

Effect of return on asset and return on equity on stock price

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ABSTRACT

The purpose of this study was to determine the effect of Return on assets and return on equity on the share price of pharmaceutical subsector companies listed on the Indonesia Stock Exchange from 2020 to 2023. The sampling used in this study was purposive sampling method. The study population consisted of 12 pharmaceutical companies listed on the Indonesia Stock Exchange for the period 2020-2023 or 4 years and the number of samples in this study amounted to 10 companies. The indicator used to calculate the stock price is the stock price at the closing price. This type of research is quantitative research and the type of data used is secondary data in the form of financial reports which can be accessed at <http://www.idx.co.id>. The results showed that ROA and ROE did not have a significant effect on stock prices, this was also evident from the t test, and the significance results of the return on assets and return on equity variables were smaller than the degree, namely $0.938 > 0.05$ for the ROA variable and $0.390 > 0.05$ for the ROE variable. The results of the f test research also show that return on assets and return on equity do not simultaneously affect stock prices because the significance value is greater than the degree of error, namely $0.079 > 0.05$.

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1. Introduction

The capital market is currently a market that attracts a lot of attention because many people and investors are interested in investing their funds in the capital market. The capital market is a meeting place for parties who have resources and parties who need resources. Currently in the capital market there are many parties who need funds, namely companies that want to improve their company's performance by going public. One of the requirements for a company to be listed on the stock exchange is a good stock price in the capital market. Many researchers have shown that profitability affects stock prices. This means that if the profitability of a company is good, it will also affect its share price in the capital market.

Several branches of PT Bio Farma until the middle of this year, have recorded growth above 100%. But the rise of technology companies soon led to a significant decline. Companies say they can look at drug inventory and gain insight into whether a company is healthy. Share price is one of the most important things for a company. This can be seen from the share price which can determine the number of investors who invest their money in the company. (Putranto and Darmawan, 2018) explain that companies that raise funds from investors through the purchase and sale of shares provide opportunities for expansion without waiting for cash outflows from the company's operating results.

Therefore, investors who want to invest their funds choose profitable companies that will help them get the maximum benefit from their investment. Investors try to understand the health of a company through the audited financial statements it submits. Generally, investors pay more attention not only to the stock price of a company but also to the sales data of a company (Tyas and Saputra, 2016). Investors can find out the profitability of a company by evaluating financial statements.

Companies that report high profits can attract investors' attention to the company in which they invest, which of course can affect the company's share price. Profitability refers to the company's ability to generate profits within a certain period of time. Profitability attracts the attention of investors who invest their capital because it also reflects the ability of a company to generate profits for its shareholders (Hery, 2017). Stock price fluctuations can be influenced by demand. The more investors who want to invest, the more demand for the shares will increase, which of course will affect the fluctuations in the share price of a company. The following is true: The higher the demand, the higher the price, and vice versa. This profitability can be seen through financial reporting ratios. (Hery, 2017) explains that return on equity (ROA) and return on equity (ROE) is one of the metrics commonly used to measure the ability of a company to generate profits.

Research (Abdullah, Soedjatmiko, Hartati, 2016), (Sukarno, Sitawati, Sam'ani, 2016), and (Pongkorung, Tommy, Tulung, 2018) research shows that profitability has a significant effect on stock prices. Meanwhile, research conducted (Utami and Darmawan, 2018) and (Martha and Yanti, 2019) shows that profitability does not have a significant negative effect on stock prices. (Dewi, Paramitha, Ermawati, 2019) Study "The Impact of Profitability, Liquidity and Company Size on the Share Price of Manufacturing Companies Listed on the IDX (Food and Beverage Subsector Period 2015-2017). The better the company's profitability, the more investors are interested in investing, and the share price tends to be higher, so that when it is sold, shareholders can benefit and the profitability is higher. Profitability is also the ability of a company to generate profits or profits, this is proof that the company fulfills its obligations to its buyers, and this affects the stock price because it is an important factor in ensuring the company's future prospects.

Based on the explanations and problems related to stock prices described above, the authors feel interested and have conducted research with the title "The Effect of Return on Equity and Return on Equity of Pharmaceutical Companies Listed on the Indonesia Stock Exchange on Stock Prices" period 2020-2023".

2. Research Method

In this study, researchers used secondary data. Secondary data is information that is processed and obtained from other sources by researchers. This research is a financial report for 2020-2023 on pharmaceutical companies listed on the Indonesia Stock Exchange (IDX). Secondary data is company performance data as measured by return on assets (ROA) and return on equity (ROE) available in financial reports on the official website idx.co.id.

Population and Sample The population of this study were pharmaceutical subsector companies for the 2020-2023 period totaling 12 companies. The data source used in this study is financial reports obtained by researchers indirectly from companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023. The sampling method used in this study was purposive sampling method so that a total sample of 12 pharmaceutical subsector companies was obtained during the 2020-2023 period. So the number of observation samples is 40 with the following criteria:

Table 1. Observation Sample

No.	Sample Criteria	Sample Quantity
1	Pharmaceutical sub-sector companies listed on the IDX for the period 2017 to 2020	12
2	Pharmaceutical sub-sector companies that do not include stock prices	2
3	Total observation data (10 x 4 years of research)	40

3. Results And Discussions

Descriptive Statistical Analysis

Descriptive statistics are used to provide an overview of the data that has been collected into statistical information. Descriptive statistics aim to process data so that the data becomes easier to understand. The resulting data is in the form of average value (mean), middle value (median), highest value (maximum), lowest value (minimum), standard deviation value, and others.

Table 2. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	40	-3.02	92.10	10.0858	14.85482
ROE	40	-8.79	224.46	17.6375	34.83836
Share Price	40	95	29000	4699.16	8409.654
Valid N (listwise)	40				

Based on the table above, it can be concluded that:

- Return On Asset has a mean value of 10.08, the highest value is 92.1, the lowest value is -3.02, and the standard deviation value is 14.85.
- Return On Equity has a mean value of 17.63, the highest value is 224.46, the lowest value is -8.79, and the standard deviation value is 34.83.
- Stock Price has a mean value of 4699, the highest value is 29000, the lowest value is 95, and the standard deviation value is 8409.65.

Data Normality Test

Table 3. Normality Test Results (One-Sample Kolmogorov-Smirnov Test)

N	40	
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.51982375
Most Extreme Differences	Absolute	.132
	Positive	.090
	Negative	-.132
Test Statistic	.132	
Asymp. Sig. (2-tailed)	.075 ^c	

Based on the results of the Kolmogorov-Smirnov statistical test in this study, it shows that the Kolmogorov-Smirnov value is $0.75 > 0.05$, so the requirements for return on equity (ROA), return on equity (ROE) and stock prices are met because they have a normal distribution.

Multicollinearity Test

Table 4. Multicollinearity Test Results (Coefficientsa)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.530	.367		6.886	.000		
	ROA	-.045	.574	-.037	-.079	.938	.116	8.636
	ROE	.608	.698	.413	.872	.390	.116	8.636

Based on the results of the multicollinearity test table, it shows that the tolerance value of return on assets and equity is greater than 0.10 and the VIF value of return on capital and equity is less than 10. it can be concluded that there is no multicollinearity in this model.

Heteroscedasticity Test

Table 5. Heteroscedasticity Test Results (Coefficientsa)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.530	.367		6.886	.000		
	ROA	-.045	.574	-.037	-.079	.938	.116	8.636
	ROE	.608	.698	.413	.872	.390	.116	8.636

From the table above, it can be seen that Return on Equity of 0.938 is greater than 0.05 and Return on Equity of 0.390 is greater than 0.05. Thus, it can be concluded that there is no heteroscedasticity problem in the data in this study.

Autocorrelation Test

Table 5. Autocorrelation Test Results (Model Summaryb)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.326 ^a	.106	.066	5562.61461	1.756

a. Predictors: (Constant), ROE, ROA

b. Dependent Variable: Harga Saham

Based on the table above, it shows that the D-W value is 1.756 according to the D-W table, if $n = 40$ and $K = 2$, the value of $dl = 1.3908$ and $du = 1.6000$ is obtained, this is an autocorrelation condition. $du < dw < 4du$. From this information it is known that $1.6000 < 1.756 < 2.4000$. This gives the conclusion that there are no autocorrelation symptoms in the data in this study.

F test

Table 6. F Test Results (Anova^a)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.446	2	1.223	2.751	.079 ^b
	Residual	14.672	33	.445		
	Total	17.118	35			

From the table above, it is known that the F number is 2.751 and the F table is 3.23, which means that the F number $< F$ table or $2.751 < 3.23$ with a significance level of $0.079 > 0.05$, which means that the independent variable has no simultaneous effect on the dependent variable. From the F test it can be concluded that return on capital and equity simultaneously have no significant effect on stock prices.

T-test

Table 7. T Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.530	.367		6.886	.000		
	ROA	-.045	.574	-.037	-.079	.938	.116	8.636
	ROE	.608	.698	.413	.872	.390	.116	8.636

Based on the t / detail test table, the t test results show that return on assets has no significant effect on stock prices, and its significance value is $0.938 > 0.05$. It is known that the significance value of return on equity is $0.390 > 0.05$, which means that return on equity has no effect on stock prices.

Discussion

Based on the results of the t test, this study shows that ROA has no significant effect on stock prices. For companies engaged in the pharmaceutical industry, this means that the return on equity of a company does not have a significant influence on the volatility or volatility of a company's share price. These results are supported by previous research (Egam, Ilat, and Pangerapan, 2017) which shows that wealth has no effect on the rise and fall of stock prices. This also shows that investment behavior is not necessarily based on the ROA of a company, but there are still many other factors.

This study found that ROE has no effect on stock prices. This shows that the return on equity of a pharmaceutical company has no significant effect on fluctuations in the company's stock price or capital market movements. These results are supported by previous research (Putri, 2017) and (Egam, Ilat, and Pangerapan, 2017) which state that return on assets has no effect on stock prices. In addition, (Egam, Ilat, Pangerapan, 2017) explained that it might also be because the focus of the capital adequacy ratio is more on internal factors than external factors when measuring financial performance.

4. Conclusion

The study investigated the impact of Return on Assets (ROA) and Return on Equity (ROE) on the share prices of pharmaceutical companies listed on the Indonesia Stock Exchange from 2020 to 2023. The findings revealed that both ROA and ROE did not significantly influence the stock prices of these companies. This conclusion was supported by the results of the t-test, where the significance levels for ROA and ROE were 0.938 and 0.390 respectively, both higher than the threshold of 0.05. Similarly, the f-test results indicated that ROA and ROE, when considered together, also did not have a significant effect on stock prices, with a significance value of 0.079, which is greater than the 0.05 threshold. The limitations of this study include the relatively small sample size of 10 companies out of the 12 pharmaceutical companies listed on the Indonesia Stock Exchange, which might not be fully representative of the entire sector. Additionally, the study only considered ROA and

ROE as the independent variables, potentially overlooking other factors that could influence stock prices, such as market conditions, company-specific events, and broader economic indicators. Future research could expand the sample size and include a more diverse set of independent variables to provide a more comprehensive understanding of the factors affecting stock prices. Additionally, longitudinal studies that cover a more extended period could help identify trends and patterns that may not be apparent in a shorter timeframe.

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