The Effect of Dividend Policy, Debt Policy, And Profitability on The Value of Automotive Companies Listed on The Indonesia Stock Exchange 2017-2021

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Abstract. The purpose of this research is to find out the effect of dividend policy, in this case, reflected by the Dividend Payout Ratio (DPR), debt policy which is reflected by the Debt-to-Equity Ratio (DER), and profitability which is reflected by the Return on Assets (ROA) of the firm value, reflected by Price to Book Value (PBV). This study uses a population of automotive companies listed on the Indonesia Stock Exchange for the 2017-2021 research period with a research sample of 11 companies selected using the purposive sampling method. The data analysis technique used in this research is multiple linear regression and t-test with a significance value of 0.05. The results of the F test reflect if dividend policy, debt policy, and profitability affect firm value.

Keywords: Dividend, Profitability, Firm value

1 Introduction

The decision regarding the return of a stock is very important for investors, whether the return will be distributed to shareholders in the form of dividends or will be held as an investment in the future. Investors tend to be more interested in returns in the form of dividends than capital gains. Companies that distribute shareholder profits in the form of dividends tend to have higher share prices, therefore the value of the company is also higher because the share price is proportional to the value of the company, the higher the shares of a company, the higher the value of the company in the eyes of investors. (Tita et al., 2018). Dividend policy is an important factor that must be considered by management in managing the company.

In general, the important thing that investors must pay attention to is the value of the company, because investors will tend to see the value of a company before investing their capital. Companies with high values will attract higher investments as well (Thamrin, 2012). The value of the company is considered by investors to assist in making investment decisions. In addition, the high and low value of the company also reflects the prosperity of shareholders. So, maximizing company value is a long-term goal that every company wants to achieve. One of the ratios used to measure company value is Price to Book Value (PBV), which is a ratio that describes how much the market appreciates the book value of a company's shares. The higher the PBV value, the greater the market confidence in the company's prospects, this reflects the higher the value of the company (Khan, 2021). The dividend policy has a significant influence on many parties, both the company itself and other parties such as shareholders and creditors. In this case, the dividend policy can be seen using the dividend payout ratio which is commonly referred to as the Dividend Payout Ratio, namely the percentage of profit paid in the form of dividends or the ratio between profits paid in the form of dividends and the total profit available to shareholders. (Bayu Ganar et al., 2018).

Debt policy, which is often referred to as a funding decision by management, will affect the company's valuation which is reflected in the stock price. Therefore, one of the tasks of financial managers is to determine funding policies that can maximize stock prices which are a reflection of a company's value (Yuniati et al., 2016). One of the ratios used to measure debt policy is the Debt-to-Equity Ratio (DER). DER is a capital management ratio that reflects the company's ability to finance its business with loans provided by shareholders. The profitability of a company reflects the percentage of profit or profit that can be generated by the company for shareholders or investors. (Ferina et al., 2015). Profit is a benchmark for determining stock prices for investors. Return on Assets (ROA) as a proxy for the company's profitability will be able to increase the value of the company. This is because the higher the profit or profit generated by the company, the higher the...
stock price and the value of the company in the eyes of investors or creditors (Khan, 2021). The greater the Return On Assets (ROA) of a company indicates that the greater the level of profit achieved by the company and the better the position of the company in terms of asset utilization and utilization. (Rosikah et al, 2018) Based on the description that has been presented, the formulation of the problem that will be studied in this research is: Do Dividend Policy, Debt Policy, and Profitability Affect Firm Value? This study aims to determine whether Dividend Policy, Debt Policy, and Profitability affect firm value.

2 Literature Review

2.1 The value of the company

The value of the company is defined as market value because the value of the company can provide maximum shareholder prosperity if the company's share price increases. Various policies are taken by management to increase the value of the company by increasing the prosperity of the owners and shareholders as reflected in the share price (Sondakh et al., 2006). Company value is the fair value of the company which describes the investor's perception of a particular issuer so that the company's value is the investor's perception of the company which is always associated with the stock price (Nelwan & Tulung, 2018). Company value is the price that prospective buyers are willing to pay if the company is sold. The higher the value of the company, the greater the prosperity that will be received by the owner of the company (Firmansyah et al., 2018). For companies that issue shares in the capital market, the price of shares traded on the stock exchange is an indicator of company value (Tjahjono, 2013).

The value of the company can be reflected in the Price to Book Value (PBV) obtained from the market price per share with the book value. A high Price To Book Value will make the market believe in the company's performance and prospects in the future. This is also the desire of the company's shareholders because a high company value indicates the prosperity of shareholders is also high (Tauke et al., 2017).

2.2 Dividend Policy

Dividend policy is an integral part of the company's funding decisions. The dividend payout ratio determines the amount of profit that can be retained in the company as a source of funding. However, holding a larger amount of current earnings in the company also means that less money will be available for current dividend payments. Thus, the main aspect of a company's dividend policy is determining the allocation of profits (Zuliani, 2012).

The right relationship between dividend payments and the addition of the company's retained earnings. Dividend policy concerns the issue of the use of profits that are the rights of shareholders (Tita et al., 2018). The profits can be divided as dividends or held for reinvestment. The ratio used is the DPR (Dividend Payout Ratio) which is the percentage of profit paid in the form of dividends, or the ratio between profits paid in the form of dividends and the total profit available to shareholders (Subiyantoro, 2003).

2.3 Debt policy

Debt policy is a decision to use debt by considering the fixed costs that arise from debt in the form of interest, which will lead to increased financial leverage and an increasingly uncertain rate of return for ordinary shareholders (Daniel et al., 2015). Debt policy is related to management's decision to increase or decrease the proportion of long-term debt and equity used to finance the company's operational activities (Nelwan, 2018).

Funding decisions by management will affect the company's research which is reflected in stock prices. Therefore, one of the tasks of financial managers is to determine funding policies that can maximize stock prices which are a reflection of a company's value (Tulung, 2018).

2.4 Profitability

A profitability ratio is a ratio to assess the company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company (Tauke et al., 2017). The profitability ratio is a ratio that measures the overall effectiveness indicated by the size of the level of profit obtained from sales and investment (Sianturi, 2015).

The benefits of profitability and indicators used to measure profitability are knowing the company's profit position in the previous year with the current year, knowing the level of profit earned by the company in one period, knowing the progress of profits from time to time, knowing the amount of net profit after tax with own capital, and find out the productivity of all company funds used both loan capital and own capital (Satiawati, 2020).

2.5 The Relationship of Dividend Policy to Firm Value

One form of return that will be obtained by potential investors is dividends. A dividend is a net profit after tax that will be distributed to shareholders. The greater the dividend paid to shareholders, the smaller the retained earnings and vice versa. Determining the amount of the company's net profit to be distributed as dividends is a company management policy, and will affect the company's profitability and share price (Tita, 2011).

H1: Dividend policy has a significant positive effect on firm value

Relationship of Debt Policy to Firm Value Debt policy is a decision to use debt by considering the fixed costs that arise from debt in the form of interest, which will lead to increased financial leverage and an increasingly uncertain rate of return for ordinary shareholders (Septariani, 2017)(Sianturi, 2015).
H2: Debt policy has a significant positive effect on firm value

Profitability Relationship to Firm Value

Profitability shows the effectiveness of the company in generating profits by managing its assets. Increased profitability can affect the value of the company. In companies that have a high level of profitability, their shares will be in demand by investors, so that high profitability also reflects the company's good prospects so that investors are interested in investing which will increase the company's stock price and increase the value of the company. (Sianturi, 2015).

H2: Profitability has a significant positive effect on firm value.

3 Research Methods

The researcher uses quantitative research with a causal approach that aims to see the relationship between the independent variable and the dependent variable. A quantitative method can be described as a research method based on the philosophy of positivism used to examine a particular population or sample, data collection using quantitative or statistical data analysis research instruments which have the aim of testing predetermined hypotheses.

Population (object of research)

In this study, the research population is automotive companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 research period.

3.1 Sampling technique

The sampling technique used in this study is purposive sampling, where this technique is a sampling technique with certain considerations set by the researcher on the object under study.

Data collection technique

In this study, documentation data collection techniques were used, where the documentation method was obtained from data on the financial statements of automotive companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 research period.

Data type

The type of data used in this research is documentary data. This documentary data is in the form of invoices, journals, letters, etc. In this study, the researcher uses the financial statements of automotive companies listed on the Indonesia Stock Exchange (IDX) for the 2017-2022 research period.

Data source

The source of data in this study comes from the official website of the Indonesia Stock Exchange IDX.go.id.

Variable operational definition

The value of the company in this study, the value of the company uses the PBV (Price to Book Value) indicator. PBV reflects how much the market appreciates the book value of a company's shares. If this ratio is higher, it means that the market believes in the company's prospects (Khan, 2021). The formula for calculating PBV:

\[ PBV = \frac{\text{Market price per share}}{\text{Book value per share}} \]  (1)

3.2 Dividend policy

A dividend policy is a decision in which the profits earned by a company at the end of the year will be distributed to shareholders in the form of dividends or the profits are also retained to increase capital for investment financing in the future (Tita et al., 2018). The formula for calculating dividend policy:

\[ DPR = \frac{\text{Dividend per share}}{\text{Earnings per share}} \times 100\% \]  (2)

3.3 Debt policy

Debt policy is a decision in using debt with consideration of fixed costs arising from debt such as interest, which in turn can lead to increased financial leverage and will also make the returns more uncertain for common shareholders. (Ferina et al., 2015). The formula for calculating debt policy:

\[ Debt \ Equity \ Ratio = \frac{\text{Total Amount of debt}}{\text{Total Equity}} \]  (3)

3.4 Profitability

Profitability is the company's ability to generate profits. This study uses the indicator ROA (Return on Assets). ROA is considered the right indicator because ROA can compare profit after tax with total assets (Tita et al., 2018). The formula for calculating ROA:

\[ Return \ on \ Assets = \frac{\text{Earnings After Tax}}{\text{Total assets}} \]  (4)

Data analysis technique

Methods of data analysis used in this research include classical assumption tests, regression analysis, and also hypothesis testing. In analyzing the data, the researcher used the SPSS 22 program. The SPSS program was used because software is a statistical data processor that is commonly used in the business field, ranging from simple to complex processing.

Analysis and discussion

Descriptive statistics statistics are used to analyze data by describing or describing the data that has been collected as it is without making conclusions that apply to the general public as seen from the average, maximum, and minimum standard deviation values.

Table 1. Descriptive Statistical Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPR</td>
<td>11</td>
<td>13.11</td>
<td>132.98</td>
<td>45.971</td>
<td>29.5319</td>
</tr>
<tr>
<td>DER</td>
<td>11</td>
<td>15.98</td>
<td>321.11</td>
<td>101.3231</td>
<td>61.5478</td>
</tr>
<tr>
<td>ROA</td>
<td>11</td>
<td>2.11</td>
<td>55.31</td>
<td>13.7631</td>
<td>13.5439</td>
</tr>
<tr>
<td>PBV</td>
<td>11</td>
<td>1.43</td>
<td>53.65</td>
<td>8.4396</td>
<td>11.5792</td>
</tr>
</tbody>
</table>

Valid \( n = 11 \) (listwise)
The results of the descriptive data test above on automotive companies listed on the Indonesia Stock Exchange in 2017-2022 with the amount of data used in 11 samples of companies having a minimum DPR value of 13.11% and a maximum of 132.98% with a mean of 45.971% and a standard deviation of 29.53190 %. DER has a minimum value of 15.98% and a maximum of 321.11% with a mean of 101.3231% and a standard deviation of 61.54781%. ROA has a minimum value of 2.11% and a maximum of 55.31% with a mean of 13.7631% and a standard deviation of 13.54391%. PBV has a minimum value of 1.43% and a maximum of 53.65% with a mean of 8.4396% and a standard deviation of 11.57924%.

3.5 Normality test

This test has the aim of knowing if the regression model and both dependent and independent variables have a distribution or not. The regression model is said to be eligible if the spread of data reflected from the probability plot has points that spread both below and above the diagonal line. If these assumptions are met, the data studied are normally distributed.

![Normal Probability Plot Graph](image)

Fig. 1 Normal Probability Plot Graph

In Figure 1 it can be seen that the data points are scattered in the area between 0 - Y and do not form a certain pattern, then the regression model formed is identified as not heteroscedasticity because the data processing does not occur heteroscedasticity, then the model regression is feasible to use in this study.

3.6 Autocorrelation Test

Autocorrelation test aims whether a model linear regression there is a correlation between the confounding error in period t with the error in the previous period. If there is a correlation, it is called an autocorrelation problem. The research provisions of the autocorrelation test are said to have no autocorrelation if the Durbin-Watson value is between the limits of -2 to 2. The value of Durbin-Watson's calculation from the results of the regression calculation is presented in Table 4 below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Durbin-Watson</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.583</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors : (Constant), ROA, DER, DPR
b. Dependent Variable : PBV

DurbinWatson's calculated value is 1.583. Based on the predetermined value that the Durbin-Watson (DW Test) value is between -2 and 2, namely -2 < 1.583 < 2, it can be concluded that the regression model does not occur autocorrelation.

3.7 Multiple linear regression

Multiple regression dependent variable is influenced by two or more independent variables. Multiple linear regression was applied in this study to determine the effect of Dividend Policy proxied by Dividend Payout Ratio (DPR), Debt Policy proxied with Debt-to-Equity Ratio (DER) and Profitability proxied by Return on Assets (ROA) to firm value proxied by Price to Book Value (PBV) using the SPSS 22 program.

![Multiple Linear Regression Results](image)

Table 5. Multiple Linear Regression Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Content)</td>
<td>-9.658</td>
<td>1.258</td>
<td>-7.346</td>
<td>.000</td>
</tr>
<tr>
<td>DPR</td>
<td>.019</td>
<td>.021</td>
<td>.059</td>
<td>.981</td>
</tr>
<tr>
<td>DER</td>
<td>.089</td>
<td>.007</td>
<td>.621</td>
<td>8.964</td>
</tr>
<tr>
<td>ROA</td>
<td>.575</td>
<td>.053</td>
<td>.721</td>
<td>9.887</td>
</tr>
</tbody>
</table>

PBV = -9.658 + 0.019 DPR + 0.089DER + 0.575ROA + e

constant (a)

The multiple linear regression equation shows a constant value (a) of -9.658 and has a negative value. This value indicates that if the independent variables, namely Dividend Policy (DPR), Debt Policy (DER), and Profitability (ROA) are equal to zero (0) or constant, the change in the Firm Value (PBV) variable is -9.658.

3.8 Dividend Policy Regression Coefficient (DPR)

The value of X1 is 0.019 indicating the direction of the positive relationship (unidirectional) between dividend policy and firm value. These results indicate that the higher the dividend policy proxied by the Dividend Payout Ratio (DPR), the higher the firm value. Conversely, if there is a decrease in dividend policy, it can reduce the value of the company.

3.9 Debt Policy Regression Coefficient (DER)

The value of X2 is 0.089 indicating the direction of a positive relationship (unidirectional) between debt policy and firm value. These results indicate that if there is an increase in debt policy as proxied by the Debt-to-Equity Ratio (DER) of one unit, the company will
experience an increase in firm value of 0.089. Conversely, if it decreases by one unit, the value of the company will decrease by 0.089.

3.10 Profitability Regression Coefficient (ROA)

The value of X3 is 0.575 indicating the direction of a positive relationship (unidirectional) between profitability and firm value. These results indicate that the higher the level of profitability proxied by Return on Assets (ROA), the firm value will increase. Conversely, if there is a decrease in the level of profitability, it can reduce the value of the company.

3.11 Model Feasibility Test (F Test)

The feasibility test of the model in this study uses the F test, which is to test the variables in the study consisting of Dividend Policy proxied by Dividend Pay-out Ratio (DPR), Debt Policy proxied by Debt-to-Equity Ratio (DER), and Profitability proxied by Return on Assets (ROA) has a significant effect on Company Value which is proxied by Price to Book Value (PBV)

<table>
<thead>
<tr>
<th>Table 6 Model Feasibility Test (F Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PBV
b. Predictors: ROA, DER, DPR

The results of the model feasibility test obtained a significant value of 0.000 <0.05 which identified that the independent variables of dividend policy (DPR), debt policy (DER), and profitability (ROA) affected the dependent variable of firm value (PBV) in registered food and beverage companies, on the IDX. This indicates that this research model deserves to be continued in the next analysis.

3.12 Coefficient of Determination (R2)

Coefficient of determination (R2) measures how far the model's ability to explain the variation of the dependent variable. In this study, the analysis of the coefficient of determination is used to determine the percentage of influence between dividend policy (DPR), debt policy (DER), and profitability (ROA) on firm value (PBV) in food and beverage companies listed on the IDX. The value of the coefficient of determination is between zero (0) and one (1), a value close to one means that the independent variable almost provides all the information needed to predict the variation of the dependent variable.

Table 7. Coefficient of Determination Results (R2)

<table>
<thead>
<tr>
<th>Model</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>.863</td>
<td>.918</td>
<td>2.88941</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ROA, DER, DPR
b. Dependent Variable: PBV

Based on Table 7, it can be seen that the coefficient of determination is 0.887, which means that dividend policy (DPR), debt policy (DER), and profitability (ROA) can affect firm value (PBV) by 88.7% while the remaining 11.3% is influenced by another factor.

3.13 Hypothesis Test (t-Test)

Hypothesis testing is done by using the t-test. The t-test in this study was conducted to examine the effect of Dividend Policy as proxied by the Dividend Pay-out Ratio (DPR), Debt Policy as proxied by Debt-to-Equity Ratio (DER), and Profitability proxied by Return on Assets (ROA) on Company Value proxied by Price to Book Value (PBV).

The test is carried out with a significant level of 0.05 (α = 5%). If the significance value is > 0.05, then H0 is accepted and H1 is rejected, which means that dividend policy (DPR), debt policy (DER), and profitability (ROA) individually have an effect. If the significance value is <0.05, then H0 is rejected and H1 is accepted which means that dividend policy (DPR), debt policy (DER), and profitability (ROA) individually have a significant effect on firm value (PBV).

<table>
<thead>
<tr>
<th>Table 8 Hypothesis test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1 (Contant)</td>
</tr>
<tr>
<td>DPR</td>
</tr>
<tr>
<td>DER</td>
</tr>
<tr>
<td>ROA</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PBV

4 Conclusion

Based on the results above, it can be concluded as follows:

Testing the Dividend Policy (DPR) on Firm Value. From the results of the tests that have been carried out, it is found that dividend policy (DPR) has a positive effect and the significance level of the dividend policy variable (DPR) is 0.367 > 0.05, so the hypothesis (H1) is H0 is accepted and H1 is rejected. This condition indicates that the effect of the dividend policy variable (DPR) on the firm value (PBV) listed on the IDX is not significant.

4.1 Debt Policy Testing (DER) on Firm Value

From the results of the tests that have been carried out, it is found that the debt policy (DER) has a positive effect and the significance level of the debt policy variable (DER) is 0.000 <0.05, so the hypothesis (H2) is that H0 is rejected and H1 is accepted. This condition indicates that the effect of the debt policy variable
4.2 Profitability Testing (ROA) on Firm Value

From the results of the tests that have been carried out, it is found that profitability (ROA) has a positive effect and the significance level of the profitability variable (ROA) is 0.000 < 0.05, so the hypothesis (H3) is Ho is rejected and H1 is accepted. This condition indicates that the effect of the profitability variable (ROA) on the firm value (PBV) listed on the IDX is significant.

5 Discussion

5.1 The Effect of Dividend Policy on Firm Value

The test results in this study indicate that the dividend policy proxied by the Dividend Payout Ratio (DPR) has an insignificant effect on firm value (PBV) in a positive direction. So, the first hypothesis (H1) which states that dividend policy has a significant positive effect is rejected because the results of the hypothesis test (t-test) that dividend policy proxied by the Dividend Payout Ratio (DPR) has no significant effect on firm value. Dividend policy is a decision regarding the company's profits whether to be distributed as dividends or to be reinvested. The dividend policy as proxied by the Dividend Payout Ratio (DPR) shows the profit that will be paid to the company's shareholders in the form of dividends (Zuliarni, 2012). Automotive company investors in this study are classified as investors who invest their funds for a short period because investors in investing do not look at the level of dividends to be distributed by the company but only look at the level of profit or profit earned by the company. The results of this study are in line with research conducted by (Dwipratama & Priana, 2009) under the title the effect of dividend policy, debt policy, profitability, and investment decisions on firm value which shows the results that dividend policy has no significant effect on firm value.

The Effect of Debt Policy on Firm Value

The test results in this study indicate that the debt policy proxied by the Debt-to-Equity Ratio (DER) has a significant effect on firm value (PBV) in a positive direction. So that the second hypothesis (H2) which states that debt policy has a significant positive effect is accepted because the results of the hypothesis test (t-test) of dividend policy proxied by the Debt-to-Equity Ratio (DER) has a significant positive effect on firm value. The results of this study indicate that the higher the company's debt policy, the higher the value of the company. This means that the higher the investor's interest in investing, the higher the value of the company. The results of this study are in line with research conducted by (Tita et al., 2018) which shows the results that dividend policy has a significant positive effect on firm value.

5.2 The Effect of Profitability on Firm Value

The test results in this study indicate that profitability as proxied by Return on Assets (ROA) has a significant effect on firm value (PBV) in a positive direction. So, the third hypothesis (H3) which states that profitability has a significant positive effect is accepted because the results of the hypothesis test (t-test) that profitability proxied by Return on Assets (ROA) has a significant positive effect on firm value. The results of this study indicate that if profitability increases it will also increase the value of the company. This means that the higher the level of profitability generated by the company can provide a positive signal for investors in assessing that the company is in a healthy condition and can earn high profits. So that investors will be interested in investing in companies that have a high level of profitability. The higher the investor's interest in investing, the higher the value of the company will be. The results of this study are in line with research conducted by (Bayu Ganar et al., 2018) which shows the results that profitability has a significant positive effect on firm value.

6 Conclusion

Based on the data analysis and discussion that has been carried out in the previous chapter, the conclusions that can be drawn in this study are dividend policy proxied by the Dividend Payout Ratio (DPR) has an insignificant positive effect on the value of food and beverage companies listed on the Indonesia Stock Exchange (IDX). This can be interpreted that the dividend policy (DPR) is not used as a reference to determine the level of change in the value of the company. Debt policy proxied by the Debt to Equity Ratio (DER) has a significant positive effect on the value of food and beverage companies listed on the Indonesia Stock Exchange (BEI). This means that the debt policy (DPR) can be used as a reference to determine the level of change in firm value. Profitability proxied by Return on Assets (ROA) has a significant positive effect on the value of food and beverage companies listed on the Indonesia Stock Exchange (IDX). This means that profitability (ROA) can be used as a reference to determine the level of change in firm value.

References


