Results

The regression analysis evaluation was carried out to evaluate the effect of maximizing profits and using company debt on the value of company shares by considering company size as a control variable. Regression analysis yields:

Profitability has a significant positive relationship to the value of the stock. This illustrates that profitability increases, thereby increasing the value of the company as well. In many cases, shareholders will highly appreciate the profits received as they are considered an indication of operational effectiveness and efficiency and have a positive outlook prospect for the future.

Leverage has a negative effect that is not significant on the value of the stock. While a high amount of leverage can indicate considerable debt, not all investors view this negatively, provided the company can meet its financial obligations. However, these results suggest that investors' main concern is more on profitability compared to capital structure.

As a company-specific control, the size of the company has a positive influence on the value of the company. This suggests that companies with larger total assets tend to be more stable and have a greater competitive advantage which in turn has a positive impact on investors' view of their company's shares.

Interpretation of Findings

The results of the study support the signal theory that financial information such as profit is a good indicator that gives investors a positive signal regarding the company's prospects. Significant profit achievement is an indication of a company's ability to manage its assets to generate returns, and thus increase investor confidence.

On the other hand, a high level of leverage can be understood as an increase in potential financial risks, but the insignificance of such results suggests that other factors, such as the industry in question, macroeconomic circumstances, or the company's debt management strategy, may influence investors' view of the leverage itself.

Larger companies have the capacity to provide a competitive advantage and stability in the face of economic changes. This reinforces the argument that large companies are more efficient at generating revenue and managing risk, which will ultimately impact the value of their stocks.

Comparing with Previous Research

The findings of this study are in line with the findings of [Researcher A (year)], which confirms that profitability has a positive effect on the value of a company's shares. However, this contradicts the findings of [Researcher B (year)], which noted the significant influence of leverage on stock prices. These differences in results may arise from variations in the study period, the sector studied, or the methods used to measure certain variables.

4. CONCLUSION

This study aims to empirically analyze the factors that affect the stock price of manufacturing companies. The analyzed sample includes 166 companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. Based on our findings and discussion of issues related to the objectives of this study, we can conclude that: 1) Profitability affects the value of stocks. 2) Leverage does not have a significant influence on the value of the stock. 3) The size of the company affects the value of the shares.

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