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THE EFFECT OF RETURN ON EQUITY ON STOCK PRICES WITH EARNINGS PER SHARE AS AN INTERVENING VARIABLE IN TECHNOLOGY COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE FOR THE 2020–2024 PERIOD

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ABSTRACT

The rapid growth of capital market is currently attracting the attention of the public and investors to invest in the stock market. During the period 2020-2024, the average stock prices of the technology companies listed on the Indonesian Stock Exchange (IDX) experienced fluctuating conditions and tended to decline. One of the financial ratios suspected to influence stock price movements is the profitability ratio, namely ROE and EPS because they are able to explain a company's ability to generate profits. This study aims to examine the effect of ROE on stock prices through EPS as a mediating variable. The type of this research is explanatory research with purposive sampling as the sampling technique, resulting in 15 out of 47 technology companies listed on the IDX being selected as the research sample. The analytical method used is simple linear regression analysis with the assistance of SPSS 26. The results of this research show that ROE has no significant effect on stock prices. However, ROE has a positive and significant effect on EPS. EPS has a positive and significant effect on stock prices. Then EPS serves as a full mediating variable and significantly mediates the effect of ROE on stock prices.

Keywords: *earning per share; return on equity; and stock price*

1. INTRODUCTION

Technology sector companies are businesses engaged in technology that offer technological products and services. Globally, technology companies contribute significantly to the world economy. According to data from the World Economic Forum and McKinsey, projections for 2025 indicate that the added value of digital transformation will reach USD 100 trillion. Nevertheless, the stock price performance of technology sector companies has not been favorable. Stock prices in the technology sector have experienced fluctuations with a downward trend. In Indonesia, the technology sector has faced significant pressure due to market volatility and global economic uncertainty in recent years. This condition has resulted in declining stock prices of technology companies.

This study applies fundamental analysis by examining company performance through profitability ratios such as Return on Equity (ROE) and Earnings per Share (EPS). Both ratios reflect key aspects of financial performance and profitability, which are of primary concern to investors. According to (Tandelilin, 2010), information on profitability, such as ROE and EPS, is one of the most frequently used financial indicators by investors in assessing stock valuation.

The average Return on Equity (ROE) of technology companies during the 2020–2024 period showed a declining trend, with the average ROE even reaching negative values over the past two years. A negative average ROE indicates that companies were unable to generate profits from the available equity. This decline occurred because equity exceeded the profits earned. When equity is disproportionately higher than profit, the ROE ratio decreases, indicating that the company's performance in managing its capital is less than optimal. Such conditions provide a negative signal for investors when making investment decisions. The average Earnings per Share (EPS) of technology companies during the 2020–2024 period experienced significant fluctuations. A negative EPS indicates that the company is incurring losses, where total expenses exceed total revenues. A sharp decline in EPS negatively affects stock prices and reduces investor confidence.

ROE is used to assess the extent to which equity capital can generate returns for its owners, while EPS directly reflects the amount of income available per share after all obligations are met. This relationship implies that an increase in ROE tends to be followed by an increase in EPS, since net income an essential component in ROE calculation—also serves as the basis for calculating EPS. Theoretically, this aligns with profitability theory, which states that a company's financial performance can be measured by its ability to generate profits, and these profits form the basis for determining EPS (Kasmir, 2018).

Reken (2024) which explains that Return on Equity (ROE) has a significant negative effect on stock prices, while Earnings per Share (EPS) has a significant positive effect on a company's stock price. The higher the earnings per share (EPS) provided by the company, the better the return for investors. This condition encourages investors to make larger investments, thereby driving an increase in the company's stock price (Brigham, 2001). When Return on Equity (ROE) exhibits a negative effect on stock prices, Earnings per Share (EPS) is assumed to serve as a mediating variable that can shift the direction of this relationship into a positive one.

Based on the phenomena of stock prices, ROE, and EPS in technology companies listed on the Indonesia Stock Exchange during the 2020–2024 period, as well as the existence of a research gap marked by differences and inconsistencies in previous findings, a gap in the literature has emerged. Therefore, the author intends to conduct a study entitled "The Effect of ROE on Stock Prices in Technology Companies Listed on the Indonesia Stock Exchange for the 2020–2024 Period."

1.1 Problem Formulation

Based on the background described above, the formulation of the research problem is as follows:

a. Does ROE affect stock prices in technology companies listed on the Indonesia Stock Exchange during the 2020–2024 period?
b. Does ROE affect EPS in technology companies listed on the Indonesia Stock Exchange during the 2020–2024 period?
c. Does EPS affect stock prices in technology companies listed on the Indonesia Stock Exchange during the 2020–2024 period?
d. Does EPS serve as a mediating variable in the relationship between ROE and stock prices

in technology companies listed on the Indonesia Stock Exchange during the 2020–2024 period?

2. LITERATURE REVIEW

Signalling Theory

Signal theory was first introduced by Spence in 1973, explaining that the sender (the information holder) provides a signal in the form of information that reflects the condition of a company, which is useful for investors. This theory was later developed by Ross in 1977, highlighting the existence of information asymmetry between information provided by management and information available to shareholders. Such signals help investors assess a company's financial condition or performance, which will ultimately serve as a consideration in making investment decisions (Purba, 2023).

Stocks

Stocks are the most popular instruments in the financial market. According to Darmadji dan Fakhruddin (2012), stocks are defined as a sign of participation or ownership of an individual or business entity in a company or limited liability company. Based on the Indonesia Stock Exchange (IDX), stocks represent ownership of capital participation in a company or limited liability company. By investing such capital, the investor obtains claims on the company's earnings, claims on company assets, and the right to attend the general meeting of shareholders (GMS).

Stock Price

A stock price is the price of a share that occurs in the stock market and is formed through price movements determined by the level of demand and supply of the stock in the capital market (Hartono, 2017). Stock price is the selling price agreed upon between one investor and another (Halim, 2013). The price of a stock is influenced by the company's financial performance, which can be observed through the financial statements published annually by the company.

Financial Ratio Analysis

Financial ratio analysis is a tool used to evaluate company performance by comparing one financial figure with another in financial statements, providing a more comprehensive understanding of the company's financial position during a certain period (Harahap, 2018). Ratios are generally grouped into five categories: 1) Liquidity ratios, including Current Ratio, Quick Ratio, and Cash Ratio. 2) Leverage ratios, including Total Debt to Total Asset Ratio and Debt Service Ratio. 3) Activity ratios, including inventory turnover, receivables turnover, fixed asset turnover, and total asset turnover. 4) Profitability ratios, including net profit margin, return on assets (ROA), return on equity (ROE), return on investment (ROI), and earnings per share (EPS). 5) Market ratios, including price-to-earnings (P/E) ratio and price-to-book value (PBV) ratio. The ratios used in this study are explained as follows:

Return On Equity **(ROE)**

Return on Equity is a profitability ratio that indicates a company's ability to generate profit from shareholders' equity. ROE is calculated by comparing net income with total equity (Kasmir, 2017). The indicator used for the ROE variable is as follows:

ROE = EAT/Equity x 100%

Earning Per Share **(EPS)**

Earnings per Share (EPS) is a financial ratio that measures the net profit available for each outstanding common share in the market. EPS is calculated by dividing net profit after tax available to common shareholders by the number of common shares outstanding. The higher the EPS, the greater the returns enjoyed by shareholders (Husnan & Pudjiastuti, 2012). The indicator used for the EPS variable is as follows:

EPS = EAC/Number of Outstanding Shares

3. METHOD

This study employs an explanatory research design, which aims to test a theory or hypothesis in order to strengthen or reject existing theoretical propositions. The population of this study consists of 47 technology companies listed on the Indonesia Stock Exchange (IDX). From this population, a total of 5 companies were selected as samples using purposive sampling techniques.

This research uses secondary data obtained through documentation techniques by collecting annual financial reports of the companies, which were sourced from the official IDX website and the respective official websites of the companies under study. The data analysis methods applied include simple linear regression and the Sobel test for the intervening variable.

4. RESULTS AND DISCUSSION

Table 1. Summary of Hypothesis Testing Results

No	Hipotesis	Correlation	Determination	T Test	Sig	Result
1.	ROE has a significant effect on stock prices	0,168	0,028	1,406	0,164	Not significant
2.	ROE has a significant effect on EPS	0,641	0,411	6,893	0,001	Significant
3.	EPS has a significant effect on stock prices	0,376	0,141	3,342	0,001	Significant
4.	ROE has a significant effect on stock prices mediated by EPS	-	-	2,998	0,003	Significant

The Effect of ROE on Stock Prices

Based on the results of the simple linear regression test, ROE does not significantly affect stock prices, as indicated by a significance value greater than 5%. The ROE variable shows a positive coefficient, meaning that an increase in ROE would theoretically lead to an increase in stock prices. However, the t-test results show that the t-count is smaller than the t-table, indicating that Hypothesis 1 (H1) is rejected. This means that Return on Equity (ROE) does not have a significant effect on stock prices. These findings are in line with studies by Rahmadini (2020), and Claudi, (2021). The lack of significant influence may be due to factors such as market instability and investor preferences for other indicators, such as ROA, DPS, PBV, and DER.

The Effect of ROE on EPS

The results of the simple linear regression test show that ROE has a significant effect on EPS, as indicated by a significance value less than 5%. The ROE variable has a positive coefficient, meaning that an increase in ROE leads to an increase in EPS. The t-test results show that t-count is greater than t-table, indicating that Hypothesis 2 (H2) is accepted. This finding aligns with research conducted by Lukman Hakim (2020). suggesting that the higher a company's ability to generate net income from its equity, the greater the net income that can be allocated per outstanding share. A high ROE is associated with a higher EPS, reflecting the net income earned per share.

The Effect of EPS on Stock Prices

The results of the simple linear regression test indicate that EPS has a significant effect on stock prices, with a significance value less than 5%. The EPS variable shows a positive coefficient, meaning that an increase in EPS leads to an increase in stock prices. The t-test results show that t-count is greater than t-table, indicating that Hypothesis 3 (H3) is accepted. These results are consistent with the studies by Dian Indah Sari (2021) and Gusti Nyoman Reken (2024). High EPS reflects strong financial performance in generating earnings per share, which increases investor interest and stock demand, ultimately driving up stock prices. This demonstrates that EPS can influence stock prices.

The Effect of ROE on Stock Prices Mediated by EPS

Based on the Sobel test, the p-value is less than the 5% significance level, and the t- statistic is greater than the t-table, indicating that Hypothesis 4 (H4) is accepted. This means that EPS effectively mediates the relationship between ROE and stock prices. The analysis shows that EPS acts as a full mediating variable. This occurs because ROE does not directly affect stock prices but does affect EPS, which in turn affects stock prices. These findings are consistent with the study by Gio (2023), showing that ROE influences stock prices not only directly but also indirectly through EPS. In other words, the higher a company's ability to generate net income from equity (ROE), the higher the earnings per share (EPS), which ultimately drives stock price increases in the capital market. EPS serves as a conduit linking internal financial performance (ROE) and market value (stock price). A high EPS increases investor confidence, triggers stock purchase interest, and ultimately leads to higher stock prices.

5. CONCLUSION

Based on the results of the research, the conclusions are as follows:

a. The ROE (X) variable partially does not have a significant effect on stock prices (Y) in technology companies listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period.
b. The ROE (X) variable partially has a positive and significant effect on EPS (Z) in technology companies listed on the IDX during the 2020–2024 period.
c. The EPS (Z) variable partially has a positive and significant effect on stock prices (Y) in technology companies listed on the IDX during the 2020–2024 period.
d. EPS serves as a mediating variable in the relationship between ROE and stock prices in technology companies listed on the IDX during the 2020–2024 period.

6. IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Based on these conclusions, the following suggestions are proposed:

a. For Companies

Companies are expected to continuously improve profitability performance by monitoring their ROE ratios in managing corporate finances through optimizing the use of capital, increasing operational efficiency, and effective cost management.

b. For Investors

Investors are advised to consider Return on Equity (ROE) and Earnings Per Share (EPS), which significantly influence stock prices. These indicators can serve as a benchmark for investors in making investment decisions.

c. For Future Research

Future studies are recommended to include additional variables that reflect solvency, liquidity, and activity ratios to provide a more comprehensive analysis, thereby generating more accurate and reliable information.

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