ANALYSIS OF THE EFFECT OF FUNDING DECISIONS, MACROECONOMIC, AND PROFITABILITY ON THE VALUE OF FOOD AND BEVERAGES COMPANIES IN THE INDONESIA STOCK EXCHANGE PERIOD 2015-2018

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ABSTRACT

This study aims to analyze the influence of funding, macroeconomic, and profitability decisions on the value of Food and Beverages companies in the Indonesia Stock Exchange in the period 2015-2018. The data used is the 2015-2018 annual financial statement data. The population is all food and beverage companies listed on the Indonesia Stock Exchange, and the study sample is 12 companies using purposive sampling.

From the results of the study found that simultaneously there is a significant influence between funding decisions (DER and DAR), Macroeconomics (SBI) and Profitability (ROA and ROE) on firm value (PER). Based on hypothesis analysis it can be concluded that DAR, DER, and ROA partially have a significant effect on firm value. Whereas ROE and SBI do not have a significant effect on Company Value (PER). The contribution of the independent variable to the dependent variable is 46.9%, which means that the variable of the independent variable is able to explain the variability of the dependent variable by 46.9%, while 53.1% is explained by other variables outside the model studied.

Keywords: Funding, Investment, Macroeconomics, Profitability, Company Value

PRELIMINARY

Indonesia is a country that has a very large population, which has now penetrated 267 million people (supas 2015). A very large population, of course, must be supported by the food and beverage sector which is adequate to meet the needs of life. Therefore, the food and beverage sector is an interesting sector to study, considering the need for food and beverages will continue to increase from year to year in line with population growth. This means that this sector is a sector that is quite attractive for investment. This was shown in the period 2014-2017 amidst the slowing down of the...
Indonesian economy, investment in food and beverages tends to increase, in addition to the export market, growth is also supported by domestic consumption. With a population of 267 million, of course, the food and beverage industry can utilize the domestic market. The food and beverage industry is one of the five pilot industries for the implementation of the fourth industrial revolution or Industry 4.0 in Indonesia. This is not separated because the food and beverage industry shows a positive performance in the global market. The Ministry of Industry (Kemenperin) has recorded the value of exports of national food and beverage products in 2017 reached US $ 11.5 billion, an increase compared to 2016 which was US $ 10.43 billion.

Last year (2016), the food and beverage industry grew 9.23% or higher than the previous year which grew 8.46%. This figure is above the national economic growth of 5.07%. The food and beverage sub-sector, which has quite high growth, includes ready-made flour, biscuits, and liquid milk. The contribution of the food and beverage industry to the total national GDP of 6.14% last year (2016). While its contribution to GDP, the manufacturing industry is the largest of the other industries, reaching 34.33%. (http://id.beritasatu.com/taj//prospek-mamin-mamin/1747730).

While some negative sentiments in the global market are still haunting, the export performance of Indonesia's food and beverage industry is projected to rise with a projected growth of 10% this year to US $ 31.9 million (Bisnis .com Jakarta 28 March 2019) High company growth will certainly have an impact on the value of the company, where the value of the company will have an impact on the prosperity of shareholders in the form of an increase in returns that benefit investors, in this case, the shareholders of the company/company owners.

Based on the above background, the authors are interested in researching with the title: Analysis of the Effects of Funding, Macroeconomic, and Profitability Decisions on the Value of Food and Beverages Companies in the Indonesia Stock Exchange Period 2104-2018

THEORETICAL BASIS

Prior Research

Several studies, among others conducted by Putri Prihatiningsih (2010), examined the "Effects of Funding Decisions, Investment Decisions, and Dividend Policies on Manufacturing Company Values on the Indonesia Stock Exchange 2007-2009, which showed the results of funding decisions (DER), investment decisions (PER ), significantly positive effect on company value (PBV) and the dividend policy (DPR) did not have a positive and significant effect on company value (PBV).

Another study was conducted by, Nila Usiati, with the title Influence of Capital Structure, Managerial Ownership, Investment Decisions, Dividend Policy, Funding Decisions, and Dividend Policy and Profitability on Corporate Value (Case Study on Financial Companies and Banks in the Indonesia Stock Exchange 2009-2013), which shows the results that the Capital Structure, Managerial Ownership, Investment Decisions, and Funding Decisions have no significant effect on the value of the company, but the dividend policy has a significant effect on the value of the company.

The next research was carried out by Ardina Zahrah Fajaria with the title: Effect of Investment Decisions, Funding Decisions, and Dividend Policies on Company Value 2009-2013 which shows the results that, Investment Decisions, Funding Decisions, and Dividend Policies simultaneously affect the firm value, but partially Decision The positive effect of investment is not insignificant to the value of the company. While the Funding Decision has a negative effect is not significant on the value of the company. Dividend policy has a significant positive effect on firm value.
This study only looks at the effect of funding decisions, macroeconomic factors, and profitability on the value of food and beverages companies in the Indonesia Stock Exchange on the company value of 2015-2018.

LITERATURE REVIEW

Investation

Investment is the delay in consumption now to be used in efficient production for a certain period (Hartono, 2012: 5). Or investment can also be defined as a commitment to some funds or other resources made at this time, to obtain several benefits in the future (Bodi Kane, 2014: 1). Thus it can be concluded that investment is delaying current consumption to be invested in an efficient production process to obtain profits in the future.

Capital Market

The capital market is a market for a variety of long-term financial instruments (securities) that can be traded, both in the form of debt (bonds) and own capital (shares), both issued by the government and by private companies. So the capital market is a narrower concept than the financial market.

With the capital market, both those who need funds and those who are excess funds can benefit. For companies, they can raise funds from people who are excess funds without having to wait for the results of the company's operations. And for the public investors can invest their funds in the company without having to be directly involved in the ownership of real assets needed for these investments. (Husnan; 2015: 4). Thus the capital market functions to mobilize funds that are in the community to be used to fund company operations, in this case from those who have excess funds to those who need funds, namely the company.

Company Purpose

The company's goal is to maximize the value of the company or shareholder prosperity. The value of the company itself is the same as the original value of the shares plus the market value of the debt. But if the market value of debt is held constant, then the value of the company will be the same as the market value of the stock. I Made Sudana (2009: 7) "The normative goals of the company can be realized by maximizing the market value of the company (market value of the firm), which maximizes the company's market value is the same as maximizing the stock market price, for companies that go public"

The Value of the Company

Measurement of company value can be measured using stock prices using ratios called valuation ratios. According to Sudana (2011: 23), the valuation ratio is a ratio associated with evaluating the performance of company shares that have gone public. Several methods are used to measure company value:

a. Price Earning Ratio (PER), which shows how much money is willing to spend to pay every dollar of reported profit (Brigham and Houston.2006: 110)

\[
\text{PER} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}}
\]
b. PBV is a ratio that shows whether the price of shares traded overvalued (above) or undervalued (below) the book value of the shares (Fakhrudin and Hardianto 2001)

\[
PBV = \frac{\text{Market Price per share}}{\text{Book value per share}}
\]

c. Tobin's Q is a comparison between the market value of shares with the book value of the company's equity Weston Copeland, 2001)

\[
\text{Tobin’s } Q = Q = \frac{(EMV + D)}{(EBV + D)}
\]

Where: Q = company value, EMV = market value of equity, EBV = book value of total assets

EMV is obtained by multiplying the closing price) with the number of shares outstanding at the end of the year. While EBV is obtained from the difference in the company's total assets with its total liabilities.

**Funding Decision**

Funding decisions are decisions that must be taken to fund corporate investment, in this study funding decisions are used Debt to Equity Ratio (DER) measure, which is a ratio to measure how the company uses the source of funds from debt and describes the company's ability to pay obligations in the long run and Debt to Assets Ratio (DAR), which is a ratio to measure how much a company's assets are funded with debt.

Tradeoff theory, namely the capital structure theory which states that companies exchange tax benefits on debt with problems caused by potential bankruptcy (Brigham and Houston.2018: 31). In this case, the positive side of debt is the spread of interest which will reduce taxable income, where these savings will increase the market value of the company.

**Macroeconomic factors**

Macroeconomic factors in this study used the interest rate of Bank Indonesia Certificates (SBI). This SBI is used to determine the interest rates at commercial banks, which of course will be related to the credit (debt) used by the company to fund its business.

**Profitability**

Profitability is a measure of a company's ability to generate profits using its resources.

Profitability in this study used two measures, namely Return on Assets (ROA) and Return on Equity (ROE)

\[
\text{ROE} = \frac{\text{Laba neto}}{\text{Ekuitas saham biasa}} ...(\text{Brigham,Houton.2018:141)}
\]

\[
\text{ROA} = \frac{\text{Laba neto}}{\text{Total Asset}} .......(\text{Brigham, Houston.201:140)}
\]

**Effect of Funding Decisions on Company Value**

The decision was taken by the company's financial manager to fund the company's investment. This funding decision will positively affect the value of the company if the proportion of debt increases, the operational funds available for the company's operations will also increase, and if the funds are managed properly, it will increase the company's profit, which will improve the company's performance. Conversely, it will have a negative effect if the amount of debt that is getting bigger, will lead to large interest costs which will reduce the company's profit. Disarming it if the debt is greater will also cause bankruptcy costs. Which will ultimately be the company's value.
Effect of Macroeconomics on firm value.

Macroeconomic factors in this case that are used are the Interest Rates of Bank Indonesia Certificates (SBI). In determining the commercial bank interest rates that are the basis of this SBI interest rate. So if SBI rises, commercial bank interest rates will also rise. Rising bank interest rates will affect the number of interest costs that must be paid by companies. With the high-interest rates that must be paid by the company, it will reduce the company's net profit. The decline in the company's net profit will affect the company's performance which will reduce the company's value.

Effect of profitability on firm value.

Profitability is the ability of a company to generate profits using its resources. In this study, the profitability ratios used are ROA and ROE.

Return on Assets (ROA) is the ratio of returns to total assets. This is a ratio that shows how much the company's total assets can generate profits.

The higher ROA that can be generated, the more effective the company uses its total assets to generate profits. The higher ROA the higher the company's performance, so that the company's value will also be higher.

Return on Equity (ROE) is the ratio of return on common stock equity. The higher the company's ROE, the more effective the company is using funds from company equity. This will improve company performance which will ultimately affect increasing company value.

RESEARCH METHODS

Population and Sample

The population in this study are all Food and Beverages companies listed on the Indonesia Stock Exchange in 2015-2018.

The Food and Beverages company samples were taken are companies that have complete financial statements from 2015-2018. With these criteria obtained 12 companies consisting of ALTO, CEKA, DLTA, ICBC, INDF, MLBI, MYOR, PSDN, SKBM, SKLT, STTP, and ULTJ.

Data types and sources

The type of data in this study is quantitative data and the source of the data is secondary data taken from IDX, Yahoo finance, and BI

Research variable

The dependent variable is the firm's value, and the independent variable is the funding, macroeconomic and profitability decisions.
OPERATIONAL DEFINITIONS OF VARIABLES

The value of the company

Company value or company performance that is formed from the demand and supply in the capital market that illustrates the opinion of the investor community about company performance. The value of the company is measured by the formula for the Earning Ratio:

\[ \text{PER} = \frac{\text{Market Price Per Share}}{\text{Earning Per Share}} \]

Funding Decision

The decision taken by the company's financial manager to fund the company's investment, which can be measured by Debt to Equity Ratio (DER) and Debt to Asset Ratio (DAR) as follows:

\[ \text{DER} = \frac{\text{Total utang}}{\text{Total ekuitas}} \]
\[ \text{DAR} = \frac{\text{Total utang}}{\text{Total Assets}} \]

Macroeconomics

Macroeconomic factors in this case are measured by SBI interest rates

Profitability

The ability of the company to generate profits with its resources, in this case measured by ROA and ROE as follows:

\[ \text{ROE} = \frac{\text{Laba neto}}{\text{Ekuitas saham biasa}} \]
\[ \text{ROA} = \frac{\text{Laba neto}}{\text{Total Asset}} \]

Analysis Tool

To examine the effect of funding, macroeconomic, and profitability decisions on firm value, the following is the multiple linear regression equation:

\[ \text{PER} = a + b_1 \text{DAR} + b_1 \text{DER} + b_3 \text{ROA} + b_4 \text{ROE} + b_4 \text{SBI} + e \]

Classic Assumption Test Results

1. Normality Test

The normality test in this study was conducted to determine whether, in a regression model, the residual value of the regression has a normal distribution. The normality test will be carried out with the P-Plot test. To detect normal residual values, it is done by looking at the plotting points whether they are around the diagonal line or not. The normality test results in this study are as follows:

Gambar 3.1 Hasil Pengujian Normalitas
Based on the picture above, it can be seen that the points or data are near or follow the diagonal line, it can be said that the residual value is normally distributed.

2. Multicollinearity Test

This test aims to determine whether there is a correlation between the independent variable with the dependent variable. A good regression model should not occur the correlation between independent variables. In the regression model, there is no multicollinearity if the tolerance value is more than 0.10 and the VIF value is less than 10 (Ghozali, 2009: 95). The test results in this study are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>DAR</td>
<td>0.253</td>
</tr>
<tr>
<td>DER</td>
<td>0.245</td>
</tr>
<tr>
<td>ROA</td>
<td>0.815</td>
</tr>
<tr>
<td>ROE</td>
<td>0.989</td>
</tr>
<tr>
<td>SBI</td>
<td>0.941</td>
</tr>
</tbody>
</table>

Based on the data presented in the table above, it can be seen that the VIF values of the five variables have a tolerance value > 0.1. And the VIF values of the five variables get a value < 10, so it can be interpreted that between independent variables do not occur multicollinearity.

3. Heteroscedasticity Test

Heteroscedasticity test is done with the aim to test whether in the regression model there is an inequality of variance from one observation to another observation residuals. To find out the presence or absence of heteroskedasticity symptoms, you can use the Scatter Plot chart. To detect heteroscedasticity test by looking at the dot patterns on scatter plot regression.

![Scatter Plot](image)

**Gambar 3.2 Hasil Pengujian Heteroskedastisitas**

Based on the picture above it is known that there is no clear pattern, such as the points spread above and below the number 0 on the Y-axis and do not form a regular pattern (wavy, widened and then narrowed) so that it can be concluded that the regression model is free from heteroscedasticity symptoms.
4. Autocorrelation Test

Autocorrelation test is performed to find out whether in the linear regression model there is a correlation between the error of the intruder in the \( t \) period and the error in the \( t-1 \) period (before). The value of Durbin Watson obtained is as follows:

<table>
<thead>
<tr>
<th>Mode 1</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.717(^a)</td>
<td>.514</td>
<td>.469</td>
<td>1.31935</td>
<td>2.123</td>
</tr>
</tbody>
</table>

\( a \). Predictors: (Constant), SBI, ROE, DAR, ROA, DER  
\( b \). Dependent Variable: LNPER, LNPBV

Based on the data above, it can be seen that the value of Durbin Watson is 2.123. The test is said to be free from autocorrelation if it is in the range \( du \) to 4-\( du \). The determination of the \( du \) value is obtained from the Durbin Watson table. At the error level of 0.05 with the magnitude of observation obtained a \( du \) value of 1,727. So the autocorrelation free range is 1,727 to 2,273. While the calculation results obtained 2.123 which means that the value of Durbin Watson is still in the autocorrelation free range.

Analysis of Regression Model Calculation Results

As for the results of the regression test conducted in this study, the following results are obtained:

\[
\begin{align*}
\text{Tabel 3.3 Hasil Regresi Linier Berganda} \\
\text{Variabel} & | \text{Unstandardized Coefficients} | B & \text{Std. Error} \\
\text{(constant)} & | \text{} | 4.182 & 1.050 \\
\text{DAR} & | \text{} | 4.260 & 2.211 \\
\text{DER} & | \text{} | -2.509 & 0.616 \\
\text{ROA} & | \text{} | -18.781 & 2.746 \\
\text{ROE} & | \text{} | 0.000 & 0.001 \\
\text{SBI} & | \text{} | 0.093 & 0.142 \\
\end{align*}
\]

Meanwhile, the regression equation that has been built in this study is as follows:

\[
Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \varepsilon
\]

Based on the results of the regression test with the values presented in the table above and referring to the equation that has been built in this study, the regression equation becomes:

\[
Y = 4.182 + 4.260X_1 - 2.509X_2 - 18.781X_3 + 0.000X_4 + 0.093X_5 + \varepsilon
\]

Based on the above formulation, it can be seen that the constant value of the Company Value variable is 4.182. In this study, the interpretation of Company Value when \( x = 0 \), therefore the value of the company tends to increase. The results presented above also show that there is a one-way relationship created, namely DAR, ROE, and SBI. Whereas DER and ROA show the direction of the inverse relationship.
Proof of Hypothesis

a. F test or simultaneous test

Based on the results of the F test (simultaneous) that has been done by researchers, the following results are obtained:

<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>99.255</td>
<td>5</td>
<td>19.851</td>
<td>11.404</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>93.997</td>
<td>54</td>
<td>1.741</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>193.251</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R Square     0.514
Adjusted R Square 0.469
Std. Error of the Estimate 1.31935

Based on the table above, it can be seen that the F value obtained in this study was 11.404 with a significance level obtained at 0.000. As for the F value of the table obtained is 2.5572. So that it can be seen that in this study F<sub>count</sub> > F<sub>table</sub> and sig values are smaller than the probability value of 0.05, or the value of 0.000 <0.05, which means that in this study the independent variables proved to have a simultaneous effect on the dependent variable of the study. From the table above, the magnitude of adjusted R<sup>2</sup> is 0.514, this means that 51.4% of the variation in Company Value can be explained by variations of the three independent variables. While the rest (100% - 51.4% = 48.6%) is explained by other causes outside the model.

b. T test or partial test

Based on the results of the t test (partial) that has been done by researchers, the following results are obtained:

<table>
<thead>
<tr>
<th>Variabel</th>
<th>t hitung</th>
<th>Sig.</th>
<th>t tabel</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>3.982</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAR</td>
<td>1.927</td>
<td>0.059</td>
<td>1.6759</td>
<td>H&lt;sub&gt;1&lt;/sub&gt; diterima</td>
</tr>
<tr>
<td>DER</td>
<td>-4.072</td>
<td>0.000</td>
<td>1.6759</td>
<td>H&lt;sub&gt;2&lt;/sub&gt; diterima</td>
</tr>
<tr>
<td>ROA</td>
<td>-6.839</td>
<td>0.000</td>
<td>1.6759</td>
<td>H&lt;sub&gt;3&lt;/sub&gt; diterima</td>
</tr>
<tr>
<td>ROE</td>
<td>0.340</td>
<td>0.735</td>
<td>1.6759</td>
<td>H&lt;sub&gt;4&lt;/sub&gt; ditolak</td>
</tr>
<tr>
<td>SBI</td>
<td>0.657</td>
<td>0.514</td>
<td>1.6759</td>
<td>H&lt;sub&gt;5&lt;/sub&gt; ditolak</td>
</tr>
</tbody>
</table>

Based on the data presented in the table above, it is known that two variables have a calculated t value greater than t table. The DAR variable has a value of t arithmetic > t table, 1.927 > 1.6759 so that it is proven to have a partial effect on Company Value. The DER variable has the value of t count > t table, -4.072 > 1.6759 so that it is proven to affect Company Value. The ROA variable has the value of t count > t table, -6.839 > 1.6759 so that it is proven to affect Company Value. The ROE variable has a calculated t value < t table, 0.340 < 1.6759 so that it is proven to have a partial effect on Company Value.
so that it is proven to have no partial effect on Company Value. The SBI variable has a calculated t value <t table, 0.657 <1.6759 so that it is proven to have no partial effect on Company Value.

CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

From the results of the study, it can be concluded that simultaneously there is a significant influence between funding decisions (DER and DAR), Macroeconomics (SBI) and Profitability (ROA and ROE) on firm value (PER).

Based on hypothesis analysis it can be concluded that DAR, DER, and ROA partially have a significant effect on firm value. Whereas ROE and SBI do not have a significant effect on Company Value (PER). Even so, the contribution of the independent variable to the dependent variable is 46.9%, which means that the free variable can explain the variability of the dependent variable by 46.9%, while 53.1% is explained by other variables outside the model under study.

Limitations in this study are that researchers only use the variable funding decisions, macroeconomics, and profitability as variables that affect the value of the company. In further research, investment decision variables and other macroeconomic variables can be added again to get better results.

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