THE EFFECT OF LIQUIDITY, LEVERAGE, AND PROFITABILITY RATIO ON STOCK PRICES

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ABSTRACT

The purposes of this study is to test and analyze the influence of liquidity (Current Ratio), leverage (Quick Ratio, Debt to Equity ratio), profitability (Return on Asset, Return on Equity) and stock prices on food and beverage companies listed in Indonesia Stock Exchange 2016-2018 period. The dependent variable of the study is stock price, liquidity (Current Ratio), leverage (Quick ratio, Debt to Equity Ratio), profitability (Return on Assets, Return on Equity). The population includes 18 companies and 10 research sample companies according to criteria specified and during the period 2016-2018, making a total of 30 observation data according to the criteria. The sampling technique used purposive sampling. methods of data analysis using panel data regression, F test shows that the test results of the partial test (t test) showed variable profitability (Return on Assets and Return on Equity) effect on the stock price, the variable liquidity (Current Ratio), leverage (Quick ratio, and Debt to Equity Ratio) no significant effect on the price on stock.

Keywords: liquidity, leverage, profitability, stock prices

INTRODUCTION

In this global era, companies are competing to get the maximum profit. There is competition in various economic sectors, such as in manufacturing companies, with the increase in companies causing increasingly fierce competition. Competition has stimulated every company to continue to innovate in various aspects, one of which is in the financial sector. For companies a healthy financial condition is not only beneficial for the Intern, but also for investors involved in the company. The role of the capital market is very important in economic development, because in addition to being a source of financing and investors to invest their capital so that they obtain profits in the form of stock investment. Shares in the form of securities traded on the capital market, namely in the form of proof of ownership of a company (Hermuningsih,2012). In the company's shares of course listed stock prices because as a determinant of the company's success. The share price does not always increase, but also decreases in a matter of minutes or seconds, and the price is formed dozens of times a day in trading for one type of stock.

Food and beverage companies are currently experiencing significant growth and are companies with good prospects because they are very profitable in the present and future era in aspects of daily life. It is expected to be able to survive and complete, therefore it must improve financial performance in order to be able to compete on the Indonesia Stock Exchange.
Financial performance is assessed by the company's financial ratios, by comparing the figures (annual report) with one another in accordance with the formula that has been available (Kasmir, 2014). There are several ratios that can be analyzed, in this discussion using liquidity ratio, proxy using a current ratio, then leverage is proxy with a quick ratio, debt to equity ratio, and profitability is proxy through return on assets, return on equity. In this discussion the data is obtained based on the annual report on the 2016 - 2018. Based on the explanation above, the researcher intends to be tested and analyzed the effect of financial ratios, namely the current ratio, quick ratio, debt to equity ratio, return on assets, return on equity as the independent variable, and stock price dependent variable in this study.

**Research Purposes**

The objectives achieved in this study are to test and analyze liquidity (current ratio), leverage (quick ratio, debt to equity ratio), and profitability (return on assets, return on equity) have an influence on the stock prices of listed food and beverage companies on the Indonesia Stock Exchange 2016 - 2018.

**Theoretical Basis and Hypothesis Formulation**

1. **Signal Theory**
   
   Signal theory produces info about financial statements for external parties, business owners or shareholders. The info shows that the business situation is in a good situation so that the company's value can increase, becoming superior to other companies (Darsono, 2015).
   
   This information is a good signal for investors in the form of annual financial statements. The report contains relevant information, important to be known to many parties, both outside and inside, especially users of financial statements.

2. **Effect of liquidity (current ratio) on stock prices.**
   
   Liquidity ratio is the ratio used to find out and analyze short-term finances. If current ratio has a positive impact on the price of the stock. It was found that the higher the current ratio, the company's ability to pay off its obligations was higher and the liquidation risk experienced by the company was getting smaller. The higher current ratio, the easier company to settle it obligations (Raharjo, 2013). Based on this, the hypothesis can be formulated as follows:
   
   \[ H_{1a} : \text{Current ratio affects stock prices.} \]

3. **Effect of leverage (quick ratio, debt to equity ratio) on stock prices.**
   
   It is a ratio used to measure the needs of companies financed with debt. The purpose of using this ratio is to get maximum profit for the company and shareholders (Kasmir, 2013).
   
   Based on (Febriawan, 2017), explained that Quick Ratio has a positive and significant effect on stock prices. The higher Quick Ratio, the better the financial position so in this study Quick Ratio has an impact.
   
   \[ H_{2a} : \text{Current ratio affects stock prices.} \]

   Based on (Novasari, 2013), if Debt Equity Ratio has an impact on stock prices. This shows that the higher the DER value, the higher the stock price will be. The stock price is a measurement to monitor, so in his research DER has an impact on its level.
   
   \[ H_{2b} : \text{Debt to equity ratio affects stock prices.} \]

4. **Effect of profitability (return on assets, return on equity) on stock prices.**
   
   Profitability is a ratio that is used to measure a company's ability to generate profits for a certain period. The profitability ratio can be seen through the comparison between the net
profit after tax through the amount of assets or capital. Business capital comes from the owner of the company (Munawir, 2012).

It was found that return on asset had a positive and significant impact, return on asset in terms of the measurement of his business regarding the gain in the number of assets used. Increasing return on asset, the company's performance is getting better and the company's stock price is increasing (Patel, 2014).

**H3a**: Return on asset affects stock prices.

If return on equity has a significant impact on stock prices. Return on equity is to provide information to investors about how many levels of return the capital of the business in finding profits. The greater the capital invested in equity, the greater the profits obtained (Feri, 2014).

**H3b**: Return on equity affects stock prices.

**Framework**

![Figure 1. Research Design](image)

**Information:**
1. **The independent variable**
   In this research are liquidity (current ratio), leverage (quick ratio, debt to equity ratio), and profitability (return on assets, return on equity).
2. **Dependent variable**
The dependent variable in this study is the stock price.

**RESEARCH METHODS**

This type of research used in this research is quantitative research. The data used in this research is secondary data. Secondary data is data from parties or institutions that have published it (Chandrarin, 2017). So this secondary data is taken from the financial statements of Food and Beverage Industry Companies listed on the Indonesia Stock Exchange (www.idx.co.id). The method of data analysis uses panel data regression. The population in this study were all food and beverage industry companies as many as 18 companies.

Sampling in this study uses a purposive sampling method, meaning that the population sampled in this study are populations that meet certain criteria. The samples in this study were 30 observations data of Food and Beverage Industry Companies, i.e. 10 companies multiplied by 3 years (2016 - 2018). The sampling criteria are as follows:
Table 1. Sample Selection Results

<table>
<thead>
<tr>
<th>No</th>
<th>Sampling Criteria</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food and beverage industry companies that exist on the 2016 – 2018 IDX.</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Companies that do not have complete data.</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Food and beverage industry companies that do not use rupiah in 2016 - 2018.</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>Companies that do not have complete stock prices.</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Food and beverage industry companies that did not make a profit in 2016 – 2018.</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Number of observation periods</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td><strong>Total period observation data 2016 - 2018 (10x3)</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

Source: Data Processed, 2019.

RESEARCH RESULT

Statistics Result

Descriptive analysis results using Eviews which show the mean and standard deviation results of the research variables. The following are the descriptive variables used in this study:

Table 2. Descriptive Statistics Result

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR (X1&lt;sub&gt;a&lt;/sub&gt;)</td>
<td>0.679</td>
<td>8.638</td>
<td>2.786</td>
<td>2.081</td>
</tr>
<tr>
<td>QR(X2&lt;sub&gt;a&lt;/sub&gt;)</td>
<td>1.549</td>
<td>8.357</td>
<td>3.153</td>
<td>1.789</td>
</tr>
<tr>
<td>DER(X2&lt;sub&gt;b&lt;/sub&gt;)</td>
<td>0.163</td>
<td>1.772</td>
<td>0.763</td>
<td>0.458</td>
</tr>
<tr>
<td>ROA(X3&lt;sub&gt;a&lt;/sub&gt;)</td>
<td>0.009</td>
<td>0.527</td>
<td>0.132</td>
<td>0.127</td>
</tr>
<tr>
<td>ROE(X3&lt;sub&gt;b&lt;/sub&gt;)</td>
<td>0.015</td>
<td>1.241</td>
<td>0.248</td>
<td>0.319</td>
</tr>
<tr>
<td>HS</td>
<td>308,000</td>
<td>16,000,000</td>
<td>4,352,000</td>
<td>4,402,182</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2019.

The results of this study indicate that the variable liquidity (current ratio) has a minimum value of 0.679 and a maximum value of 8.638, the minimum value from MLBI in 2016, while the maximum value is from DLTA in 2017, and has values 2.786 and 2.081.

Based on the descriptive statistical results above, for the variable leverage (quick ratio) has a minimum value of 1.549 and a maximum value of 8.357, the minimum value is from MLBI in 2016, while the maximum value is from DLTA in 2017, the results are each 3.153 and 1.789 respectively.

Based on the descriptive statistical results above, for the leverage variable (debt to equity ratio) has a minimum value of 0.163 and a maximum value of 1.772, the minimum value is from ULTJ in 2018, while the maximum value is from MLBI Indonesia in 2016, and produces its calculations 0.763 and 0.458.

Based on the descriptive statistical results above, the profitability variable (return on asset) has a minimum value of 0.009 and a maximum of 0.527, the minimum value is from SKBM in 2018, while the maximum value is from MLBI in 2017, and the calculations are 0.132 and 0.127.

Based on the results of the descriptive statistics above, the profitability variable (return on equity) has a small value of 0.015 and a lot value of 1.241, the minimum value is from SKBM in 2018, while the maximum value is from MLBI in 2017, and produces calculations amounted to 0.248 and 0.319.
Based on the results of the descriptive statistics above, the HS variable has a minimum value of 308,000 and a maximum value of 16,000,000 from the SKLT in 2016, while the maximum value from MLBI in 2018, has the assessment is 4,352,000 and 4,402,182.

**Classic Assumption Test Results**

The results of the classic assumption test used in this study consisted of multicollinearity, autocorrelation, heteroscedasticity, normality tests with the Eviews program.

**Table 3. Classical Assumption Test Analysis Results**

<table>
<thead>
<tr>
<th>Classic Assumption Test</th>
<th>The Results</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multicollinearity</td>
<td>Tolerance (CR, QR, DER, ROA, ROE) &lt; 0.8</td>
<td>Multicollinearity free</td>
</tr>
<tr>
<td>Autocorrelation</td>
<td>p (2.161) &gt; 0.05</td>
<td>Autocorrelation free</td>
</tr>
<tr>
<td>Heteroscedasticity</td>
<td>p (0.650; 0.230; 0.319; 0.881; 0.251)</td>
<td>Heteroscedasticity was not found</td>
</tr>
<tr>
<td>Normality</td>
<td>p (0.318) &gt; 0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2019.

**Determination of Panel Data Analysis**

To choose the right model in the panel data using the chow, hausman, and lagrange multiplier test.

**Table 4. The Results of Determining Panel Data Analysis**

<table>
<thead>
<tr>
<th>Information</th>
<th>The Results</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow</td>
<td>p (0.000) &lt; 0.05</td>
<td>Fixed effect</td>
</tr>
<tr>
<td>Hausman</td>
<td>p (0.000) &lt; 0.05</td>
<td>Fixed effect</td>
</tr>
<tr>
<td>Lagrange Multiplier</td>
<td>p (0.0004) &lt; 0.05</td>
<td>Random effect</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2019.

Based on the results of the selection of the regression model, the model used is the fixed effect model. The previous model has passed the classical assumption test, so the estimation is not biased and consistent.

**Hypothesis Testing**

1. **Panel Data Regression Analysis**

Panel data regression analysis to analyze the data structure which is panel data. This analysis is done using Eviews.

**Table 5. Panel Data Regression Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C (X1a)</td>
<td>5982.235</td>
<td>3.797374</td>
<td>0.0018</td>
</tr>
<tr>
<td>CR (X2a)</td>
<td>169.2185</td>
<td>0.273618</td>
<td>0.7881</td>
</tr>
<tr>
<td>QR (X2b)</td>
<td>-549.9488</td>
<td>-0.656887</td>
<td>0.5212</td>
</tr>
<tr>
<td>DER (X2b)</td>
<td>1109.277</td>
<td>1.597643</td>
<td>0.1310</td>
</tr>
<tr>
<td>ROA (X3a)</td>
<td>45373.96</td>
<td>4.198016</td>
<td>0.0008</td>
</tr>
<tr>
<td>ROE (X3b)</td>
<td>-29094.12</td>
<td>-4617033</td>
<td>0.0003</td>
</tr>
</tbody>
</table>

Source: Data Processed, 2019.
Based on the test results of panel data regression analysis above:

\[ Y = 5982.235 + 169.2185 \text{ CR} - 549.9488 \text{ QR} + 1109.277 \text{ DER} + 45373.96 \text{ ROA} - 29094.12 \text{ ROE} + e \]

The formed regression equation can be explained as follows:

1) The constant obtained for 5982.235 states that if all the independent variables are worth 0, then the share price will be 5982.235.

2) Current Ratio (CR) regression coefficient is positive at 169.2185. This means that if the current ratio variable rises by 1 percent assuming the other variables are fixed, it will be followed by an increase in share prices of 169.2185.

3) The coefficient quick ratio (QR) value is negative 549.9488. This means that if the quick ratio variable rises by 1 percent assuming the other variables are fixed, it will be followed by a decrease in stock prices by 549.9488.

4) The coefficient debt to equity ratio (DER) value is 1109.277. This means that if the debt to equity ratio variable rises by 1 percent assuming the other variables are fixed, then an increase in share price of 1109.277 will be followed.

5) The coefficient return on asset (ROA) is positively valued as much 45373.96. Regarding ROA an increase of 1% with the assumption that other variables can still be included in the stock price increase of 45373.96.

6) The Return on equity (ROE) regression coefficient is negative at 29094.12. This means that if return on equity variable rises by 1 percent assuming the other variables are fixed, it will be followed by a decrease in stock prices by 29094.12.

2. F Test

The F test is used to know the impact of independent variables in a joint manner over dependent or dependent variables. If the probability assessment is \( F < 0.05 \), so the conclusion is that the independent variables together have a significant effect on the dependent variable. The results obtained an F-statistic of 116,528 which means that the F-statistic value is greater than the value of the F-table (116,528 > 2.60) and a probability value of 0.000 which means less than 0.05 (0.000 < 0.05). So it can be concluded that together or simultaneously the independent variable liquidity (current ratio), leverage (quick ratio, debt to equity ratio), profitability (return on assets and return on equity) affect the dependent variable (stock prices).

3. T Test

The results of the t test can be seen in the coefficient table in the significance column. If the profitability of t count > t table or significance < 0.05, it can be said that there is a significant influence between the independent variables on the dependent variable, then \( H_0 \) is rejected.

Liquidity (CR) \( 0.273618 \) which means that the t-statistic value is smaller than t table \( (0.273618 < 2.059) \) and the probability value is 0.7881 which means it is greater than 0.05 (0.7881 > 0.05). Then this means that \( H_0 \) is accepted and Ha is rejected or in other words the Current Ratio variable has no effect and is not significant to the Share Price. These results indicate that was rejected.

Leverage (QR) \( -0.656887 \) which means the value of -t statistic is greater than -t table \( (-0.656887 > -2.059) \) and the probability value of 0.5212 which means greater than 0.05 (0.5212 > 0.05). So this matter is \( H_0 \) is accepted and Ha is rejected or in other words in the sense that it does not have significant and significant impact on the Share Price. The result is rejected.
Leverage (DER) is 1.597643, which means the value of t statistic is less than the t table (1.597643 < 2.059) and the value is 0.1310, which means it is greater than 0.05 (0.1310 > 0.05). So this is Ho accepted and Ha rejected, namely through the variable Debt to Equity Ratio there is no significant impact on the Share Price. The result is rejected. Profitability (ROA) 4.198016 which means that the value of t statistic is greater than t table (4.198016 > 2.059) and the probability value of 0.0008 regarding 0.05 (0.0008 < 0.05). So Hₒ is rejected and Ha is accepted as well as the mean of Return on Asset variable influential and significant to the Stock Price. These results are accepted. Profitability (ROE) -4.617033 which means the value of t statistic is smaller than t table (-4.617033 < 2.059) and the probability value is 0.0003 which means it is smaller than 0.05 (0.0003 < 0.05). So this means that Ho rejects Ha, that is, in other words, the variable ROE has a significant impact on stock prices. The result is accepted.

4. Coefficient Determination Test (R²)
To measure how much the role of independent variables together explain the changes that occur in the dependent variable. the result can be known if the free variables regarding the Share Price are 98.2% by the independent variable. The matter is Adjusted R Square of 0.982. while 1.8% of the dependent variable Price has the influence of the variables.

DISCUSSION
1. Liquidity (Current Ratio) Has no Effect on Stock Prices.
   The partial value of t-count < t-table (0.273618 < 2.059), probability value 0.7881 means > 0.05, means that Ho is accepted and Ha is rejected, liquidity (CR) has no effect on stock prices. The results indicate when a high CR means the company can pay debts on time, but the size of the CR will affect the company's revenue, because debt payments take precedence over others. The influence in the decline in business value, the investors will carry out sales of the company because the company is considered not to pay attention to the welfare of investors. this discussion is the same as the discussion Nugroho (2017), Wirajaya (2017) and Tumandung (2017) if CR does not have an impact on the value of its shares. As well as differing through Kundiman (2016), Wahyuni (2018) that CR has an impact on the price of shares.

2. Leverage (Quick Ratio) Has no Effect on Stock Prices.
   Leverage (QR) has no effect on stock prices. Partially t-statistic value > t-table (-0.656887 > -2.059), probability value 0.5212 > 0.05. In this case Ho is accepted while Ha is rejected, QR has no effect on stock prices. The high QR of the stock price of the business has decreased, this is probably caused by the short-term debt business which is due but the stock of merchandise in the warehouse is piling up and the company is unable to maximize all assets owned to obtain large profits, thus impacting on the financial unhealthiness of the company resulting in the stock price to decline according to discussion based on the discussion Nurjanti (2011), Nugroho (2017), Sari (2018) that QR has a significant impact on the price of shares.

3. Leverage (Debt to Equity Ratio) Has no Effect on Stock Prices.
   DER has no impact on the price of shares. By way of partial value-statistic < t-table (1.597643 < 2.059) and the probability value of 0.1310 > 0.05. is Ho accept and reject, DER has no effect and is not significant on stock prices. A large DER makes the company’s stock price decline, because companies are more focused on earning income to the debt sector, companies like this will certainly experience a continuous decline and liquidation will occur, which will make the stock price decrease if it has a large DER. In addition to the price, it is
safer because of the promise to the business economy. This discussion has been the same as conducted by Nurjanti (2011), Wirajaya (2017), Sari (2018), DER has no effect and no significant effect on stock prices. Then this acquisition contradicts researched by Widuri (2009), Kundiman (2016), Tumandung (2017), Herawati (2018) that DER has an impact on stock prices.

4. Profitability (Return on Assets) Affects the Stock Prices.
   Profitability (ROA) has an impact on stock prices. Partially t-statistics $> t$-table (4.198016 > 2.059), and the probability value of 0.0008 is $< 0.05$. $H_o$ reject and $H_a$ accept, ROA influence and significance on the stock price. Increased ROA can be the price of shares, due to the selective company policy in choosing assets that are able to support the company's performance so that the company gets a large income and has an impact on rising share prices. This discussion is in accordance with research by Kundiman (2016), Nugroho (2017), Wirajaya (2017), Herawati (2018), ROA has an effect on stock prices. But different based on Rocky (2013), Egam (2017), Sari (2018), ROA has no impact on stock prices.

5. Profitability (Return on Equity) Affects the Stock Price.
   Profitability (ROE) affects the stock price. Partially the value of -t-statistic $< t$-table (-4.617033 < 2.059), the probability value of 0.0003 $< 0.05$. Conclusion ROE has an impact on the price of its shares. High ROE makes stock prices increase, due to the company being able to utilize effectively and efficiently its equity so that the company gets a large profit as expected. One of the market responses to the increase in the price of its shares in a business is income. The discussion is the same as Widuri (2009), Tumandung (2017), Wahyuni (2018), ROE has an impact on share prices. But contrary to the research of Nurjanti (2011), Nugroho (2017), Egam (2017), Sari (2018), ROE has no impact and no significance on the price of shares.

CONCLUSION
   Based on the results of data analysis and discussions that have been carried out, it can be concluded that the variable Liquidity (CR) has no significant and significant impact on the stock prices of food and beverage industry companies in the 2016-2018 period. Leverage Variable (QR, DER) has no effect and no significant effect on the company's stock price Profitability variable (ROA, ROE) has an effect on and significant on the stock prices of the Food and Beverage Industry in the 2016-2018 period.

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