THE EFFECT OF COMPANY SIZE AND DER ON ROA AND COMPANY VALUE IN THE FOOD AND BEVERAGE SUB SECTOR ON THE INDONESIA STOCK EXCHANGE (IDX)

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Abstract
This research use firm size variable, capital structure to profitability and company value. Selection of four variables because there are differences in previous research or commonly called the research gap. The purpose of research to determine the effect of firm size, structure capital to profitability and the value of the company in food and beverage companies in Indonesia Stock Exchange. The population in this study used the company food and beverage sector 23 companies, with a sample size of 17 companies. This research uses descriptive statistical analysis methods, multicollinearity test hypothesis testing and data analysis of the coefficient of determination. The results of the analysis found that (1) firm size has negative effect not significant to profitability. (2) capital structure has positive effect significant to profitability. (3) firm size has negative effect not significant to firm value. (4) capital structure has negative effect significant to firm value. (5) profitability has positive effect significant to firm value.

Keywords: Firm Size, Capital Structure, Profitability, Company Value

1.0 INTRODUCTION

In the current era of globalization, the economy must be more advanced and require support from investors, not only from investors but companies need support from financial (Hafni, Renaldo, Chandra, & Thaief, 2020) markets, banking, and so on. The economic development in the first quarter of 2019 that was reported by Bank Indonesia reached 5.07%. The value of economic growth has reached 5%, this figure is considered good. This economic development was driven by industrial companies in Indonesia, one of which was the food and beverage industry. Investors will support the company's economy to be more advanced if the company's value is high, the level of risk borne by investors will be small. If the company's value is high, the market will believe not only in the company's current performance (Putra & Renaldo, 2020), but also in the company's prospects in the future.

Based on the JCI for the 2015-2019 period above, it can be concluded that the share price in 2015-2016 experienced a decline in share prices. Furthermore, in 2016-2018 there was a successive increase in share prices. However, in 2019 there was another decline in share prices. It can be concluded that all share prices of companies listed on the IDX are still in an unstable condition from year to year. And the movement of stock prices can determine if the stock price is high then the value of the company will be high too.

Exports of food and beverages have fluctuated. In 2015-2017 food and beverage export activities continued to increase successively, in 2018 food and beverage export activities decreased slightly, and in 2019 export activities decreased drastically. So that the share price is also affected, it can be seen that the stock price index of food and beverage companies in 5 years has experienced ups and downs or fluctuations in stock prices. In 2015 the share price decreased, but in 2016 the share price increased slightly. In 2017 the stock price increased dramatically compared to 2016, from 2018 to 2019 the stock price began to decline. This causes the company's value to decrease and investors or potential investors must reconsider investing in the company.

It can be concluded from the two explanations above that the decline in company stock prices can be influenced by the export activities of the food and beverage industry which, this can be caused by the political conditions in Indonesia that occurred, in 2015 Indonesia experienced inflation but it was manageable, mid-2017 to early 2019, as well as major natural disasters that occurred in several regions in Indonesia resulting in many victims and damage. This affects the activities of companies whose activities are in production and distribution.
With the existence of these natural disasters, it results in a decrease in profits which can also affect the value of the company. Other factors that can affect stock prices include micro and macroeconomic conditions, where company policies, sudden changes in directors, systematic risk, and company performance. By knowing the company's performance, investors can find out how the condition of a company based on the company's financial performance. One way to measure the value of a company is to measure the performance of the company. Company performance is an important factor to obtain information (Chandra, Renaldo, & Putra, 2018) whether a company has experienced growth or decreased.

Furthermore, the food and beverage industry is also one of the sectors that supports an increase in the value of national investment, which in 2018 contributed up to IDR 56.60 trillion. Realized total investment value in the manufacturing sector last year reached Rp 222.3 trillion. From the development of stock prices above, investors can see that the overall value of the company is good and if the stock price rises or falls, the company will try to improve (Renaldo, Sudarno, & Hutahuruk, 2020a) the company's performance so that it does not experience a drastic decline so as to maintain investor confidence.

Firm value is the value of expected future earnings calculated back at the right interest rate. Firm value is an important concept for investors, because it is an indicator for the market assessing the company as a whole that company value (Wirainingingsih, Junaedi, & Panjaitan, 2019) is the price that potential buyers are willing to pay if the company is sold. According to (Sudana, 2013) the valuation ratio is a ratio related to the performance of company shares that are traded on the capital market (go public). This is the method used to measure the company value Price Earnings Ratio (PER), Price to Book Value (PBV), and Tobin’s Q. However, this study uses Price to Book Value (PBV) due to the desire of the company's shareholders to provide welfare for the shareholders. Corporate value (Suyono, Suhandjo, Renaldo, Sudarno, & Sari, 2021) is a measure of the implementation of management functions. If these functions run well, the company will get a good image in the eyes of investors and potential investors. Firm value (Renaldo, Andi, Nur, Junaedi, & Panjaitan, 2021) is an important indicator for investors to assess (Renaldo, Sudarno, & Hutahuruk, 2020b) the company as a whole. So, the higher or increasing the value of the company, the potential investors will assume that the company has good performance, so that potential investors will be interested in investing in the company.

Company size (Dimaranty, Junaedi, & Panjaitan, 2019) plays an important role in company performance. Larger companies have more organizational resources because they provide greater opportunities for larger companies and are better at achieving company goals. Company size is a reflection of the total assets owned by the company. According to (Pratama, I Gusti Bagus Angga, Wikusna, 2016) the larger the size of the company will affect management decisions in deciding what financing will be used by the company so that financing decisions can optimize company value. According to (Roni, Ahmad, 2014) said that in calculating the size of the company can be seen from how much assets the company has. According to (Halim, 2016) states that company size is the size of the company, both in terms of total assets and in terms of the level of sales which will affect the amount of working capital. Company size is a variable that is considered in determining the value of a company.

According to (Wahyudi, 2016) the Firm Size (FS) variable has no effect on firm value but has a positive relationship to firm value. According to (Rumondor, Regina, 2015) states that the results of research conducted that company size has no effect and is not significant on firm value, and according to (Putri, 2019) states that company size has a positive effect on firm value.

However, this research is not in line with (Pratama and Wirawati, 2016) where company size partially has a significant positive effect on firm value. Previous research by (Languju, 2016) and (Indriyani, 2017) concluded that company size has no effect on firm value.

The ratio of net income to total assets measures the return on total assets (ROA), the more efficient use of company assets or the same amount of assets can generate large profits, and vice versa. Declining profitability or ROA is a sign that the company is less able to manage its assets to generate profits. ROA is important information because it can describe the net profit that can be obtained from all the assets owned by the company. This will attract investors to invest, and the increase in demand for shares will cause an increase in share prices. In previous research, the results of research (Agustiani, 2016) concluded that the variable Return on Assets (ROA) has no significant effect on firm value.

But in research (Susilaningrum, 2016) concluded that the variable Return on Assets (ROA) partially has a significant effect on firm value. According to (Aulia, 2017) concluded that the variable Return on Assets (ROA) has a significant positive effect on company value. According to (Wahyuni, 2018) concluded that the variable Return on Assets (ROA) partially insignificant to company value. Previous research (Meilani, Lia and Ambonintyasa, 2017) states that Return on Assets (ROA) has a negative and significant effect on Firm Size.

The capital structure (Halim, Chandra, & Sudarno, 2019) can be indicated as the Debt to Equity Ratio (DER). According to (Sudana, 2013) Debt to Equity Ratio (DER) is a comparison between debt and own capital, in bearing the risk or limit of business expansion by using loan capital. The Debt to Equity Ratio reflects a company's ability to fulfill its obligations as shown by its own capital used to make debt payments. The Debt to Equity Ratio affects the company's performance. If the Debt to Equity Ratio is higher, the risk burden that will be borne will also be higher.

There is previous research conducted by (Juliantika, 2015) and (Hasibuan, 2016) that the Debt to Equity Ratio (DER) has no significant effect on firm value. According to (Nurlaila, 2017) states that the Debt to Equity Ratio (DER) has no significant effect on company value. However, based on the results of previous research conducted...
by (Hidayati, 2010) concluded that the Debt to Equity Ratio (DER) variable has a significant negative effect on firm value.

Previous research from (Suciptayasa, 2013) and (Ayu, 2020) concluded that the Debt to Equity Ratio has a positive and significant effect on firm size in companies. The purpose of this study was to determine and analyze the effect of company size, DER on ROA and firm value in food and beverage sub-sector manufacturing companies on the Indonesian Stock Exchange (IDX).

2.0 LITERATURE REVIEW

The higher the size of the company, the higher the value of the company in the eyes of investors. The size of the company states that if there is an increase in the performance of a company, it can cause an increase in the company's share price in the capital market which will lead to an increase in profitability. According to (Ida Bagus, 2015) states that company size has a positive influence on ROA. Therefore the size of the company affects the value of the company.

H1: Company size has a negative effect on ROA in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

DER which is the ratio to assess debt to equity. The Debt to Equity Ratio reflects the ability of a company to fulfill its obligations as shown by its own capital used to make debt payments (Fahmi Irham, 2017). The Debt to Equity Ratio affects the company's performance. If the Debt to Equity Ratio is higher, the risk burden that will be borne will also be higher. If the Debt to Equity Ratio increases, there will also be an increase in Firm size. Therefore the Debt to Equity Ratio affects company size in previous research from (Meilani, Lia and Amboningtyas, 2017) which states that DER has a positive effect on company size.

H2: DER has a positive effect on ROA in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

The higher the size of the company, the higher the value of the company in the eyes of investors. The size of the company states that if there is an increase in the performance of a company, it can cause an increase in the company's share price in the capital market which will lead to an increase in the value of the company. According to (Wahyudi, 2016) and (Pratama and Wirawati, 2016) stated that company size has a positive influence on firm value. Therefore the size of the company affects the value of the company.

H3: Company size has a negative effect on company value in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

Effect of capital structure on firm value. The capital structure tells how the company can finance its assets, either with long-term debt or shareholder's capital. The Debt to Equity Ratio (DER) describes a company's ability to pay all of its debts, both short term and long term, using equity or own capital. If the Debt to Equity Ratio (DER) is higher, the company value is low and if the Debt to Equity Ratio (DER) is lower, the company value is high. Management must be wiser in using debt, because if the debt is greater, it will reduce the value of the company. According to (Hidayati, 2010) states that DER has a negative effect on firm value. And this research is in line with (Putri, 2019) stating that DER has a negative effect on firm value. The explanation of this theory states that a company's funding policy in determining the ratio with debt and equity is aimed at maximizing the value of the company. Therefore DER affects the value of the company.

H4: DER has a negative effect on company value in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

Return On Assets (ROA) is a profitability ratio. This ratio can show the company's success in generating profits. ROA is able to measure a company's ability to generate profits in the past which is then projected for the future. The better the company's ROA reflects the better the company is in paying returns to shareholders, thus providing a good signal to investors and also increasing company value. According to (Putri, 2019) and (Riyandi, 2017) stated that Return On Assets (ROA) has a positive effect on company value. This is in line with research according to (Aulia, 2017) concluded that the variable Return On Assets (ROA) has a significant positive effect on company value. Therefore Return On Assets (ROA) has a positive effect on firm value.

H5: Return On Assets (ROA) has a positive effect on Company Value in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) in 2015-2019.

3.0 METHODOLOGY

Population and Sample
The population used in this study were all food and beverage sub-sector manufacturing companies on the IDX, the number of food and beverage sub-sector manufacturing companies was 23 companies. The number of samples used in this study used a purposive sampling method. According to (Sugiyono, 2017), purposive sampling is a data sampling technique based on certain considerations. Based on the population taken, 17 companies met the criteria.
Method of Collecting Data
The data collection technique in this study is to use literature study techniques by analyzing, exploring, and reviewing various literature relevant to research, and documentation techniques by collecting data from company financial reports that have been officially recorded or published, in the form of annual reports. Report issued by the website www.idx.com. The data collected is in the form of annual reports belonging to companies that are included in the food and beverage manufacturing sub-sector which are listed on the Indonesia Stock Exchange from 2015-2019, as well as other data needed related to the research process (Journal).

Data Analysis Technique
Data analysis techniques used in this research are descriptive statistics, multicollinearity test, variable feasibility test, path analysis, structural equation analysis and hypothesis testing. Descriptive statistics are methods related to the collection and presentation of a set of data so as to provide useful information. The multicollinearity test is intended to determine whether there is a perfect linear relationship between exogenous variables. According to (Ghozali, I. Latan 2014), the Variance Inflation Factor (VIF) model is used to test collinearity problems in the PLS model. The coefficient of determination (R2) is used to determine how much interest or closeness there is between endogenous and exogenous variables. Path analysis is used to determine cause and effect relationships with the aim of explaining the direct or indirect influence between variables. Structural equation analysis is used to determine the development of a model based on theory and construct path diagrams and structural equations. Hypothesis testing in this study uses the Partial Least Square (PLS) method. Hypothesis testing is used to explain the direction of the relationship between exogenous variables and endogenous variables. This test is carried out by means of a path (path analysis) on the model that has been made.

4.0 RESULTS AND DISCUSSION

Multicollinearity Test
To test multicollinearity that can be done by looking at the Variance Inflation Factor (VIF) value of each exogenous variable. If the VIF value > 10, it can be concluded that there will be multicollinearity with the independent variables in the regression, and vice versa if VIF < 10, it can be concluded that there will be no multicollinearity.

<table>
<thead>
<tr>
<th></th>
<th>PBV</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER</td>
<td>1.096</td>
<td>1.004</td>
</tr>
<tr>
<td>FZ</td>
<td>1.006</td>
<td>1.004</td>
</tr>
<tr>
<td>ROA</td>
<td>1.096</td>
<td></td>
</tr>
</tbody>
</table>

Source: SmartPLS3 Outputs, 2020

Based on table 1 it can be seen that among the regression variables there is no correlation because the Variance Inflation Factor (VIF) value is < 10 which means that the data does not have multicollinearity.

Variable Due Diligence
In the feasibility test of this variable the coefficient of determination (R2) is used to determine whether the coefficient of determination (R2) is < 0 or > 1.

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.065</td>
</tr>
<tr>
<td>PBV</td>
<td>0.102</td>
</tr>
</tbody>
</table>

Source: SmartPLS3 Outputs, 2020

From table 2 above it can be concluded that the feasibility test variable or the coefficient of determination (R2) is > 0, where the ROA variable value of adjusted R square is only 0.065 which means that 6.5% of the ROA variable is influenced by Firm Size and DER. While the Price Book Value value of adjusted R square reaches 0.102, this means that 10.2% of the Price Book Value variable is influenced by Firm Size and DER while the rest is influenced by other factors not included in the study.

Path Analysis
Path Analysis aims to determine cause and effect relationships with the aim of explaining the direct or indirect influence between variables.
Table 3. Path Coefficient

<table>
<thead>
<tr>
<th>Variable</th>
<th>Original Sample (O)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRM SIZE =&gt; ROA</td>
<td>-0.045</td>
<td>Negative</td>
</tr>
<tr>
<td>DER =&gt; ROA</td>
<td>0.290</td>
<td>Positive</td>
</tr>
<tr>
<td>FIRM SIZE =&gt; PBV</td>
<td>-0.039</td>
<td>Negative</td>
</tr>
<tr>
<td>DER =&gt; PBV</td>
<td>-0.208</td>
<td>Negative</td>
</tr>
<tr>
<td>ROA =&gt; PBV</td>
<td>0.365</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Source: SmartPLS3 Outputs, 2020

Based on the results of the regression model above, it shows the following results:
1. Firm Size variable regression coefficient is 0.690. That is, if the Firm Size increases by one unit, it will affect profit growth by increasing by one unit, that is, by 0.690 and vice versa.
2. The regression coefficient of the DER variable is 2.212. That is, if the DER increases by one unit, it will affect profit growth by increasing by one unit, namely 2.212 and vice versa.
3. The regression coefficient of the Firm Size variable is 0.350. That is, if the Firm Size increases by one unit, it will affect profit growth and increase by one unit, namely 0.350 and vice versa.
4. The regression coefficient of the DER variable is 2.344. That is, if the DER increases by one unit, it will affect profit growth by increasing by one unit, that is, by 2.344 and vice versa.
5. The regression coefficient of the ROA variable is 2.306. That is, if ROA increases by one unit, it will affect profit growth by increasing by one unit, namely, by 2.306 and vice versa.

Hypothesis testing
Hypothesis testing is used to explain the direction of the relationship between exogenous variables and endogenous variables. This test is carried out by means of a path (path analysis) on the model that has been made.

Table 4. Hypothesis Testing

|                      | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistic (|O/STDEV|) | P Values |
|----------------------|---------------------|-----------------|---------------------------|-----------------|----------|
| FIRM SIZE => ROA     | -0.045              | -0.062          | 0.065                     | 0.690           | 0.490    |
| DER => ROA           | 0.290               | 0.280           | 0.131                     | 2.212           | 0.027    |
| FIRM SIZE => PBV     | -0.039              | 0.032           | 0.112                     | 0.350           | 0.726    |
| DER => PBV           | -0.208              | -0.214          | 0.089                     | 2.344           | 0.019    |
| ROA => PBV           | 0.365               | 0.373           | 0.158                     | 2.306           | 0.022    |

Source: SmartPLS3 Outputs, 2020

The explanation of the results from table 4 is:
1. The Effect of Firm Size Variable on Return on Assets (ROA)
   This test was conducted to determine whether Firm Size has a significant effect on ROA. From Table 4.26 it is known that the Firm Size variable has a P Value of 0.490. Meanwhile, the alpha used was 0.10 (P Value < 0.10*). From these data it can be concluded that Firm Size has an insignificant and negative effect on ROA.
2. The Effect of Variable Debt Equity Ratio (DER) on Return on Assets (ROA)
   This test was conducted to determine whether DER has a significant effect on ROA. From Table 4.26 it is known that the DER variable has a P Value of 0.027. Meanwhile, the alpha used was 0.10 (P Value < 0.10*). From these data it can be concluded that DER has a significant and positive effect on ROA.
3. The Effect of Firm Size Variable on Price Book Value (PBV)
   This test is conducted to find out whether Firm Size has a significant effect on PBV. From Table 4.26 it is known that the Firm Size variable has a P Value of 0.726. Meanwhile, the alpha used was 0.10 (P Value > 0.10*). From these data it can be concluded that Firm Size has no significant and negative effect on PBV.
4. Effect of Variable Debt Equity Ratio (DER) on Price Book Value (PBV)
   This test was conducted to find out whether DER has a significant effect on PBV. From Table 4.26 it is known that the DER variable has a P Value of 0.019. Meanwhile, the alpha used was 0.10 (P Value < 0.10*). From these data it can be concluded that DER has a significant and negative effect on PBV.
5. Effect of Variable Return on Assets (ROA) on Price Book Value (PBV)
This test was conducted to find out whether ROA has a significant effect on PBV. From table 4.26 it is known that the ROA variable has a P Value of 0.022. Meanwhile, the alpha used was 0.10 (P Value > 0.10*). From these data it can be concluded that ROA has a significant and positive effect on PBV.

Discussion

The size of the company is not too considered for investors in investing. Which is where the size of the company is measured by the amount of total assets owned because the value of total assets is generally very large compared to other financial variables.

Debt to Equity Ratio (DER) is a comparison between debt and own capital, because a high Debt to Equity Ratio (DER) can be identified that the use of own capital makes more use of debt so it can reduce the level of company value.

The Debt to Equity Ratio (DER) affects the company's performance, where the higher the burden, the higher the risk. (Mediawati, 2016) states that capital structure is a comparison between total debt and own capital. So thus the Debt to Equity Ratio (DER) can provide a reference in the capital structure owned by the company, so that the risk of uncollectible debt can be seen. The standard Debt to Equity Ratio (DER) is 90% (Kasmir, 2014).

From these results, the Debt to Equity Ratio (DER) variable will affect Return on Assets (ROA), if the Debt to Equity Ratio (DER) level of debt to the company is higher, ROA will be directly affected. Because greater profitability will make it easier to get sources of funds and make it easier to get credit from outside parties.

And the result is that the Debt to Equity Ratio variable affects Price Book Value (PBV), this indicates that with more and more company debt, investors think that companies have many opportunities to use their capital for expansion or development in the hope that the company will grow, so that profits for investors will also be rising so that investors are interested in buying company shares. The higher the stock price means the value of the company will also increase.

Based on the research results obtained, it shows that there is a significant and positive effect between the ROA variable on Price Book Value (PBV) in food and beverage companies listed on the Indonesia Stock Exchange in 2015-2019. Research shows that a good or increasing ROA condition has the potential to attract the company's investors.

5.0 CONCLUSION

Based on the results of Firm Size's research on Return On Assets, it does not have a significant and negative effect on manufacturing companies in the food and beverage sub-sector that are listed on the Indonesia Stock Exchange in 2015-2019 and this hypothesis is rejected. Debt Equity Ratio to Return On Assets has a significant influence and positive in the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2015-2019 and this hypothesis is accepted. Firm Size on Company Value does not have a significant and negative effect on food and beverage sub-sector manufacturing companies listed on the Stock Exchange Indonesia in 2015-2019 and this hypothesis was rejected. The Debt Equity Ratio to Firm Value has a significant and negative effect on manufacturing companies in the food and beverage sub-sector that are listed on the Indonesia Stock Exchange in 2015-2019 and this hypothesis is accepted. Return On Assets on Company Value has a significant and positive influence on manufacturing companies in the food and beverage sub-sector that are listed on the Indonesia Stock Exchange in 2015-2019 and this hypothesis is accepted.

The limitation in this study is that the results of the study show a very low coefficient of determination for both Y1 and Y2 variables so that this condition explains that the effect is very small between Firm Size, DER variables on ROA or between ROA, DER, Firm Size variables. against PBVs.

Based on the results of the research that has been done, there are several suggestions that can be submitted to further researchers to improve similar research in future studies. For future researchers and academics, it is hoped that they can develop this research better in the future, for example, seen from the research results, the company size variable has no effect on ROA and PBV. So that the next researcher is expected to be able to add other variables to improve research results for further research.

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