



Analysis of the Influence of DER, ROE, PER and EPS on Price Shares in Listed Healthcare Sector Companies on the Indonesia Stock Exchange 2019-2023

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Abstract . This study aims to determine the effect of Debt to Equity Ratio (DER), Return On Equity Ratio (ROE), Price Earning Ratio (PER), Earning Per Share (EPS) on Health Sector Companies listed on the Indonesia Stock Exchange in 2020-2023. The population in this study were all health sector companies listed on the IDX. The number of samples collected was 17 companies with 5 years of observation (85 observation data) that met the criteria. The analysis method used was the classical assumption test, multiple linear regression analysis, while hypothesis testing used Simultaneous and Partial tests. The results of this study indicate that DER has a positive and significant to stock prices, ROE is not affects stock prices, PER does not influence on stock prices, EPS has a positive and significant influence on stock prices.

Keywords : Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), Earning Per Share (EPS).

1. INTRODUCTION

Health is very important for humans because it can support human activities. Health is not just the presence of weakness or disease, but also a complete physical, mental, and social well-being (Giriwijoyo, 2013). Health efforts are carried out with a maintenance approach, health improvement (promotive), disease prevention (preventive), disease healing (curative), and health recovery (rehabilitative), which are carried out in a comprehensive, integrated, and sustainable manner (Prasetyo, 2013).

Health sector companies include profit motive companies and non-profit motive companies, where profit motive is a company that seeks profit or gain (private) and non-profit motive is a company that does not seek profit or gain (government). As one of the entities listed on the IDX, companies in the health sector contribute significantly to investment flows and trade activities in Indonesia. As public concern for health aspects increases, the prospects for this industry are increasingly promising and attract the attention of investors.

Chandra & Darmayanti, (2022), the capital market or better known as the Indonesia Stock Exchange (IDX), is a market that provides various long-term financial instruments such as bonds, stocks, and other derivative instruments. One of the most frequently traded instruments in the Indonesian capital market is stocks. Stocks are proof of ownership of value or securities that show proof as a sign of ownership of individuals, communities and institutions or what are often referred to as investors in a company. (Yuhani, 2021).

Stock price is the primary measure of a company's market value. Rising stock prices tend to reflect positive perceptions about the company's prospects. Conversely, falling stock prices reflect uncertainty or poor performance of a company (Sari et al., 2022). Meanwhile, according to Brigham and Houston (2019), the value listed on the capital market in a certain period reflects the price of a stock. The formation of stock prices itself is the result of the interaction between the levels of demand and supply that occur at a certain time in the market (Hartono, 2014).

The problem phenomenon in this study is that in both financial reports at PT. Kimia Farma (KAEF) and PT. Sejahteraraya Anugrahjaya (SRAJ) have the same high Debt To Equity Ratio (DER) value, which is 147.17% at PT. Kimia Farma (KAEF) and 147.69% at PT. Sejahteraraya Anugrahjaya (SRAJ), where if the Debt To Equity Ratio value in a corporation increases, this tends to have a negative impact on the value of its shares in the capital market. The share price at PT. Sejahteraraya Anugrahjaya fell by 204 from 268 in the previous year and that is reasonable considering its DER value which is quite high. In contrast to PT. Kimia Farma whose share price actually increased by 4,250 from 1,250 in the previous year. Even though the Debt to Equity Ratio values in both companies were equally high in 2020.

Stock prices can be influenced by several parts of the financial ratio with the result that if the Debt To Equity Ratio decreases, the stock price will increase. If Return On Equity increases, it can have an impact on increasing stock prices. If the Price Earning Ratio increases, the stock price will also increase. If Earning Per Share increases, it will cause an increase in stock prices (Fahmi, 2020). Financial ratios are an analysis used to see the financial condition of a company, with the existence of financial ratios, it can be seen how the strengths and weaknesses of the company's finances are. The purpose of financial ratio analysis is to determine the efficiency of the performance of financial managers which is manifested in financial records and financial reports (Wardiyah 2017).

2. LITERATURE REVIEW

- **Signal Theory**

The concept of signal theory explains that strategic steps taken by management can be an indicator for investors to understand the company's internal views regarding the potential for future business development. This theory was first proposed by Michael Spence in 1973. The signal is in the form of information that is considered important for potential investors and business actors in

determining decisions before making an investment. A signal is a strategic step taken by a business entity in providing guidance to investors regarding the management's perspective on the future of the entity (Brigham & Houston, 2019).

- **Capital market**

The capital market is a means for companies to seek long-term funds by selling shares and issuing bonds (Hartono, 2014). The level of liquidity of a capital market is reflected in how quickly market players can carry out their transaction activities. Meanwhile, capital market efficiency is realized when there is alignment between the company's valuation and the value of the instruments traded in it. The capital market must be liquid and efficient so that sellers and buyers are interested in participating in the capital market (Rachmad Faisal, 2018).

- **Share**

Shares are proof of ownership of a company, which means that if someone owns shares, that person owns part of the company's ownership. The size of ownership of a company is determined based on the percentage of shares owned from the total shares of the company. The form of the shares themselves is usually a sheet of paper, the contents of which state that the ownership of the securities is the owner of the company that made the letter (Tannadi, 2020).

- **Stock price**

Jogiyanto (2017) preferred shares are investment instruments in the form of securities issued by companies with a certain currency denomination. The value of a share reflects how management manages a company, which is a reference for investors in their stock trading activities. When the stock price of a business entity shows a significant positive trend, this indicates the company's ability to generate promising profits (Siregar, 2021).

- **Financial Ratio Analysis**

Financial ratio calculation is a technique that combines various numerical components, both those contained in the income statement and the balance sheet. This measurement method with financial ratios has become a common instrument used to evaluate the financial performance of a business entity. Financial ratio analysis is carried out to determine the strengths or weaknesses of the company, this information is important for management to evaluate the performance achieved and to prepare future company plans (Sudana, 2015).

3. METHOD

The researcher used quantitative methods with analytical techniques in this study, namely descriptive statistics and multiple linear regression analysis. The data used in this study are Health Sector companies listed on the Indonesia Stock Exchange in 2019-2023, totaling 34 companies that are the population and sample. The sampling method used is the purposive sampling method used in this study to determine the sample, so that from 34 selected companies 17 samples of companies that meet the sampling criteria, with an observation period of 5 years, namely 2019-2023, a total of 85 sample data were obtained. The dependent variable in this study is the stock price as measured by the Price Book Value (PBV) and the independent variables are the Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS).

4. RESULTS

Descriptive Statistical Analysis

Descriptive statistical analysis provides a comprehensive picture of research data, facilitating understanding by revealing key characteristics. Through statistical calculations such as averages, standard deviations, and extreme values, researchers can explore key variables in a study (referring to the literature Ghozali, 2018). The following will present the main findings from the descriptive statistical test:

Table 1. Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Debt To Equity Ratio	76	506	38247	7175.34	7813.195
Return On Equity	76	-677	3632	1185.13	948.676
Price Earning Ratio	76	-41737	88842	19590.53	21980.942
Earning Per Share	76	-36987	64994	31897.88	21247.848
Price To Book Value	76	43082	89579	70020.33	9357.033
Valid N (listwise)	76				

The results of the descriptive statistical analysis in table 1 are as follows:

1. The Debt To Equity Ratio (DER) variable obtained a minimum value of 506. The maximum value was 38247. The average value was 7175.34. and the standard deviation was 7813.195.
2. The Return On Equity (ROE) variable obtained a minimum value of -677. The maximum value is 3632. The average value is 1185.13. and the standard deviation is 948.676.

3. The Price Earning Ratio (PER) variable obtained a minimum value of -41737. The maximum value is 88842. The average value is 19590.53. and the standard deviation is 21980.942.
4. The Earning Per Share (EPS) variable obtained a minimum value of -36987. The maximum value is 64994. The average value is 31897.88. and the standard deviation is 21247.848.
5. The stock price variable with the Price To Book Value (PBV) indicator obtained a minimum value of 43082. The maximum value was 89579. The average value was 70020.33. and the standard deviation was 9357.033.

Normality Test

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		76
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	7222.67445404
Most Extreme Differences	Absolute	.058
	Positive	.036
	Negative	-.058
Test Statistic		.058
Asymp. Sig. (2-tailed)		.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Based on statistical analysis using the Kolmogorov-Smirnov normality test, a significance value of 0.200 was obtained. This finding indicates that the residual distribution in the regression model used meets the assumption of a normal distribution. This is evidenced by the significance value which is above the threshold of 0.05, indicating that the data distribution does not deviate significantly from the normal distribution curve.

Multicollinearity Test

Table 3. Multicollinearity Test

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	56398.957	2455.697		22.967	.000		
	Debt To Equity Ratio	.336	.133	.281	2.522	.014	.677	1.478
	Return On Equity	-.341	1.133	-.035	-.301	.764	.636	1.572
	Price Earning Ratio	.073	.041	.171	1.784	.079	.917	1.090
	Earning Per Share	.319	.052	.725	6.154	.000	.604	1.656

a. Dependent Variable: Price To Book Value

Based on the multicollinearity analysis conducted, it was found that all independent variables showed characteristics that were free from high correlation problems between predictor variables. This is evidenced by the Variance Inflation Factor (VIF) value which is below the critical threshold of 10, where each indicator shows a safe value. Specifically, the Debt To Equity Ratio recorded a VIF of 1,478, Return On Equity of 1,572, Price Earning Ratio recorded 1,090, and Earning Per Share had a VIF of 1,656. In addition, the tolerance parameters for each variable also support this conclusion, with values exceeding 0.1. The Debt To Equity Ratio indicator has a tolerance of 0.677, Return On Equity 0.636, Price Earning Ratio 0.917, and Earning Per Share 0.604. Based on the test results, it can be concluded that the regression model is free from multicollinearity, which means that there is no significant linear relationship between the independent variables that can interfere with the quality of the regression analysis.

Heteroscedasticity Test

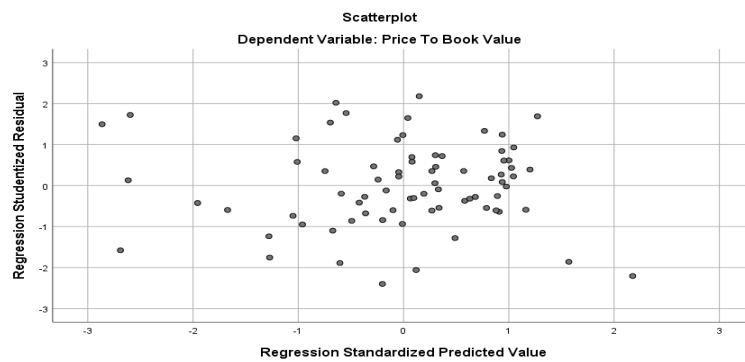


Figure 1. Scatterplots Graph

Based on visual inspection of the scatterplot diagram, the distribution pattern of the points does not appear to show a particular tendency. The points are spread irregularly and evenly around the zero line on the Y axis. This condition indicates that the regression model used does not experience heteroscedasticity problems. Thus, the model is considered to meet the requirements to be continued to the next stage of analysis.

Autocorrelation Test

Table 4. Autocorrelation Test

Model Summary^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.560 ^a	.314	.275	6907.98584	1.915
a. Predictors: (Constant), LAG_X4, LAG_X3, LAG_X1, LAG_X2					
b. Dependent Variable: LAG_Y					

Based on the statistical analysis conducted, the autocorrelation examination showed interesting results. The Durbin-Watson value obtained was 1.915 which was in the range that met the test criteria. By comparing this number to the critical values of DU (1.739) and 4-DU (2.261), important conclusions can be drawn. The test results indicate that the regression model used is free from autocorrelation problems. Thus, the model is considered feasible and can be used for further analysis processes with an adequate level of confidence.

Multiple Linear Regression Analysis

Table 5. Multiple Linear Regression Analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	56398.957	2455.697		22.967	.000
	Debt To Equity Ratio	.336	.133	.281	2.522	.014
	Return On Equity	-.341	1.133	-.035	-.301	.764
	Price Earning Ratio	.073	.041	.171	1.784	.079
	Earning Per Share	.319	.052	.725	6.154	.000

a. Dependent Variable: Price To Book Value

Based on an in-depth study of the formulated mathematical model, the regression equation developed in this study was successfully identified and described comprehensively:

$$Y = 56398.957 + 0.336 X_1 + -0.341$$

The multiple regression equation above has a constant value of 56398.957. This means that if the dependent variable, namely the stock price, is not influenced by the independent variables, namely Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), Earning Per Share (EPS), it will be worth 56398.957.

The correlational relationship between independent variables and dependent variables can be identified through the interpretation of the direction and magnitude of the resulting regression coefficient. Based on the regression equation that has been formulated, the following will be explained further:

1. Regression analysis reveals the dynamics of the relationship between a number of financial indicators and stock price movements. First, Debt To Equity Ratio (DER) shows a positive correlation, where every one unit increase will increase the stock price by 0.336, assuming other variables remain constant. This unidirectional

relationship indicates that the company's capital structure has a direct influence on market valuation.

2. In contrast to DER, Return On Equity (ROE) shows an inverse relationship in the model. A one-unit increase in ROE is correlated with a decrease in stock price of -0.341. This phenomenon shows the complexity of the relationship between capital profitability and investor perception of stock value.
3. Price Earning Ratio (PER) shows a similar pattern to DER, with a positive coefficient of 0.073. Every one unit increase in PER will push the stock price up in the same proportion, provided that other independent variables remain unchanged. This reflects how the market's assessment of potential earnings affects price movements.
4. Earning Per Share (EPS) shows the most significant relationship with stock price increases. A one-unit increase in EPS will increase the stock price by 0.319. This finding underscores the importance of a company's earnings performance in shaping investor perceptions and the market value of a stock.

Statistical Test t

Statistical analysis using the t-test is intended to evaluate the influence of each independent variable individually on the dependent variable, using a significance threshold of 0.05. The statistical decision-making criteria stipulate that the null hypothesis (H0) will be accepted and the alternative hypothesis (Ha) will be rejected if the significance value of the regression model exceeds 0.05. Conversely, H0 will be rejected and Ha will be accepted when the significance value of the regression model is below 0.05. The following will present the results of the t-test that has been carried out:

Table 6. Statistical t Test

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	56398.957	2455.697		22.967	.000
	Debt To Equity Ratio	.336	.133	.281	2.522	.014
	Return On Equity	-.341	1.133	-.035	-.301	.764
	Price Earning Ratio	.073	.041	.171	1.784	.079
	Earning Per Share	.319	.052	.725	6.154	.000

^a. Dependent Variable: Price To Book Value

Based on the statistical analysis in Table 6, the Debt To Equity Ratio (DER) variable shows a significant influence on stock prices. This is evidenced by the t-value of 2,522 which is greater than t-table 1,993, with a significance level of 0.014 which is below the threshold of 0.05. This condition indicates that DER has a real contribution in

influencing stock price movements, so the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted.

Unlike Return On Equity (ROE), this variable does not show a significant effect on stock prices. The t-value of -0.301, which is lower than t-table 1,993, and the significance level of 0.764, which exceeds the 0.05 limit, confirms that ROE individually does not have a substantial impact on stock price changes. Consequently, the null hypothesis (H0) is accepted, while the alternative hypothesis (Ha) is rejected.

Similar to ROE, Price Earning Ratio (PER) also does not show a significant effect on stock prices. With a t-value of 1,784 which is smaller than t-table 1,993 and a significance level of 0.079 which is above the threshold of 0.05, PER is not proven to have a significant contribution in determining stock price fluctuations. Therefore, the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected.

Meanwhile, Earning Per Share (EPS) shows different results. This variable shows a significant influence on stock prices, with a t-value of 6.154 which far exceeds the t-table of 1.993. The significance level of 0.000 which is below 0.05 confirms that EPS has an important role in influencing stock price movements. Consequently, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted, underlining the importance of EPS in stock analysis.

F Statistic Test

The F statistic test is an analysis method used to evaluate the linear relationship between dependent and independent variables in a study. This method aims to identify whether there is a significant influence of the independent variables on the dependent variable. When the test results show a significant F value, this indicates that at least one or even all of the independent variables have a meaningful contribution. Conversely, if the F value is not significant, it can be concluded that no independent variables have a real influence in the analysis model. The following are the findings from the F statistical testing process that has been carried out.

Table 7. F Statistic Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2654028584.602	4	663507146.151	12.041	.000 ^b
	Residual	3912526970.174	71	55106013.664		
	Total	6566555554.776	75			
a. Dependent Variable: Price To Book Value						
b. Predictors: (Constant), Earning Per Share, Price Earning Ratio, Debt To Equity Ratio, Return On Equity						

Based on the statistical analysis conducted, the results of the F test show the dynamics of the relationship between significant research variables. In table 4.12, the Fcount value obtained shows a higher number compared to Ftable, indicating a simultaneous influence between the independent and dependent variables. By using a significance level of 5% and considering the degrees of freedom calculated based on $k(4)$ and $(nk-1)$ namely $(76-4-1) = 71$, the Ftable value is 2.50. The calculation results show a significance value of 0.000 which is far below the limit of 0.05, and Fcount which is consistently greater than Ftable ($12,041 > 2.50$). This finding reveals that the independent variables studied, namely Debt To Equity Ratio (X1), Return On Equity (X2), Price Earning Ratio (X3), and Earning Per Share (X4), have a significant influence on stock prices (Y). Thus, the alternative hypothesis (Ha) is accepted, while the null hypothesis (H0) is rejected, which underlines the significance of the simultaneous relationship between variables in the context of this study.

Coefficient of Determination (R^2)

In statistical analysis, the measure of a model's ability to explain the dependent variable can be seen through the coefficient of determination. This method helps researchers understand the extent to which the independent variable is able to explain changes that occur in the observed variable. To get an accurate picture, this study uses Adjusted R Square as the main parameter in assessing the strength of the model. The findings obtained from testing the coefficient of determination show important information related to the model's capacity to describe the phenomenon being studied:

Table 8. Coefficient of Determination

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636 ^a	.404	.371	7423.342
a. Predictors: (Constant), Earning Per Share, Price Earning Ratio, Debt To Equity Ratio, Return On Equity				

Table 8 found that the regression model is able to explain part of the stock price variability through a number of independent variables. Specifically, the contribution of independent variables such as Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) are able to explain 37.1% of stock price movements. Meanwhile, the remaining 62.9% is influenced by other factors not included in the scope of this study, indicating the complexity of the dynamics that affect stock values in the market.

5. DISCUSSION

This study examines the effect of Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) on Stock Prices in Health Sector Companies Listed on the Indonesia Stock Exchange (IDX) in 2019-2023. The following is a discussion of each hypothesis:

1. The Influence of Debt to Equity Ratio (DER) on Stock Prices

The findings of this study reveal that the debt to equity ratio (DER) has a significant impact on stock price movements, which means that the DER variable affects stock prices. The findings of this study support a number of previous studies such as research conducted by Harpono & Chandra (2019), Partomuan & Simamora (2021), and Nining AF (2021) which revealed a significant correlation between Debt To Equity Ratio (DER) and stock prices.

2. The Influence of Return On Equity (ROE) on Stock Prices

The findings of this study reveal that the Return On Equity (ROE) indicator does not have a significant relationship with stock price movements in the companies studied. The results of this study are not in line with the studies conducted by Rifaldhy & Laksana (2022), Putri & Megawati (2021), and Mardiana & Triyonowati (2020) which state that the Return On Equity (ROE) value affects stock prices. However, the results of this study are in line with the studies conducted by Machfiroh et al. (2020), Harpono & Chandra (2019), and Nainggolan (2019) which revealed that Return On Equity (ROE) does not have a significant effect on stock prices.

3. The Effect of Price Earning Ratio (PER) on Stock Prices

The analysis conducted in this study proves that the Price Earning Ratio (PER) partially has no effect on stock prices. Based on the research findings, there are significant differences with previous studies conducted by Silitonga et al. (2023) and Sari & Veterina (2021). However, these findings are in line with research conducted by Afrianita & Kamaludin (2022), Putra et al. (2021), and Nainggolan (2019) showing a consistent pattern, namely that the Price Earning Ratio (PER) does not have a significant effect on stock price dynamics.

4. The Effect of Earning Per Share (EPS) on Share Prices

This study reveals that Earning Per Share (EPS) has a significant influence on stock price movements. The findings of this study support previous studies conducted by several leading researchers in this field. Research from Fitri & Retnaningdiah (2022), Mardiana & Triyonowati (2020), and Roesminiyati et al. (2018) consistently

underlines the significance of Earning Per Share (EPS) in influencing stock price dynamics.

5. The Influence of Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) on Stock Prices

This study reveals that Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) together have a significant influence on Stock Prices. The findings of this study are in line with research conducted by Rifaldhy & Laksana (2022) and research conducted by Putri & Megawati (2021) which state that there is a significant simultaneous influence between these variables on stock prices.

6. CONCLUSION

Based on the results of the analysis and testing of the influence of Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) on Stock Prices in Health Sector Companies Listed on the Indonesia Stock Exchange, the following conclusions can be drawn:

1. Debt To Equity Ratio (DER) affects Stock Prices in Health Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023.
2. Return On Equity (ROE) has no effect on Stock Prices in Health Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023.
3. Price Earning Ratio (PER) has no effect on Stock Prices in Health Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023.
4. Earning Per Share (EPS) affects the Stock Price of Health Sector Companies Listed on the Indonesia Stock Exchange in 2019-2023.
5. Debt To Equity Ratio (DER), Return On Equity (ROE), Price Earning Ratio (PER), and Earning Per Share (EPS) simultaneously influence stock prices in Health Sector Companies Listed on the Indonesia Stock Exchange.

7. LIMITATIONS

1. This study conducted observations for only 5 (five) years, namely from 2019-2023, so that for 2024 the researcher had difficulty in accessing complete financial reports because this study was conducted at the end of 2024 where data for 2024 did not yet exist.

2. This study only uses a sample of companies in the health sector listed on the Indonesian Stock Exchange, totaling 17 companies, so there may be differences if other companies are used.

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