

THE EFFECT OF STOCK PRICES AND MARKET CAPITALIZATION ON STOCK RETURNS OF MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Qori Fadla Ajmilia ¹, Nisrul Irawati ², Syahyunan ³

^{1,2,3} Management Science, Indonesia

Abstract

This study aims to analyze the effect of stock prices and market capitalization on stock returns of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022-2023 period. The research sample consisted of 78 manufacturing companies selected using the purposive sampling method. The data analysis technique used multiple linear regression with SPSS version 25. The results of the study showed that: (1) Stock prices have a significant positive effect on stock returns with a regression coefficient of 0.458 and a significance value of 0.003; (2) Market capitalization has a significant positive effect on stock returns with a regression coefficient of 0.376 and a significance value of 0.012; (3) Stock prices and market capitalization simultaneously have a significant effect on stock returns with an F value of 18.623 and a significance value of 0.000 and a coefficient of determination (R^2) of 0.349. These findings indicate that investors need to pay attention to stock price and market capitalization factors as important indicators in making investment decisions to maximize stock returns in manufacturing companies on the IDX.

Keywords: Stock Price, Market Capitalization, Stock Return, Manufacturing Companies, Indonesia Stock Exchange

Introduction

The capital market plays a strategic role in Indonesia's economy as a source of funding for companies and an investment avenue for the public (Kamilah & Zh, 2022). The Indonesia Stock Exchange (IDX), as the organizer of the capital market, continues to show significant development, including in the manufacturing sector, which is one of the main pillars of the national economy. In the first quarter of 2023, the manufacturing sector in Indonesia recorded a growth of 4.8% (year-on-year), higher than the national economic growth rate of 4.5% (BPS, 2023). In investing in the capital market, investors have the primary goal of obtaining optimal stock returns. Stock returns are the results obtained from stock investments in the form of capital gains (the difference between the selling and buying price) and dividends (Tandelilin, 2021). However, to achieve optimal returns, investors need to consider various fundamental and technical factors that influence stock performance. Stock prices are important indicators that reflect a company's value and investors' expectations of the company's future prospects. In line with signaling theory, changes in stock prices can provide signals regarding the company's condition and prospects (Brigham & Houston, 2022). A recent study by Rahmawati & Suryani (2023) indicates that stock prices have a positive correlation with stock returns in companies listed on the IDX.

In addition to stock prices, market capitalization, which represents the size of a company, is also an important consideration for investors. Companies with large market capitalization are generally considered more stable and have lower risk. This concept aligns with the size effect theory proposed by Fama & French (2022), where a company's size can influence stock returns. Previous research on the influence of stock prices and market capitalization on stock returns has been conducted, but with varying results. For

example, Wijaya (2023) found that stock prices have a positive effect on stock returns, while Santoso et al. (2022) found a different result where stock prices did not have a significant effect. In the aspect of market capitalization, Hartono & Sulistiawan (2023) showed a positive effect on stock returns, while Pratama (2022) did not find any significant effect. The inconsistency of previous research findings and the changing dynamics of Indonesia's capital market, especially post-COVID-19 and amidst global economic uncertainties, provides an important background for conducting this research. Additionally, focusing on the manufacturing sector is relevant given its significant contribution to the national economy and the large number of issuers listed on the IDX.

Based on the above, this study aims to analyze: (1) the effect of stock prices on stock returns in manufacturing companies listed on the IDX, (2) the effect of market capitalization on stock returns in manufacturing companies listed on the IDX, and (3) the simultaneous effect of stock prices and market capitalization on stock returns in manufacturing companies listed on the IDX.

Methods

Research Design

This study employs a quantitative approach with an explanatory survey design to test the hypotheses regarding the influence of customer experience and brand image on customer loyalty. The unit of analysis in this research is individual customers of the Fore Coffee Citraland Helvetia brand.

Population and Sample

The population of this study consists of all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022-2023 period. The sampling technique used is purposive sampling with the following criteria :

1. Manufacturing companies that were consistently listed on the IDX during the 2022-2023 period.
2. Companies that published complete financial statements during the study period
3. Companies that did not perform stock splits or reverse stock splits during the study period
4. Companies that have complete data on the research variables

Based on these criteria, a sample of 78 manufacturing companies was obtained.

Method of collecting data

The data used in this study are secondary data obtained from the following sources:

1. Financial statements of manufacturing companies published through the IDX website (www.idx.co.id).
2. Stock price and market capitalization data from Investing.com.
3. Statistical data from the Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX)

Descriptive Statistical Analysis

Descriptive statistical analysis includes the calculation of the minimum value, maximum value, mean, and standard deviation for each research variable.

Classical Assumption Test

1. Normality Test: Conducted using the Kolmogorov-Smirnov test and analysis of the normal probability plot.

2. Multicollinearity Test: Assessed based on the Variance Inflation Factor (VIF) and tolerance values.
3. Heteroscedasticity Test: Conducted using the Glejser test and scatterplot analysis.
4. Autocorrelation Test: Conducted using the Durbin-Watson test.

Multiple Linear Regression Analysis

The multiple linear regression model used in this study is :

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Where :

- Y = Stock return
- α = Constant
- β_1, β_2 = Regression coefficients
- X_1 = Stock price
- X_2 = Market capitalization
- e = Error term

Hypothesis Testing

1. t-test (Partial): To examine the effect of each independent variable on the dependent variable.
2. F-test (Simultaneous): To examine the effect of the independent variables collectively on the dependent variable.
3. Coefficient of Determination Test (R^2): To measure how well the model explains the variation in the dependent variable.

Descriptive Statistical Analysis

The results of the descriptive statistical analysis for the research variables are presented in Table 1

Table 1. Results of Descriptive Statistical Analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Stock Return (Y)	78	-0,452	0,876	0,147	0,258
Ln Stock Price (X_1)	78	5,298	11,435	7,862	1,523
Ln Market Capitalization (X_2)	78	25,347	33,854	29,128	2,012
Valid N (listwise)	78				

Based on Table 1, it can be seen that the average stock return of manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2023 period was 0.147 or 14.7%. The minimum stock return was -0.452 or -45.2%, while the maximum was 0.876 or 87.6%. The standard deviation of stock returns was 0.258, indicating a relatively high variation in stock returns among companies. For the stock price variable, the minimum value of the natural logarithm (Ln) of stock prices was 5.298 (equivalent to approximately IDR 200 per share) and the maximum was 11.435 (equivalent to approximately IDR 92,000 per share). The average Ln stock price was 7.862 with a standard deviation of 1.523. Regarding the market capitalization variable, the minimum Ln market capitalization was 25.347 (approximately IDR 101 billion) and the maximum was 33.854 (approximately IDR 518 trillion). The average Ln market capitalization was 29.128 with a standard deviation of 2.012.

Classical Assumption Test

Normality Test

Table 2. Results of the Kolmogorov-Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test	
N	78
Asymp. Sig. (2-tailed)	0,172

Based on Table 2, the significance value of the Kolmogorov-Smirnov test is 0.172 > 0.05, so it can be concluded that the residual data is normally distributed.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Variabel	Tolerance	VIF
Ln Stock Price (X ₁)	0,643	1,555
Ln Market Capitalization (X ₂)	0,643	1,555

Based on Table 3, the tolerance values for the stock price and market capitalization variables are 0.643 > 0.1 and the VIF value is 1.555 < 10, so it can be concluded that there is no multicollinearity between the independent variables.

Heteroscedasticity Test

Table 4. Glejser Test Results

Variabel	Sig.
Ln Stock Price (X ₁)	0,234
Ln Market Capitalization (X ₂)	0,487

Based on Table 4, the significance value of the Glejser test for the stock price variable is 0.234 > 0.05 and for the market capitalization variable is 0.487 > 0.05, so it can be concluded that there is no heteroscedasticity.

Autocorrelation Test

Table 5. Autocorrelation Test Results

Model	Durbin-Watson
1	1,872

Based on Table 5, the Durbin-Watson value of 1.872 is between d_u (1.688) and $4-d_u$ (2.312), so it can be concluded that there is no autocorrelation.

Multiple Linear Regression Analysis

Table 6. Results of Multiple Linear Regression Analysis

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	-2,415	0,577		- 4,186
Ln Stock Price (X ₁)	0,077	0,025	0,458	3,122
Ln Stock Price (X ₂)	0,048	0,019	0,376	2,567

Based on Table 6, the multiple linear regression equation is obtained as follows:

$$Y = -2.415 + 0.077X_1 + 0.048X_2$$

Interpretation of the equation :

1. The constant value of -2.415 indicates that if stock price and market capitalization are both zero, the stock return would decrease by 2.415.
2. The regression coefficient for stock price (X₁) of 0.077 indicates that for every 1-unit increase in the natural logarithm (Ln) of the stock price, the stock return will increase by 0.077, assuming other variables remain constant.
3. The regression coefficient for market capitalization (X₂) of 0.048 indicates that for every 1-unit increase in the Ln of market capitalization, the stock return will increase by 0.048, assuming other variables remain constant.

Hypothesis Testing

t-Test (Partial)

Based on Table 6, the t-test results show that :

1. The stock price variable (X₁) has a t-value of 3.122 with a significance level of $0.003 < 0.05$, thus H₁ is accepted. This indicates that stock price has a significant positive effect on stock return.

2. The market capitalization variable (X_2) has a t-value of 2.567 with a significance level of $0.012 < 0.05$, thus H_2 is accepted. This indicates that market capitalization has a significant positive effect on stock return.

F-Test (Simultaneous)

Table 7. F-Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1,823	2	0,912	18,623	0,000
Residual	3,403	75	0,045		
Total	5,226	77			

Based on Table 7, the F-value is 18.623 with a significance level of $0.000 < 0.05$, thus H_3 is accepted. This indicates that stock price and market capitalization simultaneously have a significant effect on stock return.

Coefficient of Determination Test (R^2)

Table 8. Coefficient of Determination Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,591	0,349	0,332	0,212

Based on Table 8, the coefficient of determination (R^2) value is 0.349 or 34.9%. This indicates that 34.9% of the variation in stock return can be explained by stock price and market capitalization, while the remaining 65.1% is explained by other variables not examined in this study.

Discussion

The Effect of Stock Price on Stock Return

The results of the study show that stock price has a significant positive effect on the stock returns of manufacturing companies listed on the Indonesia Stock Exchange (IDX). This is evidenced by the stock price regression coefficient of 0.077 and a significance value of $0.003 < 0.05$. These results support the proposed hypothesis (H_1) and are consistent with the findings of Wijaya (2023) and Rahmawati & Suryani (2023), who also found a positive influence of stock price on stock return. This positive influence can be explained through signaling theory, where an increase in stock price provides a positive signal about the company's prospects, thereby boosting investor confidence and encouraging higher stock returns. A high stock price also reflects favorable market expectations regarding the company's future performance, which can drive an increase in stock returns. In the context of manufacturing companies in Indonesia, stock price serves

as an important indicator for investors in assessing company performance. Manufacturing companies with high stock prices generally have strong fundamentals, good profitability levels, and promising growth prospects. This can increase investor interest in purchasing the company's shares, ultimately driving up both stock prices and returns.

The Effect of Market Capitalization on Stock Return

This positive influence can be explained through the size effect theory, which states that companies with large market capitalizations are generally considered more stable, have lower risk, and are capable of delivering more consistent returns. Companies with large market capitalizations also tend to have better access to capital markets, stronger competitive advantages, and a greater ability to withstand uncertain economic conditions. In the context of manufacturing companies in Indonesia, market capitalization becomes one of the main considerations for investors when making investment decisions. Manufacturing companies with large market capitalizations generally possess strong fundamentals, dominant market positions, and sufficient financial capabilities. This can enhance investor confidence in the company and drive higher stock returns.

The Simultaneous Effect of Stock Price and Market Capitalization on Stock Return

The study results show that stock price and market capitalization simultaneously have a significant effect on the stock returns of manufacturing companies listed on the IDX. This is evidenced by an F-value of 18.623 and a significance value of $0.000 < 0.05$. These results support the proposed hypothesis (H_3) and are consistent with the findings of Wulandari et al. (2023), who also found a simultaneous influence of stock price and market capitalization on stock return.

This simultaneous effect can be explained through the Efficient Market Hypothesis, where both factors reflect the available information about a company and can influence investment decisions. Stock price and market capitalization are interrelated, as market capitalization is the result of multiplying the stock price by the number of shares outstanding. Both are important indicators for investors in assessing a company's performance and prospects. The coefficient of determination (R^2) of 0.349 indicates that 34.9% of the variation in stock return can be explained by stock price and market capitalization, while the remaining 65.1% is explained by other variables not examined in this study. This finding suggests that although stock price and market capitalization have significant effects, there are still other factors that need to be considered when predicting stock returns.

Conclusion

Based on the research findings and discussion, it can be concluded that :

1. Stock price has a significant positive effect on the stock returns of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2023 period. This indicates that the higher the stock price, the higher the stock return generated.
2. Brand Market capitalization has a significant positive effect on the stock returns of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2023 period. This indicates that the larger the company's market capitalization, the higher the stock return generated.
3. Stock price and market capitalization simultaneously have a significant effect on the stock returns of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2023 period. These two variables can explain 34.9% of the variation in stock returns, while the remaining 65.1% is explained by other variables not examined in this study.

Bibliography

- BPS. (2023). Berita Resmi Statistik: Pertumbuhan Ekonomi Indonesia Triwulan I-2023. Jakarta: Badan Pusat Statistik
- Brigham, E. F., & Houston, J. F. (2022). *Fundamentals of Financial Management* (16th ed.). Boston: Cengage Learning
- Hartono, P., & Sulistiawan, D. (2023). Analisis Pengaruh Kapitalisasi Pasar dan Volume Perdagangan terhadap Return Saham di Bursa Efek Indonesia. *Jurnal Manajemen dan Keuangan*, 12(1), 45-62
- Kamilah, A. N., & Zh, M. H. R. (2022). the Management of Study Time and Part-Time Work for Sharia Economics Students Uin Sunan Ampel Surabaya. *Proceeding IConIGC: International Conference on Islamic and Global Civilization Faculty of Islamic Studies – University of Islam Malang THE*, 52–61.
- Fama, E. F., & French, K. R. (2022). The Five-Factor Asset Pricing Model: A Comprehensive Review. *Journal of Finance*, 77(4), 1991-2038
- Pratama, I. G. (2022). Pengaruh Kapitalisasi Pasar dan Likuiditas terhadap Return Saham Perusahaan LQ45 di Bursa Efek Indonesia. *Jurnal Riset Akuntansi dan Keuangan*, 10(2), 215-228
- Rahmawati, S., & Suryani, A. W. (2023). The Impact of Stock Price and Trading Volume on Stock Returns: Evidence from Manufacturing Companies in Indonesia. *Asian Journal of Economics, Business and Accounting*, 22(4), 78-95
- Santoso, A., Hartono, B., & Pradana, M. (2022). Analisis Pengaruh Harga Saham dan Volume Perdagangan terhadap Return Saham pada Perusahaan Indeks LQ45. *Jurnal Ekonomi dan Manajemen*, 18(2), 156-172
- Tandelilin, E. (2021). *Pasar Modal: Manajemen Portofolio dan Investasi* (2nd ed.). Yogyakarta: Kanisius.
- Wijaya, R. (2023). Pengaruh Harga Saham, Volume Perdagangan, dan Nilai Tukar terhadap Return Saham. *Jurnal Ilmiah Manajemen dan Bisnis*, 24(1), 67-82