THE EFFECT OF FIRM SIZE AND LEVERAGE ON FINANCIAL PERFORMANCE AND THEIR IMPACT ON FIRM VALUE IN FOOD AND BEVERAGE SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

The current state of the world economy is in decline, including in Indonesia due to the Covid-19 outbreak, which has affected almost all economic sectors. However, several food and beverage companies listed on the Indonesian stock exchange have remained stable, if not rising, as if they will be unaffected by the outbreak of Covid-19. The purpose of this research was to investigate the impact of business size and leverage on financial performance and firm values. From 2017 to 2020, this study used a sample of food and beverage firms listed on the Indonesia Stock Exchange (IDX). The information used was gathered from a panel of people. Path analysis is the data analysis technique that was used. Firm size has a significant effect on financial performance, leverage has a significant effect on financial performance, firm size has a significant effect on firm value, leverage has an insignificant effect on firm value, financial performance has a significant effect on firm value, and financial performance can mediate firm size and leverage, according to the findings of the study.

Keywords: Firm size, Leverage, Financial performance, Firm value

Introduction

Since the outbreak of the COVID-19 in Indonesia, which has had a fairly large impact in various sectors, including the capital market in Indonesia. Since the pandemic, the Composite Stock Price Index (IHSG) has not been able to return to its original position, namely at levels above Rp. 5,000 in March 2020, in July the increase in the index was not too significant, as well as at the beginning of August 2020. The movement of the capital market in the form of investment will strongly influenced by the value of the company. When large-scale social restrictions (PSBB) occur, many companies collapse. Although many companies tend to decline in the midst of current conditions, companies engaged in the food and beverage sector are also quite good even though this pandemic hit, the company's performance continues to rise, this is due to companies operating in the food and beverage sector.

One of the elements that can judge whether or not a company is good can be seen from the financial performance and the variables that influence it, such as company size and leverage. Company size is a measure to determine the size of a company, which can be measured in various ways, including total assets and total sales (Saemargani, 2017). The definition explains that company size is a measurement scale that shows the size of a company through total assets and total sales owned.

One aspect that affects the value of the company is leverage which refers to the extent to which the company is financed through debt and leverage can be calculated by the debt to equity ratio (leverage) which explains the extent to which the company uses its debt compared to its own capital. This understanding of leverage is also supported by the views of Brigham and Houston (2010: 140) in their book which states that leverage is a ratio that measures the extent to which a company is financed by debt (financial leverage) so that we can see the company's ability to optimize debt.

According to Brigham & Houston (2012), there are ratios that can use return on assets (financial performance) to measure the level of profitability or return on total assets used. This definition explains that the ratio used to measure profitability in evaluating a company's financial performance is financial performance. Return on assets (financial performance) shows the company's ability to generate profits from the total assets owned by the company (Kasmir, 2012). Previous research has found contradictory results of leverage and firm size on firm value, implying that there are additional variables that affect the relationship between these two variables and firm value. Since leverage, firm size, and profitability all affect firm value, and since leverage and firm size also affect profitability, profitability is used as a mediating variable in this study.

Based on the problem of the inconsistency of research results with the theory and inconsistent results of previous research in different company sectors, as well as to strengthen the theory and results of previous research, it is possible to draw the formulation of the problem to be studied:

1. Does company size affect the financial performance of food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?
2. Does leverage affect the financial performance of food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?
3. Does the size of the company affect the value of the company in food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

4. Does leverage affect company value in food and beverage companies listed on the IDX for the period 2017 – 2020?

5. Does financial performance affect the company value of food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

6. Is financial performance able to mediate company size and leverage on company value in food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

Based on the above background with the discovery of the problem phenomenon, the research objectives are to:

1. Knowing whether the size of the company has an effect on the financial performance of food and beverage companies listed on the IDX for the period 2017 – 2020?

2. Knowing whether leverage has an effect on the financial performance of food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

3. Knowing whether the size of the company has an effect on the value of the company in food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

4. Knowing whether leverage has an effect on company value in food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

5. Knowing whether financial performance has an effect on company value in food and beverage companies listed on the IDX for the period 2017 – 2020?

6. Is financial performance able to mediate company size and leverage on company value in food and beverage companies listed on the Indonesia Stock Exchange for the period 2017 – 2020?

Literature Review

The effect of company size on financial performance

Total assets have a positive effect on financial performance. Companies with high sales have a great opportunity to increase their profitability. If the company's ability to generate profits based on sales generated is getting stronger, then the company's financial performance will be good. If the larger the company, the better its financial performance, then theoretically total sales have a positive effect on financial performance. This is in accordance with research conducted by Nugraheni (2012) that total sales have a positive effect on financial performance.

Ha1: total assets have a positive effect on financial performance

The effect of leverage on financial performance

Leverage shows the company's ability to meet all its financial obligations if the company was liquidated at that time Sawir (2005), the higher the leverage ratio indicates the greater the amount of funds provided by creditors. This will make investors careful to invest in companies with high leverage ratios because the higher the leverage ratio, the higher the investment risk (Weston and Thomas, 1997).

Ha2: leverage has a negative effect on financial performance

The effect of firm size on firm value

The value of the company as measured by the value of price to book value shows the form of assessment of the company through its share price based on all assets owned by the company. So that the higher the assets owned by the company will affect the value of a company which is reflected in its share price based on all assets owned. Research that supports the above hypothesis is from Nugraheni (2012), Nuraina (2012).

Ha3: total assets have a positive effect on firm value

Effect of leverage on firm value

The use of additional capital in the form of debt can be interpreted by investors as the company's ability to pay off its obligations in the future in order to get a positive market response. Research that supports the above hypothesis, namely Eno Fuji Astriani (2014), Ramadan (2015), Angga and Wiksuana (2016), I Nyoman Agus Suwardikaj and I Ketut Mustanda (2015) obtained that leverage has a significant effect and has a positive direction on firm value.

Ha4: leverage has a positive effect on firm value

Effect of financial performance on firm value

Investors can evaluate the company's performance and determine which shares will be the investment choice. The chosen company is of course a healthy company and has good financial performance, the higher the profitability, the better the perception of investors to invest in the company based on its opportunities in market capitalization. So that financial performance has a positive effect on firm value (Antari and Dana, 2013. Mahendra, 2011).

Ha5: financial performance has an effect on firm value
The effect of firm size on firm value through financial performance

Companies with high assets and sales have the ability to generate high profits. If the company is getting better at generating profits based on its total assets, then the company shows good financial performance. The higher the total assets, the firm value will increase through better financial performance. So that total assets and total sales have a positive effect on company values through financial performance (mahendra, 2011. Rahayu, 2016).

Ha6: total assets affect firm value through financial performance

The effect of leverage on firm value through financial performance

Leverage as a capital structure is one of the sources to encourage in improving financial performance. The company's financial performance is one of the factors that is considered by potential investors to determine stock investment. The better the company's leverage, the better the financial performance so that it can increase the value of the company.

Ha7: leverage affects firm value through financial performance

Methods

The object of this research is the observation of companies from several companies in the food and beverage sector listed on the Indonesian stock exchange where the effect of company size and leverage on financial performance will be tested, where company size and leverage are referred to as independent variables and company value as the dependent variable in the study, this as well as financial performance as a mediating variable. The sources and methods of determining the research data are obtained from the official website of the Indonesian Stock Exchange (BEI), namely www.idx.co.id, while the research data is included in leveraged secondary data, because it is determined by means of a literature study of the annual reports of food and beverage sector companies. beverage period 2017 – 2020

The population determined in this study were all food and beverage companies listed on the Indonesian stock exchange (IDX) during the study period 2017 - 2020, while the sample in this study was selected using a purposive sampling method, namely 20 food and beverage companies.

In this research, there are several research variables consisting of several groups of variables, namely company size as an independent variable consisting of total assets (x1) then there is leverage represented by the debt to equity (x2) financial performance as the dependent variable which is measured by return on assets (y). For more details can be seen from the following table

<table>
<thead>
<tr>
<th>Variable type</th>
<th>Variable group</th>
<th>Variable</th>
<th>Calculation formulas and indicators</th>
<th>Data scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>Company size</td>
<td>Total assets</td>
<td>Ln (total assets)</td>
<td>Ratio</td>
</tr>
<tr>
<td>variable</td>
<td>Leverage</td>
<td>Leverage</td>
<td>Total debt/total equity</td>
<td>Ratio</td>
</tr>
<tr>
<td>Dependent</td>
<td>Financial</td>
<td>Financial</td>
<td>(net income after tax/total assets) x 100%</td>
<td>Ratio</td>
</tr>
<tr>
<td>variable</td>
<td>performance</td>
<td>performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>The value of the</td>
<td>The value of</td>
<td>Market price per share/ book value per</td>
<td>Ratio</td>
</tr>
<tr>
<td>variable</td>
<td>company</td>
<td>the company</td>
<td>share</td>
<td></td>
</tr>
</tbody>
</table>

Research Model

![Figure 1. Research Model]
Result and Discussion

Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>72</td>
<td>113,192</td>
<td>96,198,559</td>
<td>4,056,146</td>
</tr>
<tr>
<td>Leverage</td>
<td>72</td>
<td>-213%</td>
<td>183%</td>
<td>65%</td>
</tr>
<tr>
<td>Financial performance</td>
<td>72</td>
<td>-16%</td>
<td>25%</td>
<td>8%</td>
</tr>
<tr>
<td>The value of the company</td>
<td>72</td>
<td>-0.33</td>
<td>9.99</td>
<td>2.957638889</td>
</tr>
</tbody>
</table>

Source: data processed 2021

The average value of the company size variable is Rp. 4,056,146 million rupiah. The standard deviation of the company size variable is 11,476,800 million rupiah. Sentra food indonesia tbk holds the lowest value of 113,192 million rupiah in 2020, while indofood is successful in prospering tbk. Has the highest value of 96,198,559 million rupiah in 2017.

The average value of the leverage variable is 65 percent. The standard deviation of the leverage variable is 59 percent. The three pillars of prosperous food tbk held the smallest value of -213 percent in 2019, while the food center of indonesia tbk had the largest value of 183 percent in 2017.

The standard deviation of the profitability variable (financial performance) is 8%, and the average value of the profitability variable (financial performance) is 8 percent. Sentra Food Indonesia Tbk has the lowest percentage of 16 percent in 2020, while Multi Bintang Indonesia Tbk has the highest percentage of 25 percent in 2017.

The average value of the firm value variable (firm value) is 2.95 times. The standard deviation of the firm value variable (firm value) has a value of 2.01 times. The three pillars of prosperous food tbk held the lowest score of -0.33 times in 2019, while garudafood Putra Jaya tbk had the highest score of 9.99 times in 2017.

The coefficient of asymp.sig (2-tailed) is 0.265, according to the table above (0.05). Because 0.265 is more than 0.05, these results indicate that the data used are normally distributed.

Table 3. Multicollinearity Test

<table>
<thead>
<tr>
<th>Collinearity statistics</th>
<th>Tolerance</th>
<th>Vif</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.883053203</td>
<td>1.132435</td>
<td></td>
</tr>
<tr>
<td>0.858472849</td>
<td>1.164859</td>
<td></td>
</tr>
<tr>
<td>0.896474541</td>
<td>1.115481</td>
<td></td>
</tr>
</tbody>
</table>

Source: data processed 2021

The firm size variable has a tolerance value of 0.883, the leverage variable has a tolerance value of 0.858, and the financial performance variable has a tolerance value of 0.896, all of which are more than 0.10. With a vif of 1.132 for the firm size variable, 1.164 for the leverage variable, and 1.115 for the financial performance variable (financial performance) which are all less than 10, it can be concluded that the data used in this equation does not exist. Multicollinearity

Table 4. Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ln_x1</td>
<td>.753</td>
</tr>
<tr>
<td>Leverage</td>
<td>.356</td>
</tr>
<tr>
<td>Financial performance</td>
<td>.523</td>
</tr>
</tbody>
</table>

Source: data processed 2021

Based on the table above, the firm size variable has a significance value of 0.753, the leverage variable has a significance value of 0.356, and the profitability variable has a significance value of 0.523, all of which indicate a number greater than 0.05, indicating that the data used in this equation does not show heteroscedasticity.

First model test

Table 5. Model Summary First Equation

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted r square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.322</td>
<td>.304</td>
<td>.278</td>
<td>.08014</td>
</tr>
</tbody>
</table>

Source: data processed 2021
It can be seen from the data table above that the value of $r^2$ is 0.304, this shows that the contribution of the variable total assets, total sales, leverage in explaining each relation to financial performance is 30.4%, while the rest is 69.6%. is a contribution that can be explained by other variables that are not explained in this study. Meanwhile for the value of $e_1$ can be searched with the formula $e_1 = \sqrt{1 - 0.304} = 0.834$

<table>
<thead>
<tr>
<th>Table 6. Coefficients First Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>ta</td>
</tr>
<tr>
<td>Leverage</td>
</tr>
</tbody>
</table>

Source: data processed 2021

The processing results produce a constant value of 0.370 based on the table above, the first equation model can be arranged as follows:

$$Y = 0.370 - 0.234x_1 - 0.289x_2$$

Second model test

<table>
<thead>
<tr>
<th>Table 7. Model Summary Second Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Source: data processed 2021

It can be seen from the table above that the value of $r^2$ is 0.461, this shows that the contribution of the total asset, leverage, and financial performance variables in explaining each relation to firm value is 46.1%, while the remaining 53.9% is contribution that can be explained by other variables that are not explained in this study. Meanwhile, the value of $e_2$ can be found using the formula $e_2 = \sqrt{1 - 0.461} = 0.734$

<table>
<thead>
<tr>
<th>Table 8. Coefficients Of The Second Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>ta</td>
</tr>
<tr>
<td>Leverage</td>
</tr>
<tr>
<td>Financial performance</td>
</tr>
</tbody>
</table>

Source: data processed 2021

The processing results produce a constant value of 2.402 based on the table above, the second equation model can be arranged as follows:

$$Z = 2.402 - 0.004x_1 + 0.116 + 0.247y$$

Total assets have a significant effect on financial performance

The first hypothesis examines the effect of total assets on financial performance. The output regression results show that the beta of 0.234 is positive and the significance value of 0.04 is smaller than 0.05. The higher the total assets owned by the food and beverage company, the higher the company's financial performance so that H1 is accepted. The results of this study indicate that high total assets owned by a company will improve the company's financial performance. The results of this study are in accordance with research conducted by Yulius Ardy Wiranata (2013) which explains that company size when measured by total assets has a significant effect on financial performance.

Leverage has a significant effect on financial performance

The next hypothesis examines the effect of leverage on financial performance. The results show a beta of -2.89 and a significance value of 0.017, which is smaller than 0.05, which means that the higher the leverage in a company, the lower the company's financial performance. So H2 is accepted. The results of this study contribute that any increase in leverage on the company will reduce the company's financial performance. With the increase in the value of debt, it will reduce the company's profits because of the interest costs that must be paid so that it becomes a risk for the company. Research in this case is in accordance with lais khafa, herry laksito 2015 mentions the effect of leverage significant leverage on financial performance.
Total assets have a significant effect on firm value

The third hypothesis examines the effect of total assets on firm value. The output regression results show that a beta of -0.004 has a negative effect and the significance value of 0.005 is smaller than 0.05. So that it can be proven that total assets have a negative effect on firm value and with a significant effect, the higher the total assets owned by the company, the lower the firm value of the company so that h3 is accepted. The results of this study indicate that every increase in the total assets of the company reduces the value of the company. Management is also considered to be more flexible in the use of company assets if the company's total assets are larger. This freedom of management raises concerns for asset owners (investors). Therefore, a large total asset reduces the value of the company from the point of view of the owner of the company. The results of this study are in accordance with research conducted by Astriani (2014) which states that company size when measured by total assets has a negative effect but has a significant effect on firm value.

Leverage has no significant effect on firm value

The fourth hypothesis examines the effect of leverage on firm value. The regression results show that beta of 0.116 has a negative effect and the significance value of 0.364 is greater than 0.05. So that there has no significant effect on firm value so that h4 is rejected. Some of the investors consider that high leverage poses a lot of risks for the company and considers poor performance. This result is in accordance with this study, which is supported by research conducted by Dewi Ernawati, Dini Widyawati (2015) which states that leverage has a negative and insignificant effect on firm value.

Financial performance has an effect on firm value

Based on the test results, h5 is accepted because the significance test is significant at a level less than 0.05 with a positive direction. Financial performance has a significant positive effect according to statistical testing, with a beta coefficient of 0.247 and a significance of 0.049. According to the findings of this study, any increase in financial performance achieved by food and beverage companies will increase the value of the company, which indicates that financial performance can be used to predict or explain company value. The findings of this study agree with Antar and Dana (2013), Mahendra (2011), and Khairiyani et al (2016), who found that financial performance has a significant influence on firm value.

Financial performance is able to mediate the effect of total assets on firm value

It can be explained that total assets have a significant effect on financial performance, financial performance has a significant effect on firm value, and total assets have a significant effect on firm value. So it can be concluded that total assets have a direct effect on firm value, and can affect firm value through financial performance So h6 is accepted. The total assets owned by the company can be used to determine the size of the company, it can be said that a company is large if the overall assets are large. Large companies are usually considered as very solid companies that should be able to generate large profits which shows that the company is performing well financially. Investors will respond positively to these signals, which will have an impact on the value of the company. The findings of this study agree with Antar and Dana (2013), Mahendra (2011), and Khairiyani et al (2016), who found that financial performance has a beneficial and significant influence on firm value.

Financial performance is able to mediate between leverage and firm value

Financial performance is able to mediate between leverage and firm value even though the results cannot directly affect firm value, but leverage can influence financial performance because financial performance has a significant effect on firm value, and leverage has a significant effect on financial performance, so h7 is accepted. This study explains that financial performance is able to mediate the effect of leverage on firm value, it can be said that total assets affect firm value through financial performance. This research is in line with Ni putu ira kartika dewi, nyoman abundanti (2019) which states that profitability with financial performance is able to mediate leverage on firm value.

Conclusion

Based on the above research, it can be concluded that firm size and leverage can affect financial performance and firm size can affect firm value but leverage does not affect firm value, while leverage has an indirect effect on financial performance and financial performance is able to mediate the effect of firm size. to the value of the company.

References


Ayu Octaviany, Syamsul Hidayat, Miftahudin Pengaruh Ukuran Perusahaan dan Leverage terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Intervening 2019


Dewi Ernawati dan Dini Widyaawati pengaruh profitabilitas, leverage dan ukuran perusahaan terhadap nilai perusahaan 2015


I Gusti Ngurah Gede Rudangga dan Gede Merta Sudiarta pengaruh ukuran perusahaan, leverage, dan profitabilitas terhadap nilai perusahaan 2016


Ni Putu Ira Kartika, Dewi Nyoman Abundanti, 2019. Pengaruh Leverage Dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Mediasi


