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# Stock Prices Affected by Debt to Equity Ratio and Net Profit Margin in Pharmaceutical Sub-Sector Companies Listed on The Indonesia Stock Exchange (IDX) For the 2019-2020 Period

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**Abstract:** The purpose of this research is to determine the effect of debt to equity ratio and net profit margin on the stock price of Pharmaceutical companies on the Indonesia Stock Exchange. The type of approach in this research is quantitative the type of analysis using associative analysis with the classical assumption method, model testing, and hypothesis testing. Simultaneous research results affect stock prices. Partially debt to equity ratio and net profit margin affect stock prices. The coefficient of standardization of the most significant beta is the variable net profit margin, so it can be concluded that the most influential variable is the variable net profit margin.

## Keyword: Debt to Equity Ratio (DER), Net Profit Margin (NPM), Stock Prices

## **INTRODUCTION**

The capital market is one of the potentials of the national economy. Stock price volatility makes it difficult for investors to invest, so investors do not invest their funds arbitrarily. The stock price can be an indicator of the company's success that shows market strength by buying and selling shares in the capital market. Every company wants to meet the interests of its members and shareholders. The company is said to be successful in managing its business. If the stock price continues to rise, investors will be able to assess whether the company is successful in managing company. Shares can be defined as securities that show ownership of a company. The form of share ownership is a piece of paper that explains that the paper's owner is the owner of the company that issued the paper. According to Aziz (2015), "the stock price is the stock price in the real market, and is the price that is most easily determined because it is the price of an ongoing stock, if the market is closed, then the market price is the closing price."

In this study, choosing the object of research in pharmaceutical companies, the selection of this object is because, in 2020, the performance of issuers in the pharmaceutical sector will increase in the first half of 2020. One of them is a state-owned pharmaceutical

company, PT Kimia Farma Tbk (KAEF), which pocketed net sales of Rp 4.69 trillion in the first half of 2020 or 3.76% growth from sales of Rp 4.52 trillion in the same period in 2019. PT Kalbe Farma Tbk (KLBF) followed with net sales of up to Rp 11.6 trillion. This number increased by 3.76% compared to the first semester of last year, which reached Rp 11.18 trillion. Director of Research and Investment of Pilarmas Investindo Sekuritas Maximilianus Nico Demus assessed that health sector companies, namely pharmaceuticals, had become one of the prima donnas in 2020 amid Covid-19.

Many factors affect stock prices. One factor that affects stock prices is the debt to equity ratio (DER). Debt to equity ratio (DER) is a financial ratio that shows the relative proportion between equity and debt used to finance company assets and to measure how well a company's investment structure is debt to equity ratio (DER) is a financial ratio that measures how much the company's ability to pay off its debts. Kasmir (2016) stated: "debt to equity ratio (DER) is used to measure debt ratio and equity ratio, by comparing all current debt with all equity."Debt to equity ratio a low DER will increase the positive response from the market, and the company's ability to pay long-term obligations will be better because the risk arising from the use of funding sourced from debt will decrease so that the stock will rise.

Apart from the debt to equity ratio (DER), this study also uses net profit margin (NPM) as one factor influencing stock prices. Net profit margin (NPM) or net profit margin is a profitability ratio that expresses profit from business operations as a percentage of net income or sales. According to Kasmir (2016) states: "net profit margin (NPM) or profit margin is one of the ratios used to measure profit margins with net sales.

The way to measure this ratio is to compare net profit after tax with net sales. Net profit margin (NPM) has a positive effect on stock prices. These results indicate that the company's price can increase if the company succeeds in obtaining high profits and has expertise in managing costs that are not needed during its operational activities. This can provide high confidence to investors to invest in shares in the company. Research objectives to find out the effect of debt to equity ratio and the net profit margin simultaneously on the share price of pharmaceutical companies on the IDX.

#### LITERATURE REVIEW

#### **Stock Price**

Share Price is part of the dependent variable, denoted by (Y). The stock price that has increased has a good impact on the company because it can increase the value of the stock. Understanding stock prices According to Azis (2015) that "the stock price is the price of shares in the real market, and is the price that is most easily determined because it is the price of an ongoing stock, if the market is closed then the market price is the closing price."

#### **Debt to Equity Ratio (DER)**

The debt to equity ratio (DER) is part of the independent variable denoted by (X1). Debt to equity ratio (DER) is a financial ratio that measures how much the company can pay off its debts. According to Kasmir (2016) stated that "Debt to equity ratio (DER) is the ratio used to assess debt and equity. This ratio is sought by comparing all current debt with all equity debt.

#### Net Profit Margin (NPM)

Net profit margin (NPM) is part of the independent variable denoted by (X2). Net profit margin (NPM) is a profitability ratio that expresses the company's operations as a percentage of revenue or net sales. According to Kasmir (2016) states that: "Net profit margin (NPM) or

profit margin is one of the ratios used to measure profit margins with net sales. The way to measure this ratio is to compare net profit after tax with net sales.

## Hypothesis

Based on the background, problem formulation, research objectives, and literature review, the hypotheses proposed in this study are assumed to follow: 1). There is a partial effect of the debt to equity ratio (DER) on stock prices in pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period. 2). There is a partial net profit margin (NPM) effect on stock prices in the pharmaceutical sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period. 3). There is a simultaneous influence of debt to equity ratio (DER) and net profit margin (NPM) on stock prices in the pharmaceutical sub-sector listed on the pharmaceutical sub-sector listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period. 3).

## **RESEARCH METHODS**

This study uses quantitative data analysis techniques. This study was chosen because it is to test the proposed hypothesis. This hypothesis is expected to explain the relationship and influence between variables.

## **Population and Sample**

The population in this study was 11 pharmaceutical companies listed on the Indonesia Stock Exchange. The samples in this study were seven pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange. The sample is determined based on the following considerations: Pharmaceutical sub-sector companies that have published consecutive financial reports in the 2019-2020 period. 2). Pharmaceutical sub-sector companies listed on the IDX in the 2019-2020 research period. 3). In the company's research, there are no mergers and acquisitions.

No.	Code	Company name	IPO		
1	KLBF	PT Kalbe Farma Tbk	Jul 30 1991		
2	KAEF	PT Kimia Farma Tbk	04 Jul 2001		
3	INAF	PT Indo Farma Tbk	April 17, 2001		
4	TSPC	PT Tempo Scan Pacific Tbk	Jun 17, 1994		
5	DVLA	PT Darya-Varia Lab. Tbk	11 Nov 1994		
6	BRAND	PT Merck Tbk	Jul 23 1981		
7	PEHA	PT Pharos Tbk	26 Dec 2001		

Table 1. Sample of Pharmaceutical Companies listed on the Indonesia Stock Exchange

Source: IDX Financial

## Data Analysis Technique

The data analysis method used in this research is the multiple regression analysis methods.

# **RESEARCH RESULTS AND DISCUSSION**

Multiple linear regression analysis

Table 2. Effect Simultaneously Debt to Equity Ratio (DER) and Net Profit
Margin (NPM) On Stock Prices in the Pharmaceutical Sub-Sector Listed on the
Indonesia Stock Exchange (IDX) for the 2019-2020 period

	Parameter							
Variable	Multy R	R Square	constant	Regression Coefficient	Sig.			
DER	0.891	0.793	-1888,773	870,560	0.000	0.05		
NPM				2182.583	0.000			
Significant Test								
<b>F</b> count = 101.70	2							

Dependent Variable: Share\_Price

Based on Table 1, the test results F = 101,702 with a significance of 0.000. The results of the F test between DER and NPM on stock prices yield a significance level of 0.000 less than 0.05, so Ha is accepted and H0 is rejected. This means that simultaneously DER and NPM variables significantly affect stock prices. Donations made debt to equity ratio (DER) and net profit margin (NPM) to the share price of 0.793 or 79%, while the remaining 0.207 or 20% is explained by other variables not examined.

The results of the regression equation: Y = -1888,773 + 870.560 + 2182.583

The coefficient of debt to equity ratio (DER) is 870.560, meaning that if the debt to equity ratio increases, the stock price will increase with the assumption that the net profit margin (NPM) is constant or fixed. The coefficient of net profit margin (NPM) is 2182.583. This means that if the net profit margin increases, the stock price will increase, assuming that the debt to equity ratio is constant or fixed.

## Discussion

#### **Hypothesis** 1

The results of simple regression analysis of variables debt to equity ratio (DER) to the stock price shows a constant value of -1888,773. This means that this value shows the level of stock prices that the company will obtain if the level of debt to equity ratio (DER) is assumed to be 0. Coefficient Valuedebt to equity ratio (DER) as big as 870,560 states that every time there is an increasing debt to equity ratio (DER) will be followed by an increase in stock prices. The results of the t-test between debt to equity ratio (DER) on stock prices show a significance level of 0.000 which is less than a significance of 0.05, so Ha is accepted and H0 is rejected. This means that partially the debt to equity ratio (DER) variable has a significant effect on stock prices.

## Hypothesis 2

Simple regression analysis results in net profit margin (NPM) to the stock price shows a constant value of -1888,773. This means that this value shows the level of stock prices that the company will obtain if the level of net profit margin (NPM) is assumed 0. Coefficient Value net profit margin (NPM) as significant as 2182.583 states that every time there is an increase for net profit margin (NPM) will be followed by an increase in the share price of

2182.583. The results of the t-test between net profit margin (NPM) on stock prices show a significance level of 0.000 which is less than a significance of 0.05, so Ha is accepted and H0 is rejected. This means that partially net profit margin (NPM) significantly affects stock prices.

#### Hypothesis 3

The result of the regression equation constant is -1888,773. This means that this figure shows the level of the share price obtained by the company if the debt to equity ratio (DER) and net profit margin (NPM) are assumed to be zero. The coefficient of debt to equity ratio (DER) is 870.560. This means that if the debt to equity ratio (DER) increases, the stock price will increase. The coefficient of net profit margin (NPM) is 2182.583. This means that if the net profit margin (NPM) has increased, then the stock price has increased by 2182.583.

The results of the F test between debt to equity ratio (DER) and net profit margin (NPM) on stock prices yield a significance level of 0.000 less than 0.05, so Ha is accepted and H0 is rejected. This means that simultaneously debt to equity ratio (DER) and net profit margin (NPM) significantly affect stock prices. The results of the coefficient of determination test that debt to equity ratio (DER and net profit margin (NPM) effect of 0.793 or 79.3% meaning that the stock price can be explained by debt to equity ratio (DER) and net profit margin (NPM of 79.3%, while the remaining 0.207 or 20.7% is explained by other variables not examined.

#### **CONCLUSIONS AND SUGGESTIONS**

#### Conclusion

Based on the results of research and discussion on the effect of the debt to equity ratio (DER) and net profit margin (NPM) on the stock price of the Pharmaceutical Sub-Sector listed on the Indonesia Stock Exchange (IDX), which is the object of research, the following conclusions can be drawn: 1). The research results on hypothesis 1 show that the debt to equity ratio (DER) partially affects stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) partially affects stock prices in pharmaceutical companies listed on the 2019-2020 BEI. 2). The results of hypothesis 2 research show that the net profit margin (NPM) partially affects stock prices with a significance of 0.00. So this proves that the net profit margin (NPM) partially affects stock prices in pharmaceutical companies listed on the 2019-2020 BEI. 3). The research results on hypothesis 3 show that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices with a significance of 0.00. So this proves that the debt to equity ratio (DER) and net profit margin (NPM) simultaneously affect stock prices in pharmaceutical companies listed on the 2019-2020 BEI.

#### Suggestion

In the research that has been carried out, the author concludes the study results. Next, the author wants to advise pharmaceutical companies listed on the BEI to be more input and attention for companies: 1). Companies should not have debt in substantial amounts or exceed the equity (capital) owned by the company. In addition, to reduce the use of debt, companies can use their capital or retained earnings. Companies that can maintain the value of the debt to equity ratio (DER) below the optimum limit will attract investors to invest because the risk is not too big. 2). Companies must be able to further improve performance in generating net income. This can be done by increasing the company's revenue by streamlining costs to a minimum. So that the net profit margin (NPM) of the company can increase every year because if the NPM continues to increase, it will attract investors and increase the company's share price. 3). For investors, before investing, it is better to analyze

other factors that can affect the condition of the company such as Return On Assets (ROA), Earning Per Share (EPS), company value, and also take into account other things related to changes in stock prices so that they can be used as the basis for making investment decisions because if NPM continues to increase it will attract investors and increase the share price of the company. 3). For investors, before investing, it is better to analyze other factors that can affect the condition of the company such as Return On Assets (ROA), Earning Per Share (EPS), company value, and also take into account other things related to changes in stock prices so that they can be used as the basis for making investment decisions because if NPM continues to increase it will attract investors and increase the share price of the company. 3). For investors, before investing investment decisions because if NPM continues to increase it will attract investors and increase the share price of the company. 3). For investors, before investing investment decisions because if NPM continues to increase it will attract investors and increase the share price of the company. 3). For investors, before investing, it is better to analyze other factors that can affect the condition of the company such as Return On Assets (ROA), Earning Per Share (EPS), company value, and also take into account other things related to changes in stock prices so that they can be used as the basis for making investment decisions because if the condition of the company such as Return On Assets (ROA), Earning Per Share (EPS), company value, and also take into account other things related to changes in stock prices so that they can be used as the basis for making investment decisions.

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