The Effect Of Firm Size, Profitability and Leverage on Firm Value
(Study on Manufacturing Companies Sector Consumer Goods Industry Listed in Indonesian Stock Exchange Period 2017-2019)

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Abstract - This research's purpose is to examine the effect of firm size, profitability, and leverage on firm value. The population of this research are companies in the consumer goods sector listed at Indonesia Stock Exchange in 2017-2019, and the sample size was 33 companies selected by saturated sampling technique. Multiple regression analysis will be used as a data analysis technique.

Based on the results, it is found that firm size, profitability, and leverage has a positive and significant effect in firm value in companies in the consumer goods sector listed on the Indonesia Stock Exchange (IDX) 2017-2019.

Keywords - Firm Value, Firm Size, Profitability, Leverage

I. INTRODUCTION

Companies go public to generate profits to increase the prosperity of shareholders through increasing company value. Firm's value information is important on a stock investment, making decisions for investors because it will help investors find out which stocks are growing and have a good performance. Information relating to an investor's interest in investing in a company shares can be done by measuring the value of the Company. The measurements taken reflect how investors value the Company's shares. The higher firm value indicates that the Company is considered to have good performance, and this is an opportunity towards the investment (Berzkalne & Zelgave, 2014).

Investment opportunities provide a positive signal about the Company's future growth, thereby increasing share prices as an indicator of firm value (Brigham & Daves, 2018: 730). Signalling theory is the signal of success or failure of management (agent) delivered to the owner (principal). The impetus for providing signals arises because of the presence of asymmetrical information between the company (management) and outside parties, where investors know that the Company's internal information is relatively less and slower than the management. Financial reports can be used to make decisions for investors; financial reports are the most important part of a company's fundamental analysis (Farida et al., 2019).

Firm value in research is proxied by price-book value (PBV). Price Book Value (PBV) is one approach in determining the intrinsic value of shares. PBV also illustrates the relationship between market price and book value per share. The higher PBV means the market has confidence in the Company's prospects. PBV is a ratio to measure the Company's financial performance. PBV also shows how far a company can create firm value relative to the amount of invested capital. The higher PBV ratio means, the more successful the Company is in creating a value for shareholders. A successful company generally has a PBV ratio above one, which indicates that the market value of the stock is greater than its book value. PBV has an important role as consideration for investors in choosing shares to buy, and PBV can also be used as an indicator of stock price or value. (Thakur & Workman, 2016).

Fajaria et al. (2017) stated that stock prices as a representation of firm value are determined by three main factors, which are internal company factors, company external factors, and technical factors. Internal and external factors of the Company are fundamental factors that are often used as the basis for decision making by investors in the capital market. Meanwhile, technical factors are more technical and psychological, such as the volume of stock trading, the value of stock trading transactions, and the tendency for the ups and downs of stock prices. This study emphasizes the internal factors of the Company, which are...
often seen as important factors in determining stock prices. The Company's internal factors in the capital market analysis are often viewed as the Company's fundamental factors; these factors are controllable so that the Company can control them. Internal company factors can be grouped into factors of company policy and company performance factors. Management must work harder to be able to optimize the company values, where the optimization of its value can be achieved through the implementation of its policy factors emphasizing financial management policies, which include investment decisions, funding decisions and dividend policies (Brigham & Dave, 2018: 322).

The investment decision by the Company is very important for the survival of the Company concerned. This is due to investment decisions regarding the funds used for investment, the type of investment to be made, the investment returns and investment risks that may arise. A funding decision is a financial decision about the origin of funds to purchase assets. There are two types of funds or capital, including foreign capital such as bank loans and bonds, as well as equity such as retained earnings and stocks. Companies tend to determine the selection of these sources. Firstly with internal equity financing, as if the equity is not considered new enough, so it uses the external finance. The use of external financing itself first uses debt (debt financing); if the debt is insufficient, the Company uses external equity financing, namely by issuing shares. Fulfilling the need for funds from external funding sources means increasing the amount of debt which at the same time creates an obligation for the Company to pay in the future, namely principal plus interest. Apart from investment decisions and financing decisions, dividend policy is a problem that companies often face. Dividend policy is a decision whether the profits from the Company at the end of the year, which will be distributed to shareholders in the form of dividends or be held to increase capital to finance future investments. If the Company's retained profit is large, it means that the profit will be paid along with the smaller dividend. Thus, an important aspect of dividend policy is determining the appropriate allocation between earnings as dividend payments and retained earnings in the Company (Tarmidi & Triani, 2019). In addition to financial management policies as a measure in assessing a company, there are other variables as well such as firm size, leverage and profitability where the research results of Husna & Satria (2019), Suffah & Riduwan (2016), Grill & Obradovich (2012), Manoppo & Arie (2016), Sabrin et al., (2016), Farhan (2017), Lodhi et al., (2018) found that these three variables have a positive and significant effect on firm value.

Firm size can be used to value a company based on total assets, number of sales and market value of shares. The size of a large company indicates that the Company is experiencing growth so that investors will respond positively, and the firm value will increase. The bigger the total assets and sales, the bigger the firm size and the easier it is for the Company to get funding, both internal and external and it has an influence on company value (Hirdinis, 2019). Firm size in this study is proxied by total assets. Companies that have large total assets show good prospects in a relatively stable period and generate profits compared to companies that have small total assets (Masakure, 2016).

Research by Manoppo & Arie (2016) found that firm size has a positive and significant effect on firm value. Research conducted by Gill and Obradovich (2012) also proves that firm size has a positive effect on firm value. However, research conducted by Suffah & Riduwan (2016), Chuzaimah et al., (2017), found that firm size hurts firm value.

The next factor affecting firm value is profitability. The higher the profitability obtained by the Company will encourage investors to make bigger investments so that the Company's value will increase (Sabrin et al., 2016). Higher profitability means that it will be easier for companies to finance their business activities. The growth of Return on Assets (ROA) shows better company prospects because it means the potential for increased profits to be obtained by the Company so that investors capture it as a positive signal from the Company which will increase investor confidence and will make it easier for company management to attract capital in the form of shares. If there is an increase in the demand for company shares, it will increase the stock price in the capital market (Sabrin et al., 2016). Profitability in this study using Return on Assets (ROA) is a measure of the Company's overall ability to generate profits with the total number of assets available in the Company. The greater the Return on Assets (ROA) results, the better the Company's performance (Sabrin et al., 2016).

Research conducted by Hamidah & Umdiana (2017) found that profitability has a positive and significant effect on firm value. This research is also supported by Suffah & Riduwan (2016), Sucuahi & Cambarihan (2016), Sabrin et al., (2016), Hirdinis (2019) and Tiska (2015) who found that profitability has a positive influence on firm value. Different research results found by Manoppo & Arie (2016), Farhan (2017) prove that profitability, as measured by Return on Assets (ROA) hurts firm value.

Another factor that can affect firm value is leverage. Leverage is a company policy to use funds obtained from outside the Company (Pinem & Rachmawati, 2015). Leverage is a ratio that measures how much a company uses financing that comes from debt (financial leverage). Companies that use debt are liable for interest expense and loan principal expense. The use of debt (external financing) has a large enough risk of not repaying the debt, so the use of debt needs to pay attention to the Company's ability to generate profits. Leverage in this study uses the Debt to Asset Ratio (DAR). Debt to Asset Ratio (DAR) is a comparison between total debt and total assets. The lower the leverage level, the lower the investment risk faced (Vatansever and Hepsen, 2013).
Research conducted by Suffah & Riduwan (2016), Manoppo and Arie (2016), and Purwowhandoko (2017) Gill and Obradovich (2012) found that leverage has a positive effect on firm value. Meanwhile, research by Husna & Satria (2019), and Pinem & Rachmawati (2015) proved that leverage, as measured by Debt to Asset Ratio (DAR), harms firm value.

Based on previous findings, it turns out that each of these factors has an inconsistent relationship and influence on firm value, so the analysis is carried out to determine the effect of company size, profitability and leverage on firm value.

II. LITERATURE REVIEW AND HYPOTHESIS

A. Literature Review

a) Signal Theory

This theory involves two parties, namely an insider such as management who acts as a party providing a signal and an outside party such as an investor who acts as a party receiving the signal. According to (Farida et al., 2019), the signal theory emphasizes the importance of information issued by companies on investment decisions from parties outside the Company. This information usually appears in the form of an annual financial report which contains information on the state of the Company, records and company conditions. It can also reflect the performance of a company. According to Brigham & Dave (2018), the integrity of financial statement information that reflects the firm’s value is a positive signal that can influence the opinion of investors and creditors or other interested parties. Once investors have received this information, they will first carry out interpretation and analysis of the information they received, so that the information provided can be decided as good news or bad news.

b) Firm Value

Firm value is a certain condition that has been achieved by a company as a reflection of the Company's public trust, according to several year’s processes of activities (Efendi, 2016). Panaretou (2014) states that firm value consists of several types, namely nominal value, market value, intrinsic value, book value, liquidation value. According to Brigham and Davies (2018: 296-298), the methods used to measure firm value are Price Earning Ratio (PER), Price to Book Value (PBV), and Tobin’s Q.

c) Firm Size

Firm size is the grouping of several groups of companies, including large, medium and small companies. Large companies have various advantages over small companies. The first advantage is that the size of the Company can determine the level of ease of the Company in obtaining funds from the capital market. Second, firm size determines the bargaining power (Bargaining Power) in the financial contract. Third, there is a possibility that the influence of scale in costs and returns allows larger companies to earn more profit (Sawir, 2014).

d) Profitability

Profitability is one of the financial ratios used to evaluate a company. Knowing how well the Company's success is in generating profits requires a measure. The measure used is profitability. Profitability can measure how much the Company's ability to earn a profit both concerning sales, assets and profits for its capital. The profitability of a company can be assessed in various ways depending on the profit and assets or capital that will be compared with one another. The use of profitability ratios can be done by using comparisons between the various components in the financial statements, especially the balance financial statements and the income statements (Brigham & Daves, 2018: 293). Indicators that can be used to measure profitability are gross profit margin, operating profit margin, net profit margin, return on assets, return on investment, return on equity, return on common stock equity, earning per share and basic earning power.

e) Leverage

Leverage is the extent to which the Company uses debt financing. Leverage arises due to fixed financial obligations that the Company must issue. The leverage ratio measures how much financial leverage the Company bears. The solvency ratio or leverage ratio means how much debt the Company bears in comparison to its assets. The leverage ratio can be measured using the debt to equity ratio (DER) and the debt to assets ratio (DAR) (Brigham & Dave, 2018: 290).

B. Hypothesis

a) Effect of Firm Size on Firm Value

Firm size can be measured from the Company's total assets, sales or capital. The larger the firm size, the greater the increase in its value. Larger size companies will have more flexibility and accessibility to get funds from the capital market than the small ones. Investors will consider about the Company sizes information in making investment assessments which in turn can increase value for the Company (Iswajuni et al., 2018). Research that supports this was conducted by Manoppo & Arie (2016), Gill & Obradovich (2012), and Husna & Satria (2019) found that firm has a positive effect on firm value.

H1: Firm Size has a positive effect on Firm Value

b) Effect of Profitability on Firm Value

The Company's high profitability makes the Company's financial performance looks good, as investors will see that the Company's prospects will also be better. Information about a high level of profitability is a signal for investors and can be used as a consideration in making investment decisions. A positive response from investors will increase demand for shares which will be followed by the company value (Mariani & Suryani, 2018). Research that supports this was carried out by Hamidah & Umdiana (2017), Suffah & Riduwan (2016), Sucuahi & Cambarihan (2016), Hirdinis (2019), Sabrin et al. (2016) and Tiska (2015) found that profitability had a positive effect on firm value.

H2: Profitability has a positive effect on Firm Value
c) Effect of Leverage on Firm Value

Leverage is a funding policy related to the Company's decision to finance the Company. Companies that use debt are liable for interest expense and loan principal expense. The use of debt (external financing) has a large enough risk of debt non-payment, so the use of debt needs to pay attention to the Company's ability to generate profits (Prasetyorini, 2013). Research that supports this was carried out by research conducted by Suffah & Riduwan (2016), Manoppo & Arie (2016), Purwohandoko (2017), Gill and Obradovich (2012) which stated that leverage has a significant positive effect on firm value.

H3: Leverage has a positive effect on Firm Value

Fig 1: Conceptual framework

III. RESEARCH METHODOLOGY

The research design used the associative to determine the effect of firm size, leverage, and profitability on firm value. The location of the research is carried out in consumer goods industrial sector manufacturing companies listed on the Indonesia Stock Exchange by accessing data on the Indonesia Stock Exchange official website at www.idx.co.id and the yahoo finance website. The object examined is the value of the Company in manufacturing companies with the consumer goods industry sector listed on the Indonesia Stock Exchange (BEI) for the 2017-2019 period.

This research used quantitative data, where quantitative data is data in the form of numbers. The quantitative data referred to this study are financial reports on consumer goods industry sector companies listed on the Indonesia Stock Exchange 2017-2019. This study used secondary data sources, where data was obtained through publishing parties. The data was obtained through the Indonesia Stock Exchange official website.

The populations are the consumer goods industry sector companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2019 period. The total population of companies in the consumer goods industry sector listed on the Indonesia Stock Exchange (IDX) is 54 companies. The sample is part of the number and characteristics of a population. The number of samples used was 33 companies. The sampling method used in this study is to use saturated sampling technique or census. The data collection method used in this study is the non-participant observation method, in which the researcher is not directly involved and only examines it. This non-participant observation method is carried out by observing and analyzing the financial reports of the consumer goods industry sector, which can be accessed through the official website of the Indonesia Stock Exchange (IDX).

This study uses four variables, which will be proxied by a single indicator: 1) the dependent variable, namely firm value, and 2) the independent variable, namely firm size, profitability, and leverage.

1. Firm Size

The size of the Company in this study is the total asset of each Company. The size of the Company is measured using the logarithmic value of total assets or commonly known as Ln total assets.

Firm Size = Ln Total Assets

2. Profitability

Profitability in this study uses ROA (Return On Asset). ROA (Return On Asset) is obtained by comparing net income after tax with the Company's total assets and multiplied by 100%. The following formula calculates the return on Total Assets (ROA):

\[
ROA = \frac{Net \ Profit \ After \ Tax}{Total \ Assets}
\]

3. Leverage

Leverage in this study uses DAR (Debt to Asset Ratio). DAR (Debt to Asset Ratio) is obtained by comparing total debt to total assets. DAR (Debt to Asset Ratio) is calculated using the following formula:

\[
DAR = \frac{Total \ Debt}{Total \ Assets}
\]

4. Firm Value

Firm value in this study uses PBV (Price Book Value). PBV (Price Book Value) is obtained by comparing the market price per share with the book value per share. PBV (Price Book Value) is calculated using the following formula:

\[
PBV = \frac{Market \ Price \ per \ Share}{Book \ Value \ per \ Share}
\]

The technique used to analyze data was multiple regression analysis calculated by using SPPS programs. This analysis is used to determine the effect of the independent variables (firm size, profitability, and leverage) on the dependent variable (firm value). The multiple linear regression equation models used in this study are:

\[
Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e
\]
Where:
\[ Y = \text{Firm Value} \]
\[ a = \text{constant} \]
\[ b_1, b_2, b_3 = \text{regression coefficient} \]
\[ X_1 = \text{Firm size} \]
\[ X_2 = \text{Profitability} \]
\[ X_3 = \text{Leverage} \]
\[ e = \text{residual (error)} \]

IV. RESULTS AND DISCUSSION

A. Results
Classic Assumption Test
Normality test
The results of the normality test found that the Asymp. Sig. (2-tailed) obtained a value of 0.078 > 0.05. These results indicate the data used are normally distributed.

Multicollinearity Test
The multicollinearity test results found that the tolerance value for firm size was 0.931, profitability 0.972, leverage 0.957 and VIF values were 1.075, 1.029, 1.045 <10 respectively, which means that the regression model does not contain multicollinearity symptoms.

Autocorrelation Test
The results of the autocorrelation test found that the Durbin-Watson value of 2.228 was between the values (dU = 1.713) and (4-dU = 2.286). This means that there were no autocorrelation symptoms.

Heteroscedasticity Test
The results of the heteroscedasticity test found that the significance value of the variable firm size, profitability, and leverage, respectively, was 0.927, 0.765 and 0.902, which was greater than 0.05 so that the data were free from heteroscedasticity.

Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-7.286</td>
<td>5.122</td>
</tr>
<tr>
<td>Ukuran Perusahaan</td>
<td>0.220</td>
<td>0.178</td>
</tr>
<tr>
<td>Profitabilitas</td>
<td>0.244</td>
<td>0.028</td>
</tr>
<tr>
<td>Leverage</td>
<td>2.205</td>
<td>1.808</td>
</tr>
</tbody>
</table>

The regression equation formed from the regression test on the firm value is as follows:
\[ Y = -7.286 + 0.220X_1 + 0.224X_2 + 2.205X_3 \]

Simultaneous Significance Test (F Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>922.539</td>
<td>3</td>
<td>307.513</td>
<td>30.146</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>969.081</td>
<td>95</td>
<td>10.201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1891.620</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the F test found that Ftable < Fcount with a significance level of 0.000 < 0.05. Thus, it is concluded that firm size, profitability, and leverage simultaneously (together) have a significant effect on firm value.

Partial Significance Test (T-test)

<table>
<thead>
<tr>
<th>Model</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.422</td>
<td>0.000</td>
</tr>
<tr>
<td>Ukuran Perusahaan</td>
<td>6.231</td>
<td>0.001</td>
</tr>
<tr>
<td>Profitabilitas</td>
<td>8.653</td>
<td>0.000</td>
</tr>
<tr>
<td>Leverage</td>
<td>7.219</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Partial test results (t-test) note that the significance value of firm size (X1) is 0.001 < 0.05, indicating that firm size has a positive and significant effect on firm value. The significance value of profitability (X2) is 0.000 < 0.05, indicating that profitability has a positive and significant effect on firm value. The significance value of leverage (X3) is 0.003 < 0.05, indicating that leverage has a significant effect on firm value.

Coefficient of Determination (R²)

<table>
<thead>
<tr>
<th>Model</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.705</td>
</tr>
</tbody>
</table>

The results of the determination test show that the value of Adjusted R Square (R2) is 0.705 or 70.5%. This shows that the percentage of the influence of the independent variables (firm size, profitability and leverage) on the dependent variable (firm value) is 70.5%, the remaining 29.5% is influenced by other variables not included in this study.

B. Discussions
a) Effect of Firm Size on Firm Value
The results of the study found that firm size has a positive and significant effect on firm value. The bigger the size of the Company indicates that the Company is experiencing good growth and will find it easier to enter the capital market because investors get a positive signal to the Company so that the positive response reflects the increase in firm value. The results of this study support the results of research conducted by Manoppo & Arie (2016), Husna & Satria (2019) and Gill & Obradovich (2012). They found that firm size has a positive effect on firm value.
b) Effect of Profitability on Firm Value

The results of the study found that profitability had a positive and significant effect on firm value. The ability of a company to generate profits or profits in a period reflects the Company's ability to increase company value which is reflected in the stock price. The level of profitability is a positive signal for investors in predicting company value. The results of this study support the results of research conducted by Iswajuni et al. (2018), Waweru et al. (2013), Mariani & Suryani (2018), Hamidah & Umdiana (2017), Suffah & Riduwan (2016), Sucahu & Cambarihan (2016), Hirdinis (2019), Sabrin et al. (2016) and Tiska (2015) who found that profitability has a positive effect on firm value.

c) Effect of Leverage on Firm Value

The results of the study found that leverage has a positive and significant effect on firm value. An increase in the debt ratio of a company is a positive signal for investors with the assumption that the Company's cash flow in the future will be maintained. The presence of debt also shows optimism from management in investing, so it is hoped that in the future the prospects of the Company will be better, or in other words the higher the leverage, the higher the firm value. Leverage is a positive signal to potential investors that the Company is growing and needs funds for operational activities. The results of this study support the results of research conducted by Suffah & Riduwan (2016), Manoppo and Arie (2016), and Purwohandoko (2017) Gill and Obradovich (2012) which found that leverage has a positive effect on firm value.

V. CONCLUSION AND RECOMMENDATION

Conclusion

Based on the test results, it is found that there is a positive influence on company size, profitability and leverage on the value of companies listed on the Indonesia Stock Exchange simultaneously, meaning that company size, profitability and leverage can affect firm value.

Based on the results of the hypothesis analysis, it can be concluded that part, there is a significant positive effect on the firm size on firm value, which means that company size separately affects firm value. Based on the results of the hypothesis analysis, it can be concluded that part, there is a significant positive effect of profitability on firm value, meaning that profitability separately affects firm value. Based on the results of the hypothesis analysis, it can be concluded that part, there is a significant positive effect between leverage on firm value, meaning that leverage can separately affect firm value. Company size, profitability and leverage have a positive and significant effect on firm value in the consumer goods sector listed on the IDX for the 2017-2019 period.

Recommendations

Further research is expected to add factors or deepen the criteria for other variables that could affect firm value. Further researchers are also suggested to be able to expand the research period, and research samples from companies listed on the Indonesia Stock Exchange (IDX) so that the results obtained are better.

REFERENCES


Firmike Lidyatami Radja & Lub Gede Sri Artini / IJEMS, 7(11), 18-24, 2020


