# Analysis of the Effect of Profitability Ratios on Company Stock Prices with EPS as an Control Variable

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#### ABSTRACT

The capital market is a means of business financing where companies obtain capital from investors. The main goal of investors in buying shares is to obtain dividends from the difference between the selling price and the buying price of the shares. The share price is the price per share of a company's shares issued on the stock exchange. Share prices are determined by supply and demand for the shares themselves. The more people buy shares, the share price tends to move up and conversely, the more people sell their shares, the share price tends to move down. Prospective investors should understand fundamental analysis as an additional material in looking at financial ratios, learn to invest well, learn to assess stock portfolios so that they suit the investor's characteristics. This research aims to determine the effect of Net Profit Margin (NPM), Return on Equity (ROE), and Return on Assets (ROA) on share prices with earnings per share (EPS) as the control variable. Data for this research was obtained from secondary data using a purposive sampling method. The samples used were 11 companies listed on the Indonesian Stock Exchange (BEI) manufacturing companies in the pharmaceutical subsector in 2019-2023. The analytical tool used is t test regression analysis with SPSS application tools. The results of this research show that Net Profit Margin (NPM) has a positive effect on stock prices. The test results on Return on Assets (ROA) have a positif effect on stock prices. The test results on the variables Earning Per Shares (EPS) and Net Profit Margin (NPM) have a positive effect on share prices. While the ROE ratio does not affect the company's stock price. Meanwhile, for the simultaneous test, the ROA, ROE, NPM and EPS ratios together influence the stock prices of pharmaceutical companies.

Keywords: ROA, ROE, NPM, EPS, and Stock Price

#### **INTRODUCTION**

In the era of globalization, investing in the capital market has been known to all groups such as entrepreneurs, professionals, and has even spread to students. The capital market is a place where various parties, especially companies, sell stocks and bonds with the aim that the proceeds from the sale will later be used as additional funds or to strengthen business capital (Fahmi, 2015). The capital market plays an important role in the country's economy, because the capital market is a means of financing businesses where companies obtain capital from investors. Therefore, so that investors do not experience losses, investors are required to monitor fluctuations and factors that can affect stock prices when making decisions (Dewi, 2022). According to Tahir et al, 2021, investing in BEI is carried out with a number of processes such as bonds, stocks, mutual funds and derivatives. Investing in the stock exchange has a greater risk. However, behind that there is also high profitability, which we often call high risk and high return. Stock prices experience decreases and increases due to investors assessing stock performance from the company's profit side, so researchers use the Net Profit Margin (NPM) ratio and the company's ability to return its capital using the Return On Equity (ROE)

ratio, so that the company has difficulty attracting investors to invest their funds in the company (Suhadak, et. al,. 2019). The high demand for an issuer's shares can increase the price of the shares. One of the benchmarks for increasing the value of a company is by increasing the share price. Stock price is one indicator of the success of company management, but this is not easy to achieve because stock price fluctuations occur almost every time. This study aims to obtain empirical evidence of the factors that influence the company's stock price. The variables used include the ROA, ROE, NPM, and EPS ratios.

#### LITEATURE REVIEW AND HYPOTHESIS DEVELOPMENT Return on Equity (ROE)

ROE (Return on Equity) is a comparison between net profit after tax and equity. ROE is a volume that describes the extent to which assets contribute to creating net profitability (Maftukhah, 2024). Return on equity (ROE) is used to measure the ability of a business entity to generate profits with equity invested by shareholders. The higher the return on equity (ROE), the higher the amount of net profit generated from each rupiah of funds invested in equity (Ekawati, 2020).

$$ROE = \frac{Net \ Profit}{Total \ Equity} \ x \ 100\%$$

#### **Return on Assets (ROA)**

This theory is based on the opinion that a company's assets are funded by shareholders and creditors, therefore the ROA ratio must be able to provide a measure of asset productivity in providing returns to investors.

$$ROA = \frac{Net \ Profit}{Total \ Aktiva} \ x \ 100\%$$

#### **Net Profit Margin (NPM)**

According to Kurniawan (2010) in Triyanti (2021), Net Profit Margin is an analysis tool used to calculate the extent of a company's ability to generate net profit at a certain sales level.

$$NPM = \frac{Earning After Tax}{Sales} \times 100\%$$

#### **Earning Per Shares (EPS)**

Earning Per Share is used to show how much profit is generated per share, net profit that is ready to be distributed to shareholders, and how much profit investors get per share (Triyanti, 2021). According to Gitman (2012) in Octavia (2018) The firm's earnings per share (EPS) is generally of interest to present or prospective stockholders and management. As we noted earlier, EPS represents the number of dollars earned during the period on behalf of each outstanding share of common stock.

$$EPS = \frac{Earning After Tax}{number of shares outstanding} \ x \ 100\%$$

#### **Stock Price**

Stock price is one indicator of the success of company management. If the stock price of a company always rises, investors assume that the company has succeeded in managing its company. This is very beneficial for the issuer because the more people believe in the issuer, the stronger the desire to invest.

#### **Hypothesis Development**

According to Suryawuni (2022), the company's improving performance and increasing company value will give hope for an increase in the company's stock price which will ultimately have an impact on increasing stock returns. This means that increasing the return on assets can provide maximum benefits to the company's value so that it can increase the stock price.

#### H1: ROA affects the company's stock price

Return on Equity (ROE) is a ratio to measure net profit after tax with equity (Khoiri, 2020). This ratio can show how efficient the company is in using its equity. The higher the ROE, the better the company's performance can be said to be.

# H2: ROE affects the company's stock price

According to Hendri (2019) the NPM level has a direct relationship with stock prices. The higher the NPM level indicates the better the company's performance. This means that high NPM will affect good performance which can also affect the increase in stock prices in a company.

#### H3: NPM affects the company's stock price

The higher the Earning Per Share, the more it will affect the company's performance level, so that it will make the company better and can cause the stock price to increase, this can increase investor confidence to invest in the company (Triyanti, 2021). If the Earning Per Share value is high, it means that the company's ability to earn profits and distribute the profits achieved by the company to shareholders is getting better and if the Earning Per Share value is low, the profit achieved by the company to shareholders is not good.

#### H4: EPS berpengaruh terhadap harga saham perusahaan

#### **RESEARCH METHOD**

This study uses secondary data in the form of financial reports of manufacturing companies, especially companies in the Pharmaceutical sector listed on the Indonesia Stock Exchange (IDX) in 2019-2023. The study used pharmaceutical sub-sector manufacturing companies with 11 companies that had financial report data and stock prices available on the IDX for 5 consecutive years. In this study, the researcher used the classical assumption test, namely the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. To test the effect, using the t-test and f-test. To test the hypothesis, the following formula is formulated:

$$Y = \alpha + b_1 ROA + b_2 ROE + b_3 NPM + b_4 EPS + \epsilon$$



#### **Figure 1. Research Framework**

#### **RESULTS**

This study uses a sample of manufacturing companies in the pharmaceutical sub-sector in 2019 - 2023. The total data is 55 from 11 companies with a period of 5 years. This study aims to obtain empirical evidence of the influence of ROA, ROE, NPM, and EPS ratios on the company's stock price. This study obtained the following results:

Table 1. Descriptive Statistics							
	Ν	Minimum	Maximum	Mean	Std. Deviation		
ROA	55	-144.11	90.36	10.5936	25.73552		
ROE	55	-24.17	31.85	8.1388	9.07091		
EPS	55	-138.06	402.85	97.0113	114.28927		
NPM	55	-37.45	38.47	7.3139	11.16997		
SP	55	43.00	4750.00	1459.0000	1158.66617		
Source: Processed Data SPSS (2024)							

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Source: Processed Data, SPSS (2024)

### **Classical Assumption Test**

Normality Test

This test is useful for knowing whether the data is normally distributed or not. This study uses the normality test, namely One Sample Kolmogorov-Smirnov. From the processed sample data, the results of the normality test are in table 2. Normality Test.

Tabel 2. Normality Test						
Ratio	Ν	Sig.	Significance Level	Conclusion		
ROA	55	0,000	0,05	Abnormal		
ROE	55	0,016	0,05	Abnormal		
NPM	55	0,000	0,05	Abnormal		
EPS	55	0,000	0,05	Abnormal		

Source: Processed Data, SPSS (2024)

The results in table 2 Normality Test results using the One Sample Kolmogorov Smirnov Test convey that the Significance value of the ROA, NPM, and EPS variables is 0.000 where 0.000 <0.050 (alpha) which means the data is not normally distributed. While for the ROE variable, the Significance value of the ROA variable is 0.016 where 0.016 < 0.050 (alpha) which means the data is not normally distributed.

#### **Test Multicollinearity**

Testing the regression model, whether or not there is a relationship between the dependent variable and the independent variable using multicollinearity test. If the result is the Tolerance value is not more than equal to 0.10 and the VIF is not more than equal to 10, then the model can be recognized as having no indication of multicollinearity. From the results processing the data contained in table 2, the Tolerance values obtained from all independent variables are above 0.10 and the VIF is not greater than 10, then the regression model has no indication of multicollinearity.

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Table 5. Multiconnearity Test				
Variah al	Collinearity Statistics			
v allabel	Tolerance	VIF		
ROA	.214	4.662		
ROE	.069	1.464		
EPS	.765	1.307		
NPM	.048	2.627		
NPM	.048	2.627		

Source: Processed Data, SPSS (2024)

### **Autocorelation Test**

Table 4. Autocorelation Test						
Model	R	R Square	Adjusted R	Std. Error of	Durbin-	
		1	Square	the Estimate	Watson	
1	.785 <sup>a</sup>	.617	.586	745.62941	.936	

Source: Processed Data, SPSS (2024)

Table 4 above, the results of data processing from 55 samples, obtained a DW value of 0.936. There are 4 independent variables (k=4). If you look at the special DW table, you get the value of dL=1.5190, the value of dU=1.7399, and the value of 4-dU=2.2601. From the calculation results, the regression model shows that there is no autocorrelation because the dU <DW <1.971.

#### **T-Test Result**

Based on table 1, it is known that the significance value of the ROA variable is 0.015; where this value is smaller than the significance level of 5% (0.05), which means that the ROA variable has an effect on the company's stock price. Furthermore, the significance value of the ROE variable is 0.139; where this value is greater than the significance level of 5% (0.05), which means that the ROE variable does not affect the company's stock price. Then, the significance value of the EPS variable is 0.000; where this value is smaller than the significance level of 5% (0.05), which means that the EPS variable is 0.000; where this value is smaller than the significance level of 5% (0.05), which means that the EPS variable affects the company's stock price. Finally, the significance value of the NPM variable is 0.064; where this value is smaller than the significance level of 10% (0.10), which means that the NPM variable affects the company's stock price.

	Table 1. T-Test Results						
Variabel	Unstandardized Coefficients	Standardized Coefficients	t	Sig.			

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	В	Std. Error	Beta		
ROA	21.343	8.513	474	-2.507	.015
ROE	64.017	42.543	501	-1.505	.139
EPS	8.835	1.015	.871	8.704	.000
NPM	78.002	41.256	.752	1.891	.064

Source: Processed Data, SPSS (2024)

The test results on Return on Assets (ROA) have a negative effect on stock prices. The test results on the variables Earning Per Shares (EPS) and Net Profit Margin (NPM) have a positive effect on share prices. Meanwhile, for the simultaneous test, the ROA, ROE, NPM and EPS ratios together influence the stock prices of pharmaceutical companies.

#### **F-Test Result**

	Table 2. F-Test Result							
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	44697232.939	4	11174308.235	20.099	.000 <sup>b</sup>		
	Residual	27798161.061	50	555963.221				
	Total	72495394.000	54					

Source: Processed Data, SPSS (2024)

The value of Sig. of 0.000 which is smaller than the 5% significance level (0.05) so in conclusion, High company profit growth is influenced by Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM), and Earning per Shares (EPS).

### DISCUSSION

This study uses a sample of manufacturing companies in the pharmaceutical sub-sector in 2019 – 2023. The total data is 55 from 11 companies with a period of 5 years. This study aims to obtain empirical evidence of the influence of ROA, ROE, NPM, and EPS ratios on the company's stock price. This study obtained the following results:

#### H1: ROA affects the company's stock price

The significance value of the ROA variable is 0.015; where this value is smaller than the significance level of 5% (0.05), which means that the ROA variable has an effect on the company's stock price. Increasing the attractiveness of a company makes the company increasingly attractive to investors, because the rate of return will be greater. This will also have the impact that the company's share price in the capital market will also increase so that Return On Assets (ROA) will influence the company's share price (Siregar, 2022). The higher the Return On Assets, then shows that performance within the company will get better because of the level The returns are getting bigger so that investors are interested in buying shares that will affect share prices (Dewi, 2022).

#### H2: ROE does not affect the company's Share Price

The significance value of the ROE variable is 0.139; where this value is taller than the significance level of 5% (0.05), which means that the ROE variable does not affect the company's stock price. Return On Equity does not have a significant influence on share prices. So the effective and efficient level of company management is decreasing, or in other words, the performance of company management in managing sources of operational financing funds is not optimal in generating net profits. So that it influences investors' interest in investing in the company.

## H3: NPM affects the company's Stock Price

The significance value of the EPS variable is 0.000; where this value is smaller than the significance level of 5% (0.05), which means that the EPS variable affects the company's stock price. An increasing Net Profit Margin (NPM) reflects the company's improving performance and the profits (returns) obtained by shareholders will increase, thus investors or potential investors will be interested in investing their funds in the company.

#### H4: EPS affects the company's Stock Price

The significance value of the NPM variable is 0.064; where this value is smaller than the significance level of 10% (0.10), which means that the NPM variable affects the company's stock price. Based on the positive value of the beta coefficient, it shows that companies that have a high Earning Per Share value tend to increases the share price of a company and is considered profitable for investors. If EPS is low it will reduce investor confidence in companies and cause investor interest to invest in the capital market reduce. In other words, every increase in EPS shows that The company is able to provide a higher level of shareholder profits good. The higher the Earning Per Share value, the higher the share price company so that it will have an impact on the size of profits for shareholders.

# CONCLUSION, LIMITATION, SUGGESTION

#### Conclusion

This study uses a sample of manufacturing companies in the pharmaceutical sub-sector in 2019 – 2023. The total data is 55 from 11 companies with a period of 5 years. This study aims to obtain empirical evidence of the influence of ROA, ROE, NPM, and EPS ratios on the company's stock price. The test results on Return on Assets (ROA) have a positif effect on stock prices. The test results on the variables Earning Per Shares (EPS) and Net Profit Margin (NPM) have a positive effect on share prices. While the ROE ratio does not affect the company's stock price. Meanwhile, for the simultaneous test, the ROA, ROE, NPM and EPS ratios together influence the stock prices of pharmaceutical companies.

#### Limitation

The limitations of this study are limited to manufacturinf companies subsector Pharmaceutical in 2019-2023. As a suggestion for future research, researchers can replace data from different years and more companies.

#### Suggestion

In addition, further researchers can examine other variables besides the variables used in this study that may have an effect on high profit growth.

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