The Effect of Current Ratio and Debt to Equity Ratio on Company Value with Return on Asset as Intervening Variable in Food and Beverage Companies Listed on the Indonesia Stock Exchange for Period 2017-2020

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Abstract

The food and beverage sector is a sector that is in great demand by investors, considering that business developments in this sector continue to experience significant growth, which is the main attraction for local and foreign entrepreneurs to invest in this sector. The rapid development of the food and beverage sector will make companies compete with each other in order to maintain and increase company value. This effort is certainly a problem for the company, because it relates to the funds that will be used. The purpose of this study was to examine and analyze the effect of the current ratio and debt to equity ratio on firm value through return on assets. The method used in this research is quantitative research, and the nature of the research is explanatory. The data collection technique used is documentation. The types and sources of data are secondary data in the form of financial statements of companies in the food and beverage sector published by the Indonesia Stock Exchange for the period 2017-2020. The research data was tested using Partial Least Square (Software Smart PLS). The conclusion of this study is that the current ratio and debt to equity ratio have no effect on company value. Return on assets is not able to mediate the effect of the current ratio on company value. Return on assets is able to mediate the effect of debt to equity ratio on company value.

Keywords: Current Ratio; Debt to Equity Ratio; Return On Assets; Company Value

Introduction

The food and beverage sector is one of the sectors that continues to experience growth. This can be seen in the increasing number of food and beverage industries in Indonesia. As the population in Indonesia increases, the need for food and beverage continues to increase. Especially in this modern era, Indonesia people tend to look for fast food because it is practical and easy to get. Based on the results of the survey, the number of Indonesian people who consume fast food is 69%
https://id.wikipedia.org/wiki/Makanan_siap_saji. This makes fast food in Indonesia continue to dominate the world of Indonesian food. With this intense competition, companies are encouraged to continue to strengthen themselves to compete with similar companies.

Companies are required to be more responsive to any changes that exist in business world and must be able to fulfill the demands of increasingly complex society. This condition forces companies to able to adapt by increasing the value of the company. The value of company can be reflected in the share price of the company concerned from year by year. A high company value indicates the company has a good performance. This will make investors believe in the company and attract investors to invest.

The indicator used to measure company value in this study is Tobin’s Q. Tobin’s Q defines company value as the combined of tangible assets and intangible assets. Several financial aspects that affect company value are current ratio, debt to equity ratio and return on asset. Current ratio is used to measure the company’s ability to pay a short term obligations which are due when they are billed as a whole. Selection of current ratio variable to see how liquid the state of a company is. The current ratio can be said to be a form to measure the level of security (safety margin) of a company (Kasmir, 2017). The companies must continue to monitor the relationship between the amount of current liabilities and current assets, especially to evaluate the company’s ability to meet its short-term obligations by using its current asset. Companies that have more current asset liabilities than current asset, usually these companies will experience liquidity difficulties when their current liabilities mature (Hery, 2015). This will reduce investor confidence in the company and will affect its value of the company. Research conducted by Listyawati and Kristiana (2020) explains that the current ratio has a significant positive effect on company value. This study contradicts the research conducted by Kharunissa et all. (2019) which proves that the current ratio has no effect on company value.

Another factor that effects company value is debt to equity ratio. Debt to equity ratio compares total liabilities with equity. The selection of the debt to equity variable is to determine how much the company’s dependence on debt is. Debt should not be greater than capital so that the company’s burden doesn’t increase. High debt will make the interest expense borne by the company even greater. This will reduce profits, small profits will make investors less confident in the company and tend to avoid risks that might harm them. The research by Utami and Welas (2019) concluded that the debt to equity ratio had a significant effect on company value. While the research conducted by Reni (2020) states that leverage has a negative and significant effect on company value.

Company value is also influenced by return on asset. Return on asset is one of the profitability ratio. The selection of the return on asset variable is to measure the company’s ability to generate profits by using the company’s total assets. High profitability reflects the company has good prospects. The higher the level of profitability owned by a company, it will reflect the high level of company efficiency as well, so that good company performance can be seen (Pratama and Wiksuana, 2016). Research conducted by Ayu et all. (2019) stated that profitability has a positive effect on company value. While the research conducted by Putri and Welas (2019) stated that return on asset had no effect on company value.

The following table show the current ratio, debt to equity ratio, return on asset and company value in the company:
The Effect of Current Ratio and Debt to Equity Ratio on Company Value with Return on Asset as Intervening Variable in Food and Beverage Companies Listed on the Indonesia Stock Exchange for Period 2017-2020

Table of Current Ratio (CR), Debt to Equity Ratio (DER), Return On Asset (ROA) and Company Value (CV) in Several Companies Food & Beverage Period 2017-2020

<table>
<thead>
<tr>
<th>No</th>
<th>Code</th>
<th>Year</th>
<th>CR</th>
<th>DER</th>
<th>ROA</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ADES</td>
<td>2017</td>
<td>1.202</td>
<td>0.497</td>
<td>0.046</td>
<td>1.118</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2018</td>
<td>1.388</td>
<td>0.453</td>
<td>0.060</td>
<td>1.069</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2019</td>
<td>2.044</td>
<td>0.309</td>
<td>0.102</td>
<td>1.059</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020</td>
<td>2.970</td>
<td>0.269</td>
<td>0.142</td>
<td>1.168</td>
</tr>
<tr>
<td>2</td>
<td>BUDI</td>
<td>2017</td>
<td>1.007</td>
<td>1.460</td>
<td>0.016</td>
<td>0.737</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2018</td>
<td>1.003</td>
<td>1.766</td>
<td>0.015</td>
<td>0.766</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2019</td>
<td>1.006</td>
<td>1.334</td>
<td>0.021</td>
<td>0.726</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020</td>
<td>1.144</td>
<td>1.241</td>
<td>0.023</td>
<td>0.704</td>
</tr>
<tr>
<td>3</td>
<td>DLTA</td>
<td>2017</td>
<td>8.638</td>
<td>0.171</td>
<td>0.209</td>
<td>4.707</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2018</td>
<td>7.198</td>
<td>0.186</td>
<td>0.222</td>
<td>3.125</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2019</td>
<td>8.050</td>
<td>0.175</td>
<td>0.223</td>
<td>1.842</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2020</td>
<td>7.498</td>
<td>0.202</td>
<td>0.101</td>
<td>2.644</td>
</tr>
</tbody>
</table>

The above table shows the movement of the Current Ratio (CR), Debt to Equity Ratio (DER) and Return On Asset (ROA) at the company PT. Akasha Wira International Tbk (ADES), PT Budi Starch & Sweetener Tbk (BUDI) and PT Delta Djakarta Tbk (DLTA) along with fluctuations in Company Value (Tobin’s Q) from year to year which can be presented in a graph.

Current Ratio Fluctuations in Food & Beverage Companies in 2017-2020

The above picture shows current ratio level in 2018-2019 at the PT. Delta Djakarta Tbk experienced in increase form 7.198 to 8.050, not in line with the company value (Tobin’s Q), the company value decreased from 3.125 to 1.842. The contradict with the research by Listyawati and Kristiana (2020) research show the current ratio has positive effect on company value.
“Debt to Equity Ratio Fluctuation in Food & Beverage Companies in 2017-2020”

The above picture shows the company PT Akasha Wira International Tbk (ADES) in 2019-2020 experienced a decrease in the debt to equity ratio from 0.309 to 0.269 in line with the increase in company value from 1.059 to 1.168, but this result contradict with the research conducted by Lusi and Aminar (2019) which states that the leverage ratio (DER) doesn’t affect on company value.

“Return On Asset Fluctuation in Food & Beverage Companies in 2017-2020”

The above picture shows the company PT Budi Starch & Sweetener Tbk (BUDI) experienced a decrease in return on asset in 2017-2018 from 0.016 to 0.015 which wasn’t in line with the increase in company value. This result contradict with the research conducted by Firmansyah and Suwitho (2017) which states that probability (ROA) has a positive effect on company value.

Against this background, the researcher is interested in conducting a study entitled "The Effect of Current Ratio and Debt To Equity Ratio with Return On Asset as a Intervening Variable in Food & Beverage Companies Listed on the Indonesia Stock Exchange For Period 2017-2020". 
The hypotheses of this study are:


**Method**

The research approach uses quantitative method with quantitative descriptive research to determine the relationship between the current ratio and debt to equity ratio on company value mediated by return on assets. The subjects in this research are food and beverage companies listed on the Indonesian Stock Exchange for the 2017-2020 period. The data collection technique in this research uses a documentation study which is carried out by collecting documents related to research, namely in the form of an annual report. The data analysis technique used in this research is a quantitative analysis using a Partial Least Square model with smart-pls program. According to (Ghozali, 2008 ; 17), Partial Least Square is a very powerful method that’s not based on many assumptions.

Population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2018 ; 117). The population of study is all food and beverage companies listed on the Indonesia Stock Exchange for the 2017-2020 period, with a total of 30 companies. Sample is part of the characteristics possessed by populatation (Sugiyono, 2018 ; 118). The technique used in determining the sample of this study is purposive sampling, which is a sampling technique based on certain considerations. Some of the criteria established by the researcher include:

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food &amp; beverage company listed on the Indonesia Stock Exchange from 2017-2020</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Food &amp; beverage companies that do not publish their full financial statements from 2017-2020 (3)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Food &amp; beverage companies that suffered losses during the 2017-2020 period (7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of company survey samples</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Observational data from the survey (20 x 4)</td>
<td>80</td>
</tr>
</tbody>
</table>

The test in this study uses Partial Least Square (PLS) model structural equation modeling (SEM). Husein (2015) the analysis technique in the PLS method is as follows:

1. Outer model analysis. The outer model analysis is carried out to ensure that the measurement used is feasible to be used as a measurement (valid and reliable). Here are some indicators of outer model analysis: (a) Convergent validity, an indicator that is measured based on the relationship between the component scores and the construct scores. Which can be seen from the standardized loading factor, reliability if outer loading > 0.70. (b) Discriminant validity, aims to test how far the latent construct is different from other constructs. Looking at the extracted variance (AVE) of each indicator > 0.5. (c) Composite reliability, an indicator to measure a construct that can be seen in the view of latent variable coefficients. Internal consistency > 0.70 and Cronbach’s alpha > 0.70.
2. Inner model analysis. The inner model analysis describes the relationship between latent variables based on substantive theory. The inner model analysis can be evaluated by: (a) R-square, assessing the effect of the independent variable on the dependent variable. (b) Stone-Geisser Q-square test takes into account how well the observed value generated by the model. (c) T-test and the significance of the structural path parameter coefficients.

3. Hypothesis test. In this test can be seen the value of t-statistics and the value of profitability. the hypothesis test was accepted if the t-statistical value > 1.96 and p-value of < 0.05.

**Results and Discussion**

Results of Data Analysis

In this study, it is no longer necessary to evaluate outer models to test the validity and reliability of data because the data used are secondary data sourced from the annual financial reports published by the Indonesian Stock Exchange.

A. Evaluation of the Structural Model (Inner Model)

A1. R-Square

<table>
<thead>
<tr>
<th>Variable</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Value (Y)</td>
<td>0.411</td>
</tr>
</tbody>
</table>

Based on the table above, it shows that R-Square value for the variable Company Value (Y) in this study is 0.411. This figure explains that the current ratio ($X_1$), debt to equity ratio ($X_2$) and return on assets ($Z$) can be explained by company value (Y) variable of 41.1%.

A2. Q-Square

\[
Q^2 = 1 - [(1 - R^2)]
\]

\[
= 1 - [(1 - 0.411)]
\]

\[
= 1 - 0.589
\]

\[
= 0.411
\]

Based on the results of the above calculations, the value of Q-square is 0.411. This shows that the magnitude of the diversity of research data that can be explained by the research model is 41.1%. While the remaining 58.9% is explained by other factors unrelated to the research model.

A3. Path Coefficient Test

<table>
<thead>
<tr>
<th>Path Coefficient</th>
<th>Original Sample Mean</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CR -&gt; CV</td>
<td>-0.010</td>
<td>-0.010</td>
<td>0.116</td>
<td>0.085</td>
<td>0.932</td>
</tr>
<tr>
<td>DER -&gt; CV</td>
<td>0.035</td>
<td>0.039</td>
<td>0.056</td>
<td>0.636</td>
<td>0.525</td>
</tr>
<tr>
<td>CR*ROA -&gt; CV</td>
<td>-0.011</td>
<td>-0.004</td>
<td>0.068</td>
<td>0.169</td>
<td>0.866</td>
</tr>
<tr>
<td>DER*ROA -&gt; CV</td>
<td>-0.092</td>
<td>-0.087</td>
<td>0.043</td>
<td>2.107</td>
<td>0.036</td>
</tr>
</tbody>
</table>

Source: Processed secondary data, 2022
The Effect of Current Ratio and Debt to Equity Ratio on Company Value with Return on Asset as Intervening Variable in Food and Beverage Companies Listed on the Indonesia Stock Exchange for Period 2017-2020

Table Description:
- CR : Current Ratio (X₁)
- DER : Debt to Equity Ratio (X₂)
- ROA : Return On Asset (Z)
- CV : Company Value (Y)
- CR*ROA : Current Ratio* Return On Asset (X₁*Z)
- DER*ROA : Debt to Equity Ratio* Return On Asset (X₂*Z)

Through the path coefficient data, the PLS equation model is formulated as follows:

\[ \text{SWITCH} = 0.010 \text{CR} + 0.035 \text{DER} - 0.011 \text{CR} \times \text{ROA} - 0.092 \text{DER} \times \text{ROA} + e \]

C. Hypothesis Test

The research hypothesis can be declared accepted if the value of T-Statistics > 1.96 (t-table) and P-Values <0.05. The following are the results of the hypothesis tests obtained by the inner model in this study:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Influence</th>
<th>Original Sample</th>
<th>T-Statistics</th>
<th>P-Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>CR -&gt; CV</td>
<td>-0.010</td>
<td>0.085</td>
<td>0.932</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2</td>
<td>DER -&gt; CV</td>
<td>0.035</td>
<td>0.636</td>
<td>0.525</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3</td>
<td>CR*ROA -&gt; CV</td>
<td>-0.011</td>
<td>0.169</td>
<td>0.866</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4</td>
<td>DER*ROA -&gt; CV</td>
<td>-0.092</td>
<td>2.107</td>
<td>0.036</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Processed secondary data, 2022

Hypothesis test:

1. H1 Hypothesis test
   The results between the current ratio and company value have a parameter coefficient of -0.010 with a T-Statistic significance value of 0.085 < 1.96 and a P-Value of 0.932 > 0.05. This shows that the current ratio has no significant effect on company value in food & beverage companies listed on the IDX for the 2017-2020 period.

2. H2 Hypothesis Test
   The results between the debt to equity ratio and company value have a parameter coefficient of 0.035 with a T-Statistic significance of 0.636 < 1.96 and a P-Value of 0.525 > 0.05. This shows that the debt to equity ratio has no significant effect on company value in food & beverage companies listed on the IDX for the 2017-2020 period.

3. H3 Hypothesis Test
   The results between the current ratio and company value have a parameter coefficient of -0.011 with a T-Statistic significance value of 0.169 < 1.96 and a P-Value of 0.866 > 0.05. This shows that return on asset is not able to mediate the effect of current ratio on company value in food & beverage companies listed on the IDX for the 2017-2020 period.

4. H4 Hypothesis Test
   The results between the debt to equity ratio and company value has a parameter coefficient of -0.092 with a T-Statistic significance value of 2.107 > 1.96 and a P-Value of 0.036 < 0.05. This shows that
return on asset can mediate the effect of debt to equity ratio on company value in food & beverage companies listed on the IDX for the 2017-2020 period.

**Discussion of Research Results**

- **The Influence of Current Ratio on Company Value**

The results of this study rejected the first hypothesis (H1), which states that current ratio doesn’t influence company value. This means that the high or low current ratio has no impact on the value of the company. Kasmir (2019), from the results of the current ratio measurement if the current ratio is low it can be said that the company’s condition lacks the capital to pay debts. However if the results of the measurement ratio are high, it does not mean that the company’s condition is good. This can happen because cash is not used as well as possible. So it can be interpreted that the current ratio cannot be fully used to assess the condition of the company because it only describes short-term credit risk and the efficiency of using short-term assets, therefore this ratio doesn’t affect the value of a company. Sawir (2005), a low current ratio can have an impact on lowering the company stock price, but if it is too high it can reduce the company profitability because of the large number of idle funds. The existence of bad debts and inventories that have not been sold can cause a high current ratio. If it dominates other components of current assets, of course, this will have an impact on the company current ratio, which will be high and it will appear as if the company is in a liquid condition.

The results of this study support the research conducted by Erni (2020) and Reni (2020) which states that the current ratio doesn’t effect on company value. However, the results of this study don’t support the research conducted by Meliana (2020) which states that current ratio effects on company value. The difference in the results because by a different analysis period, which Meliana research researched from the 2016-2018 period while in this study the researcher used the 2017-2020 period. The number of samples of Meliana is also different from the researcher, namely 39 samples, while the researcher used 80 samples. The dependent variable Meliana used is price to book value (PBV), while the researcher uses Tobin’s Q as a proxy for the company value variable.

- **The Influence of Debt to Equity Ratio on Company Value**

The results of this study rejected the second hypothesis (H2), which states that debt to equity ratio doesn’t influence company value. It means the higher the debt, the higher the interest expense, which will reduce profits. Low profits will make investors less confident in the company and tend not to take risk that might harm them. However, high total debt isn’t always bad because if the company can manage the combination of debt with equity, then the company can maximize profits that can add value to the company (Radiman, 2018).

The results of this study shows that the debt to equity ratio doesn’t effect on company value in food & beverage companies listed on the 2017-2020 period. This study supports research conducted by Dewi (2018) which states that the debt to equity ratio has no significant effect on Tobin’s Q, however the result of this study don’t support the research conducted by Putri and Welas (2019) which states that debt to equity ratio has a positive and significant effect on company value. The difference in the results is because of different analysis period, in which the research conducted by Putri and Welas researched from the 2015-2017 period while in this study the researcher used the 2017-2020 period. Then the differences in the companies studied, where the previous researcher examined the property & real estate but in this study, the researcher used food & beverage companies. The dependent variable in the previous study used PBV while in this study the researcher used Tobin’s Q as a proxy for the company value.
The Effect of Current Ratio and Debt to Equity Ratio on Company Value with Return on Asset as Intervening Variable in Food and Beverage Companies Listed on the Indonesia Stock Exchange for Period 2017-2020

The Influence of Current Ratio on Company Value with Return on Asset as an Intervening Variable

The results of this study reject the third hypothesis (H3), which states that the effect of current ratio on company value with return on asset as a mediating variable is not significant. This shows that return on asset doesn’t mediate the effect of current ratio on company value in food and beverage companies listed on the 2017-2020 period. This means that high liquidity identifies idle funds which will reduce the level of company profitability and will have an impact on company valuation. Idle current ratio are not good for profitability because the return generated is smaller than fixed assets. The placement of funds that are too large on the asset side has two different effects. On the one side, the company liquidity is getting better. But on the other side, the company loses the opportunity to get additional profits, because the funds that should be used for investments that benefit the company are reserved to meet liquidity.

The results of this study support the research conducted by Diana (2021), which states that return on assets can not mediate the relationship between the current ratio and company value. However, the results of this study don’t support the research conducted by Agam et al. (2022), which states that profitability mediates the effects between liquidity and company value. The different results because due to different analysis periods, were in the research of Agam et al. from period 2016-2020, while in this study the researchers used the period from 2017-2020. Then the difference between the companies studied, where the previous researchers examined manufacturing companies, but in this study used food & beverage companies. The dependent variable studied in previous studies used PBV while in this study used Tobin’s Q.

The Influence of Debt to Equity Ratio on Company Value with Return on Asset as an Intervening Variable

The results of this study reject the fourth hypothesis (H4), which states that the effect of debt to equity ratio on company value with return on asset as a mediating variable produces a significant value. This shows that return on asset is able to mediate the effect of debt to equity ratio on company value. This means that the increase in stock and debt prices can increase profitability and will indirectly increase the value of the company. Debt is not always assumed to be bad, considering that debt will go into assets or capital that can be used to generate profits for the company. At a certain level, the use of high debt can provide good benefits for the company because it can be used to increase production which will ultimately increase profits.

The results of this study support the research conducted by Diana (2021), which states that return on asset mediates the effect of debt to equity ratio on company value. However, the results of this study don’t support the research conducted by Ayu et al. (2019) which states that profitability is not able to mediate the effect of leverage on company value. The difference in the results because due to a different analysis period, were in the research of Ayu et al. research from 2013-2017, while in this study the researcher studied from the period 2017-2020. Then the next difference is proxy used, where the previous researcher used PBV while the researcher used Tobin’s Q as a proxy for the company value variable. The number of samples in previous studies is also different from the researcher, were in the previous study used 40 samples, while in this study used 80 samples.

Conclusion

From this research, it can be concluded that: (1) The current ratio has no significant effect on company value in food & beverage companies listed on the IDX for the 2017-2020 period. (2) The debt to
The effect of current ratio and debt to equity ratio on company value with return on asset as intervening variable in food and beverage companies listed on the Indonesia Stock Exchange for period 2017-2020 period.

(1) The current ratio has no significant effect on company value in food & beverage companies listed on the IDX for the 2017-2020 period. (2) The debt to equity ratio has no significant effect on company value in food & beverage companies listed on the IDX for the 2017-2020 period. (3) Return on asset is unable to mediate the effect of the current ratio on company value in food & beverage companies listed on the IDX for the 2017-2020 period. (4) Return on asset is able to mediate the effect of the debt to equity ratio on company value in food and beverage companies listed on the IDX for the 2017-2020 period.

References


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