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## THE IMPACT OF FINANCIAL PERFORMANCE ON THE TECHNOLOGY SECTOR STOCK PRICE LISTED ON THE INDONESIA STOCK EXCHANGE IN 2021-2023



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### Abstract

This study was conducted to evaluate the extent to which financial performance plays a role in the stock price movements of technology sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2021 to 2023. In this study, Return on Assets (ROA), Earning Per Share (EPS), and Debt to Equity Ratio (DER) were used as independent variables, while stock prices were used as tied variables. The research method used is a quantitative approach with the application of multiple linear regression analysis, using the help of SPSS software version 27. Research data was obtained from 22 companies selected through the purposive sampling method, resulting in a total of 66 observational data in a span of three years. The findings of this study reveal that ROA and EPS have a significant impact on stock price changes, showing that solid financial performance is a particular attraction for investors. In contrast, DERs have no real influence on stock prices, which shows that investors in the technology sector tend to pay less attention to debt ratios when considering their investment decisions. This research provides practical implications for companies and investors. Companies are advised to improve operational efficiency to increase ROA and EPS, while investors can use both ratios as indicators in investment decision-making. This research also opens up opportunities for further studies in exploring other external factors that can affect stock price fluctuations in technology companies.

**Keywords:** Financial Performance, Stock Price, ROA, EPS, DER, IDX

## INTRODUCTION

In recent years, the development of the digital sector in Indonesia has experienced an extraordinary surge. Many technology-based companies have begun to list on the Indonesia Stock Exchange (IDX) through the initial public offering (IPO) mechanism. This phenomenon is driven by the great interest from investors who assess that technology companies have strong growth prospects in the long term. However, despite offering attractive prospects, the sector also faces major challenges, one of which is quite high stock price fluctuations. In 2023, the technology stock index experienced a significant decline, with a decline of 14.07% in a year. This decline reflects uncertainty in the market as well as the high risks associated with owning shares in technology companies.

The movement of stock values in the technology industry is currently the focus of attention for market participants and potential investors. Investors need to be more careful and selective in choosing stocks to optimize their investment returns. One approach that can be taken to support decision-making is to evaluate the company's financial performance. This financial condition describes the fundamental state of the company and helps investors estimate the potential for future business development (Spence, 1973).

Several financial indicators, such as Return on Assets (ROA), Earnings Per Share (EPS), and Debt to Equity Ratio (DER) are often used to assess a company's performance. ROA shows the level of effectiveness of a company in using available assets to generate revenue. EPS shows how much profit is earned for each share outstanding in the market. Meanwhile, DER illustrates the composition of company funding, namely, how much dependence on loans is compared to internal capital in carrying out business activities.

However, previous research has shown mixed results regarding the impact of these three ratios on stock price movements, especially in the technology sector, which has unique properties compared to other sectors. Therefore, a more comprehensive study is needed to find out the extent to which ROA, EPS, and DER affect the share price of technology companies in Indonesia. Referring to the conditions that occurred and the findings of previous research, this study aims to examine the relationship between ROA, EPS, and DER on the share prices of technology sector companies listed on the Indonesia Stock Exchange during the 2021–2023 period.

## REVIEW OF LITERATURE

### Signaling Theory

The concept of signal theory, which was first proposed by Spence in 1973, explains that the informant (data owner) sends signals or signs in the form of information that represent the state of the company, so that it can be a useful reference for the recipient of information (investors). According to (Brigham Eugene F and Houston Joel F, 2011), this theory outlines that management's perception of the company's future growth opportunities is able to influence the reaction of potential investors. The information conveyed acts as a signal, showing the management's steps in realizing the company's owner's targets. This information is then considered as a crucial factor that becomes the main consideration for investors and businesspeople when making their investment decisions.

### Financial Statements

Financial statements are the product of processing and recapitulation of business transaction records. An accountant is expected to be able to manage accounting information efficiently and compile it into accurate and reliable reports. In addition, accountants also have the responsibility to interpret and evaluate the financial statements that have been made, in order to provide a deeper understanding of the company's financial situation (Hery, 2016).

Financial statements are basically the final product of a series of accounting processes that aim to convey information about the financial condition and operational performance of a company to interested parties. As such, the report serves as a communication tool between companies and stakeholders, providing a thorough understanding of the company's financial health and performance.

### **Financial Performance**

Financial Performance refers to the company's ability to achieve goals related to financial aspects. These goals can be in the form of increasing profits, revenue growth, earnings per share, and improving company liquidity. This financial performance can be evaluated through various variables that reflect the extent to which the company is successful in its financial aspects (Apridasari, 2023).

There are several theories used to explain financial performance, including:

**Capital Market Theory** (Arief Yanto Rukmana et al., 2021), which believes that stock prices reflect all publicly accessible information, and that investors' decisions are based on their expectations of the company's future financial performance.

**Financing Theory** (Hartati et al., 2022) discusses how financing decisions, such as the selection of funding sources and capital structures, affect financial performance. Theories in this framework, such as capital structure theory and financial agency theory, are used to analyze a company's financial performance.

**Investment Selection Theory** (Angelia Putriana, 2023) focuses on how companies choose investment projects that can increase the value of the company. Financial performance is assessed based on efficiency in capital allocation, anticipated benefits from investments, and potential risks associated with the project.

### **Stock Price**

The stock price refers to the value set by the market for each share of a company listed on the stock exchange. This value is reflected in the interaction between demand and supply of stocks in the capital market. Therefore, before deciding to buy shares, investors need to conduct an analysis first to determine whether the share price is in accordance with the fair value of the company or not (Wuryaningrum & Budiarti, 2015). In stock evaluation, there are two main methods that are commonly applied, namely fundamental and technical analysis methods (Robiyanto, 2018). The fundamental approach focuses on assessing the company's intrinsic value by considering the condition of the company's assets, production processes, marketing strategies, and revenues that reflect future prospects (Prasetya et al., 2022). To conduct a fundamental analysis, a company's financial statements are needed to assess its financial performance (Robiyanto et al., 2017). If the company shows solid performance and is able to achieve high profits, its stock price tends to increase. On the other hand, the technical approach prefers analyzing the trend of previous stock price movements through charts to predict future price movements, and is often used for short-term analysis (Robiyanto, 2017).

### **Return on Asset (ROA)**

Return on Assets (ROA) is a financial ratio used to assess the extent to which a company can make a profit from the total assets it owns. The value of ROA describes the effectiveness of a company in utilizing existing assets to generate profits (Apridasari, 2023).

$$ROA = \frac{Net\ Profit}{Total\ Assets}$$

### Earning Per Share (EPS)

EPS (Earning Per Share) is an indicator used to assess the extent to which management has succeeded in generating shareable profits to shareholders. A low ratio value indicates that management is less successful in meeting the wishes of shareholders, while a high ratio indicates that the company is succeeding in increasing profits for shareholders.

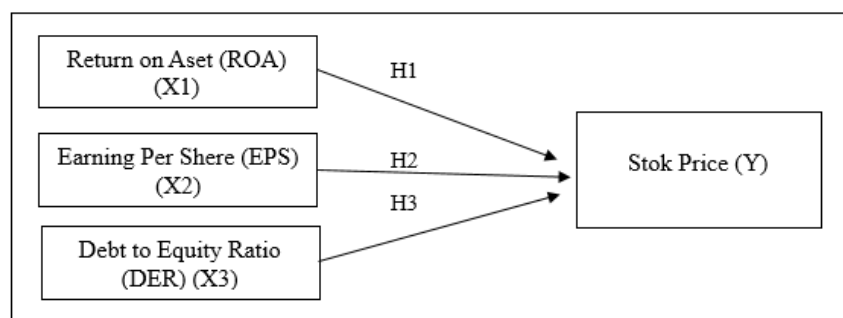
$$EPS = \frac{Net\ Profit}{Outstanding\ Shares}$$

### Debt to Equity Ratio (DER)

Debt to Equity Ratio (DER) is a ratio that describes the ratio between the total liabilities of the company and the capital owned by shareholders. This ratio is obtained by comparing all the company's liabilities, both short-term and long-term debt, with the owner's own capital. The DER provides an understanding of the extent to which the company relies on debt in financing compared to the capital provided by shareholders. Therefore, the DER indicates the proportion of debt that must be secured with the company's equity (Kasmir, 2018). The DER formula is a comparison between the amount of debt and the amount of equity of the company, which is calculated as follows.

$$Debt\ to\ equity\ ratio = \frac{Total\ Liabilities}{Equity}$$

### Research Framework



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

### RESEARCH METHOD

This study uses a quantitative method with an analytical descriptive approach. Based on the explanation Sugiyono (2020: 16) Quantitative methods are research approaches that are based on the school of positivism, in which research is conducted on a specific population or sample and data is collected through the use of research tools or instruments. Data analysis is carried out quantitatively or statistically, with the main objective of testing pre-determined hypotheses. According to Ghozali (2018:19) Descriptive statistics function to provide an overview or explanation of the data, analysis is carried out based on several parameters such

as mean values, standard deviations, variance, highest and lowest values, total sum, range, and data distribution measurements that include kurtosis and skewness.

In this study, the analyzed population includes stocks from technology sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period, with a total of 28 companies. Sampling was carried out using the purposive sampling method. The criteria used in the selection of this research sample include:

1. Companies in the technology industry listed on the Indonesia Stock Exchange (IDX) from 2021 to 2023.
2. Companies in the technology sector that complete financial statements and always list variables that are consistently researched from 2021 to 2023.
3. Companies in the technology sector that experience stock price variations (up and down) every year in the 2021-2023 period.
4. Companies in the technology sector listed on the Indonesia Stock Exchange (IDX) and present financial statements in rupiah during the research period.
5. Companies in the technology sector listed on the Indonesia Stock Exchange (IDX) and did not suffer losses during the research period.

As a result, 22 companies in the technology sector were selected to be listed on the Indonesia Stock Exchange (IDX) during the period 2021 to 2023, with a research period spanning three years, so that the total data analyzed reached 66 company entries. This study uses secondary data as the primary data type. The data sources needed for this study were obtained through two methods applied by the researchers, namely:

#### **Documentation**

The researcher collected information for this study by searching for previous research articles that were related to the research topic, obtained from the Indonesia Stock Exchange (IDX).

#### **Library Research**

This research uses previous research that focuses on related subjects, such as books, journals, articles from the internet, and other sources.

This research includes two types of variables, namely dependent variables and independent variables. The dependent variable used is the company's share price listed on the Indonesia Stock Exchange (IDX) for the period 2021 to 2023 (Y). Meanwhile, independent variables consist of Return on Assets (ROA) (X1), Earning Per Share (EPS) (X2), and Debt to Equity Ratio (DER) (X3). Data collection is carried out through the documentation method.

The relevant document for this study is the annual report published by each company. The data used in this study is secondary data, namely financial statements available on the official website of the Indonesia Stock Exchange, which includes information on stock prices, ROA, EPS, and DER of listed companies during the 2021-2023 period.

The steps of data analysis begin with grouping the data based on the variables present. The collected data is then arranged in a neat and organized order. Furthermore, the data that has been collected is analyzed according to the focus of the research. In the final stage, calculations were carried out to test the hypothesis and answer the questions asked in this study. In data analysis, this study used multiple linear regression tests processed using the SPSS version 27 program.

## RESULTS AND DISCUSSION

**Table 1.**  
**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	66	.09	125.61	14.2441	21.44705
EPS	66	.00	891.07	97.4635	194.95731
DER	66	2.34	337.35	53.2130	65.10531
Harga saham	66	3.91	10.55	6.6929	1.76108
Valid N (listwise)	66				

Source: Data processed with SPSS version 27

**The evaluation of data quality** in this study was carried out using statistical measures such as mean and standard deviation, which is part of descriptive statistical analysis. Data quality is considered better if the mean value is higher than the standard deviation. Standard deviation serves to measure how much the value variation in a sample is compared to the average, and also describes how scattered the data is in the sample. If the standard deviation is greater but still within reasonable limits, then the data is considered more representative of the population. Based on the existing table, with 66 company sample data in the 2021-2023 period, the results of the analysis show the following:

**The Return on Asset (ROA)** based on descriptive statistical tests shows a minimum value of 0.09, a maximum of 125.61, a mean of 14.2441, and a standard deviation of 21.44705. Because the standard deviation is greater than the average, it indicates the existence of considerable data variation, or a highly variable distribution of data between one data point and another in the study period.

**Earnings Per Share (EPS)** based on descriptive statistical tests has a minimum value of 0.00, a maximum of 891.07, a mean of 97.4635, and a standard deviation of 194.95731. A standard deviation value greater than the mean indicates that there is considerable variation in the data, which means that the distribution of data over the study period is very non-uniform between one data point and another.

**The Debt-to-Equity Ratio (DER)** based on the descriptive statistical test has a minimum value of 2.34, a maximum of 337.35, a mean of 53.2130, and a standard deviation of 65.10531. A larger-than-average standard deviation indicates that the variation in the data is quite high, which suggests that the distribution of data during the study period differs greatly from one data point to another.

The stock price based on the descriptive statistical test has a minimum value of 3.91, a maximum of 10.55, an average (mean) of 6.6929, and a standard deviation of 1.76108. A standard deviation that is smaller than the average can mean that the variation of research data tends to be low, so that the data between one data are not too different.

### Normality Test

**Table 2.**  
**Normality Test Results, One-Sample Kolmogorov-Smirnov Test**

**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual	
N		65	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.23352160	
Most Extreme Differences	Absolute	.109	
	Positive	.109	
	Negative	-.100	
Test Statistic		.109	
Asymp. Sig. (2-tailed) <sup>c</sup>		.053	
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.055	
	99% Confidence Interval	Lower Bound	.049
		Upper Bound	.061

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 299883525.

Source: Data processed with SPSS version 27

The results of the normality test in table 2 show that the residual data is distributed normally, due to the Asymp. Sig. (2-tailed) of 0.053 is greater than 0.05. Thus, it can be concluded that the data follows a normal distribution.

**Multicollinearity Test**

The ROA variable had a tolerance value of 0.711 and a VIF value of 1.406, which indicates that there was no multicollinearity in the ROA variable, because the tolerance value was greater than 0.10 and the VIF value was less than 10. The EPS variable has a tolerance value of 0.716 and a VIF value of 1.397, which indicates that the EPS variable also does not experience multicollinearity, because the tolerance value is greater than 0.10 and the VIF value is less than 10. Likewise, the DER variable has a tolerance value of 0.939 and a VIF value of 1.065, which shows that the DER variable does not experience multicollinearity, because the tolerance value is greater than 0.10 and the VIF value is less than 10. Based on these findings, it can be concluded that the four independent variables do not show the presence of multicollinearity.

**Heteroscedasticity Test**

The heteroscedasticity test using the Glejser method showed that the significance value for the independent variables Return on Asset (ROA) was 0.054, Earning Per Share (EPS) was 0.619, and Debt to Equity Ratio (DER) was 0.675. Since all significance values are greater than 0.05, it can be concluded that no symptoms of heteroscedasticity occurred in the independent variables tested.

**Autocorrelation Test**

The results of the autocorrelation test listed in Table 5 above show that there is no autocorrelation, with a Durbin Watson value of 1.124. This value is between -2 and +2, which indicates that the data is free from autocorrelation issues.

**Multiple Linear Regression Analysis**

**Table 3.**  
**Results of Multiple Linear Regression Analysis**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.520	.288		22.641	<.001
	ROA	-.033	.011	-.401	-3.114	.003
	EPS	.005	.001	.522	4.066	<.001
	DER	.003	.003	.127	1.132	.262

a. Dependent Variable: Harga saham

Source: Data processed with SPSS version 27

The multiple linear regression model of independent variables to bound variables can be in the form of equations shown in table 6 above:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e$$

$$Y = - 6.520 - 0.033 (X_1) + 0.005 (X_2) + 0.003 (X_3) + e$$

The following can be drawn from the regression equation:

**A constant coefficient ( $\alpha$ )** of 6.520 with a positive value indicates that if all independent variables are considered zero or have no effect, then the stock price will remain constant at 6.520.

**The regression coefficient of ROA** of -0.033 which has a negative direction indicates an inverse relationship between ROA and the company's stock price. This means that if the ROA increases by one unit, the share price will decrease by 0.033 units. This implies that an increase in a company's ROA is likely to lead to a decline in the stock price.

**The EPS regression coefficient** of 0.005 with a positive direction indicates that there is a direct relationship between EPS and the company's share price. This means, if the EPS increases by one unit, then the share price will increase by 0.005 units. Thus, it can be concluded that an increase in the EPS of a company will cause the stock price to increase.

**The regression coefficient of DER** of 0.003 with a positive direction shows that DER also has a direct relationship with the company's stock price. This means that every one unit increase in the DER will cause the stock price to increase by 0.003 units. Thus, it can be concluded that the increase in the company's DER will have a positive effect on the stock price.

#### **Partial Test (T Test)**

The results of the ROA significance calculation showed a value of 0.003, which is smaller than the significance level of 0.05. This shows that ROA has a significant effect on the stock price ( $0.003 < 0.05$ ). Thus, the first hypothesis that ROA affects the stock price is acceptable, meaning  $H_0$  is rejected and  $H_a$  is accepted.

The significance value of EPS based on the calculation of 0.001, which is also smaller than 0.05, shows that EPS has a significant influence on the stock price ( $0.001 < 0.05$ ). Therefore, the first hypothesis that assumes that EPS affects the stock price is acceptable, so  $H_0$  is rejected and  $H_a$  is accepted.

Meanwhile, the significance value of DER of 0.262, which is greater than 0.05, indicates that DER has no significant influence on the stock price ( $0.262 > 0.05$ ).

Therefore, the hypothesis that DER affects the stock price is rejected, meaning H0 is accepted and Ha is rejected.

### **Coefficient of Determination Test (R<sup>2</sup>)**

The results of the Determination Coefficient Test show that the value of the determination coefficient R<sup>2</sup> is 0.268. This means that the Financial Performance variables proxied with ROA (X1), EPS (X2), and DER (X3) contribute 26.8% to the stock price (Y). Meanwhile, the remaining 73.2% was influenced by other factors not covered by this model.

### **The Effect of Return on Asset (ROA) on Stock Price Changes**

Based on the results of the hypothesis test that has been carried out, it is obtained that the effect of the Return on Asset (ROA) variable on the stock price has a significance value of 0.003, which is smaller than the significance level of 0.05. Thus, it can be concluded that the Return on Asset (ROA) variable has a significant effect on the stock price, and the H1 hypothesis that states that ROA affects the stock price is accepted. This shows that investors consider the ROA variable in investment decision-making to predict the movement of a company's stock price.

### **The Effect of Earnings Per Share (EPS) on Stock Price Changes**

Based on the results of the hypothesis test conducted, a significance value of 0.001 was obtained for the effect of the Earnings Per Share (EPS) variable on the stock price, which is smaller than the significance level of 0.05. Therefore, it can be concluded that the Earnings Per Share (EPS) variable has a significant influence on the stock price, and the H2 hypothesis that EPS affects the stock price is accepted. These findings illustrate that a company's strategy can influence investor perception, which takes into account EPS variables in making investment decisions to predict stock prices.

### **The Effect of Debt-to-Equity Ratio (DER) on Stock Price Changes**

Based on the analysis of the results of the hypothesis test that has been carried out, it was found that the influence of the Debt-to-Equity Ratio (DER) variable on the stock price has a significance value of 0.262, which is greater than the set significance value of 0.05. Thus, it can be concluded that the DER variable does not significantly affect the stock price, and the H3 hypothesis that there is an effect of the DER on the stock price must be rejected. These findings illustrate that in investment considerations, investors tend not to take DER into account as an influential factor in predicting a company's stock price.

## **CONCLUSION**

Based on the results of the study, the hypothesis regarding the impact of financial performance on stock prices shows that Return on Assets (ROA) has a significant influence on stock prices. The increase in ROA indicates that the company can utilize its assets efficiently, which attracts investors to buy shares. Earnings per Share (EPS) has also been shown to have a significant effect on stock prices, where an increase in EPS is linked to an increase in the share price, indicating that investors see EPS as a key indicator for a company's profit potential. In contrast, the Debt-to-Equity Ratio (DER) does not show any influence on the stock price. This is because the high or low debt-to-equity ratio does not have a significant impact on the company's value. This suggests that investors are not paying

much attention to the extent to which the company uses debt in its capital structure when making investment decisions.

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