

**THE EFFECT OF RETURN ON ASSETS, RETURN ON EQUITY,
AND NET PROFIT MARGIN ON STOCK PRICES IN FOOD AND
BEVERAGE COMPANIES LISTED ON THE INDONESIA STOCK
EXCHANGE FOR THE 2019-2021 PERIOD**

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Abstract

Fundamental analysis is a widely used approach for predicting stock price movements. This study aims to investigate the impact of return on assets (ROA), return on equity (ROE), and net profit margin (NPM) on the stock prices of food and beverage companies listed on the Indonesia Stock Exchange during the period of 2019-2021. The research is based on secondary data from 84 samples. The data analysis employs multiple linear regression using the SPSS version 22 application. The findings reveal that return on assets and net profit margin do not exhibit significant effects and have a negative influence on stock prices. Conversely, return on equity demonstrates a significant and positive correlation with stock prices. Overall, the study indicates that ROA, ROE, and NPM significantly impact stock prices. As a recommendation, investors should closely analyze ROA, ROE, NPM, and stock price movements to enhance their profitability.

Keywords: Return On Assets, Return On Equity, Net Profit Margin, Stock Price

1. INTRODUCTION

The food and beverage industry in Indonesia represents a significant and rapidly growing sector with favorable growth prospects (Fahmi, 2015). The industry's growth is directly linked to the increasing population of Indonesia, leading to a rising demand for food and beverages (Zulianti & Aslami, 2022).

In 2022, despite the challenges posed by the Covid-19 pandemic, the food and beverage industry managed to achieve a growth rate of 3.57%, surpassing the previous year's rate of 3.49%. Remarkably, the sub-sector contributed to the overall growth of the non-oil and gas industry, which reached 4.88% (source: <https://kemenperin.go.id/>). However, the industry faces certain challenges, such as the continuous decline of the rupiah, increasing pressure on business performance due to reliance on imported raw materials, and the sensitivity of the rupiah exchange rate, affecting the cost of domestic products.

To foster growth and innovation, companies in the food and beverage industry often invest in hiring more employees and upgrading their systems, necessitating substantial capital (Bastian, 2006). One common avenue to raise capital is through the stock market, where companies can sell shares to investors, thus generating more funds for future growth and development, demonstrating positive business prospects (Anoraga et al., 2006).

The stock price of a company plays a crucial role in attracting investors, as it reflects the company's overall value. High-performing companies with strong achievements tend to have shares in high demand among investors. Financial reports issued periodically by companies provide valuable information to investors for making informed decisions regarding buying, selling, or investing in stocks. Higher stock prices correspond to higher company valuations, particularly for publicly traded companies, as they indicate the value of the company's assets.

Over the past three years (2019-2021), food and beverage companies listed on the Indonesia Stock Exchange experienced fluctuations in their financial ratios. The Covid-19 pandemic in 2019 had a significant impact, causing a decline of 54% in some companies within the sector. Among the 28 companies analyzed, 13 experienced an increase, while 15 saw a decrease in their share prices. These fluctuations are influenced by both internal and external factors. Internal factors, controlled by company management, include Return On Assets (ROA), Return On Equity (ROE), and Net Profit Margin (NPM), which directly affect stock prices.

Given the inconsistencies in previous research on the variables affecting stock prices, specifically ROA, ROE, and NPM, the present study aims to examine the profitability of food and beverage companies. Despite the challenges faced during the Covid-19 pandemic, the food and beverage industry demonstrated continuous growth. However, this growth was accompanied by the depreciation of the rupiah, resulting in higher costs for importing raw materials. Consequently, companies need to closely monitor their financial ratios, particularly profitability indicators measured by ROA, ROE, and NPMs. Other variables like Debt-to-Assets Ratio (DAR) and Debt-to-Equity Ratio (DER) are not considered in this study since they are used for different purposes (measuring total debt to total assets and leverage to shareholder equity, respectively).

As such, the primary goal of this research is to analyze the impact of Return On Assets, Return On Equity, and Net Profit Margin on Stock Prices in Food and Beverage Companies Listed on the Indonesia Stock Exchange for the 2019-2021 period.

2. RESEARCH METHOD

The research employs causal research, which aims to determine the impact of independent variables on the dependent variable. The study is conducted among food and beverage companies listed on the Indonesia Stock Exchange between 2019 and 2021, totaling 72 companies. The sample size comprises 28 companies for three years, totaling 84 samples.

The study employs multiple linear regression analysis to understand the relationships between variables comprehensively. Classical assumptions, including normality, multicollinearity, heteroscedasticity, and autocorrelation, are tested to ensure the appropriateness of the regression model. The analysis utilizes SPSS version 22.

3. RESULTS AND DISCUSSION

3.1. Results

3.1.1. Classic Assumption Test

1) Normality test

Table 1. Normality Test Result	
One-Sample Kolmogorov-Smirnov Test	
asymp. Sig. (2-tailed)	.061

The results of the normality test on 84 research data showed that the data were normally distributed as indicated by the significance value in the Kolmogorov – Smirnov test above which was greater than 0.05, namely 0.061.

2) Multicollinearity Test

Table 2. Multicollinearity Test Results

Coefficients		
	Tolerance	VIF
ROA	.839	1,192
ROE	.786	1,272
NPM	.875	1.142

Dependent Variable: Stock Price

Based on the table above, it can be seen that the results of the VIF multicollinearity test for each ROA, ROE, and NPM variable obtained showed that 1.192, 1.272 and 1.142 < 10 and the tolerance value for each ROA, ROE, and NPM variable obtained showed that 0.839, 0.786, and 0.875 > 0.10, there is no multicollinearity between variables.

3) Heteroscedasticity Test

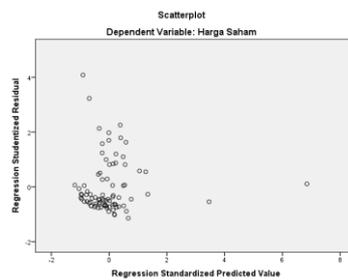


Figure 1. Heteroscedasticity Test

From Figure 1 above, the Scatter Plot shows that the points spread randomly and are scattered above and below the number 0 on the Y axis. It can be concluded that there is no heteroscedasticity in the regression model, so the regression model is feasible to use to predict stock prices based on independent variables ROA, ROE, and NPM.

4) Autocorrelation Test

Table 3. Autocorrelation Test Result

Summary models	
ROA, ROE, NPM	Durbin-Watson .016

Dependent Variable: Stock Price

Based on the table above, the Durbin-Watson value is 0.016. This shows the DW value between -2 to +2 with this regression model free from autocorrelation.

5) Linearity Test

Table 4. Linearity Test X1 with Y

ANOVA Table		
ROA * SHARE PRICE	Deviation from Linearity	Sig. .139

Based on the results of the linearity test in the table above, it shows that the sig deviation from linearity data is $0.139 > 0.05$. So it can be concluded that between the independent variable, namely Return On Assets and the dependent variable, namely Stock Price, there is a linear relationship.

Table 5. Linearity Test X2 with Y

ANOVA Table		
ROE * SHARE PRICE	Deviation from Linearity	Sig. .868

Based on the results of the linearity test in the table above, it shows that the sig deviation from linearity data is $0.868 > 0.05$. So it can be concluded that between the independent variable, namely Return On Equity and the dependent variable, namely Stock Price, there is a linear relationship.

Table 6. Linearity Test X3 with Y

ANOVA Table		
NPM * SHARE PRICE	Deviation from Linearity	Sig. .859

Based on the results of the linearity test in the table above, it shows that the sig deviation from linearity data is $0.859 > 0.05$. So it can be concluded that between the independent variable, namely Net Profit Margin, and the dependent variable, namely Stock Price, there is a linear relationship.

3.1.2. Hypothesis Testing

Table 7. Partial test (t)

Coefficients		
	Q	Sig.
ROA	-0.914	0.363
ROE	4,820	0.000
NPM	-0.508	0.613

Dependent Variable: Stock Price

The criteria for the t-table test at a significant level of 5% with degrees of freedom (df) is calculated as $df = nk - 1$ or $84 - 3 - 1 = 80$ (where n is the total observations and k is the total independent variables). The t-table value at a 5% significant level is 1.664.

1. First Hypothesis Testing

H1: The ROA variable has a t statistic $<$ t-table ($-0.914 < 1.664$) with a significance level of $0.363 > 0.05$. Thus, it can be concluded that H0 is accepted and H1 is rejected, indicating that ROA has no significant and negative effect on stock prices.

2. Second Hypothesis Testing

H2: The ROE variable has a t statistic $>$ t-table ($4.820 > 1.664$) with a significance level of $0.000 < 0.05$. Therefore, it can be concluded that H0 is rejected and H2 is accepted, meaning that ROE has a positive and significant effect on stock prices.

3. Third Hypothesis Testing

H3: The NPM variable has a t statistic $<$ t-table ($-0.508 < 1.664$) with a significance level of $0.613 > 0.05$. Thus, it can be stated that H0 is accepted, and H3 is rejected, suggesting that NPM has no significant effect on stock prices.

3.2. Discussion

3.2.1. Effect of Return On Assets (ROA) on Stock Prices

The findings of the first hypothesis indicate that ROA does not have a significant impact on stock prices, and the relationship is negative (H0 accepted, H1 rejected). The data tabulation results show that ROA has a non-unidirectional relationship with stock prices, meaning that an increase in ROA is associated with a decrease in stock prices. Typically, a good ROA is considered to be greater than 2% (Lestari & Sugiharto, 2007), and during the study period, 26 out of 28 sample companies had ROA values above this threshold. According to Kasmir (2020), a higher ROA indicates better company performance with larger returns, attracting investors to invest in the company and leading to a rise in stock prices. However, this study's results contrast with previous research (Ani et al., 2019; Darmadji & Fakhrudin, 2006; Santy & Triyonowati, 2017) that found a positive ROA value attracts investors and leads to an increase in stock prices. Instead, this study aligns with the work of Itabillah (2013) and Akbar & Djawoto (2021), which identified a negative and insignificant effect of ROA on stock prices.

The relationship between signal theory and ROA on stock prices suggests that a higher ROA percentage signals better profit-earning ability to investors, leading to increased confidence and higher stock prices. However, the results of this study indicate

a negative signal to potential investors, suggesting that the company's ability to control operational costs and earn profits is still low. The company may have a higher number of total assets compared to its net income, resulting in underutilized assets and reduced profitability. As a consequence, some investors might be cautious before making investment decisions due to associated risks.

3.2.2. Effect of Return On Equity (ROE) on Stock Prices

The second hypothesis testing shows that ROE has a positive and significant effect on stock prices (H0 rejected, H2 accepted). The data tabulation results reveal a unidirectional relationship between ROE and stock prices, meaning that an increase in ROE corresponds to an increase in stock prices. A good ROE is considered to be greater than 12% (Lestari & Sugiharto, 2007), and during the study period, 18 out of 28 sample companies had ROE values above this threshold. Kasmir (2015) highlights that ROE measures the company's ability to generate profits for shareholders and efficient use of capital. A higher ROE attracts shareholders to invest in the company, leading to an increase in stock prices. These results align with Husaini (2012) and Murtiningsih (2011).

The relationship between signal theory and ROE on stock prices suggests that a higher ROE value indicates better company performance and profitability, thereby signaling to investors to invest in the company, resulting in higher stock prices. The findings of this study support the signal theory, indicating that ROE gives a positive signal to potential investors. The management's success in maximizing shareholder returns and efficient utilization of capital leads to an increase in stock prices, making it a safer investment choice for potential investors amid rising demand in the capital market.

3.2.3. Effect of Net Profit Margin (NPM) on Stock Prices

The results of the third hypothesis test indicate that NPM does not have a significant and positive effect on stock prices (H0 accepted, H3 rejected). The data tabulation results show a negative relationship between NPM and stock prices, implying that an increase in NPM leads to a decrease in stock prices. A good NPM is considered to be greater than 5% (Lestari & Sugiharto, 2007), and during the study period, 18 out of 28 sample companies had NPM values above this threshold. Contrary to Kasmir (2015), who suggests that a higher NPM indicates better profit-earning ability relative to stock prices, this study's findings suggest that NPM is not significant and does not indicate the company's efficiency in obtaining profits from sales.

The relationship between signal theory and NPM on stock prices suggests that a higher NPM value signifies higher sales revenue and profits, leading to better company performance and higher stock prices. However, the results of this study indicate a negative signal to potential investors, implying that the company's cost efficiency in generating net profit is still low, leading to reduced profitability and no significant impact on stock prices. Investors are highly sensitive to profit levels in the company, and thus, potential investors must carefully consider the investment decision due to the associated risks.

4. CONCLUSION

This research study provides valuable insights into the relationship between financial ratios and stock prices for food and beverage companies listed on the Indonesia Stock Exchange from 2019 to 2021. The findings indicate that ROA and NPM do not exert a significant impact on stock prices. However, it is evident that ROE plays a crucial and positive role in influencing the stock prices of these companies during the mentioned period.

ROE, representing the company's proficiency in generating profits from shareholder assets allocation and optimizing net profit to benefit shareholders, emerges as a decisive factor. Investors are influenced by a strong ROE and are more inclined to purchase shares, consequently driving an upward trend in share prices.

Moreover, when considering all three independent variables, namely ROA, ROE, and NPM together, they collectively demonstrate a substantial effect on the dependent variable, which is the stock prices. This highlights the importance of comprehensively assessing these financial ratios to gain a holistic understanding of their impact on a company's stock performance.

In conclusion, while ROA and NPM do not significantly influence stock prices in the food and beverage sector, ROE stands out as a key driver in attracting investor interest and positively impacting share prices. Therefore, companies in this industry should focus on maximizing their ROE to enhance their market value and appeal to potential investors.

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