THE EFFECT OF RETURN ON ASSETS AND CURRENT RATIO ON FINANCIAL DISTRESS USING THE SPRINGATE METHOD IN TECHNOLOGY COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2019-2021

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THE EFFECT OF RETURN ON ASSETS AND CURRENT RATIO ON FINANCIAL DISTRESS USING THE SPRINGATE METHOD IN TECHNOLOGY COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE IN 2019-2021

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Abstract
This study aims to influence Return on Assets (ROA) and Current Ratio (CR) on Financial Distress in technology companies listed on the Indonesia Stock Exchange. The population of this study amounted to twenty six companies. The sampling technique using purposive sampling method obtained six companies. The research results prove that ROA has no significant effect on Financial Distress. Meanwhile, CR has a positive and significant effect on Financial Distress in technology companies listed on the Indonesia Stock Exchange.

Keywords: Return on Assets (ROA), Current Ratio (CR), and Financial Distress (FD).
1. Introduction

Business sector is expanding quickly as time goes on, which is increasing fierce competition. This frequently leads to the bankruptcy of numerous businesses that can no longer operate. Low and unpredictable economic levels have a detrimental effect on businesses and eventually lead to a financial distress situation. Analyzing a company’s financial accounts is one method for predicting the state of its financial distress. Long-term profitability indicates that a company is performing well since it can produce profits (Santoso, 2017). If a corporation does not do an early analysis, it is susceptible to having internal and external issues that could result in financial difficulties. A Financial Distress event will occur without prevention, which will have a detrimental effect on the company (Safitri & Yuliana, 2021).

The requirement to continuously monitor financial conditions can be utilized to plan the funding that the company will provide and the sales goals that need to be met. A company may experience financial distress conditions if the management is unable to manage the business effectively. If this condition is not resolved right away, it will undoubtedly have a negative effect on the company's ability to continue operating in the future because it may file for bankruptcy or liquidate (Amanda & Tasman, 2019).

In order to predict bankruptcy in the future, an investigation of the signs of bankruptcy must be done. This can be accomplished by using a specific model to assess the company's financial ratios. This is due to the fact that businesses in Indonesia frequently face bankruptcy phenomena (Permana et al., 2017). When a business is in financial distress, it cannot meet its obligations because it has insufficient cash flow from operations. In this situation, the business must take immediate strategic action (Arifin, 2019). Therefore, companies must be able to monitor financial conditions both from balance sheets and profit and loss in financial reports in order to minimize bankruptcy.

Figure 1. Financial Distress Percentage

Figure 1 illustrates the level of potential financial distress for a number of companies listed on the Indonesia Stock Exchange. Therefore, the purpose of this study was to determine whether or not the relationship between profitability and liquidity causes the phenomena of financial distress. According to the formula for determining financial distress, namely the Springate method, it is stated that if the S-Score > 0.862 then the company is classified as a healthy company and vice versa when the S-Score is 0.862.
2. Theoretical Background

Return on Assets

Return on Assets is one of the profitability ratios used to measure company performance and the extent to which a company can generate profits by utilizing the total assets it owns (Hertina et al., 2021). This ratio provides an indication of the managerial effectiveness and efficiency of a business. Utilizing the firm's assets effectively will lower the costs incurred by the company, resulting in savings and enough money for the company to operate (Agustini & Wirawati, 2019). The formula for Return on Assets as provided by Noviyani & Muid (2019).

\[
\text{RETURN ON ASSETS} = \frac{\text{Net Income}}{\text{Total Assets}}
\]

Current Ratio

Current Ratio is a comparison between current assets and current liabilities and is the most commonly used to measure a company's ability to meet its short-term obligations (Ananto et al., 2017). This ratio demonstrates the maximum amount of short-term debt that can be secured to a high degree by current assets (Dewi Ayu Puspita Sari, M. Hidayat, 2019). Debt that is due to mature soon could be included in the company's current obligations (Agustini & Wirawati, 2019). Current Ratio formula according to Susyana & Nugraha (2021).

\[
\text{CURRENT RATIO} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

Financial Distress

Financial distress happens when a company's operating cash flow is insufficient to meet all of its obligations. Financial distress is defined as a company's inability to pay its debts and its inability to create enough cash flow to fulfill its contractual obligations (Arifin, 2019). Wesa & Otinga (2018) stated that when a company is having a financial distress, there are two main things that can happen: either there is a scarcity of cash in assets or obligations on liabilities from financial statements are coming due. The detrimental impacts of financial distress on the organization put the company's viability in danger. The Springate method, which has been one of the methods to predict financial distress is used in this study (Wahyuni, 2021).

\[
\text{S-SCORE} = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4
\]

Hypothesis Research

Some of the researches that had been put forward have a dispute between the variables that have the possibility of having an influence on Financial Distress. On Return on Assets, namely the research conducted by Curry et al., (2018) stated that Return on Assets has a negative effect on Financial Distress. While Ananto et al., (2017) stated that Return on Assets has a positive and significant effect on Financial Distress.

Nurhamidah & Kosasih (2021) stated that Current Ratio has a positive and significant effect on Financial Distress. Companies that are struggling financially still meet their long-term commitments as well as their short-term ones. Current Ratio calculates the company's ability to pay its short term obligations. Meanwhile, Nurhamidah & Kosasih (2021) stated that Current Ratio has a negative and significant effect on Financial Distress. In a study that had been carried out by Silvia & Yulistina (2022), it’s clarified that Financial Distress is negatively and negligibly impacted by the Current Ratio. The purpose for doing this study to determine whether Return on Assets and Current Ratio have an impact on financial distress was due to the inconsistency of earlier researches.

Effect of Return on Assets on Financial Distress

Return on Assets is a metric used to determine if a company is doing well or having trouble. If earnings are increasing, the business is doing well. On the other side, if the business is under financial stress, profitability will drop until it is negative (Hery, 2017). According to a research by Amalia et al. (2020) and Fabiana Meijon Fadul (2019), Return on Assets is said to have a favorable impact on financial distress circumstances. This shows that the ability of the corporation to earn profits decreases as the Return on Assets increases,
which increases the likelihood that the company may encounter financial distress. The following research hypotheses were found based on the aforementioned study:

**H₁**: Return on Assets has an effect Financial Distress.

**Effect of Current Ratio on Financial Distress**

The current ratio can provide insight into a company's financial health based on how well it is able to pay off its debts. The ability of a business to pay its financial obligations when they become due is gauged by the current ratio (Fahmi, 2017). The higher the Current Ratio, the smaller the chance of a company experiencing financial distress. The Current Ratio has a positive effect on Financial Distress as stated by Al., (2021) and Zulaecha & Mulvitasari (2019) because it is feared that a corporation with limited liquidity won't be able to pay its short-term debt. The following research hypotheses were found based on the aforementioned study:

**H₂**: Current Ratio has an effect Financial Distress.

![Research Model](image)

**3. Methods**

This study uses quantitative method and draws on secondary data, including financial reports from technology-related companies listed on the Indonesia Stock Exchange (www.idx.co.id) for the years 2019–2021. Using the purposive sampling method, a technology company sample of 26 companies was selected for the study. Companies that: a) maintain consistency during the observation year; b) provide financial accounts during the observation year. Multiple linear regression analysis was used during the testing process. The independent variable (Return on Assets and Current Ratio) and the dependent variable are the 2 (two) types of variables employed in this study (Financial Distress). The six companies in this study's criteria were used to determine which of the companies will be unable to pay its short-term debt. Based on determining the criteria in this study 6 companies. The following is a list of companies that were used as research samples:

<table>
<thead>
<tr>
<th>No.</th>
<th>Nama Perusahaan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PT Sat Nusapersada Tbk</td>
</tr>
<tr>
<td>2.</td>
<td>PT NFC Indonesia Tbk</td>
</tr>
<tr>
<td>3.</td>
<td>PT Metrodata Electronics Tbk</td>
</tr>
<tr>
<td>4.</td>
<td>PT Multipolar Technology Tbk</td>
</tr>
<tr>
<td>5.</td>
<td>PT M Cash Integrasi Tbk</td>
</tr>
<tr>
<td>6.</td>
<td>PT Anabatic Technologies Tbk</td>
</tr>
</tbody>
</table>
4. Results and Discussion

Table 2. Classic Assumption

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normality Test</td>
<td>0.200</td>
<td>Normally distributed</td>
</tr>
<tr>
<td>Autocorrelation Test</td>
<td>1.345</td>
<td>There are no symptoms of autocorrection</td>
</tr>
<tr>
<td>Multicollinearity Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.980</td>
<td>There are no symptoms of multicollinearity</td>
</tr>
<tr>
<td>CR</td>
<td>0.980</td>
<td>There are no symptoms of multicollinearity</td>
</tr>
<tr>
<td>Heteroskedasticity Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.406</td>
<td>There were no symptoms of heteroscedasticity</td>
</tr>
<tr>
<td>CR</td>
<td>0.354</td>
<td>There were no symptoms of heteroscedasticity</td>
</tr>
</tbody>
</table>

Source: processed data using SPSS

Gozali (2018) tested the normality test to find out whether in the regression model, it is normally distributed so that tests on research data can be continued. Based on Table 3, it shows the value of Sig. (2-tailed), i.e. 0.200 > 0.05 can be stated that the data is normally distributed because the value > 0.05 is the criterion for fulfilling the normality test. Figures that are declared normal can be continued to the next test.

Based on Table 3, it shows a Durbin-Watson value of 1.345. This value will be compared with the Durbin-Watson value using the method proposed by Santoso (2017). In accordance with the statement that the DW is between -2 to +2, so there is no autocorrelation. This calculation produces DL and DU values of 1.046 and 1.535. The provision for knowing whether the data has autocorrelation or not is when the DW value lies between the DU and DL values so that the resulting DW value is between DU and 4-DU which explains that there is no autocorrelation so that research can be continued.

Based on Table 5, it shows the tolerance and VIF values of 0.908 and 1.020. The value will meet the criteria if Tolerance > 0.1 and VIF < 10. So the result is that the Tolerance value is 0.908 > 0.1 and VIF 1.020 < 10, meaning that there are no symptoms of multicollinearity and the analysis can be continued.

Gozali (2018) stated that heteroscedasticity test aims to test the regression model whether there is an inequality of variance from the residuals of one observation to another. Based on table 6, the heteroscedasticity test using the Glejser method obtained a significance value of 0.406 and 0.354, which is 0.05 greater, so it can be concluded that the data does not have a heteroscedasticity problem. So, it can be concluded that there are no symptoms of heteroscedasticity.

Table 3. Multiple Linear Regression Analysis

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R² Test</td>
<td>0.775</td>
<td>Contributions Between Variables are 77.5%</td>
</tr>
<tr>
<td>F Test</td>
<td>0.000</td>
<td>Hypothesis Between Variables are Accepted</td>
</tr>
<tr>
<td>t Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-0.238</td>
<td>There is Effect on Variables</td>
</tr>
<tr>
<td>CR</td>
<td>7.143</td>
<td>There is Effect on Both Independent and Dependent Variables</td>
</tr>
</tbody>
</table>

Source: processed data using SPSS

The value used in the determination test is the Adjusted R Square value. If the R² value gets closer to 1, the better the model's ability to explain the dependent variable (Gozali, 2018). Based on table 8, the output value of R² is 0.775 or 77.5%. This shows that the contribution of the ROA and CR variables to FS is 77.5% while the remaining 22.5% is influenced by other factors that cannot be explained in this study.

Gozali (2018) F test aims to determine the effect of the independent variables together (simultaneously) on the dependent variable. F test decision making is based on the significant value resulting from data processing. Based on table 9, the sig. or the probability is as big as 0.000, meaning that the research data is Fit (feasible) because < 0.05 or 5% so it
can be concluded that the hypothesis is accepted and together the variables RoA (X1) and CR (X2) have an influence on FS (Y).

Gozali (2018) t test was conducted to find out whether the independent variables in the regression model had an individual effect on the dependent variable. Based on Table 10, the results of the t test must be greater than 0.05 if you want to be significant. The t column shows the value (-0.238) and 7.143 for the independent variable, so that the variables RoA (X1) and CR (X2) have a positive and significant effect on the FS variable (Y).

**Discussion**

**Effect of Return on Assets on Financial Distress**

Return on Assets measures a company's capacity to make money in relation to sales, total assets, and own capital over a specific time period. The likelihood of financial distress is reduced the more money a company makes. In light of the findings of the research, it has been established that Return on Assets has no bearing on the likelihood of financial distress. Return on Assets variable's final t test result was -0.238 < 2.131, indicating that the hypothesis is rejected and that the Return on Assets variable has no impact on Financial Distress. This research does not support previous research, but supports research conducted by Hanifah (2020); Bagus & Wiksuna (2017); Sari (2017) who stated that Return on Assets has a negative effect on Financial Distress.

**Effect of Current Ratio on Financial Distress**

Current Ratio is applied as a goal to help measure a company's ability to meet debts and pay off the company's current liabilities when utilizing its current assets. Explained by Silanno & Loupatty (2021) that is believed a company with a high current ratio has many current assets that are prepared to pay off its short-term debt in order to prevent financial distress. According to the study, there was a connection between the Current Ratio variable and Financial Distress. The t test results for the Current Ratio variable are 7.143 > 2.131, indicating that the hypothesis is accepted and that the Current Ratio variable impacts Financial Distress. The findings of this research are supported by Al., (2021); Zulaech & Mulvitasari (2019); Fitrianingsih (2021) who stated that Current Ratio has a negative effect on Financial Distress.

**5. Conclusion**

This study used technology companies listed on the Indonesia Stock Exchange (IDX) in 2019 – 2021 to examine the impact of Return on Assets and Current Ratio on Financial Distress. Independent variables (Return on Assets and Current Ratio) have a substantial impact on the dependent variable, according to the test findings using the SPSS V.23 program. 1) Independent variables (Return on Assets and Current Ratio) have a significant effect on the dependent variable (FD). However, the Return on Assets variable has a negative effect on Financial Distress, 2) while the Current Ratio variable has a positive effect on Financial Distress. This can be said because of the results of simultaneous F testing and partial t.

**References**


Fabiana Meijon Fadul. (2019). *No Title No Title No Title.*


