The Influence of Collateral Assets on Stock Prices (Empirical Study of Basic and Chemical Industry Companies Listed on the Indonesia Stock Exchange Period 2012–2016)

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Abstract— This study aims to find out how the description of collateral assets and stock prices in the Basic and Chemical Industry companies listed on the Indonesia Stock Exchange for the period 2012-2016, and how the influence of collateral assets on stock prices in Basic and Chemical Industry companies listed on the Indonesia Stock Exchange period 2012-2016. The factors tested in this study are collateral assets as independent variables, while stock prices as the dependent variable. The research method used in this research is descriptive and verification method. The population in this study are basic industrial and chemical companies listed on the Indonesia Stock Exchange from 2012 to 2016, totaling 70 companies. The sampling technique used in this study is nonprobability sampling with a purposive sampling method so that the number of samples is 41 companies. The data analysis used in this study is multiple linear regression analysis at a significance level of 5%. The program used in analyzing data using Eviews 9. The results showed that collateral assets tended to increase, but stock prices tended to decline. In addition, the results of the study also show that collateral assets affect stock prices. The magnitude of the influence of collateral assets in giving contributions to the effect of the stock price of 8.3%.

Keywords— Collateral Asset and Stock Price

I. INTRODUCTION

A company is a business entity that runs its business to make a profit (profit-oriented). Along with increasing global economic growth, making competition in the business world increasingly complex. This requires every company to improve its performance to be able to compete with its competitors. The economic development of a country can be done in various ways, one of which is to know the development of capital markets and the development of various types of industries in the country [1].

Investors need to do a careful analysis before making a new investment decision [2]. Investment is an activity of placing funds on one or more than one asset during a certain year period with the hope of obtaining and increasing the value of investments [3].

Before investing, investors need to know and choose which stocks can provide the most optimal for the funds invested. Stocks are one of the capital market instruments most sought after by investors, being able to offer an attractive level of importance. Stock is a sign of ownership or ownership of a person or entity in a company. A sheet of paper shares which explains the owner of the paper is the owner (whatever the portion) of a company that issues the paper (shares), in accordance with the share ownership listed on the shares [4]. The share price is the value of shares in rupiah resulting from the action of buying and offering shares on the exchange by fellow exchange members [5].

Based on table 1, the performance of stock indexes in companies in the Basic and Chemical Industry sectors showed fluctuating values. In 2011-2013 companies in the Basic Industry and Chemical, sectors experienced an increase in the performance of the stock index. However, in 2013-2016, companies in the Basic Industry and Chemical sectors experienced a decline in the performance of the stock index. This means that the performance index of the Basic and Chemical Industry shares shows that stock performance has not been maximized. The decline in the value of the stock index performance can be caused by internal factors or external factors of the company. For this reason, investors before making an investment decision need to analyze stock movements. The analysis in predicting future stock price movements is divided into two ways, namely fundamental analysis and technical analysis. One of the factors that can be a basis for
investment considerations is collateral assets. Investors will assess the extent of the company's fixed assets that are used as collateral for company loans. The term collateral is also used for fixed assets that are pledged for debt so that they are also called collateral assets. Collateral assets are the number of assets guaranteed by creditors to guarantee corporate loans [6]. Collateral assets are the ratio of fixed assets to total assets that are considered as a proxy for collateral assets [7]. The high guaranteed assets owned by the company will reduce conflicts of interest between shareholders and creditors so that the company can pay dividends in large amounts. This will certainly increase investor interest in investing so that it will have an impact on increasing the company's share price [8].

II. METHOD

The research method used in this study was the verification research method. The population in this study were companies in the Basic and Chemical Industries listed on the Indonesia Stock Exchange in the 2011-2016 period, which were bought by 70 companies. The sampling technique used in this study is nonprobability sampling with a purposive sampling method. The sample in this study was companies of Basic and Chemical Industries listed on the Indonesia Stock Exchange in the 2011-2016 period that was bought by 41 companies. The data analysis method used in this study is a simple linear regression analysis using Eviews software version 9.00.

III. RESULTS

Collateral Asset

Collateral is a general term that often means securities used as collateral for debt repayment. The term collateral is also used for fixed assets that are pledged for debt so that they are also called collateral assets. Collateral assets are the number of assets guaranteed by creditors to guarantee corporate loans [6].

Collateral assets are the ratio of fixed assets to total assets that are considered as a proxy for collateral assets [7]. The following are collateral asset measurements, namely:

\[
\text{Collateral Asset} = \frac{\text{Fixed Assets}}{\text{Asset Total}} \times 100\%
\]

Stock price

According to Brigham and Houston [9] states that the stock price is as follows: "Share prices determine shareholder wealth. Maximizing shareholder wealth translates into maximizing the company's share price. The price of a stock at a certain time will depend on the cash flow that is expected to be received in the future by the "average" investor if the investor buys the stock".

Research Hypothesis

Effects of Collateral Assets on Share Prices

Collateral assets are the number of assets in the form of fixed assets that are pledged by creditors to guarantee corporate loans [6]. Creditors often ask for collateral in the form of assets when lending to companies that need funding [7]. The higher the guarantee of the company's assets to creditors, the company can pay dividends in higher amounts as well. This is due to agency conflict between shareholders and creditors that can be minimized by a guarantee made by the company because, with the high asset guarantee, the creditor will not control the company over its receivables; then the creditor will not prevent the company from paying dividends to shareholders [10].

High Assets Assets that are owned by the company will reduce Conflicts of interest between Ownership and Creditors so that the Company can pay a large number of dividends. It will be better. However, the company will increase conflicts of interest between shareholders and creditors. And creditors will ask companies to pay large amounts of dividends to shareholders. Also, the higher the collateral assets that the company needs, the prospective investor can trust the company to be able to pay dividends for the investment provided by the investor without worrying about the worries the company needs. This will certainly increase investor interest in investing so that it will increase the company's share price [8].

H1: Collateral assets contribute to the stock price.

Discussion of Collateral Asset Variables

Collateral assets are company assets that can be used as collateral for borrowers. In this study, collateral assets are taken by using fixed assets and total assets. Below, a review of the collateral assets of the Basic and Chemical Industry companies listed on the Indonesia Stock Exchange for the period 2012-2016 will be presented in the following Fig 1.

![Collateral Asset Charts for Basic and Chemical Industrial Companies Listed on the Indonesia Stock Exchange for the 2012-2016 Period](image)

Based on Fig. 1, it can be seen that in 2012, the average value of collateral assets was 0.481. In 2013, the average value of collateral assets decreased to 0.470. In 2014, the average value of collateral assets increased to 0.485. In 2015, the average value of collateral assets increased to 0.516. Whereas in 2016 the average value of collateral assets declined again to 0.558. From the graph above it can be seen that the average collateral assets in the Basic and Chemical Industry companies listed on the Indonesia Stock Exchange for the period 2012-2016 show fluctuating values but tend to increase, meaning that the number of assets owned by the company can be used as collateral for loans company.
The high value of collateral assets shows that the high number of assets that can be used as collateral for company loans. The low average value of collateral assets shows that the low number of assets that can be used as collateral for company loans. The increase in the value of collateral assets can be caused by an increase in the amount of the company’s fixed assets. A decrease in the value of collateral assets can be caused by a decrease in the amount of the company’s fixed assets.

**Discussion of Stock Price Variables**

The share price is the value of shares in rupiah formed as a result of the action of buying and offering shares on the stock exchange by fellow members of the exchange. The share price in this study was measured using the closing stock price at the end of the year. Below is a description of the price of shares in the Basic and Chemical Industry companies listed on the Indonesia Stock Exchange for the period 2012-2016 will be presented in the following Fig 2:

![Share Price Charts on Basic and Chemical Industrial Companies Listed on the Indonesia Stock Exchange for the 2012-2016 Period](image)

Fig. 2. Share Price Charts on Basic and Chemical Industrial Companies Listed on the Indonesia Stock Exchange for the 2012-2016 Period

Based on Fig. 2, it can be seen that in 2012 the average value of the stock was 1,811. In 2013, the average value of the share price increased to 2,054. In 2014, the average value of the share price decreased to 2,051. In 2015, the average value of stock prices decreased to 1,592. Whereas in 2016 the average value of share prices declined again to 1,330. From the figure above it can be seen that the average share price of basic and chemical industrial companies listed on the Indonesia Stock Exchange in the period 2012-2016 shows fluctuating values and tends to decline, meaning that the company's stock performance in the capital market has not been maximally seen from the average stock prices that tend to appreciate the decline from 2013-2016.

The high stock price value shows that the high performance of the company's shares is reflected in the high demand and supply of shares in the capital market. The low value of the stock price shows that the low performance of the company's shares is reflected in the low demand and supply of shares in the capital market. An increase in the value of stock prices can be caused by increasing financial performance and the performance of company management. The decline in the value of stock prices can be caused by internal factors (financial performance and company management) and external factors (macro and microeconomic).

**Simple Linear Regression Analysis**

Based on the test results using linear regression analysis obtained results as follows:

![Regression Model Output](image)

**TABLE II. SIMPLE LINEAR REGRESSION ANALYSIS**

<table>
<thead>
<tr>
<th>Dependent Variable: HARGA_SAHAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Least Squares</td>
</tr>
<tr>
<td>Date: 09/12/19 Time: 15:12</td>
</tr>
<tr>
<td>Sample: 1 204</td>
</tr>
<tr>
<td>Included observations: 204</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>COLLETERAL_ASET</td>
</tr>
</tbody>
</table>

R-squared 0.082542 Mean dependent var 0.752735
Adjusted R-squared 0.078000 S.D. dependent var 0.379459
S.E. of regression 0.364360 Akaike info criterion 0.828404
Sum squared resid 26.81709 Schwarz criterion 0.860935
Log-likelihood 82.49724 Hannan-Quinn criteria 0.841564
F-statistic 18.17362 Durbin-Watson stat 1.822948
Prob(F-statistic) 0.000031

Source: the result of reviews output9

\[ Y = 0.810114 + 0.598242 \times X \]

From the regression equation model, it can be explained as:

1. If the constant value of 0.810114 means that if the independent variable, namely the collateral asset variable is considered constant (value 0), then the dependent variable that is the variable stock price will be worth 0.810114.

2. If the regression coefficient value of the collateral asset variable shows 0.598242, it means that if the collateral asset variable has increased by (one) unit, then the dependent variable that is the stock price variable will increase by 0.598242.

Based on table 2 in the bag shows that the results of hypothesis testing obtained the value of the collateral asset variable significance of 0.0000 < 0.05 (the significance level of research significance). Besides that, it can also be seen from the result of the comparison between tcount and ttable that shows the tcount value of 4.263, while table is 1.972. From these results it can be seen that tcount > ttable is 4.263 > 1.972, it can be concluded that H1 is accepted, meaning that the collateral asset variable influences the stock price variable. In addition, the R2 value is 0.083, which means that the variability of the dependent variable, namely the stock price that can be explained by the independent variable, namely the collateral assets in this study is 8.3%, while the remaining 91.7% is explained by other variables outside the model research.

Discussion on the Effect of Collateral Assets on Stock Prices: The results showed that collateral assets affect stock prices. The magnitude of the effect of collateral assets on stock prices is 8.3%. The results of this study are also supported by previous discussions that collateral assets are the amount of assets in the form of fixed assets guaranteed by creditors to guarantee corporate loans [6]. Creditors often ask for collateral in the form of assets when lending to companies that need funding [7]. The higher the guarantee of the company's assets to creditors, the company can pay dividends in higher amounts as well. This is due to agency conflict between shareholders and creditors that can be minimized by a guarantee made by the company because with the high asset guarantee; the creditor will not control the

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**Notes:**

9. Results of reviews output.

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**Figures and Tables:**

- **Fig. 2** Share Price Charts on Basic and Chemical Industrial Companies Listed on the Indonesia Stock Exchange for the 2012-2016 Period.

**Tables:**

- **TABLE II. SIMPLE LINEAR REGRESSION ANALYSIS**

**Equation:**

\[ Y = 0.810114 + 0.598242 \times X \]
company over its receivables, then the creditor will not prevent the company from paying dividends to shareholders [10].

The high guaranteed assets owned by the company will reduce conflicts of interest between shareholders and creditors so that the company can pay dividends in large amounts. Conversely, the lower the collateral of assets owned by the company will increase the conflict of interest between shareholders and creditors so that creditors will prevent the company from financing large dividends to shareholders for fear that their receivables will not be paid. This means that the higher the collateral assets owned by the company, it will make potential investors feel safe because the company will be able to pay dividends on investments provided by investors without worrying about the company's debt. This will certainly increase investor interest in investing so that it will have an impact on increasing the company's share price [8]. So the higher the collateral assets, the higher the stock price. The results of this study are not in line with the results of previous studies conducted by Setiawati and Yesisca [11]. The results of his research show that collateral assets do not affect stock prices.

IV. CONCLUSION

Based on the results of research and discussion in the previous chapter, the following conclusions are obtained:

The average value of collateral assets in the Basic and Chemical Industry companies listed on the Indonesia Stock Exchange in the period 2012-2016 shows fluctuating values but tends to increase, meaning that the amount of assets owned by the company can be used as collateral for company loans. The average value of share prices in basic and chemical industry companies listed on the Indonesia Stock Exchange for the period 2012-2016 shows fluctuating values and tends to decline, meaning that the company's stock performance in the capital market has not been maximally seen from the average share price tends to enjoy a decline from 2013-2016. Collateral assets affect the stock price. So the higher the collateral assets, the higher the stock price. The magnitude of the effect of collateral assets on stock prices is 8.3%.

REFERENCES


