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Research article

Does profitability affect stock prices? Empirical evidence from the plastic and packaging sub-sector of the Indonesia Stock Exchange

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ABSTRACT

This study aims to analyze the effect of profitability ratios on stock prices of manufacturing companies in the plastic and packaging sub-sector listed on the Indonesia Stock Exchange (IDX) during 2019–2023. The profitability ratios examined are Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Using purposive sampling, five companies were selected, and secondary data were obtained from their annual financial reports. Data analysis was conducted through descriptive statistics, classical assumption tests, and panel data regression with the Random Effect Model (REM). The findings reveal that ROA and ROE have no significant effect on stock prices, while NPM has a positive and significant impact. These results indicate that investors tend to consider sales-based profitability rather than asset and equity efficiency when valuing stock prices in the plastic and packaging sub-sector. This study provides implications for investors, company management, and regulators in evaluating financial performance, formulating profitability strategies, and supporting capital market stability in Indonesia.

Keywords: Profitability Ratio, Stock Price, Return on Assets, Return on Equity, Net Profit Margin

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1. Introduction

In the era of the Industrial Revolution 4.0, technological advancements have made producers more optimistic about the year 2024. However, at the beginning of 2019, the COVID-19 pandemic began to spread in Indonesia, resulting in restrictions on activities that led to a global economic crisis. This condition affected various industrial sectors, including manufacturing companies in the plastic and packaging sub-sector. Nevertheless, data from the Ministry of Industry showed that the plastic sub-sector experienced growth of 11.72% in the second quarter of 2021 (Ministry of Industry of the Republic of Indonesia, 2021). This proves that the plastic sub-sector continues to play an important role in supporting national economic recovery. The improving performance of companies in the plastic and packaging sub-sector also contributed to the increase in stock prices in the capital market, as investor perceptions of company performance often influence stock prices.

On the other hand, companies in the plastic and packaging sub-sector face challenges due to increasing public awareness of environmental issues. The government and various environmental organizations have intensified campaigns to reduce the use of single-use plastics to suppress the volume of plastic waste. Based on data from the Ministry of Environment and Forestry (KLHK) in 2020, plastic waste contributed around 15% of total waste in Indonesia (Kementerian Lingkungan Hidup dan Kehutanan, 2020). This situation encourages companies to innovate in creating more environmentally friendly products, which ultimately influences investor interest in the long-term prospects of this industry. In the investment context, stock prices are often considered a key indicator of a company's performance in the capital market. Various internal and external factors influence changes in stock prices. One of the internal factors is financial performance, which can be measured through financial ratios, particularly profitability ratios. These ratios provide an overview of a company's ability to generate profit from its operational activities and its efficiency in managing available resources (Sihombing, 2020).

Pratama & Kurniawan (2020) examined the effect of profitability ratios, specifically Return on Assets (ROA) and Return on Equity (ROE), on the stock prices of plastic and packaging sub-sector companies listed on the Indonesia Stock Exchange. Their findings indicated that profitability had a significant effect on stock prices. Companies with high ROA and ROE tended to experience stock price increases because investors perceived them as more efficient in generating profits from their assets. They concluded that profitability ratios can serve as important indicators for investors in assessing the competitiveness of companies in the plastic and packaging sub-sector.

Conversely, a study by Rahayu & Suhendar (2021) showed that the effect of profitability ratios on stock prices in the plastic and packaging sub-sector is not always consistent. They argued that other factors, such as environmental policies and regulations related to plastic use, also significantly influence investor interest in this industry. As a result, profitability ratios such as ROE had only a weak effect on stock prices. According to them, investors in this sector have started to consider sustainability and environmental responsibility in making investment decisions, meaning that financial performance alone is not the sole determinant of stock prices.

This study aims to analyze the effect of profitability ratios namely Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM) on the stock prices of companies listed on

the Indonesia Stock Exchange. These ratios are used to assess the efficiency of corporate management in generating profits from assets and equity, which may affect investor interest and stock price movements (Weygandt et al., 2022). Furthermore, this study seeks to determine which profitability variable has the most significant impact on stock prices, given that profitability indicators can serve as strong signals of performance for investors in making investment decisions (DeFond & Hung, 2021). This research is expected to provide valuable insights for investors, academics, and corporate management in understanding the relevance of profitability ratios to stock market value, thereby supporting more effective decision-making (Robinson et al., 2020).

2. Theory and hypothesis

Signaling Theory

This theory suggests that financial information disclosed by companies, such as profitability ratios, serves as a signal to investors regarding the firm's prospects. A positive signal indicated by high profitability ratios can enhance investor confidence and influence stock price movements (Ross, 1973). The Signaling Theory has evolved from its original concept introduced by Spence and was later expanded by Zhang & Huang (2022) in their study entitled *"Corporate Financial Disclosure and Market Signaling in Emerging Markets."* In the context of emerging markets, Zhang and Huang found that financial information, including profitability ratios, plays a crucial role in signaling future corporate prospects to investors. Their findings support the view that the higher the profitability ratio, the stronger the positive signal perceived by investors, which ultimately may drive up a company's stock price. In this study, the Signaling Theory is employed as the foundation to understand how profitability ratios influence investor decisions in companies within the plastic and packaging sub-sector.

Regarding financial ratio analysis and stock valuation, Liu & Wang (2022) in their book *"Financial Ratios and Stock Valuation in Emerging Markets,"* explain that financial ratios such as Return on Equity (ROE), Return on Assets (ROA), and Net Profit Margin (NPM) are key indicators in assessing a company's value and performance, particularly in emerging markets. They found that a high level of profitability reflects management's effectiveness in utilizing resources optimally, thereby strengthening investor confidence in the company's growth potential. In this study, the theory is applied to examine whether profitability, as reflected in financial ratios, has a significant impact on stock prices.

Profitability Ratios

Profitability refers to a manager's ability to manage a company to generate profit within a specific period. Profitability reflects the level of management efficiency in running business operations to achieve customer expectations. The company's profit level also influences the amount of tax burden it must bear; therefore, the higher the profit earned, the greater the tax burden (Herlinda & Rahmawati, 2021). Meanwhile, according to Sudarno (2022) profitability is defined as a company's ability to generate profit in a specific period. Companies that can generate good profits generally show positive performance, as profitability is often used as a benchmark for assessing a company's performance.

Profitability ratios, such as Return on Equity (ROE) and Net Profit Margin (NPM), have long been used as primary indicators for assessing a company's financial performance. These ratios are

considered to have a significant impact on a company's stock price because they reflect the extent to which the company can generate profit from its equity or sales. Previous research indicates that investors consider a company's profitability level as a key factor in assessing stock value.

Research conducted by Irawan & Santoso (2020) showed that Return on Assets (ROA) has a positive correlation with stock prices. Similarly, research by Nugraha & Putri (2021) revealed that Return on Equity (ROE) has a positive influence on stock prices, as ROE reflects management's effectiveness in utilizing shareholders' equity to generate profit. However, some studies in different industrial sectors show varying results, especially in companies with higher leverage levels (Setiawan & Yuniarti, 2019).

ROA measures how efficiently a company uses its assets to generate profit. This indicator shows the company's ability to generate earnings from every unit of asset owned. Formula:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Assets}} \text{ X } 100\%$$

ROE measures how effectively a company uses shareholders' equity to generate profit. This indicator is important for investors as it shows the return generated from their investment. Formula:

$$\text{ROE} = \frac{\text{Net Income}}{\text{Total Equity}} \text{ X } 100\%$$

NPM measures the percentage of net profit generated from total revenue. This indicator shows how efficient a company is at controlling costs and generating profit from its sales. Formula:

$$\text{NPM} = \frac{\text{Net Income}}{\text{Net Sales}} \text{ X } 100\%$$

Stock Price

Stock price is the value of an equity interest in a listed limited liability company at which the share is currently traded. Stock price can also be described as the price formed by the interaction of both buyers and sellers of shares, motivated by expectations of the company's profits (Prasetyo et al., 2021). Purnamasari & Gantino (2020) state that stock price reflects the collective assessment of investors regarding the company's current performance and future prospects. When the market is more optimistic about a company, the high price makes it easier for the company to raise additional capital. Thus, stock prices play a major role in capital allocation within the economic market, directing capital to the companies and applications with the greatest perceived potential.

Stock prices can rise or fall rapidly within a short time, even changing within seconds or minutes. The stock price is the price that occurs at a given moment, made possible by the supply and demand between buyers and sellers of shares. Specific conditions and situations that can alter a stock include corporate expansion policies, as well as micro and macroeconomic conditions, such as the opening of agencies or branches both domestically and internationally; sudden changes in the positions of managers or commissioners involved in criminal acts; and stock prices should reflect the company's financial performance (Prasetyo et al., 2021). When a company's financial performance improves, the market will respond appreciatively by increasing

the stock price, and vice versa. In other words, a company's financial performance should be reflected in its stock price. If financial performance improves, the company's stock tends to be favored by investors, thereby driving the stock price higher (Puspitaningtyas, 2017). This indicates a positive relationship between financial performance and stock price. The higher the financial performance, the higher the stock price, and vice versa.

The Effect of Return on Assets (ROA) on Stock Price

According to signaling theory, a company's financial statements can provide signals to investors about management's success or failure in managing the company, where profitability is often a key indicator that attracts investor attention (Spence, 2020). Return on Assets (ROA), for instance, measures the extent to which a company can generate net profit from its total assets. An increase in ROA is generally viewed positively by the market as it indicates that management is able to utilize its assets efficiently to create profit. Accorsding to Ross et al., (2021) increase in ROA tends to strengthen investors' positive perception of the company's potential, thereby potentially increasing the stock price.

H_1: Return on assets (ROA) has an effect on the market price of shares.

The Effect of Return on Equity (ROE) on Stock Price

Return on Equity (ROE), which measures the net profit generated from shareholders' equity, is also a closely watched indicator. A high ROE demonstrates that the company is capable of providing adequate returns for its shareholders. Gitman & Zutter (2022) reveal that a consistently high ROE often attracts investor interest, which increases the stock's appeal in the market and drives the stock price in a more positive direction.

H_2: Return on Equity (ROE) has an effect on the market price of shares.

The Effect of Net Profit Margin (NPM) on Stock Price

Net Profit Margin (NPM), which shows the percentage of net profit from total revenue, also plays a crucial role in attracting investor interest. This is primarily because a high NPM reflects the company's ability to manage costs effectively. Lee & Park (2023) in the Asian Journal of Business and Finance found that companies with high NPM typically have better stock prices in the market, as investors tend to view these companies as having stable profitability potential and greater resilience to competitive pressures.

H_3: Net Profit Margin (NPM) has an effect on the market price of shares.

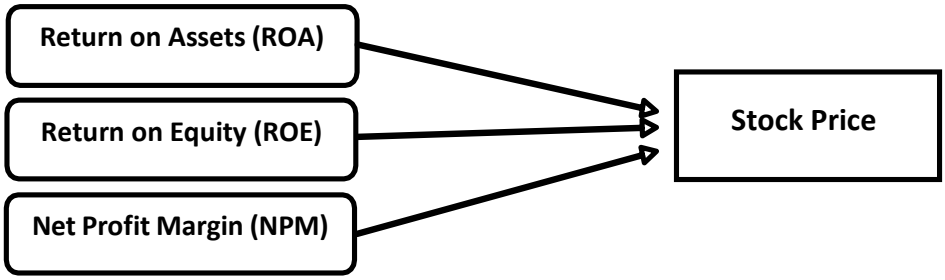

Figure 1. Research model

3. Methods

This study employs a quantitative approach with an associative design to analyze the effect of profitability ratios on the stock prices of manufacturing companies in the plastics and packaging subsector listed on the Indonesia Stock Exchange (IDX) for the 2019-2023 period. The independent variables consist of Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM), while the dependent variable is the stock price, measured based on the period-end closing price.The research population encompasses all companies in the plastics and packaging subsector listed on the IDX. The sample was selected using purposive sampling, resulting in 5 companies that met the criteria. Secondary data in the form of annual financial reports and stock prices were obtained from the official IDX website.

Data analysis was conducted through descriptive statistics, tests for classical assumptions (normality, heteroscedasticity, and autocorrelation), and panel data regression model selection tests. The best model was determined through the Chow test, Hausman test, and Lagrange Multiplier test. The F-test was used to assess the overall significance of the model, the t-test to examine the partial effect of the independent variables, and the coefficient of determination (R^2) to measure the model's ability to explain the dependent variable. The final analysis was performed using panel data regression with the Random Effect Model (REM) approach. The regression model used can be formulated as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Which:

Y	= Price Stock
X1	= ROA (*Return on Assets*)
X2	= ROE (*Return on Equity*)
X3	= NPM (*Net Profit Margin*)
A	= Constanta
β1, β2. β3	= Coeficient of regression
E	= Error

4. Results and implications

Results

This section presents the results of the statistical analysis conducted using panel data. The objective of this analysis is to determine the effect of profitability ratios on the stock prices of companies listed in the plastics and packaging subsector. The analysis includes descriptive statistics, classical assumption tests, regression model tests, and hypothesis testing.

Table 1. Descriptive Statistics Results

	SP	ROE	ROA	NPM
Mean	724,2164	8,676548	6,616690	6,131739
Median	340,0000	7,899905	6,232723	6,442524
Maximum	3520,000	19,37225	15,43194	15,40151
Minimum	50,00000	0,911058	0,722882	1,133735
Std. Dev.	865,2805	6,185984	4,987473	3,771871
Observations	25	25	25	25

Source: Processed Data Output from EViews 12.0

Based on the table above, it can be explained that the Stock Price (HS) has an average value of 724.2164 with a maximum value of 3520.000 and a minimum value of 50.00000. The standard deviation value of 865.2805 indicates that the stock prices of companies in the plastics and packaging subsector have considerable variation, reflecting high stock price volatility. Return on Equity (ROE) has an average of 8.676548, with a maximum value of 19.37225 and a minimum of 0.911058. The standard deviation value of 6.185984 indicates that there is a fairly significant difference between companies in the plastics and packaging subsector with high and low ROE. Return on Assets (ROA) has an average of 6.616690 with a standard deviation of 4.987473, showing that the profitability based on assets of companies in the plastics and packaging subsector varies quite significantly between companies. Net Profit Margin (NPM) has an average of 6.131739 with a maximum value of 15.40151 and a minimum of 1.133735, indicating the level of profit from revenue earned by the companies in this research sample.

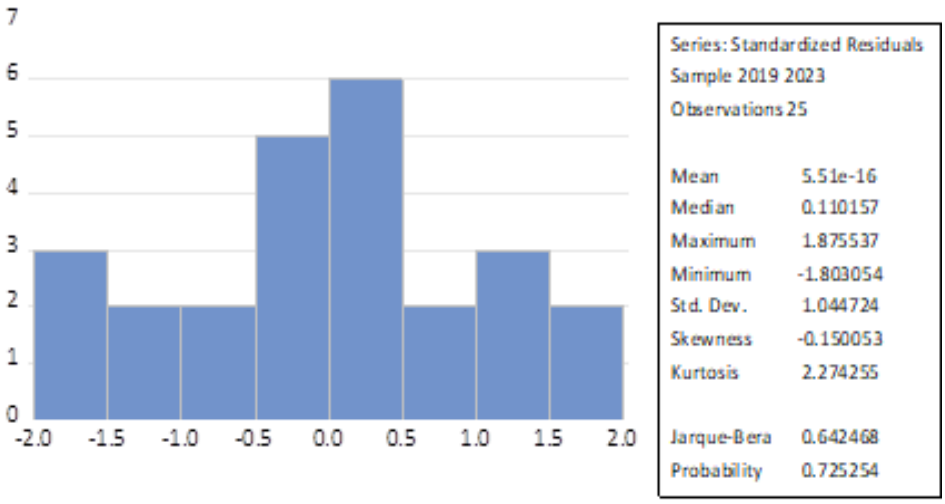

Figure 1. Normality Test Result
Source: Processed Data Output from EViews 12.0

Regressions Model Tests

Based on the panel regression results, there are differing findings among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). In the CEM, the variables Return on Assets (ROA) and Return on Equity (ROE) do not have a significant effect on stock price, whereas Net Profit Margin (NPM) shows a significant positive influence at the 5% significance level. This result indicates that sales-based profitability is given more attention by investors in assessing stock prices. Meanwhile, in the FEM, all three variables ROA, ROE, and NPM show no significant influence, leading to the conclusion that internal profitability factors are insufficient to explain stock price variations in this model. Furthermore, in the REM, ROA and ROE are also not significant, while NPM has a positive influence with a probability value close to the 5% significance level (p = 0.0554). Although not statistically significant, this finding suggests a tendency for NPM to remain a relatively more consistent indicator compared to ROA and ROE in influencing stock prices. Overall, these research results confirm that sales-based profitability (NPM) plays a greater role in influencing investor perception of stock prices in the plastics and packaging subsector companies compared to aset based profitability (ROA) or equity based profitability (ROE).

Table 2. Panel Data Regression Results

Common Effect Model				
Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	167,5213	317,3251	0,527917	0,6031
ROA	76,00312	164,7982	0,461189	0,6494
ROE	-152,2978	156,8819	-0,97078	0,3427
NPM	224,2798	104,2229	2,151925	0,0432
Fixed Effect Model				
C	324,3668	656,2810	0,494250	0,6275
ROA	510,2532	586,6149	0,869827	0,3965
ROE	-488,8587	426,1168	-1,147241	0,2672
NPM	206,3475	304,1491	0,678442	0,5066
Random Effect Model				
C	167,5213	336,7212	0,497507	0,6240
ROA	76,00312	174,8713	0,434623	0,6683
ROE	-152,2978	166,4711	-0,914860	0,3707
NPM	224,2798	110,5934	2,027968	0,0554

Source: Processed Data Output from EViews 12.0

Table 3. Model Selection Test Results

Effects Test	**Prob.**
Chow Test	0,7972
Hausman Test	0,8551

Source: Processed Data Output from EViews 12.0

The Chow Test was used to determine whether the panel data regression model using the Fixed Effect method is more appropriate than the model without dummy variables or the Common Effect Model. Based on the results of the Chow Test, a probability value of 0.7972 was obtained, which is greater than 0.05. This indicates that there is no significant difference between the two models; therefore, the null hypothesis (H_0) is accepted, and the more suitable model is the

Common Effect Model (CEM) over the Fixed Effect Model (FEM). Subsequently, the Hausman Test was conducted to compare the suitability of using the Random Effect Model (REM) versus the Fixed Effect Model (FEM). The results of the Hausman Test showed a probability value of 0.8551, which is also greater than 0.05. According to the testing criteria, this condition indicates that REM is more appropriate to use than FEM. Thus, based on the overall results of the model selection tests, the most suitable method for this research is the Common Effect Model (CEM).

Panel Data Regression Test

Based on the panel data regression model approaches in Eviews (Common Effect Model, Fixed Effect Model, and Random Effect Model) and the tests conducted (Chow Test and Hausman Test), the results indicate that the more appropriate regression model for this research is the Fixed Effect Model. The results of the panel data regression and t-test are presented in the following table:

Table 4. Panel Data Regression Test Results

Variabel	Coefficient	Std. Error	t-Statistic	Prob.
C	167,5213	317,3251	0,527917	0,6031
ROA	76,00312	164,7982	0,461189	0,6494
ROE	-152,2978	156,8819	-0,970780	0,3427
NPM	224,2798	104,2229	2,151925	0,0432

Source: Processed Data Output from EViews 12.0

Based on the regression results above, the regression equation can be derived as follows:

Stock Price = 167,5213 + 76,00312 ROA - 152,2978 ROE + 224,2798 NPM + e

This equation describes the relationship between the dependent variable, stock price, and the independent variables Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). A constant value of 167.5213 indicates that if all independent variables were zero, the stock price would be estimated at 167.5213. The ROA coefficient of 76.00312 has a positive direction, meaning that every one-unit increase in ROA tends to increase the stock price by 76.00312. However, the probability value (p-value) of 0.6494 indicates that the effect of ROA is not statistically significant. The ROE coefficient of -152.2978 shows a negative direction, meaning that every one-unit increase in ROE would decrease the stock price by 152.2978. However, this effect is not significant as the p-value of 0.3427 is greater than 0.05. Meanwhile, the NPM coefficient of 224.2798 has a positive direction and is significant with a p-value of 0.0432 (<0.05). This means that a one-unit increase in NPM will significantly increase the stock price by 224.2798 at a 95% confidence level. Therefore, these research results indicate that among the three profitability ratios tested, only Net Profit Margin (NPM) has a significant effect on stock price, while Return on Assets (ROA) and Return on Equity (ROE) do not show significant effects.

Hypothesis testing is a statistical procedure used to examine assumptions or claims about a population based on sample data. The primary goal of hypothesis testing is to determine whether there is sufficient evidence in the sample data to support or reject the proposed hypotheses. The following hypothesis tests were conducted in this study:

The coefficient of determination is used to measure how much the independent variables (ROA, ROE, and NPM) are able to explain the dependent variable (stock price). The results show an R^2 value of 0.2457, which means the model can explain 24.57% of the variation in stock prices based on ROA, ROE, and NPM. The remaining 75.43% is explained by other factors outside the model.

Based on the t-test (partial test) results, only Net Profit Margin (NPM) has a significant effect on stock price, with a p-value of 0.0432 (less than 0.05). This indicates that the higher the net profit margin achieved by the company, the higher its stock price, as investors tend to view net profit as a key indicator in assessing company performance. Meanwhile, Return on Assets (ROA) and Return on Equity (ROE) do not have significant effects on stock price. ROA has a p-value of 0.4618, meaning that asset efficiency in generating profit is not a primary factor in determining stock prices in the plastics and packaging sector. As for ROE, with a p-value of 0.3427, it also shows no significant effect on stock price. Furthermore, the ROE coefficient is negative, suggesting that an increase in equity-based profit may be associated with a decrease in stock price, although this relationship is not strong enough to be considered significant.

Discussion

The Effect of Return on Assets (ROA) on Stock Price

The test results indicate that Return on Assets (ROA) has a coefficient of 76.00312 with a p-value of 0.4618. This probability value is greater than the 0.05 significance level, leading to the conclusion that ROA does not have a significant effect on the stock prices of companies in the plastics and packaging subsector listed on the Indonesia Stock Exchange during the 2019-2023 period. This finding suggests that although ROA represents a company's ability to generate profit from its total assets, improvements in asset-based profitability do not directly influence investor decisions or stock price movements in this sector. Within the context of the plastics and packaging industry, the insignificant effect of ROA can be explained by the business characteristics that heavily rely on external factors, such as fluctuations in raw material prices for plastics, import-export policies, and environmental regulations concerning plastic usage. These factors often play a more dominant role in influencing market perception compared to the company's internal asset efficiency. Investors in this sector tend to pay more attention to other profitability indicators that more directly reflect long-term profit prospects, such as net profit margin (NPM), rather than asset efficiency.

This result aligns with the findings of Anwar & Huda (2021), who demonstrated that ROA often lacks a direct effect on stock prices, particularly in industries with high uncertainty levels, as investors focus more on profitability indicators that provide insights into sustainable earnings. Research by Rahman & Putri (2020) also supports this result by affirming that in the manufacturing industry, the influence of external factors such as raw material prices and government policies is more dominant than corporate ROA performance in determining stock price fluctuations. Therefore, it can be concluded that ROA is not a primary determinant of stock prices for companies in the plastics and packaging subsector, but rather one internal indicator whose role is relatively minor compared to external factors and other profitability indicators.

The Effect of Return on Equity (ROE) on Stock Price

Based on the analysis results, Return on Equity (ROE) has a coefficient of -152.2978 with a p-value of 0.3427. This probability value, being greater than the 0.05 significance level, indicates that ROE does not have a significant effect on the stock prices of companies in the plastics and packaging subsector listed on the Indonesia Stock Exchange during the 2019-2023 period. Interestingly, the negative coefficient suggests an inverse relationship between ROE and stock

price, although this relationship is not statistically significant. This indicates that an increase in ROE does not automatically lead to a rise in stock price, and under certain conditions, may even reduce investor interest.

This phenomenon can be explained by the characteristics of the plastics and packaging industry, where improvements in equity based profits do not necessarily reflect healthy financial performance. For instance, a high ROE might stem from increased profits supported by substantial debt usage, which actually elevates the company's financial risk. This risk can raise investor concerns about long-term sustainability, causing stock prices not to respond positively to ROE increases. Furthermore, in a highly competitive industry influenced by fluctuating raw material costs, investors tend to prioritize assessing financial stability prospects and long-term resilience over merely examining equity based profitability.

This finding aligns with research by Fitri & Suryadi (2022), which explains that a high ROE does not always indicate healthy financial conditions, particularly when profit improvements are achieved through excessive leverage. Similarly, research by Zaki & Pratama (2023) confirms that investors tend to focus more on long term financial stability indicators than solely on equity-based profitability ratios. Therefore, for companies in the plastics and packaging subsector, ROE is not a primary consideration for investors in making investment decisions, as financial risk factors and industry uncertainties more dominantly influence stock price movements.

The Effect of Net Profit Margin (NPM) on Stock Price

The research results show that Net Profit Margin (NPM) has a coefficient of 224.2798 with a p-value of 0.0432. This probability value, being lower than the 0.05 significance level, indicates that NPM has a positive and significant effect on the stock prices of companies in the plastics and packaging subsector listed on the Indonesia Stock Exchange during the 2019-2023 period. This means that every one-unit increase in NPM will increase the stock price by 224.2798. This finding confirms that net profit margin is a key factor considered by investors in assessing performance and stock price prospects in this industry.

Within the context of the plastics and packaging subsector, net profitability serves as a crucial indicator since this industry is significantly influenced by fluctuations in raw material costs, energy expenses, and demand levels from user industries (such as food, beverage, and pharmaceuticals). Thus, companies capable of maintaining high net profit margins are perceived as having good operational efficiency and stronger competitiveness. Investors tend to view NPM as a positive signal of the company's ability to consistently generate net profits despite facing substantial external pressures.

This research result aligns with Fadhilah & Munandar (2021), who state that a high NPM reflects corporate efficiency in managing costs, thereby providing greater returns for shareholders and enhancing investment attractiveness. Similarly, Putra (2021) affirms that a stable and consistently improving NPM can indicate long-term growth potential that strengthens investor confidence. Therefore, for companies in the plastics and packaging subsector, NPM proves to be the most significant profitability variable affecting stock prices compared to both ROA and ROE.

5. Conclusion

This study aims to analyze the effects of Return on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM) on the stock prices of companies in the plastics and packaging subsector. The results indicate that ROA does not have a significant effect on stock prices,

suggesting that asset-based profitability is not a primary factor in determining stock prices in this sector. Furthermore, ROE also shows no significant effect and exhibits a negative relationship with stock prices, implying that improvements in equity-based profits do not necessarily enhance investor confidence. In contrast, NPM demonstrates a significant effect on stock prices, indicating that high profit margins are a key factor considered by investors when evaluating company stocks. Therefore, companies in the plastics and packaging sector should focus more on enhancing operational efficiency and sales-based profitability to attract investor interest. Additionally, future research could consider incorporating broader variables, such as macroeconomic factors and industrial policies, to provide a more comprehensive understanding of the factors influencing stock prices.

Limitation

This study has several limitations that need to be acknowledged. First, the variables used are limited to profitability measures (ROA, ROE, and NPM), while other factors such as dividend policy, company growth, and market risk may also influence stock prices. Second, the data only covers companies in the plastics and packaging subsector, which may limit the generalizability of the findings to other industries with different characteristics. Third, the research timeframe is relatively limited, which means this study may not capture the long-term effects of profitability on stock prices. Fourth, this research does not account for external factors such as macroeconomic conditions and government policies, which could significantly impact stock prices in this sector. Therefore, the findings of this study should be interpreted with these limitations in mind.

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