

Earning per Share, Debt to Equity Ratio and Return on Equity in Stock Prices

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ABSTRACT

Investment is an important element that contributes to business expansion and progress. This study aims to examine how earnings per share, debt-to-equity ratio, and return on equity affect the stock prices of pharmaceutical companies on the IDX from 2018 to 2020. The focus is on pharmaceutical companies listed on the IDX from 2018 to 2022. The results reveal that while ROE has a positive effect on prices, its impact is minimal compared to EPS and DER, which both have a positive effect. The inference test showed an adjusted R-squared value of 0.211. This means that only 21.1% of the changes in stock prices can be explained by the independent variables EPS, DER, and ROE. Additional elements not included in this research affected the remaining 78.9%.

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INTRODUCTION

A capital market is a place where financial instruments such as shares are traded. According to Welan et al (2019), investors should have information about the company they are investing in. This information is important for decision-making and re-evaluating whether the company used as an investment site is capable of good management. Prospective investors focus on stock prices as important information when deciding on investments. Investors consider share prices important before making investment decisions because they provide an overview of company performance (Junaedi, et al., 2021). Earnings per share (Umar and Savitri, 2020; Kurnia et al, 2020), debt to equity ratio (Dewi and Suwarno, 2022; Kurnia et al, 2020), and return on equity (Rahmat and Fatima, 2022; Dewi and Suwarno, 2022) is an element that influences share prices.

A study by Dewi dan Suwarno (2022) suggests that earnings per share (EPS) reflects the value of a share's price. Research by Dewi dan Suwarno (2022) demonstrates that EPS positively influences stock prices, while Umar and Savitri (2020) found that EPS has minimal impact on discount rates. It's crucial to take into account credit risk and personal capital when making investment decisions. The Debt to Equity Ratio (DER) assesses risk by comparing liabilities to equity. Cornea et al. found that there is a positive correlation between the debt-to-equity ratio (DER) and stock prices. Brigham and Houston (2023) explain that return on equity (ROE) shows how well a company can make profits using its equity. ROE is also used to assess net profit and tax efficiency with the company's funds

(Kasmir, 2023). Rahmat and Fatima (2022) research showed that ROE positively affects stock prices, but Dewi and Suwarno (2022) found that ROE has little impact on stock prices. Researchers continue to study stock prices due to these differing findings.

A theory called signaling theory can describe the way two parties act when they have different levels of information (Ghozali, 2021). Kharuddin et al. (2022) state that signaling theory explains the tendency of companies to share financial information with external stakeholders. Company signals can include details regarding the steps taken by management, depending on key variables, to carry out the owner's wishes (Kharuddin et al., 2022). This theory explains how financial reports can convey signals about a company's performance, both good signals and negative signals.

THEORETICAL BASIS AND DEVELOPMENT OF HYPOTHESES

Investors often consider earnings per share as a key indicator before making investment decisions. This is because company performance has a direct effect on the size of profits based on shares owned (Umar and Savitri, 2020). One key factor to look at when analyzing a company's shares is its Earning per share (EPS). Prospective shareholders are attracted to large earnings per share, because this is one indicator of a company's success (Muzzaqi and Dewi, 2023). The link between benchmark theory and earnings per share (EPS) is that a high price per share is a good sign for investors. Dewi and Suwarno (2022) discovered that earnings per share (EPS) has a strong positive impact on stock prices. Generally, an increase in EPS tends to result in a corresponding increase in share prices. Drawing from theoretical analysis and prior studies, the following hypothesis is suggested:

H1 : Earning per share (EPS) is believed to have a significant impact on stock prices.

The debt-to-equity ratio is used to assess the relationship between a company's debt and equity (Kasmir, 2023). A higher level of company debt can impact the net profit generated. The link between the debt ratio and index theory suggests that a high debt ratio is unfavorable for investors, as a significant portion of income is derived from debt. Leverage shows how well a company can repay its debts. Having a lot of debt can make it harder for the entity to manage its finances. Having a large amount of debt will lead to lower profits. Decreasing profits are a bad sign for investors, so they don't want to invest money in the business (Nahdhiyah and Alliyah, 2023). Kurnia et al. (2020) found that the debt-to-equity ratio (DER) significantly negatively impacts share prices. Based on theoretical analysis and previous research, the following hypothesis is proposed:

H2: The debt-to-equity ratio (DER) is believed to have a significant negative impact on stock prices.

Returns on equity is a metric for assessing the effectiveness of equity capital in obtaining profits for all shareholders, including ordinary and preferred shareholders (Dewi and Suwarno, 2022). A higher return on equity indicates a more attractive investment opportunity for potential investors. The relationship between benchmark theory and return on equity lies in the fact that a higher return on equity is a good indicator of a firm's ability to use equity to produce results. An increasing Returns on Equity (ROE) value has the effect of increasing the company's reputation which ultimately contributes to an increase in share prices. Rahmat and Fatima (2022) research indicates that return on equity (ROE) significantly impacts share prices. A rise in ROE is linked to an increase in share prices. Based on the theoretical framework and prior findings, the following hypothesis is proposed:

H3 : Return on equity (ROE) is believed to have a significant impact on share prices.

METHOD

Variable Operationalization

Stock prices

Rahayu (2019) defines "share price" as the value of a stock traded on the IDX. Typically, a higher share price indicates to potential investors that the company has effectively managed its

operations. In this study, share prices are represented by the closing prices recorded at the end of the year, as noted by Nasution and Sari (2020).

Earnings per Share (EPS)

Earnings per share (EPS) indicator that provides important information to investors and investors because it shows the income related to each part of the company (Tandelilin, 2020). The EPS calculation is obtained from the following formula (Kurnia et al, 2020):

$$EPS = \text{Profit after tax divided by the number of shares} \times 100\%$$

Debts to Equity Ratio (DER)

The debt-to-equity ratio (DER) is used to assess a company's ability to meet its financial obligations. Typically, a higher DER is associated with lower share prices (Dewi and Suwarno, 2022). The DER is determined using the following formula (Kurnia et al., 2020):

$$DER = \text{Total Debts/Total Equity} \times 100\%$$

Returns on Equity (ROE)

Return on equity (ROE) assesses a company's profitability. A higher ROE indicates a greater ability to generate profit after taxes (Davy and Suvarno, 2022). The ROE is calculated using the following formula (Kurnia et al., 2020):

$$ROE = \text{Profit Bersih/Total Equity} \times 100\%$$

Data Analysis Methods

Data analysis was done using a quantitative assessment where the numbers were derived using statistical methods controlled by SPSS software. The regression equation is described as follows:

$$SP = \alpha + \beta_1 EPS + \beta_2 DER + \beta_3 ROE + e$$

Keterangan:

SP	: Stock Prices
EPS	: Earnings per share
DER	: Debts to equity ratio
ROE	: Returns on equity
α	: Constant
$\beta_1 \beta_2 \beta_3$	: Regression coefficient
e	: Standard error

RESULTS AND DISCUSSION

Normality test

Table 1 Normality Test Outcome

N	30
<i>Kolmogorovs-Smirnov</i>	0,135
<i>Asymp. sigs. (2-tailed)</i>	0,169

Table 1 reveals that the normality test results show a significant value of 0.169. The residuals are expected to be normally distributed if the asymptotic significance is greater than 0.05.

Multicollinearity test**Table 2 Outcome Multicollinearity Test**

Variable	Tolerances	VIF	Information
EPS	0,952	1,051	Not multicollinearity
DER	0,661	1,512	Not multicollinearity
ROE	0,682	1,467	Not multicollinearity

The information in Table 2 shows that there is no important relationship between the independent variables in this model, as indicated by the tolerance and VIF values. Each independent variable has a tolerance coefficient above 0.10, and the VIF value is less than 10.

Heteroscedasticity test**Table 3 Heteroscedasticity Result**

Variable	Sig	Information
EPS	0,88	Not heteroscedasticity
DER	0,142	Not heteroscedasticity
ROE	0,067	Not heteroscedasticity

The data in Table 3 show that the probability values for all variables are above 0.05, which supports accepting the null hypothesis (H₀). Therefore, it can be concluded that the regression model does not reveal any significant differences.

Autocorrelation test

Source: Secondary data processing, 2024.

Table 4 shows an asymptotic significance level of 0.193, which is above 0.05. This means that the regression model used in this study does not show any autocorrelation.

Hypothesis Testing**Table 5 Outcome Hypothesis Testing**

Variable	β	Sig	Information
EPS	5,368	0,013	H ₁ accepted
DER	392,023	0,022	H ₂ rejected
ROE	15,490	0,230	H ₃ rejected

The impact of earnings per share (EPS) on share price

It is generally believed that earnings per share (EPS) greatly impact share prices. The first hypothesis test results indicate that EPS helps increase share prices, confirming the validity of the first hypothesis in this study. This means that when earnings per share (EPS) goes up, the prices of shares also tend to go up significantly.

The effect of debts related equity (DER) on share prices

The second hypothesis posits that the debt-to-equity ratio (DER) has a negative impact on share prices. However, the results of the hypothesis test reveal that DER significantly influences share prices, resulting in the rejection of the second hypothesis. This finding indicates that as DER increases, share prices also experience a significant rise. By raising a company's DER, the company can enhance its share price, particularly through a debt strategy to lower tax liabilities. This result aligns with Dewi and Suwarno's (2022) research, which shows a positive effect of DER on costs.

The effect of returns on equity (ROE) on share prices

The third hypothesis states that return on equity (ROE) has a big effect on stock prices. The test results show that ROE has little impact on share prices. This means that the hypothesis in the

study has been rejected. A significant increase in ROE typically indicates strong company performance and effective resource management, which should theoretically enhance share prices (Dewi and Suwarno, 2022). According to indicator theory, this trend is important as it reflects the company's ability to manage its stocks for profit generation. This finding is consistent with Rahmat and Fatima (2022) research, which also indicates that ROE has a minimal impact on share prices.

CONCLUSION

After examining the data processing results in the previous section, the following results are possible: Earnings per share (EPS) has a significant and positive impact on share prices. A high EPS shows that the company is making a lot of profits efficiently, which makes it a good choice for investors. The debt-to-equity ratio (DER) can impact share prices in a positive way. A high Debt to Equity Ratio (DER) indicates that the company is using its debt effectively to help with its growth and expansion. Return on equity (ROE) has a positive impact on share prices, but the influence is not very strong. A high ROE demonstrates the company's capability to manage its resources efficiently to generate profits, which can enhance investor confidence and attract more investment.

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