

The impact of profitability on stock prices: The moderating role of firm size in publicly listed companies

Aswin Sauwamah*; Vivin Gotama Tie; Imang Dapit Pamungkas

Accounting, Universitas Dian Nuswantoro, Semarang

*Corresponding author: aswiinsauwamah27@gmail.com

Abstract

This research aims to analyze the effect of profitability on stock prices with firm size as a moderating variable. The population in this study consists of manufacturing companies in the food and beverage sector listed on the Indonesia Stock Exchange. The sample companies during the years 2021-2023 are 78 companies that meet the criteria determined through purposive sampling method. The research data was analyzed using moderation regression analysis based on data processing results with SPSS Version 25. The research results show that profitability affects stock prices and firm size does not moderate the effect of profitability on stock prices.

Keywords: Stock Prices, Profitability, Firm Size

INTRODUCTION

The rise and fall of stock prices in capital markets have become an intriguing area of research, as they reflect fluctuations in company value. Stock price movements are influenced by numerous internal and external factors, creating shifts in stock supply and demand, which in turn impact stock price volatility (Savira *et al.*, 2020). Companies are compelled to enhance performance to remain competitive, requiring effective strategies for sustaining their competitive edge (Krismandari dan Amanah, 2021). For investors, company profitability is a critical indicator, often assessed through profitability ratios such as Return on Assets (ROA), which measures the company's ability to generate profit relative to its assets (Novianti dan Hakim, 2019). For example, PT. Wilmar Cahaya Indonesia Tbk (CEKA) experienced positive growth of 11.2% and 12.84% in 2021 and 2022, respectively, but saw a decline of 8.11% in 2023. Similarly, PT. Wahana Interfood Nusantara Tbk (COCO) and PT. Delta Djakarta Tbk (DLTA) showed fluctuating growth patterns across the same years, highlighting the dynamic impact of various factors on profitability (IDX, 2021).

Stock price fluctuations are driven by both internal factors, such as operational performance and management decisions, and external influences, including economic conditions, government policies, and inflation (Fadillah & Budiman, 2020). While companies cannot control external factors, they can focus on strengthening internal performance to maintain or increase stock prices. For investors, profitability and effective use of assets are key in forecasting returns on investment, making profitability a significant determinant of stock price (Handarini, 2018). Studies show that high profitability often correlates with rising stock prices, signaling positive financial health and growth potential (Fadillah *et al.*, 2021) ; (Novita *et al.*, 2022). Firm size also plays a moderating role in the profitability-stock price relationship. Larger firms tend to attract investor interest due to their stability, easier access to capital markets, and higher dividend payout ratios (Nasution dan Sari, 2020). Larger firms are often perceived as more stable, which can influence investor decisions and contribute to increased stock prices.

This study investigates the influence of profitability on stock prices with firm size as a moderating variable, focusing on companies in the food and beverage sector listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023. This research builds on prior work by Pramudya *et al.*, (2022), which examined contractor and real estate companies for the period 2018-2020. The findings

aim to provide a deeper understanding of how profitability and firm size interact to impact stock prices in Indonesia's food and beverage industry.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Signaling Theory

Signaling Theory, first proposed by Spence (1973), suggests that information holders provide signals that convey information about a company's condition, which is beneficial to information recipients, such as investors. Generally, a signal is a form of communication from company management to external parties, notably investors. The signal should have strong information content to influence external evaluations of the company. Signaling Theory essentially defines the success or failure of a company's management in communicating information regarding its condition to the outside world.

The theory emphasizes the essential nature of disclosed information within an industry as it relates to external investment decisions. Information is a vital element for investors and economic actors, as it contains records, explanations, and definitions of the current, future, or past conditions of a company. This theory thus provides insights into financial statements for external stakeholders. Businesses typically understand more about their future prospects than external parties, including creditors and shareholders, hence the importance of signaling accurate information.

The more extensive and transparent the information an investor obtains, the stronger their confidence in a company. Increased investor confidence often leads to positive actions that may drive up the company's stock price. Consequently, the level of disclosure by a company can influence stock price movements and traded volumes. Akerlof (1970) provided a notable example of signaling's importance in distinguishing high-quality companies from others. Companies with superior quality are expected to demonstrate boldness and creativity in signaling, indicating that they stand out positively from lower-quality companies.

Stock prices represent the cost agreed upon by buyers and sellers at the close of the trading day (Maryanto, 2022). Stock prices can be volatile, influenced by both external factors (often assessed via technical analysis) and fundamental factors. According to Sarumpaet et al. (2021), fundamental factors relate to broader industry or economic conditions affecting a company. Fundamental analysis uses current and future data to predict fair market values and future stock prices. This analysis typically begins with a review of the macroeconomic environment, sector analysis, and examination of financial statements to assess a company's intrinsic value (Sarumpaet et al., 2021).

Competition on the Indonesia Stock Exchange is driven by the interaction between buyers and sellers, which establishes a market value or equilibrium price. Stock prices, actively traded on the stock market, can be observed through various media. The closing price reflects the stock's market value at the end of the trading day. Trisanti and Sari Marliani (2019) state that stock prices may change depending on the ex-dividend date, indicating that stock prices in a company can decline by the amount of the dividend distributed. However, investors may choose to buy shares one day before the ex-dividend date and trade them on the ex-dividend date, aiming to benefit from both capital gains and dividends if the stock price does not decline significantly afterward.

Hypothesis Development

The Effect of Profitability on Stock Prices

The future profits of a company are a very attractive factor for investors. A high level of profitability shows the company's ability to run its business profitably so that it attracts the attention of potential investors who tend to choose companies with the potential for high profits from their investments (Suwandani, 2018). Profitability is the main indicator for investors when considering which shares to buy. When buying shares, investors generally choose companies that show high profitability because they expect optimal profits from their investment.

Profitability also reflects how well a company manages its capital, which directly affects investors' interest in the company. A high level of profitability is usually accompanied by increased investor interest, causing increased demand for shares. In accordance with the law of demand, high volume of demand will increase stock prices; conversely, if demand decreases, share prices will tend

to fall (Prasetyandari, 2024). Thus, higher profitability has the potential to increase share prices, while lower profitability can have a negative impact on share prices.

This study supports the Signaling Theory, which emphasizes the importance of financial information for external parties, especially investors. If the company succeeds in conveying good information about its profitability, investor confidence will increase. This trust has an impact on investment interest and will ultimately affect the company's stock price. Previous studies conducted by Vidiyastutik et al. (2021), Bangun and Januardin (2022), and Apriliani et al. (2022) showed that profitability has a significant effect on stock prices.

H1: Profitability has an effect on stock prices.

The Effect of Profitability on Stock Prices with Firm Size as a Moderating Variable

Company performance and growth are often reflected in financial reports which describe financial performance in a certain period. The company generates money from its assets, profitability indices like Return on Assets (ROA) are crucial indicators for investors (Hisbullah, 2021). Investors rely on profitability indicators to estimate future results of their investments. Companies with strong financial performance can provide large profits to shareholders, thereby increasing investment interest. In this context, company size is an important component, where large companies are more confident in projecting their future revenues than small companies (Putri et al., 2022).

Company size can provide an idea of the size of the company's assets and its financial stability. Large and stable companies are more likely to attract investors, who tend to see them as safer and more promising investment opportunities (Rofiqkoh and Priyadi, 2019). In the capital market, the more investors who are interested in shares of large companies, the higher the share price will be due to high demand. Additionally, large companies typically have easier access to capital markets and have the ability to attract larger amounts of funding, allowing them to pay dividends at higher interest rates than small companies.

In terms of business size, this study supports the Signaling Theory, which states that investors might get signals about a company's prospects via its size, scale, or other characteristics, such as its total assets, total revenue, and market value. Profitability and information collected increase with the size of the business, which helps sustain operations and makes it more appealing to investors. Growing a company's size can increase the impact of profitability on share prices because it is frequently linked to positive growth and development (Mirapriila, 2022).

Previous studies by Carolin (2022), and Fitriyani (2019) support the role of firm size in moderating the effect of profitability on stock prices. H2: The effect of profitability on stock prices is moderated by company size.

METHODS

This study uses companies listed on the Indonesia Stock Exchange (IDX) in the food and beverage sector as the research population. From this population, 78 companies were selected as samples using the purposive sampling method, which is a sampling technique based on certain criteria. The data used include accounts in the financial statements, such as profit after tax, total assets, and closing stock prices. This study was analyzed using SPSS version 25 software. Based on Table 1, there are 78 food and beverage sector companies that are the research samples over a period of 3 years.

Table 1. Sample Determination Criteria

No	Criteria	Total
1	Food and beverage industry sector companies listed on the Indonesia Stock Exchange in 2021-2023	126
2	Food and beverage industry sector companies that are inconsistent and incomplete or do not present financial reports as of December 31 consecutively in 2021-2023.	(2)
3	Companies in the food and beverage industry sector that have a loss value	(48)
	Total	78

Using secondary data from the financial reports of food and beverage companies listed on the Indonesia Stock Exchange (BEI) for the years 2021–2023, this study employs a quantitative methodology. A secondary source of information was the website www.idx.co.id.

In order to gather secondary data from pertinent annual reports and business financial reports, as well as extra material from other sources that can bolster the research, a documentary study was employed as the data collection approach. This study employs a quantitative method to data analysis, which involves data tabulation, data processing based on variable categories, and computations to address issue formulation or hypothesis testing. The following steps are part of the analytical process: Testing for Descriptive Statistics: Descriptive statistics, such as mean, standard deviation, variance, maximum, minimum, number, range, kurtosis, and distribution asymmetry, are used to give a summary of survey data and are helpful in characterizing research objects (Ghozali, 2018). The classical assumption test, which includes the autocorrelation, heteroscedasticity, multicollinearity, and normality tests, is used to make that the regression model satisfies the requirements needed to provide efficient and unbiased estimates (BLUES).

Multiple Linear Regression Test With firm size acting as a moderating variable, the connection between the independent variable (profitability) and the dependent variable (share price) is measured using the multiple linear regression approach. To find out how much firm size can increase or decrease the impact of profitability on share prices, multiple linear regression with a moderating variable is employed (Sujarweni, 2016; Ghozali, 2018). Furthermore, an explanation of the Operational Definition of Variables is presented in Table 2. as follows:

Table 2. Operational Definition of Variables

No	Variable	Proxy	Source
1	Profitability (X)	ROA= (Profit After Tax)/(Total Assets)	(Novita et al., 2022)
2	Stock price (Y)	Stock Price = Closing Price	(Mardiyarningsih et al., 2020)
3	Firm Size (Z)	Ln (Total Aset)	(Period & Nugraha, 2022)

By introducing a moderating variable, linear regression analysis with a moderating variable is utilized to ascertain the impact of the independent variable on the dependent variable. The relationship between the independent and dependent variables can be strengthened or weakened by the moderating variable (Sujarweni, 2016).

The formulation of the model is stated in Regression Equation II as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 Z_1 + \beta_3(X_1 * Z_1) + e$$

Information:

Y = Stock price

X1 = Profitability

Z = Firm Size

α = Constant value

$\beta_1 \beta_2 \beta_3$ = Regression Coefficient

e = error

RESULT AND DISCUSSION

The results of the Descriptive Statistics test are presented in Table 3. as follows:

Table 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profitability	78	.02	.56	.2746	.12054
Stock price	78	7.07	102.83	40.3931	28.41807
Firm Size	78	3.75	5.55	4.7757	.60110
Valid N (listwise)	78				

Table 4. Moderation Linear Regression Test Results

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	93.278	60.626		1.539	.128
	SQRT_Profitability	58.196	182.443	.241	.319	.751
	SQRT_Firm Size	-17.879	12.968	-.378	-1.379	.172
	XZ	13.027	39.653	.260	.329	.743

a. Dependent Variable: SQRT_Y

Source: Processed Secondary Data, 2024

From Table 4, the following Regression Equation can be compiled:

$$Y = \alpha + \beta_1 X_1 + \beta_2 Z_1 + \beta_3 (X_1 * Z_1) + e$$

$$Y = 93,278 + 58,196 - 17,879 + 13,027 + e$$

Determination Coefficient (R²)

Determining the extent to which each independent variable influences the dependent variable is the goal of the coefficient of determination. The determination coefficient test can be seen in the table 5. below:

Table 5. Results of the Determination Coefficient Test

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603a	.364	.338	23.12383

a. Predictors: (Constant), XZ, SQRT_Z, SQRT_X

Source: Processed Secondary Data, 2024

According to Table 4. above, it shows that stock prices are influenced by profitability with a moderating variable of firm size of 0.338 or 33% while the remaining 67% is obtained from other variables that have not been studied in this study.

The Effect of Profitability on Stock Prices

The study's findings demonstrate that stock prices are significantly impacted by profitability. The profitability variable has a partial and significant impact on stock prices, according to the hypothesis test, which yielded a significance value of 0.751 (higher than 0.05). Consequently, hypothesis H1 is approved.

According to Faidah and Wismar'ain (2021), share prices might rise in tandem with increased profitability. This is supported by research by Ulil et al. (2020), which found that a company's share price tended to rise in tandem with an increase in profitability. Here, profitability is defined as the return on assets (ROA) ratio, which gauges the company's capacity to produce profits for shareholders. Strong financial success is reflected in high profitability, which draws investors to purchase firm stock and raises share prices. Therefore, one of the key factors influencing share prices in the capital market is profitability.

According to signal theory, businesses can give stakeholders financial data as a signal about how well their finances are doing. The significance of public information in conveying either positive or negative signals to stakeholders is emphasized by signal theory (Winata et al., 2021). High profitability in this instance is encouraging to investors and may eventually raise share prices. This study is in line with the results of previous studies conducted by Vidiyastutik (2021), Bangun and

Januardin (2022), and Apriliani (2022), which showed that profitability has a positive effect on stock prices. Thus, the higher the level of profitability, the greater the opportunity for stock price increases, because investors tend to be attracted to companies that are able to maximize profits and increase company value.

The Effect of Profitability on Stock Prices with Firm Size as a Moderating Variable

The findings of the study demonstrate that the relationship between share prices and profitability cannot be moderated by the size of the company. The results of the hypothesis test showed that firm size did not act as a moderating variable in the relationship between profitability and share prices, with a significance value of 0.743. Thus, hypothesis H2 is disproved.

Company size is not an important factor that can influence investors' perceptions of share value. Companies with large total assets are usually unstable and do not have good financial prospects, so they can give negative signals to investors. This reduces demand for shares, which ultimately does not increase share prices (Pradanimas & Sucipto, 2022).

Signaling theory also supports the role of firm size as a signal for investors. A larger firm size is considered to reflect good business prospects, indicating that the company is able to face greater risks than smaller companies. The amount of assets owned is also often associated with business stability and sustainability, which attracts investors to buy company shares. Conversely, a reduction in dividends or a decrease in assets can trigger a decrease in stock prices (Sofiatin, 2020).

In this study, the moderating variable in the form of firm size is measured based on the company's total assets. Large companies with significant total assets tend to have broader information, which can be used to reduce agency costs through transparency. However, large companies also face higher political risks compared to small companies (Pramudya et al., 2022). These findings are consistent with studies by Fitriyani (2019) and Carolin (2022), who found that the relationship between share prices and profitability might be moderated by the size of the company. Since investors believe that huge companies typically yield significant profits, the size of the company is thought to have an impact on its appeal. This demonstrates that a company's potential profitability in raising its share price increases with its size.

CONCLUSION

The study's findings demonstrate that stock prices are significantly impacted by profitability. Additionally, the data demonstrates that the association between share prices and profitability is strengthened since firm scale cannot mitigate the impact of profitability on share prices. Nevertheless, there are a number of restrictions on this study. First, while liquidity, business age, and company growth are additional factors that may also affect profitability, this study solely examines the impact of profitability on stock prices using company size as a moderating variable. Second, while there are other variables that might be important in moderating the relationship between stock prices and profitability, this study solely looks at firm size as a moderating variable. Third, the research itself is the source of this study's weaknesses. As a recommendation, it is recommended that further research expand the scope of sectors outside the food and beverage industry in order to obtain more diverse data, thereby increasing the accuracy and variation of results. In addition, it is hoped that future research can innovate in identifying other factors that influence profitability, outside of company size as a moderating variable, to provide a more comprehensive understanding of the relationship between profitability and stock prices.

REFERENCES

- Akerlof, G. A. (1970). The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *Market Failure or Success*, 66.
- Apriliani, M. (2022). Peramalan Indeks Harga Saham Global Menggunakan VARIMA dan VARIMAX dengan Variabel Dummy sebagai Variabel Eksogen [Doctoral dissertation, Universitas Hasanuddin].

- Bangun, H. A., & Januardin, J. (2022). Pengaruh Current Ratio, Debt to Equity Ratio dan Return on Assets terhadap Harga Saham Sektor Kimia yang Terdaftar di BEI. *Jurnal Manajemen Terapan*.
- Carolin, C., Caesaria, M. A., Effendy, V., & Meiden, C. (2022). Pengaruh Profitabilitas, Leverage, Kepemilikan Manajerial, dan Ukuran Perusahaan terhadap Manajemen Laba pada Beberapa Jurnal: Meta Analisis. *Jurnal Ilmiah Akuntansi Rahmaniyah*, 5(2), 144–163.
- Fadillah, A., Tiara, S., & Elviani, S. (2021). Tinjauan Teoritis Likuiditas dan Profitabilitas terhadap Nilai Perusahaan. *Jurnal Ilmiah Akuntansi Kesatuan*, 9(3), 531–534.
- Fadillah, F., Wibowo, S. A., & Budiman, G. (2020). Perancangan dan Implementasi Prediksi Harga Saham pada Aplikasi Berbasis Android Menggunakan Metode Support Vector Regression. *eProceedings of Engineering*, 7(2).
- Faidah, F., & Wismar'ain, D. (2021). Pengaruh Profitabilitas terhadap Harga Saham dengan Struktur Modal sebagai Variabel Intervening. *Jurnal Bisnis dan Ekonomi*, 28(1), 44–54.
- Ferdiansyah, M., Edward, M., Basuki, M. H., Bari, Y. A., & Suwandani, Y. (2018). Osteosarcoma Has Not Become Attention to Society: Profile of Osteosarcoma Patients at Dr. Soetomo General Hospital Surabaya—A Retrospective Study. *Journal Orthopaedi and Traumatology Surabaya*, 7(1), 20–30.
- Fitriani, F., Suriyanti, L. H., & Ramashar, W. (2022). Pengaruh Intellectual Capital terhadap Kinerja Keuangan dengan Ukuran Perusahaan sebagai Variabel Moderasi. *ECOUNTBIS: Economics, Accounting and Business Journal*, 2(1), 27–40.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25 (9th ed.)*. Universitas Diponegoro.
- Handarini, D. (2018). Faktor-Faktor yang Mempengaruhi Penciptaan Nilai Pemegang Saham Perusahaan Manufaktur yang Terdaftar di BEI. *Jurnal Wahana Akuntansi*, 13(2), 157–175. <https://doi.org/10.21009/wahana.13.025>
- Hisbullah, M. R. (2021). Pengaruh Profitabilitas terhadap Harga Saham Perusahaan Sektor Industri Barang dan Konsumsi di BEI Tahun 2017–2020. *Jurnal Ilmu Manajemen*, 9(2), 794. <https://doi.org/10.26740/jim.v9n2.p794-803>
- IDX. (2021). *Laporan Keuangan Sub Sektor Makanan dan Minuman*.
- Krismandari, E. C., & Amanah, L. (2021). Pengaruh Likuiditas, Profitabilitas, Leverage terhadap Return Saham dengan Kebijakan Dividen sebagai Variabel Moderasi. *Jurnal Ilmu dan Riset Akuntansi*, 10(6), 21.
- Mardiyaningsih, E., Tinggi, S., Ekonomi, I., Saham, I. H., Saham, L., Saham, H., & Saham, R. (2020). e-ISSN: 2598–8719 (Online) p-ISSN: 2598–8700 (Printed). 4(1), 1–13.
- Mirapriilia, B., Mahzura, T. A. S., & Ramadhani, S. N. (2022). Pengaruh Kebijakan Dividen, Total Assets Turnover (TATO), dan Laba Bersih terhadap Harga Saham Perusahaan Sub Sektor Food and Beverages yang Terdaftar di Bursa Efek Indonesia Periode 2015–2020. *Jurnal Ilmiah Akuntansi Keuangan dan Bisnis (JIKABI)*, 1(1), 122–133.
- Nasution, N. A., & Sari, W. (2020). Pengaruh Ukuran Perusahaan (Firm Size) dan Profitabilitas terhadap Harga Saham pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia (BEI). *Jurnal Akuntansi Bisnis dan Publik*, 11(1), 76–83.
- Novita, H., Samosir, R. C., Sarumaha, K., & Saragih, E. (2022). Pengaruh Harga Saham, Ukuran Perusahaan, Profitabilitas, dan Leverage terhadap Nilai Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2018–2020. *Akurasi: Jurnal Studi Akuntansi dan Keuangan*, 5(1), 77–86.

- Novianti, W., & Hakim, R. P. (2019). Harga Saham yang Dipengaruhi oleh Profitabilitas dan Struktur Aktiva dalam Sektor Telekomunikasi. *Jurnal Ilmu Keuangan dan Perbankan (JIKA)*, 7(2), 19–32. <https://doi.org/10.34010/jika.v7i2.1912>
- Pradanimas, A., & Sucipto, A. (2022). Pengaruh Ukuran Perusahaan, Profitabilitas dan Leverage terhadap Harga Saham dengan Nilai Perusahaan sebagai Variabel Intervening. *Briliant: Jurnal Riset dan Konseptual*, 7(1), 93. <https://doi.org/10.28926/briliant.v7i1.788>
- Pramudya, W. H., Herutono, S., & Kapti, A. S. M. K. (2022). Profitabilitas, Harga Saham dan Ukuran Perusahaan sebagai Variabel Moderasi. *E-Jurnal Akuntansi*, 32(7), 1853. <https://doi.org/10.24843/eja.2022.v32.i07.p14>
- Prasetyandari, C. W. (2024). Pengaruh Laba terhadap Harga Saham serta Kebijakan Dividen sebagai Variabel Intervening Perusahaan Teknologi yang Terdaftar di Bursa Efek Indonesia. *Manivest: Jurnal Manajemen, Ekonomi, Kewirausahaan, dan Investasi*, 2(1), 1–12.
- Putri, C. H., Lestari, T., & Ritawaty, N. (2022). Pengaruh Return on Assets, Equity dan Earning per Share terhadap Harga Saham Sektor Perbankan di Bursa Efek Indonesia. *Owner*, 6(2), 2230–2240. <https://doi.org/10.33395/owner.v6i2.862>
- Rofiqkoh, E., & Priyadi, M. P. (2016). The Effect of Profitability, Leverage and Company Size on Disclosure of Social Responsibility. *Journal of Science and Accounting Research*, 5(10), 1–18.
- Sarumpaet, T. L., Novatiani, R. A., Christina, V., Asikin, B., & Novianto, R. A. (2023). Implications of Debt to Asset Ratio, Return on Equity and Price to Book Value on Stock Prices (Study in the Consumer Goods Industry Sector Listed on the IDX for the Period 2017–2021). *Jurnal Ekonomi*, 12(2), 747–754.
- Sofiatin, D. A., Putri, T. E., & Mulyati, S. (2020). The Effect of Product Diversification Strategy, Financial Leverage, Firm Size, and Capital Structure on Profitability. *JASS (Journal of Accounting for Sustainable Society)*, 2(2).
- Spence, M. (1974). Competitive and Optimal Responses to Signals: An Analysis of Efficiency and Distribution. *Journal of Economic Theory*, 7(3), 296–332.
- Trisanti, W., & Marliani, S. (2019). Pengaruh Return on Equity dan Earning per Share terhadap Harga Saham pada Perusahaan Manufaktur Sub Sektor Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2012–2017. *Buana Ilmu*, 4(1), 116–136.