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# Analysis of Leverage, Cash Ratio, Net Profit Margin Towards Dividend Payout Ratio in Manufacturing Companies in the Metal Sub Sector and That Listed on the Indonesia Stock Exchange for the 2016-2020 Period

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# ABSTRACT

This study aims to find empirical evidence of Leverage, Cash Ratio and Net Profit Margin to Dividend Payout Ratio in metal and similar sub-sector manufacturing companies listed on the IDX. The period used in this study is 5 (five) years, starting from 2016-2020. The population used in this study amounted to 16 companies. The sampling technique used was purposive sampling method, and 11 companies were used as samples. The data analysis technique used is multiple linear regression analysis. The results of the study found that: partially (1) Leverage has a positive and significant effect on the Dividend Payout Ratio (2) the cash ratio has a positive and significant effect on the Dividend Payout Ratio (3) Net profit margin has no effect on the Dividend Payout Ratio.

Keywords: Leverage, Cash Ratio, Net Profit Margin and Dividend Payout Ratio.

# **INTRODUCTION**

In the current era of globalization, the rapid development of business requires accuracy in making decisions, which must be considered and considered by the company's management, to reduce the possibility of risks and uncertainties that will occur. Profit allocation is one of the determining factors of an investment. The profit allocated to retained earnings will be used by the company for reinvestment (reinvestment) in profitable assets, for example for profitable investments. Meanwhile, profits allocated to dividends will be distributed to investors in the form of cash dividends or stock dividends. Investment is the placement of a number of funds at this time with the hope of obtaining profits in the future (Halim, 2015) in Septiani Arie Arsanda, (2011: 1) One form of investment in the capital market is stocks. Stock investors can expect returns in the form of dividends and/or capital gains.

The debt ratio or what is termed leverage is a ratio to measure how much the company's assets are financed with debt (Irawati, 2016). Debt to equity ratio is the ratio of the total debt to the company's total equity. Companies that have greater growth opportunities generally have lower debt to equity ratios in their capital structure policies (Smith and Watts, 1992). Prihantono (2003) revealed that the higher the debt to equity ratio, the higher the debt composition, which will result in the lower ability of the company to pay dividends to shareholders, so that the dividend payout ratio will be lower.

Investors and creditors can use the cash ratio of a company to determine whether the company is experiencing financial problems or not. So, the cash ratio can be used as a good indicator for the short term rather than using other liquidity ratio measurements. Hanafi and Halim (2015; 86) state that the net profit margin (NPM) is one of the profitability ratios that calculates the extent to which the company's ability to generate net profit at a certain level of sales. This ratio provides an overview of profit for shareholders as a percentage of sales, this net



profit margin ratio also measures all efficiency, both production, administration, marketing, funding, pricing and tax management (Prastowo and Julianty, 2015: 97).

In this study, the companies used are metal and similar sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period. The researcher chose to examine the metal and similar sub-sector manufacturing companies listed on the Indonesia Stock Exchange because through the Indonesia Stock Exchange researchers can obtain financial reports and data on metal and similar manufacturing companies that are needed in the study, especially those that are the object of complete research.

# LITERATURE REVIEW

# **Dividend Payout Ratio**

Dividends are the distribution of company profits to shareholders based on the number of shares owned. This distribution will reduce retained earnings and cash available to the company, but the distribution of profits to owners is indeed the main goal of a business. Dividend payout ratios are used in a variety of situations. For example, the ratio is used in valuations as a way of predicting the size of dividends in the coming year, because most analysts use growth in earnings rather than dividends. Second, the retention rate ratio, which is a ratio that indicates the size of the net profit reinvested or retained in the company, is believed to be useful in estimating future earnings growth.

Dividend payout ratio  $= \frac{\text{Dividen tunai per lembar saham}}{\text{Laba bersih per lembar saham}}$ 

#### Leverage

According to Sudana (2013) Leverage is the use of assets and sources of funds by companies that have fixed costs (fixed expenses) with the aim of increasing the potential profits of shareholders. According to Kasmir (2016) this ratio is used to assess debt with equity so that this ratio is useful for knowing the amount of funds provided by loans (creditors) with company owners. The formula used to find the debt to equity ratio is as follows:

Debt to equity ratio =  $\frac{\text{total hutang}}{\text{modal (equity)}}$ 

#### **Cash Ratio**

Cash ratio is a ratio that reflects the position of the company's cash and cash equivalents to cover current liabilities or short-term debt. The calculation of the cash ratio is cash divided by total current liabilities. According to Kasmir (2012:138) Cash Ratio is a tool used to measure how much cash is available to pay debts. Availability of cash can be shown from the availability of cash or cash equivalents such as checking accounts or savings accounts in banks (which can be withdrawn at any time). It can be said that this ratio shows the company's true ability to pay its short-term debts.

# Net Profit Margin

Net Profit Margin is one of the profitability ratios, this ratio measures the company's ability to generate net income to total sales achieved. Maximum sales will generate maximum



income if the management of the company's financial expenses can be minimized, so that with this ratio the company's performance can be assessed. According to Jumingan (2014), "The value generated from the net profit margin(NPM) gives an important picture because of the success rate of sales and the achievement of the company's profit targets.

 $Net \ Profit \ Margin = \frac{Earning \ After \ Taxes}{Sales}$ 

# **METHODS**

The research method that the author uses in this study is quantitative, the type of research is using the associative method, namely to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the general public (Sugiyono, 2016: 29) with verifying the financial statements of manufacturing companies in the metal and similar sub-sectors listed on the Indonesian Stock Exchange for the 2016-2020 period, with this type of data, namely secondary data. population in this study are metal and similar sub-sector manufacturing companies listed on the Indonesia Stock Exchange. (IDX) during the 2016-2020 period. From these data, there are 15 companies in this population, while also using literature studies by reading related materials. The sample is part of the number and characteristics possessed by the population (Sugiyono 2016). The sample used in this study amounted to 11 companies that met the sampling criteria.

# **RESULTS AND DISCUSSION**

# Results

# Hypothesis test

To find out how much influence the independent variables, namely Leverage (DER), Cash Ratio, and Net Profit Margin (NPM) have on the Dividend Payout Ratio (DPR), it can be seen in Table 4.4 below which pays attention to R-Square, Adjusted R-Square, F -value, regression coefficient, tvalue and significant t.

Variable	Regression	Standard	T count	Significant	Conclusion
	Coefficient	Error			
DER	4,478	2,695	3,761	0.004	Significant
Cash Ratio	0.239	0.108	2,216	0.032	Significant
NPM	0.460	0.138	1.251	0.803	Not significant
Constant = 17,940					
R = 0.845					
R2 = 0.898					
Ad R2j = 0.840; k = 4					
Sig. F = 0.027; n = 45					

**Table 4. Regression Test Results** 

From the results of multiple regression analysis in this study, summarized in Table 4.4 above, it can be seen that only the Cash Ratio has a significant effect on the dependent variable.



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Based on the results of multiple regression analysis, the following regression equation is obtained:

#### DPR = 17,940 + 4,478 DER + 0.239 Cash Ratio - 0.039 NPM

#### **Regression Coefficient Test**

#### Simultaneous Regression Coefficient Test (F Test)

Simultaneous test with F-test aims to determine the joint effect of independent variables on the dependent variable. The results of the F-test show that the independent variables together have a significant effect on the dependent variable if Fcount is greater than Ftable. From the SPSS calculation, which can be seen in Table 4, it is known that the probability value of the variables (DER, Cash Ratio and NPM) in this study is 0.027 and is significant at a level > 5%. From the ANOVA test results obtained Fcount of 15.380, with one-sided testing criteria obtained Ftable of 2.60. Because F count > Ftable, it can be concluded that the variables (DER, Cash Ratio and NPM) simultaneously have a significant effect on the Dividend Payout Ratio.

#### Partial Regression Coefficient Test (t-test)

This test is to find out each independent variable has an effect on the dependent variable, namely the dividend payout ratio. If the value of sig.t <0.05, it can be concluded that the independent variable partially affects the dividend payout ratio (DPR). Based on table 4 above, it can be concluded that the Debt to Equity Ratio (DER) variable has a t-count value of 3.761 with a probability value of 0.004 having a significant effect at the level of a = 5%. From the results of the regression analysis obtained t count of 3.761, with t table of 1.679. Because t count > t table, it can be concluded that the Debt to Equity Ratio (DER) partially has a positive and significant effect on the dividend payout ratio (DPR).

Based on table 4 above, it can be concluded that the Cash Ratio variable has a t-count value of 2.216 with a significant probability value of 0.032 at level a = 5%. From the results of the regression analysis obtained t count of 2.216 with t table of 1.679. Because t count > t table, it can be concluded that the Cash Ratio partially has a positive and significant effect on the dividend payout ratio (DPR).

Based on table 4 above, it can be concluded that the Net Profit Margin (NPM) variable has a t-count value of 1.251 with a probability value of 0.803 which is not significant at the level of a = 5%. From the results of the regression analysis obtained t count of 1.251 with t table of 1.679. Because t count < t table, it can be concluded that the Net Profit Margin (NPM) partially has no significant effect and has a negative direction on the dividend payout ratio (DPR).

#### **Coefficient of Determination Test (R2)**

From table 4 the results of the regression test obtained the value of the coefficient of determination (R2) of 0.898. This result means that there is a contribution of 89.8% of the variables (DER, Cash Ratio and NPM) to the Dividend Payout Ratio (DPR). While the remaining 0.898 (1-89.8 = 88.8) or 88.8% (100% - 88.8% = 11.2%) was explained by other variables not examined in this study.



#### Discussion

#### Effect of DER, Cash Ratio and NPM on DPR

The results of the F-test show that the independent variables jointly have a significant effect on the dependent variable if Fcount is greater than Ftable, the probability value of the variables (DER, Cash Ratio and NPM) in this study is 0.027 and is significant at a level > 5%. From the ANOVA test results obtained Fcount of 15.380, with one-sided testing criteria obtained Ftable of 2.60. Because F count > Ftable, it can be concluded that the variables (DER, Cash Ratio and NPM) simultaneously have a significant effect on the Dividend Payout Ratio.

# Effect of DER on DPR

To test the partial effect of the independent variable on the dependent variable, the t-test was used. Based on the results of the analysis with the t-test, the partial effect for each variable, it can be concluded that the Debt to Equity Ratio (DER) variable has a t-count value of 3.761 with a significant probability value of 0.004 at level a = 5%. From the results of the regression analysis obtained t count of 3.761, with t table of 1.679. Because t count > t table, it can be concluded that the Debt to Equity Ratio (DER) partially has a significant effect and has a positive direction on the dividend payout ratio (DPR). The results of this study are not in line with Tanta Kuswanta (2016) which states that Leverage has a negative and significant effect on Dividend Policy.

# **Effect of Cash Ratio on DPR**

To test the partial effect of the independent variable on the dependent variable, the t-test was used. Based on the results of the analysis with the t-test, the partial effect for each variable, it can be concluded that the Cash Ratio variable has a t-count value of 2.216 with a significant probability value of 0.032 at the level of a = 5%. From the results of the regression analysis obtained t count of 2.216 with t table of 1.679. Because t count > t table, it can be concluded that the Cash Ratio partially has a positive and significant effect on the dividend payout ratio (DPR). The results of this study are in line with Ihwandi's research (2019) which states that the Cash Ratio has a positive and significant effect on the dividend payout ratio (DPR).

The cash ratio has a positive and significant coefficient. This means that if the cash ratio increases, the dividend payout ratio that is distributed is also positive or increases. The results of this study indicate that a high cash ratio can be one of the factors that must be considered by company management before making a decision to determine the amount of dividends to be paid to shareholders. The stronger the company's cash position means the greater its ability to pay dividends due to high cash availability can reduce conflicts between agents (managers) and shareholders (principals). The results of this study indicate that a high cash ratio can be one of the factors that must be considered by company management before making a decision to determine the amount of dividends.

The stronger the company's cash position means the greater its ability to pay dividends. The ability to pay dividends due to high cash availability can reduce conflicts between agents (managers) and shareholders (principals). The results of this study indicate that a high cash ratio can be one of the factors that must be considered by company management before making a decision to determine the amount of dividends to be paid to shareholders. The stronger the



company's cash position means the greater its ability to pay dividends. The ability to pay dividends due to high cash availability can reduce conflicts between agents (managers) and shareholders (principals).

# Influence of NPM on DPR

To test the partial effect of the independent variable on the dependent variable, the t-test was used. Based on the results of the analysis with the t-test, the partial effect for each variable, it can be concluded that the Net Profit Margin (NPM) variable has a t-count value of -0.251 with a probability value of 0.803 which is not significant at level a = 5%. From the results of the regression analysis obtained t count of -0.251 with t table of 1.679. Because t count < t table, it can be concluded that the Net Profit Margin (NPM) partially has no significant effect and has a negative direction on the dividend payout ratio (DPR). The results of this study are in line with the research of Donald Ferdinanta Hutagalung (2018) which states that Net Profit Margin (NPM) has a negative and significant effect on the Dividend Payout Ratio (DPR).

# CONCLUSIONS

This study aims to examine the effect of leverage, cash ratio and net profit margin on dividend payout ratio in metal and similar sub-sector manufacturing companies listed on the IDX for the 2016-2020 period with a research sample of 11 companies:

- 1. Simultaneously, the effect of leverage, cash ratio and net profit margin on dividend payout ratio in metal and similar sub-sector manufacturing companies listed on the IDX has a positive and significant effect.
- 2. Partially, leverage (DER) has no positive and significant effect on the dividend payout ratio of manufacturing companies in the metal and similar sub-sectors listed on the IDX.
- 3. Partially, the cash ratio has a positive and significant effect on the dividend payout ratio in manufacturing companies in the metal and similar sub-sectors listed on the IDX.
- 4. Partially, the net profit margin (NPM) has no positive and significant effect on the dividend payout ratio in manufacturing companies in the metal and similar sub-sectors listed on the IDX.

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