The Influence of Current Ratio, Net Profit Margin, Debt to Equity Ratio on Stock Prices of Cigarette Companies Listed on the Indonesia Stock Exchange from 2018-2021

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Abstract

The aim of this research is to discern the correlation between the Current Ratio, Net Profit Margin, and Debt to Equity Ratio variables, and the stock price movement of tobacco companies that have operating licenses on the Indonesia Stock Exchange (IDX) during the period of 2018-2021. The most appropriate method for this research topic is multiple linear regression analysis. This study has successfully passed classical assumption tests, which include normality, multicollinearity, autocorrelation, and heteroskedasticity tests. The purposive sampling method was utilized for the selection of research samples. Out of the total population, only three companies met the criteria and were selected as samples for this study. Based on the research findings, it has been demonstrated that the Current Ratio has a positive and significant correlation with stock price movement when considered individually. Similarly, the Net Profit Margin also exhibits a positive and significant correlation with stock price movement. However, no positive correlation has been observed between the Debt to Equity Ratio and the Stock price. In addition to these findings, it has been observed that the Current Ratio, Net Profit Margin, and Debt to Equity Ratio simultaneously exhibit a positive and significant correlation with the closing prices of shares of tobacco companies. This suggests that these three variables need to be collectively taken into account when analyzing the factors that influence the stock price movement of tobacco companies listed on the IDX.

Keywords: Current Ratio, Net Profit Margin, Debt to Equity Ratio, and Stock price.

1. Introduction

Manufacturing companies in the tobacco subsector are businesses engaged in the production and sale of tobacco products processed into cigarettes. In this industry, companies typically transform tobacco leaves into ready-to-consume cigarette products for the market. Despite ongoing government efforts to reduce cigarette consumption due to its negative health impacts, demand for cigarettes remains high in several countries, including Indonesia. In this study, the researchers are interested in analyzing the financial performance of manufacturing companies (Meiryani et al., 2023; Yusuf et al., 2023), particularly those in the tobacco subsector, listed on the Indonesia Stock Exchange between the years 2018-2021. The researchers scrutinized corporate financial reports such as profit and loss statements, balance sheets, and cash flow statements to analyze the profitability and growth of these companies during this period (Fahlevi et al., 2022). The following interesting phenomena were discussed:

© Authors. Terms and conditions of this job is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License apply. Correspondence: Helman, Universitas Prima Indonesia Medan. Email: helmanharun@gmail.com
Table 1 Phenomena for the period 2018-2021

<table>
<thead>
<tr>
<th>Code</th>
<th>Year</th>
<th>Current Asset</th>
<th>Net Income</th>
<th>Total Debt</th>
<th>Stock Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGRM</td>
<td>2018</td>
<td>45,284,719,000</td>
<td>7,793,068,000</td>
<td>23,963,934,000</td>
<td>83,625</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>52,081,133,000</td>
<td>10,880,704,000</td>
<td>27,716,516,000</td>
<td>53,250</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>49,537,929,000</td>
<td>7,647,729,000</td>
<td>19,668,941,000</td>
<td>41,000</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>59,312,578,000</td>
<td>5,605,321,000</td>
<td>30,676,095,000</td>
<td>30,600</td>
</tr>
<tr>
<td>HMSP</td>
<td>2018</td>
<td>37,831,483,000</td>
<td>13,538,418,000</td>
<td>11,244,167,000</td>
<td>3,710</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>41,697,015,000</td>
<td>13,721,513,000</td>
<td>15,223,076,000</td>
<td>2,130</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>41,091,638,000</td>
<td>8,581,378,000</td>
<td>19,432,604,000</td>
<td>1,505</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>41,323,105,000</td>
<td>7,137,097,000</td>
<td>23,899,022,000</td>
<td>965</td>
</tr>
<tr>
<td>WIIM</td>
<td>2018</td>
<td>888,979,741,744</td>
<td>51,142,850,919</td>
<td>250,337,111,893</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>2019</td>
<td>948,430,163,983</td>
<td>27,328,091,481</td>
<td>266,351,031,079</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>2020</td>
<td>1,288,718,539,539</td>
<td>172,506,562,986</td>
<td>428,590,166,019</td>
<td>540</td>
</tr>
<tr>
<td></td>
<td>2021</td>
<td>1,590,984,206,544</td>
<td>176,877,010,231</td>
<td>572,784,572,607</td>
<td>428</td>
</tr>
</tbody>
</table>

From Table 1 above, the phenomenon that occurred at PT. GGRM in 2019 shows that its current assets increased, yet its stock price decreased. In 2020, its current assets decreased, followed by a drop in the stock price (Meiryani et al., 2023). The phenomenon at PT. HMSP in 2019 shows that its net profit increased, but the stock price fell; logically, the stock price should have increased that year. However, in 2020, both the net profit and stock price decreased. The phenomenon at PT. WIIM in 2020 was also interesting. Ideally, the stock price should have dropped when total debt increased, but in this year, the stock price rose even as debt increased. Then, in 2021, as total debt increased, the stock price decreased.

2. Literature Review

Theory of the Influence of Current Ratio on Stock price

According to Sawir (2009:10), a high Current Ratio (CR) is often viewed as an indication of a company's lack of productivity in generating profits. Conversely, if the CR is too low, it's also not seen as favorable as it indicates the company has liquidity issues. Fahmi (2011:61) suggests that a healthy and successful company is one with a good CR. However, an excessively high CR is also considered unfavorable as it may indicate inventory estimation issues relative to sales.

Theory of the Influence of Net Profit Margin on Stock price

According to Hery (2015), if net profit derived from sales increases, then the profit margin also increases. Hani (2015) asserts that a rising Net Profit Margin (NPM) proves the company is becoming more effective in conducting its operational activities. In other words, the higher the NPM, the more efficient the company is in generating profit from its business activities.

Theory of the Influence of Debt to Equity Ratio on Stock price

According to Hery (2015), if net profit derived from sales increases, then the profit margin also increases. Hani (2015) asserts that a rising Net Profit Margin (NPM) proves the company is becoming more effective in conducting its operational activities. In other words, the higher the NPM, the more efficient the company is in generating profit from its business activities.
Prihadi (2011) states that the Debt-to-Equity Ratio (DER) is used to ascertain the position of liabilities in relation to equity. This ratio reflects the proportion of the total debt owned by a company to its equity. A higher DER means that the risk of the company going bankrupt is also higher. This ratio is also used to determine how much funding can be prepared by creditors and how much fresh capital has been provided by the business owner, according to Samryn (2014).

Conceptual Framework

Based on the theoretical exposition above and previous research periods, the research model can be seen in the following figure:

![Figure 1 Conceptual Framework](image)

Research Hypotheses

- H1: The Current Ratio (CR) has a positive correlation with the movement of stock prices in tobacco sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.
- H2: The Net Profit Margin (NPM) has a positive correlation with the movement of stock prices in tobacco sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.
- H3: The Debt to Equity Ratio (DER) has a positive correlation with the movement of stock prices in tobacco sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.
- H4: The Current Ratio (CR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) collectively have a positive correlation with the movement of stock prices in tobacco sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.

3. Methodology

This study was conducted on tobacco sub-sector manufacturing companies officially listed on the Indonesia Stock Exchange (IDX) during the period 2018-2021. The data for this research was
obtained through the official IDX website, www.idx.co.id, from November 2020 to May 2021, which was the research period. According to Sugiyono (2012:206), this is descriptive statistical research, a method used to examine collected data with the intent of visualizing it (Ahmed et al., 2023; Aprilani et al., 2023; Fahlevi et al., 2023).

The population for this study includes all tobacco sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the period 2018-2021. The total number of tobacco sub-sector companies listed on IDX during this period is five. For the sample selection, this study applies the purposive sampling technique, chosen because the researchers want to select samples based on specific criteria defined beforehand. In this research, three companies were chosen as research samples. The criteria used in the sample selection are as follows: 1. The company has been listed in the tobacco sub-sector on the IDX during the period 2018-2021. 2. The company does not have financial reports that were published consecutively during the 2018-2021 period. 3. The company did not make a profit during 2018-2021.

The data collection process in this study was carried out in two steps. The first stage is a literature study, involving previous research and references from books relevant to the research topic (Marhaeni et al., 2023; Setyaningrum et al., 2023; Shah et al., 2023). The second stage involves collecting secondary data through the www.idx.co.id website. By combining these two stages, the researchers can obtain the data necessary to answer research questions and conduct an analysis aligned with the research objectives. The research variables identified are both dependent and independent. The main focus of this research is the Closing Stock price (Y), which serves as the dependent variable. The independent variables are the Current Ratio (X1), Net Profit Margin (X2), and Debt to Equity Ratio (X3).

The multiple linear regression analysis technique is being applied in this study. This technique is used to obtain a comprehensive visualization of the correlation between the independent variables and the dependent variable. With this technique, researchers can determine whether there is an influence of the independent variables on the dependent variable. Hypothesis testing involves the use of the t-test and the F-test, as described by Ghozali (2016). Other tests include normality, multicollinearity, autocorrelation, and heteroskedasticity. The Coefficient of Determination (R2) is used to measure how far the regression model can explain the variation of the independent variable.

4. Result and Discussion

Descriptive Analysis

In this study, the sample size used consists of 12 companies over a period of 4 years (2018-2021), yielding a total of 12 data points. For each variable observed, a summary of the minimum, maximum, average, and standard deviation values are provided.

<table>
<thead>
<tr>
<th>Table 2. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>Current_Ratio 12</td>
</tr>
<tr>
<td>Net_Profit_Margin 12</td>
</tr>
<tr>
<td>Debt-to_Equity_Ratio 12</td>
</tr>
<tr>
<td>Stock Price 12</td>
</tr>
</tbody>
</table>

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The lowest value for the Current Ratio variable is 1.88, while the highest value for Current Ratio is 6.02. The average Current Ratio for tobacco sector companies listed on the Indonesia Stock Exchange during 2018-2021 is 32.979. The lowest value for the Net Profit Margin variable is 0.06, and the highest value for the Net Profit Margin is 0.48. The average Net Profit Margin for tobacco sector companies listed on the Indonesia Stock Exchange during 2018-2021 is 0.2397. The lowest value for the Debt to Equity Ratio variable is 0.25, while the highest Debt to Equity Ratio is 0.48. The mean Debt to Equity Ratio for tobacco sector companies listed on the Indonesia Stock Exchange during 2018-2021 is 0.4531. The lowest value for the Stock Price variable is 140, while the highest Stock Price is 83652. The average closing Stock Price for tobacco sector companies listed on the Indonesia Stock Exchange during 2018-2021 is 18151.00

**Normality Test**

To determine whether the observed data follows a normal distribution or not, a Normality Test is required. In this study, the normality test is conducted using two methods: graphical testing and statistical testing. The results of the normality test in this study are as follows.

![Figure 2. Histogram](image)

From the above histogram, it is evident that the distribution of the research data tends to be symmetrical, indicating the possibility of the data having a normal distribution. However, to confirm whether the data indeed follows a normal distribution, a normality test needs to be conducted using the P-plot method.
Figure 3. P-Plot

From the above Normal Probability Plot, it is observed that the data points are distributed around the Y-axis line. This shows that the data points in the graph closely approach the Y-axis line, which is the reference line for a normal distribution. Therefore, it can be concluded that the data in this research tends to be normally distributed.

Multicollinearity Test

The multicollinearity test is an important step in regression analysis following the Normality Test. This test is used to examine whether there is or isn't a relationship among the independent variables. This relationship can be observed through the values of tolerance and Variance Inflation Factor (VIF). Based on the results of the multicollinearity test, it can be concluded that the data in this study does not suffer from multicollinearity issues. This can be confirmed by the fact that the tolerance value for all variables is greater than 0.10 and the Variance Inflation Factor (VIF) value for all variables is less than 10.

Partial Test

Table 3. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant) -105789.643</td>
<td>93287.927</td>
</tr>
<tr>
<td></td>
<td>Current_Ratio 10486.085</td>
<td>12204.421</td>
</tr>
<tr>
<td></td>
<td>Net_Profit_Margin 191404.792</td>
<td>65989.714</td>
</tr>
<tr>
<td></td>
<td>Debt-to_Equity_Ratio 95977.599</td>
<td>89253.593</td>
</tr>
</tbody>
</table>

Y = Stock Price Variable a = Constant X1 = Current Ratio Variable X2 = Net Profit Margin Variable X3 = Debt to Equity Ratio Variable e = Error rate of 5%

1. The constant (a) value of 10.579 indicates that the stock price will be 10.579 if the variables current ratio, net profit margin, debt to equity ratio are zero.

2. The coefficient value of the current ratio (X1) is 1.049. This proves that with every 1% increase in the current ratio, the stock price will increase by 1.049.

3. The coefficient value of the net profit margin (X2) is 19.1404. This suggests that with every 1% increase in the net profit margin, the stock price will increase by 19.1404.

4. The coefficient value of the debt to equity ratio (X3) is -9.598. This proves that with every 1% increase in the debt to equity ratio, the stock price will decrease by 9.598.

Discussion

Effect of Current Ratio on Stock Price

Based on the t-test results, the obtained t-value (1.959) is larger than the t-table value (1.85955) with a significance level (0.015) that is smaller than 0.05. Therefore, it can be concluded
that the Current Ratio variable significantly affects the Stock Price of tobacco sector companies listed on the Indonesian Stock Exchange during the period 2018-2021.

**Effect of Net Profit Margin on Stock Price**

Based on the t-test results, the obtained t-value (2.901) is larger than the t-table value (1.85955) with a significance level (0.02) that is smaller than 0.05. Therefore, it can be concluded that the Net Profit Margin variable significantly affects the Stock Price of tobacco sector companies listed on the Indonesian Stock Exchange during the period 2018-2021.

**Effect of Debt to Equity Ratio on Stock Price**

Based on the t-test results, the obtained t-value (-1.075) is smaller than the t-table value (-1.85955) with a significance level (0.314) that is greater than 0.05. Therefore, it can be concluded that the Debt to Equity Ratio variable does not significantly affect the Stock Price of tobacco sector companies listed on the Indonesian Stock Exchange during the period 2018-2021.

5. **Conclusions**

The Current Ratio has a partial, positive correlation with Stock Price, meaning that changes in the Current Ratio affect changes in the closing Stock Price of tobacco sector companies. The Net Profit Margin partially has a significant influence on the Stock Price. This means that changes in the Net Profit Margin will impact changes in the Stock Price of tobacco sector companies. The Debt to Equity Ratio does not have a significant partial influence on the Stock Price, suggesting that changes in the Debt to Equity Ratio will not have a significant effect on the changes in the Stock Price of tobacco sector companies. Simultaneously, the Current Ratio, Net Profit Margin, and Debt to Equity Ratio significantly affect the closing Stock Price, indicating that these three variables can simultaneously affect the closing Stock Price of tobacco sector companies. Company management needs to pay attention to the Current Ratio and Net Profit Margin in efforts to increase Stock Price. Both these variables correlate positively with Stock Price, thus affecting investor decisions. In subsequent research, it is recommended to observe over a longer period involving more companies in order to gain a better understanding of the effect of the variables on the closing Stock Price.

**References**


