THE EFFECT OF RETURN ON ASSETS AND THE CURRENT RATIO ON STOCK RETURN IN TECHNOLOGY COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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ABSTRACT

This study aims to determine and analyze the effect of return on assets (ROA) and current ratio (CR) on stock returns in technology companies listed on the Indonesia Stock Exchange for the 2019–2021 period. The population of this study amounted to 26 companies. The sampling technique using the purposive sampling method obtained data from 6 companies. The results of this study indicate that ROA has a positive and significant effect on stock returns, while CR has no significant effect on stock returns.

Keywords — Return on Assets, Current Ratio, and Stock Return

1. INTRODUCTION

Currently, Indonesia's condition in 2022 is in a period of recovery after approximately two years in which the coronavirus has been endemic in Indonesia. As a result of this, several companies were affected; one of the companies that felt the impact was a technology company. This resulted in the number of technology users in the country increasing. In addition, the increase in technological developments has made the company's stock returns grow rapidly every year.

Figure 1. Stock Returns of Technology Companies
Source: Yahoo.Finance

Figure 1 shows stock returns for technology companies in 2019 of -0.1524; an increase in 2020 of 0.2056; and in 2021 of 1.8296. The increase in stock returns may be caused by several factors, so this study will analyze the changes that occur in stock prices, which are the main focus of this research. Determination in the measurement of variables that will be used with the company's financial performance.

Previous research discrepancies on each independent variable include return on assets (ROA) and current ratio (CR). Husain (2021); Simanjuntak (2021); Tahir et al (2021); Putra et al (2021); Worotikan et al (2021) stated that ROA has no significant effect on stock returns. Whereas, Widyadhari et al (2018); Winarto & Rochmah (2018); Parawansa et al (2019); Istriomah (2022) states that ROA has a positive and significant effect on stock returns and simorangkir (2019); T. B.
Simanjuntak & Kaluge (2016); Nurlia & Juwari (2020) states that ROA has a negative and significant effect on stock returns.

Worotikan et al (2021); Idris (2021); Rahmadewi & Abundanti (2018); Gustmainar & Marian (2018); Syahbani (2018) stated that CR had no significant effect on stock returns. Whereas, Husain (2021); Putra et al (2021); Ratnamingtyas (2021); Lufriansyah (2021); Lestari & Suryantini (2019) stated that CR had a positive and significant effect on stock returns and Rahmadewi & Abundanti (2018); Parawansa et al (2019); Amrah & Elwisam (2019); Haryani & Priantinah (2018) states that CR has a negative and significant effect on stock returns.

Based on previous research's phenomena and gaps in empirical results, this study will examine the effect of return on assets (ROA) and current ratio (CR) on stock returns in technology companies listed on the Indonesia Stock Exchange for the 2019-2021 period.

2. LITERATURE REVIEW

2.1 Stock Returns

Mulyana et al (2021), The return obtained from an investment is in the form of dividends that investors receive from the company; Iradianty et al (2018) return is the total income from investments made in a certain period; Kasmir (2019) state the calculation formula as follows:

\[ R_t = \frac{R_t - P_{t-1}}{P_{t-1}} \]

2.2 Return On Assets

Agustini & Wirawati (2019) The effectiveness of the use of company assets will reduce the costs incurred by the company so as to obtain savings and have sufficient funds to run the business. (Winarto & Rochmah, 2018) states ROA is the result of return on assets, which states how much assets contribute to net income. (Winarto & Rochmah, 2018); (Telaumbanua, 2020) stated the calculation formula as follows:

\[ ROA = \frac{Laba Bersih}{Total Aset} \]

2.3 Current Ratio

Kasmir (2019); Murhadi (2019) stated that the "current ratio" (CR) is a measure of a company's ability to pay its short-term obligations as they mature. Kasmir (2019); Polapa (2021) stated the calculation formula as follows:

\[ CR = \frac{Aktiva Lancar}{Hutang Lancar} \]

2.4 Research Hypothesis

Based on the theoretical studies described previously, it can be hypothesized for each variable as follows:

1. (Widyadhari et al., 2018); (Parawansa et al., 2019); (Istiqomah, 2022) stated The return on assets influences stock returns. The higher the return on assets of a company, the better the level of effectiveness of the company as a whole. Return on assets has a positive and significant effect on stock returns.

   \[ H1: \text{Return on assets influences stock returns.} \]

2. (Widyadhari et al., 2018); (Wulandari, 2020); (Rahmawati & Hadian, 2022) shows the current ratio has an effect on stock returns. The higher the current ratio of a company, the smaller the risk of failure by the company in fulfilling its short-term obligations. The current ratio has a positive and significant effect on stock returns.

   \[ H2: \text{The current ratio influences stock returns.} \]

Based on the preparation of theoretical studies and hypotheses and the formation of a research conceptual framework from the previous discussion, this study proposes a research model that is used as follows:

Independent Variables: Return on Assets (X1) and Current Ratio (X2)

Dependent Variable: Stock Return (Y)

\[ Y = \frac{\text{Return on Assets}}{\text{Current Ratio}} \]
3. RESEARCH METHODS
This research was conducted at technology companies listed on the Indonesia Stock Exchange (IDX). The independent variables in this study are return on assets and the current ratio. The dependent variable is the stock return. The population in this study is all technology companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2021 period, totaling 26 companies. Samples were taken using the purposive sampling method. The criteria that will be used are as follows: a) companies that are consistent in the year of observation for the 2019–2021 period; b) companies

4. RESULT AND DISCUSSION
4.1 Results Of Descriptive Statistical Analysis
4.1.1 Descriptive Statistical Analysis
Based on table 1, the research data examined up to 18 variables. The table shows the minimum value of return on assets is 0.0056 and the maximum is 0.2142; the minimum current ratio is 0.8728 and the maximum is 4.4317; and the return on shares has a minimum value of -0.5960 and a maximum of 3.9440. The following table shows the results of data processing regarding descriptive statistics for technology sector companies, as follows:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>18</td>
<td>0.0056</td>
<td>0.2142</td>
<td>0.0694</td>
<td>0.0476</td>
</tr>
<tr>
<td>CR</td>
<td>18</td>
<td>0.8728</td>
<td>4.4317</td>
<td>2.1655</td>
<td>1.1653</td>
</tr>
<tr>
<td>RS</td>
<td>18</td>
<td>-0.5960</td>
<td>3.9440</td>
<td>0.5685</td>
<td>1.2074</td>
</tr>
<tr>
<td>Valid N</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 The Normality Test
Ghozali (2018) The normality test was tested to find out whether the regression model is normally distributed so that the test on research data can be continued.

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Residual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.007*</td>
</tr>
</tbody>
</table>

Based on table 2, The Kolmogorov-Smirnov test shows a value of 0.007; the condition is that the research data can be said to be normal when the Kolmogorov-Smirnov data is > 0.005; in the data above, the Kolmogorov-Smirnov value shows 0.007 > 0.005, meaning that the research data is normally distributed.

4.1.3 The Autocorrelation Test
Ghozali (2018) The autocorrelation test was tested to see if there was a correlation between the confounding errors in period t and period t-1 (current and previous periods).

<table>
<thead>
<tr>
<th></th>
<th>Durbin-Watson Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.057 No Correlation</td>
</tr>
</tbody>
</table>

Based on table 3, In the Autocorrelation test it is knows that the DW value is 2.057, and the range is 1.65 < DW < 2.35, Which means thst the data in this study has no correlation.

4.1.4 A Multicollinearity Test
Ghozali (2018) A multicollinearity test is used when there is a perfect relationship between some or all of the independent variables in the regression model.

<table>
<thead>
<tr>
<th></th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance VIF</td>
</tr>
<tr>
<td>ROA</td>
<td>.980 1.020</td>
</tr>
<tr>
<td>CR</td>
<td>.980 1.020</td>
</tr>
</tbody>
</table>

Source: Data processed by researchers, 2022
Based on table 4, focus on the coefficients column in the tolerance and VIF columns. The tolerance value is shown in the column as 0.980 > 0.1, while the VIF value is shown as 1.020. It can be said that the research data does not have a strong correlation between each independent variable.

4.1.5 The Heteroscedasticity Test
Ghozali (2018) The heteroscedasticity test aims to test the regression model to see whether there is an inequality of variance from one residual observation to another.

<table>
<thead>
<tr>
<th>Table 5. Heteroscedasticity Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>RoA</td>
</tr>
<tr>
<td>CR</td>
</tr>
</tbody>
</table>

Based on the heteroscedasticity test using the glejser method, a significance value of 0.321 and 0.365 was obtained, which was 0.05 greater, so that it can be concluded that the data does not have a heteroscedasticity problem. And based on test results show that the dots spread above or below only. The distribution of data points does not form a pattern. So, it can be concluded that there are no symptoms of heteroscedasticity.

4.2 Multiple Linear Regression
Multiple linear regression is used to determine the direction and how much influence the independent variables have on the dependent variable (Ghozali, 2018).

<table>
<thead>
<tr>
<th>Table 6. Multiple Linear Regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>RoA</td>
</tr>
<tr>
<td>CR</td>
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</tbody>
</table>

Based on the table above, a regression equation can be formulated to determine the effect of the independent variables on the dependent variable as follows: Y = -0.376 + 15.588 X1 - (0.064) X2 + e, including:

a. A constant of -0.376 means that if the return on assets and the current ratio are both 0, then the stock return is -0.376.

b. The regression coefficient of the current ratio variable is -0.064, meaning that if the variable return on assets has a fixed value and the current ratio increases by 1%, stock returns will decrease by -0.064, or -6.4%.

4.3 The Determination Test
The value used in the determination test is the adjusted R square value. If the value of R2 gets closer to 1, the better the model's ability to explain the dependent variable (Ghozali, 2018).

<table>
<thead>
<tr>
<th>Table 7. Determination Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Based on the results, the output value of R2 is 0.372, or 37.2%. This shows that the contribution of the ROA and CR variables to RS is 37.2%, while the remaining 62.8% is influenced by other factors that cannot be explained in this study.
4.4 F Test (Anova)
Ghozali (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 value of Fcount > Ftable and the significant value resulting from data processing.

<table>
<thead>
<tr>
<th>Table 8. ANOVA(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>Regression</td>
</tr>
</tbody>
</table>

Source: Data processed by researchers, 2022

Based on Table 8, the results of the F test in this study obtained an F count of 4.444 with a probability level of 0.031. it can be concluded that simultaneously the independent variables on the dependent variable have a positive and significant effect.

4.5 Partial Test (t Test)
Ghozali (2018) A t test was conducted to determine whether the independent variables in the regression model have an individual effect on the dependent variable.

<table>
<thead>
<tr>
<th>Table 9. Partial Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>ROA (X1)</td>
</tr>
<tr>
<td>CR (X2)</td>
</tr>
</tbody>
</table>

Source: Data processed by researchers, 2022

Based on table 9, the results of the t test for X1 are -.300 which is greater than 0.05. So that the X1 variables has a negative but not significant effect. Whereas for X2, 2.979 has a positive and significant effect on the variable, namely stock return

4.6 DISCUSSION
4.6.1 Effect Of Return On Assets On Stock Return
Return on assets is used to determine the effectiveness of a company and how effectively it is managing the company as a whole. If a company can generate a high return on assets (RoA), then it can be said to have good performance and be a productive company. So with an increase in return on assets, it will affect the high level of stock returns on the part of investors.

Based on the test results, it can be said that the return on assets has a positive and significant effect on stock returns. The results of the study state that "Return on Assets" has a positive and significant effect on stock returns for technology companies listed on the Indonesia Stock Exchange in 2019–2021. Based on the results of the calculations shown in Table 9, it can be partially seen that RoA has a positive and significant effect on stock returns. This can be proven by the results of regression testing, which show that the t count is 2.979, with a significance value of 0.009 0.05. The results of this study are supported by (Widyadhari et al., 2018); (Winarto & Rochmah, 2018); (Parawansa et al., 2019); (Istiqomah, 2022) which states that RoA has a positive and significant effect on stock returns.

4.6.2 The Effect Of The Current Ratio On Stock Performance
The current ratio is used to determine a company's ability to meet short-term obligations. If a company can generate a high current ratio (CR), then it has little potential to fail in fulfilling its short-term obligations. However, in this study, it is said that the current ratio has no effect on the level of stock returns. That means it can be said that a high or low current ratio will not affect stock returns.

Based on the test results, it can be said that the current ratio has a negative but not significant effect on stock returns. The results of the study state that the current ratio has a negative and insignificant effect on stock returns at technology companies listed on the Indonesia Stock Exchange in 2019–2021. Based on the results of the calculations shown in Table 9, it can be partially seen that CR has a negative and insignificant effect on stock returns. This can be proven by the results of regression testing, which show that the t count is (-0.300) while the t table value is 2.131 So the t value of the variable CR in the t table means that CR has no effect on RS, and in the significant column (sig.), CR with a sig. of 0.769 is greater than 0.05, meaning that CR has a negative effect but not a significant one on stock returns. The results of this study are supported by previous research. Worotikan et al (2021); Idris (2021); Rahmadewi & Abundanti (2018); Gustmainar & Mariani (2018); Syahbani (2018) stated that CR had no significant effect on stock returns and Rahmadewi & Abundanti
(2018); Parawansa et al (2019); Amrah & Elwisam (2019); Haryani & Priantinah (2018) stated that CR had a negative effect on stock returns.

5. CONCLUSION
The conclusions This research was conducted to determine the effect of return on assets and the current ratio on stock returns using technology companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2021 period. Based on the test results using the SPSS 23 program, both of the independent variables (ROA and CR) have a significant effect on the dependent variable (RS). However, the CR variable has a negative effect on RS, while the ROA variable has a positive effect on RS. This can be said from the results of simultaneous F testing and partial t.

Suggestion from the research indicate that it is hoped that technology sector stocks can maintain stock returns that increase every year. Future research is expected to add to the independent variable in order to find out other relationship between technology sector.

REFERENCES


[33] https://www.idx.co.id/perusahaan-tercatat/laporan-keuangan-dan-tahunan/