ANALYSIS OF DIVIDEND POLICY (STUDY OF MANUFACTURING COMPANIES REGISTERED ON INDONESIA STOCK EXCHANGE)

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ABSTRACT

This study aims to examine the effect of Liquidity (CR),Leverage (DER), Profitability (ROE) on Dividend Policy. The object of this study is a manufacturing company registered on the stock exchange in 2016- 2018. From 147companies that became the population, there were 107 selected samples obtained by using random sampling through the Slovin formula. Data regression analysis performed is a data panel consisting of cross-sections of data and time series processed by using Microsoft Excel and E-views. The test conducted in this study show that (1) liquidity with the current ratio has no significant effect on the dividend policy, (2) leverage with the proxy of debt to equity ratio has a significant effect on the dividend policy, (3) profitability with the proxy of return on equity ratio has no significant effect and has a negative relationship with dividend policy.

Keywords*: liquidity, leverage, profitability and dividend policy.*

1. INTRODUCTION

In this globalization era, the development of technology and science is rapidly growing. This advancement has resulted in various sectors experiencing increased productivity. This can encourage economic activities which are carried out between producers and consumers more broadly, not only within the scope of the domestic market but can penetrate the international market. The capital market is one of the results of these technological advancements, which can be said as an appropriate media to invest funds both long and short term. One investment model that can be done is the stock investment. Profits that can be given through investing the shares of the company in the form of dividends generated from the net profits of the company.

The dividend distribution itself is distributed based on the portion of the purchase of shares that have been made by investors which certainly aims to get a great profit rate.

For the companies, there are factors that are considered in determining the amount of dividend distribution, that are the need for corporate funds,

liquidity, the company's ability to cover its debts, the company's ability to generate profits and inflation. Liquidity is the basis for determining dividends distributed by companies, because it shows an indication that the company is able to fulfill its current liabilities which must be immediately fulfilled. Therefore, the higher the company's ability to cover its current debt properly using its current assets, then the company's opportunity to obtain loans are also getting higher. It is because the current debts obtained by the company can be used as funds to finance the company's operational activities which indirectly will help the company in generating profits. So, the distribution of dividends can be influenced by the current ratio of a company.

In addition, profitability also becomes a consideration for companies to determine the amount of dividend distribution. Profitability itself is the company's ability to manage its capital to generate profits. Therefore the profits of the company will affect the profits distributed in the form of dividends to shareholders.

Then leverage also becomes a factor that is considered by the company because leverage indicated whether a company is able to cover its debts with all of the company's wealth or not. If the position of the capital structure is not good, it will affect the profits that will be retained by the company. Therefore the thing that determines the number of dividends to be given to shareholders becomes very vital and it has become the duty of financial managers to take the right dividend policy. In this case, the financial manager must be able to make decisions that will balance current dividends with dividends in the future.

Table 1. Current Data Ratio, Debt Equity Ratio, Return On Equity, and Dividend Payout Ratio for Manufacturing Companies listed on the Indonesia Stock Exchange in 2016-2018 "

No	COMPANY	DPR			CR			DER			ROE		
		2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
1	FASW	55,74	38,99	28,57	107,51	74,18	118,75	1,72	1,85	1,59	26,43	22,61	21,78
2	TOTO	79,5	48,1	44,75	219	229,55	311,17	0,69	0,67	0,49	11,06	16,47	12,1
3	SIDO	81,16	81,49	46,86	831,82	781,22	624,94	0,08	0,09	0,1	17,42	18,43	16,26
4	UNVR	99,69	99,67	34,34	60,56	63,37	74,77	2,56	2,65	1,58	135,85	135,4	120,21
5	BRAM	26,08	59,51	69,73	189,08	238,89	218,51	0,5	0,4	0,42	11,28	11,32	4,6
6	SMSM	20,66	71,49	96,38	286,03	373,91	354,54	0,43	0,34	0,35	31,78	30,38	9,79
AVERAGE TOTAL		60,47	66,54	53,44	282,33	293,52	283,78	0,997	1	0,76	38,97	39,10	30,79

Source: Data is processed from idx.co.id

Based on these data, the author is interested in examining **the effect of liquidity, leverage and profitability on dividend policy.** Therefore, the authors take the title **Analysis of Dividend Policy (Study of Manufacturing Companies Registered on the Indonesia Stock Exchange).**

Purpose of research

Based on the background and formulation of the problem above, this research aims to:
1. Find out the effect of liquidity on dividend policy of manufacturing companies listed on the Indonesian Stock Exchange
2. Find out the effect of leverage on the dividend policy of manufacturing companies registered on Indonesia Stock Exchange
3. Find out the effect of profitability on the dividend policy of manufacturing companies registered on Indonesia Stock Exchange.

2. LITERATURE REVIEW

2.1 Objectives of research

This study is expected to be able to contribute and can be a reference for further research also as a comparison for the development of further studies relating to liquidity, leverage, profitability and dividend policy.

Nidar (2016, p. 259) if a dividend has increased than usual then this is a sign that is shown to investors that company management predicts a great income in the future. On the contrary, a decrease or increase in dividends whose amount of change is lower than usual is believed as a signal that the company will have a difficult time in the future.

The point of the above explanation is about some information that is available when the company provides large or small dividends. But in fact, this does not become a standard measure that the company's financial condition is improving. The only thing that can happen is that the company pays a dividend with an increasing amount than as usual, apparently, the company is experiencing a decline in its financial performance.

2.2 Liquidity and dividend policy

The company's liquidity is a concern when making dividend decisions. It is because dividends mean a cash outflows, so the greater the company's cash position and liquidity, the greater the company's ability to pay dividends. The same thing was conveyed by Sutrisno (2017, p.267) that if a company provides dividends, it must be able to provide enough current assets and this will reduce the level of company liquidity. When linked to dividends, the profits to be retained by the company will shrink because the use of retained earnings to finance debt and the company's operational needs has been met. The above theories expressed are in line with the results of research conducted by Safariyan (2015), Dewi (2017), Prawiradkk (2014) showing the results that liquidity has a significant effect on dividend policy.

H1: Liquidity affects dividend policy

2.3 Leverage and dividend policy

Sutrisno (2017, p.267) explains that one of the sources of the company's budget is from creditors in the form of short-term and long-term debt. These debts must be paid off when they are due, and to pay it off requires a budget that must be provided. The more debt that must be paid the greater the funds that must be issued. So the interest

expense created will reduce the number of dividends to be paid to shareholders. Besides, with the due date of the debt, it means that the debt funds must be replaced. The alternative to replace debt funds can be done by finding new debt, and also by internal funding sources by increasing retained earnings. Meanwhile, according to Eltya et al (2016) also said the similar thing that the higher the DER, the higher the level of debt and interest expense. The company will prioritize repaying the debt and making the profit to be retained so that the dividends distributed are small. This is also supported by the study conducted by Dian Masita Dewi (2016), Devi & Erawati (2014), Eltyadkk (2016) which shows the results that leverage has a significant effect on dividend policy.

H2: Leverage affects the dividend policy.

2.4 Profitability and dividend policy

According to Sutrisno (2017, p.268) who explains that for companies that have a stable income, the number of dividends that will be given to shareholders is greater than companies with unstable income. Companies that have stable incomes do not need to provide a lot of cash just in case, while companies with unstable income must provide cash that is great enough. Dividends are part of the company's net profit, meaning that dividends will be paid to shareholders if the company has made a profit. It can be said that company profits will greatly affect the number of dividend payouts. This result is in line with the theory of bird in the hand conclude that investors are more interested in stable income in the form of dividend rather than unstable income like a capital gain. The increased profitability will increase the company's ability to pay dividends to its shareholders. In addition, the dividends given for the profits obtained by the company can be a factor in consideration for investors to invest. This is in line with the results of the study conducted by Prawira et al (2014), Arilaha (2009), Idawati (2014) who support that profitability has a significant effect on the dividend policy.

H3: Profitability has a significant effect on the dividend policy

3. RESEARCH METHODOLOGY

The data used in this study is secondary data. Data in this research are the data relating to dividend policy as the dependent variable, and liquidity, leverage and profitability as independent variables. The data collection method used in this study is the documentation method. This documentation method is a method of collecting data by studying records or documents.

In this study the document was obtained by downloading the annual reports of the company through the official website of the Indonesian Exchange Stock and the official website of the company as well as researchers using literature study techniques carried out by reading the any literatures related to the topic studied, journals and various other sources of writing in order to obtain an overview and theoretical basis of the company problems and analyze data or information about the results of the writing.

3.1 Population

Population is a generalization area that consists of: objects / subjects that have

certain definite qualities that are determined by researchers to be studied and their conclusions are examined. In this study, the population used is manufacturing companies listed on the Indonesian stock exchange. The total population is 147 companies.

3.2 Samples

Sample is part of the number and characteristics belong to the population. This study uses a sample that is determined by using the probability sampling method. Probability sampling is sampling method conducted by giving equal opportunities for each element (member) of the population to be elected as a sampling member. The determination of the number of samples using the formula Slovin, with the following formula:

$$n=(N/(1=N.e^2)) \quad (1)$$

3.3 Data analysis technique

1. Descriptive Statistics

Statistics used to analyze data by explaining about the data that has been collected without intending to draw generalization conclusions.

2. Panel data regression method

Panel data is a combination of time series data and cross section data.

The general form of the panel data equation is as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e_{it} \quad (2)$$

Remarks:
Y = Dividend Policy
X1 = Liquidity
X2 = Leverage
X3 = Profitability
β = Constant
e = Error term
i = Object (Company)
t = Time (Year)

Generally, there are three methods that are used for working with mandatory boards as follows:

1. Common effect model is a fairly simple technique that assumes that combine the existed data, showing the real situation. The results of the regression analysis are considered valid for all objects at all times.
   The regression equation is as follows:
   $$Yit = \beta 0 + \beta 1Xit + \beta 2Xit + \beta 3Xit + eit \quad (3)$$
2. Fixed effect model shows the inequality of constants between objects, even with the same regression coefficient. The permanent effect here is an object. Have a fixed constant for various period of time. As well as the regression coefficient, it has fixed number over time (time invariant). To distinguish one object from another, a dummy

variable is used. Therefore, this model is often called as the Least Squares Dummy Variable or LSDV.

This model equation is as follows:

$$Yit = \beta 0 + \beta 1Xit + \beta 2Xit + \beta 3Xit + \beta 4d1i + \beta 5d2i + \beta 6d3i + eit \quad (4)$$

1. The random effect model is used to overcome the weaknesses of the fixed effect method that uses dummy variables, so the model experiences uncertainty. Without using dummy variables, the random effect method uses residuals, which are thought to have inter-temporal and inter-object relationships.
   The regression equation is as follows:

$$yit = \beta 0i + \beta 1Xit + \beta 2Xit + \beta 2Xit + eit \quad (5)$$

It is not like on the fixed effect model ($\beta 0$ is considered fixed), on this model $\beta 0$ is assumed to be random, so it can be written in the equation as follows:

$$\beta 0 = \beta 0 + \mu i,\ i = 1, \ldots, n \quad (6)$$

To determine which model is the best and can be applied in a study, it is necessary to conduct a test that is intended to be more targeted in managing the data under study. From the three approaches above, two tests were conducted to determine the best model in the study. The first test conducted is the chow test or the Likelihood Ratio test, this test is conducted to choose which one is the best model between the common effect model and the fixed effect model.

The formula can be described as follows:

$$F = \frac{(SSRR - SSRU)/q}{SSRU/(n-k)} \quad (7)$$

Remarks:
SSRR = Sum of Squared Residuals common effect model
SSRU = Sum of Squared Residuals Unrestricted fixed effect model
q = number of restrictions or restrictions in the common effect model
n = number of samples
k = number of parameters in the fixed effect model
The null hypothesis of the Likelihood Ratio test is as follows:
H0: common effect model
Ha: fixed effect model

Meanwhile, the Hausman Test was used to determine which model will be selected in the study, between the random effect model and the fixed effect mode. The formula to get the chi square value in the Hausman test is as follows:

$$M = q'var\ (q)\ -1q \quad (8)$$

$$q = \beta ols - \beta gls \text{ and var } (q) = var\ (\beta ols) - var\ (\beta gls) \quad (9)$$

Remarks:

βols = vector for fixed effect variable statistics
βgls = vector for statistics of random effect variables
The null hypothesis of the Hausman test is as follows:
H0: random effect model
Ha: fixed effect model

3.4 Hypothesis testing

1. Individual or Partial Testing (t Test)

Partial Test (t test) is used to show or describe whether the independent variable partially (individually) has an effect on the dependent variable. Decisions made in this test are based on a significance level of 5% or 0.05.

The formulation of the hypothesis in this test is as follows:

a. Liquidity variables have an effect on dividend policy.
   H0: β1 = 0 Liquidity has no significant effect on dividend policy.
   Ha: β1 ≠ 0 Liquidity has a significant effect on dividend policy
b. The leverage variable has significant effect on dividend policy.
   H0: β2 = 0 Leverage has no significant effect on dividend policy.
   Ha: β2 ≠ 0 Leverage has a significant effect on dividend policy.
c. Variable of Profitability has significant effect on dividend policy
   H0: β3 = "0 Profitability has no significant effect on dividend policy.
   Ha: β3 ≠ 0 Profitability has a significant effect on dividend policy.

The decision making about rejection and hypothesis acceptance are based on the criteria below:

a. Based on the comparison of the value of t count and the basic table of decision making is:
   1. If t arithmetic <t table then H0 is accepted and Ha is rejected (have no effect).
   2. If t arithmetic> T table then H0 is rejected and Ha is accepted (have effect).
b. Based on the value of the probability (significant) the basis for decision making is:
   1. If the probability is> 0.05 then H0 is accepted and Ha is rejected (not significant).
   2. If the probability <0.05 then H0 is rejected and Ha is accepted (significant).

2. R^2 Test or Determination Coefficient

The coefficient of determination is what states about how reliable the regression line matches the data. The coefficient of determination ranges from 0-1. The small value shows that the independent variable in explaining the variation of the dependent variable is not very good or limited. Vice versa, a value close to 1 indicates that the independent variables provide almost all the information needed to predict the independent variables.

4. FINDING AND DISCUSSION

4.1 Data analysis and Hypothesis test

Table 2 Descriptive Statistic Result

	DPR	CR	DER	ROE
Mean	38.69746	247.3241	146.4041	12.2258

				3
Maximum	100	3637.84	9409.97	235.11
Minimum	0.921	3.34	-692.99	-672.76
Std. Dev.	26.56899	268.8071	592.0033	48.9951 8
Observations	321	321	321	321

Source: data eviews 9

From the table above, we can see the output from E-Views 9 about descriptive statistics to find out how much the level of dividend policy, liquidity, leverage, and profitability. As for the interpretation of descriptive statistics from the table above are as follows:

a. Dividend Payout ratio
   The average value of 321 observational data is 38.69746. The highest dividend payout ratio (DPR) is 100 percent owned by INTP and AMFG. Meanwhile the lowest value is 0.921 percent owned by IMAS. Then, the standard deviation is 26.56899, which means that the distribution of the dividend payout ratio is below average.
b. Current rasio
   The average value of the current ratio (CR) is 247.3241. Then the highest value is 3637.84 percent owned by IMPC. Meanwhile the lowest value is 3.34 percent owned by IKAI. Standard deviation has a value of 268.8071 which means that the distribution of the current ratio is above the average value.
c. Debt to equity ratio
   The average value of the debt to equity ratio (DER) is 146.4041. Then, the highest value is 9409.97 percent or 94.09 times more owned by SUI. Then, the lowest value is -692.99 percent or -6.92 times more owned by SULI. The standard deviation has a value of 592.0033 which indicates that the distribution of debt to equity ratio (DER) is above the average value.
d. Return on equity
   The average value of return on equity (ROE) is 12.22583. Then, the highest value is 235.11 percent owned by IKAI. Meanwhile, the lowest value is -672.76 owned by CPRO. The standard deviation value is 48.99518, which means that the distribution of liquid water yield (ROE) is above the average level.

4.2 Selection of panel data regression test model

4.2.1 Likelihood ratio test

Likelihood ratio test or better known as the Chow test is a method used to compare which model is best used in the study. The Likelihood Test looks at the best model between the Common Effect Model (PLS) and the Fixed Effect Model (FEM). The hypothesis in the Likelihood test is as follows:
H0 = Common Effect Model
Ha = Fixed Effect Model
Based on the above hypothesis, H0 is rejected if the probability value of cross-section chi square Likelihood test is more than 0.05, and Ha is rejected if the probability value of the cross-section chi-square Likelihood test Ratio is greater than 0.05. Likelihood test results are described as follows:

Table 3: likelihood ratio test

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed EFfects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.724890	(72,117)	0.0000
Cross-sectionChi-square	337.722351	72	0.0000

Source: data eviews 9

It can be concluded that the value of the probability of cross-section chi square for this study was 0.0000 and smaller than 0.05. Then Ha is accepted and H0 is rejected. So the best model for this research is Fixed Effect Model.

4.2.2 Hausman Test

In this study, the Hausman test was also used to determine the best model, as well as to strengthen the results of previous tests. The Hausman Test itself is a means to see which model is better between the Fixed Effect Model (FEM) and the Random Effect Model (REM). "The hypothesis in the Hausman test is as follows:
H0 = Random Effect Model
Ha = Fixed Effect Model Model

Based on the above hypothesis, H0 is rejected if the random cross-section probability value of the Hausman test is less than 0.05, and Ha is rejected if the random cross-section probability value of the Hausman test is greater than 0.05. The results of the Hausman test are as follows:

Table 4 hausman test

Correlated Random Effects - Hausman Test Equation: Untitled Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	19.279033	3	0.0002

Source: data eviews 9

It can be concluded that the value of the cross-section chi square probability for this study was 0.0000 and smaller than 0.05. Then Ha is accepted and H0 is rejected. So that the best model for this research is the Fixed Effect Model.

4.2.3 Panel data regression model used

Based on two test results conducted, the Likelihood Test indicates that the best model used is the Fixed Effect Model. Then the Hausman test conducted also gave the same result which is Fixed Effect Model that was used as the best model in this study.

Tabel 5 fixed effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.80335	5.678978	3.311044	0.0012
CR	0.001567	0.004764	0.328983	0.7428
DER	0.245694	0.070659	3.477167	0.0007
ROE	-0.035020	0.087618	-0.399688	0.6901

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.845413
Adjusted R-squared	0.746318
Prob(F-statistic)	0.000000

Source: data eviews 9

Based on the test results on the panel data regression model, then the regression equation can be written as follows:
Dividend policy = 18.80335 + 0.001567 Current ratio + 0.24569 Debt to equity ratio - 0.035020 Return on equity

From the regression equation, it can be described as follows:

1. Based on the results of the regression test, it is known that the value of the constant is 18.80335. It can be concluded that if the value of the independent variable in this study is explained by Liquidity (CR), Leverage (DER), Profitability (ROE) is considered constant or equal to 0 (zero), then the value of the Dividend Policy (DPR) is 18.80335.
2. The value of the liquidity regression coefficient in this study is measured by the current ratio (CR) of 0.001567, this can be interpreted that the CR value experiences an increase of 1 (with the assumption that the value of variable values remains constant or unchanged). Therefore the dividend policy will increase by 0.001567. This shows that the coefficient is positive, and it means that between CR and dividend policy has a positive relationship.
3. The value of the regression coefficient of leverage in the research is measured with a debt to equity ratio (DER) of 0.245694. This shows that the coefficient is positive, and means that DER and dividend policy have a positive relationship.
4. The profitability regression coefficient value in this study is measured by return on equity (ROE) of -0.035020, this can be interpreted that if the ROE value increases by 1 (assuming that the value of other variables is fixed or unchanged), then the dividend policy will decrease by -0.035020. This shows that the coefficient is negative and means that between ROE and dividend policy has a negative relationship.

4.3 Hypothesis testing

4.3.1 Partial Test (t test)

Hypothesis testing is done by using the t test which aims to find out the effect of the independent variables in this research, which are liquidity (X1), leverage (X2), and profitability (X3) partially or individually to the dependent variable, which is the dividend

policy (Y). The hypothesis taken in the t test can be measured by comparing the value of t arithmetic with t table to see the effect of independent variables on the dependent variable. If t arithmetic <t table then H0 is accepted and Ha is rejected. T table can be seen in the statistical table at the 0.05 significance with degrees df = number of observations (N) - (K+ 1). K is the independent variable. In this study, by referring to the formula, the value of the table is 1.65978.

Meanwhile, to see the significance of the independent variable with the dependent variable can be done by comparing the significance value of the variable and its critical value. If the significance value is < critical value or prob value is <0.05 then H0 is accepted and Ha is rejected. It means the independent variable has a significant effect on the dependent variable.

Based on table 12 above, the results of statistical data processing using the program E-views 9, it can be seen that the effect of the independent variables partially on the dependent variable is as follows:

1. The effect of liquidity on dividend policy stated in the current ratio shows a coefficient value of 0.001567 and t count is smaller than t table, that is 0.328983 smaller than 1.65978 and a significant value of 0.7428 is greater than 0.05. Then Ha is rejected and H0 is accepted. This means that liquidity has no significant effect on dividend policy.
2. The effect of leverage on the dividend policy stated in the debt to equity ratio shows a coefficient value of 0.245694 and a t count greater than t table that is 3.477167 greater than 1.65978 and a significant value of 0.0007 is smaller than 0.05. Then Ha is accepted and H0 is rejected. This means that leverage has a significant effect on dividend policy.
3. The effect of profitability on dividend policy stated in return on equity shows a coefficient of -0.035020 and a value of t is smaller than t table that is -0.399688 smaller than 1.65978 and a significant value of 0.6901 is greater than 0.05. Then Ha is rejected and H0 is accepted. This means that the return on equity does not have a significant effect on dividend policy.

4.3.2 Koefisien Determinasi (R adjusted Square) test

R adjuster Square test or determination coefficient test is conducted to measure how large the proportion of the dependent variable can be explained by the independent variable. The results of the determination coefficient test are obtained from the adjusted R-squared value. Based on table 5 above, the Adjusted R-squared value is 0.746318 or 74.63%. This figure indicates that the dependent variable which is the dividend policy can be explained or influenced by the three independent variables namely liquidity, leveraged and profitability of 74.63%. While, 25.37% part of the rest is influenced by other factors outside the research model.

4.3.3 Discussion

1. **The effect of liquidity on dividend policy**
   Based on the panel data regression test table contained in table 12, it shows that liquidity represented by the current ratio shows the value of t arithmetic of 0.328983 and smaller than the value of t table of 1.65978. It also shows a significance value of 0.7428> 0.05 which means that liquidity has no significant effect on dividend policy. Therefore the first hypothesis (H1) in this study was rejected. Then, the relationship

between liquidity and dividend policy is positive. After that, based on the above explanation it can be concluded that the high and low liquidity will not have a significant effect on policy on dividends. This is because when a company pays a dividend, the activity is an outflow of cash. Cash is one component that can determine the amount of large or small current ratio. However, it is not only cash that determines the amount of the current ratio, but there are still other assets. Thus, this makes the current ratio not yet able to illustrate that the rise and fall of the value of the current ratio can affect the dividend policy of the company. This is in accordance with the statement that the company can only pay dividends if there is sufficient cash (Sudana, 2015 page.195) The results of this study are supported by previous research conducted by Nurwani (2017), Eltya et al (2016) and Wicaksono & Nasir (2014) which provide the result that liquidity has no significant effect on dividend policy.

2. **The effect of leverage on dividend policy**

Based on the panel data regression test in table 12, it explains that the leverage that is represented by debt to equity ratio has a calculated t value of 3.477167 whose value is greater than the t table value of 1.65978. It also shows the significance value of 0.0007 <0.005, which indicates that the leverage has a significant effect on the dividend policy. Then the second hypothesis (H2) in this research was accepted. Then, the relationship of leverage with dividend policy is positive. Furthermore, based on the explanation above, it can be concluded that the higher the DER indicates that the company has a capital structure filled with more debt usage. The use of high debt for the company is expected to increase productivity. Thus, the company is able to generate higher profits. This is because the use of more debt will create an interest expense that will reduce taxes received by the company's pre-tax profit. The explanation above is in line with Sutrisno's statement (2017, p.238) which says that the company adds the amount of debt because it wants to increase cash, so that if there is an increase in the amount of short and long term debt, it will add to the amount of cash coming in. Therefore, when the company receives additional debt, it also can increase amount of cash and will affect the increase in dividend payments. Then, this is also supported by the trade off theory which says that the company's decision to use debt is based on a balance between tax savings and the cost of financial difficulties. So, if the benefits provided are still quite proportional, then the use of debt is still permissible (Sudana, 2015 p. 151). The results of this study are supported by previous studies conducted by Ni Putu Yunita Devi & Ni Made Adi Erawati (2014), and Eltya (2014) which generate the results that leverage has a significant effect on dividend policy.

3. **The effect of profitability on dividend policy**

Based on the results of the panel data regression test in table 5, it shows that the profitability that is represented by a return test has a value that is smaller than t table that is -0.399688 <1.65978, and it shows a significance value of 0.6901 which is greater than 0.05, which indicates that profitability has no significant effect on the t dividend policy. Then the third hypothesis (H3) in this study was rejected. Then, the relationship between profitability and dividend policy is negative. Furthermore, based on the explanation above, it can be concluded that the rise and fall in ROE has not been able to describe its influence on the company's dividend policy. This is because the company, in its activities should only use profits to pay dividends, but the company also has other activities as well as expanding the company. When the company is experiencing rapid growth, then the company will compensate by expanding or developing the company. As a result, the need of fund in the scope of the

expansion can be met by using the source of funds from debt, adding their own capital and one of them can also be obtained from retained earnings. Sutrisno (2017, p.267) said that when investment opportunities are widely open, the company will utilize the opportunity to use it and invest in it. The results of this study are supported by research conducted by Nurwani (2017) and Novianti (2017) which show the results that profitability has no significant effect on dividend policy.

5. CONCLUSION

The selection of the sample used is the manufacturing company registered on the Indonesian stock exchange from 2016 to 2011 by using the determination of the number of samples taken based on Slovin formula.

Analysis and discussion in this study generate the conclusions that can be drawn by the writer as follows:

1. Liquidity testing results which are represented by the current ratio show the results indicates that liquidity has no significant effect on dividend policy on manufacturing companies registered on the Indonesia Stock Exchange in the 2016-2018 of research period. So, it can be concluded that the research hypothesis is not proven.
2. The results of leverage testing which are represented by the debt to equity ratio show the results indicates that leverage has a significant effect on dividend policy on manufacturing companies listed on the Indonesian stock exchange in the 2016-2018 research period. In other words, it can be concluded that the research hypothesis is proven.
3. The results of profitability testing represented by return on equity show the results indicates that profitability has no significant effect on dividend policy on manufacturing companies listed on the Indonesian stock exchange in the study period of 2016-2018.

   This research has strived for its implementation using scientific procedures. however it still has many limitations as follows:

   1. This research only uses factors that have a relationship with dividend policy and may also be able to affect dividend policy such as liquidity, leverage and profitability. This research ignores other factors that might influence dividend policy such as company growth, investment opportunities and cash flow.
   2. There is a limited time to collect required data. Thus, the data used in research does not have a long time span.
   3. There are difficulties in collecting dividend policy data because there are still many companies that have not distributed dividends annually.

REFERENCES

Afriyani, F., Safitri, E., dan Aprillia, R. (2015). Pengaruh Likuiditas, Leverage, Profitabilitas, Ukuran Perusahaan dan Growth terhadap Kebijakan Dividen. STIE MDP Palembang.

Arilaha, M. A. (2009). Pengaruh Free cash flow, Profitabilitas, Likuiditas, dan leverage terhadap Kebijakan Dividen: Studi pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia, Jurnal Keuangan dan Perbankan, Vol.13, hlm. 78-87.

Devi, N. P. Y., dan Erawati, N. M. A. (2014). Pengaruh Kepemilikan Manajerial, Leverage, dan Ukuran Perusahaan pada Kebijakan Dividen: Studi Pada Perusahaan Manufaktur, E-jurnal Akuntansi, hlm. 709-716.

Dewi, D. M. (2016). Pengaruh Likuiditas, Leverage, Ukuran Perusahaan terhadap Kebijakan Dividen Tunai dengan Profitabilitas sebagai variabel intervening: Studi pada Perusahaan Manufaktur, Jurnal Bisnis dan Ekonomi, Vol.23, hlm. 12-19.

Eltya, S., Topowijono., dan Azizah, D. V. (2016). Pengaruh Leverage, Likuiditas, Profitabilitas dan Ukuran Perusahaan terhadap Kebijakan Dviden: Studi pada Perusahaan Perbankan yang terdaftar d iBursa Efek Indonesia,*Jurnal Administrasi Bisnis, Vol.38, hlm.55-62*.

Harjito, D. A., dan Martono. (2014). *Manajemen Keuangan*. Yogyakarta: Ekonisia.

Idawati, I. A. A., dan Sudhiartha, G. M. (2014). Pengaruh Profitabilitas, Likuditas, Ukuran Perusahaan terhadap Kebijakan Dividen: Studi pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia, hlm. 1604-1619.

Kasmir. (2017). *Pengantar manajemen keuangan*. Jakarta: Rajawali pers.

Lestari, K. F., Tanuatmojo, H., dan Mayasari. (2016). Pengaruh Likuiditas dan ProfitabilitasterhadapKebijakanDividen:StudipadaBankUmumSwasta Nasional yang terdaftar di Bursa Efek Indonesia, *Journal of Business Management Education, Vol.1, hlm.11-16*.

Nidar,S.R.(2016).*ManajemenKeuanganPerusahaanModern.*Bandung:Pustaka reka cipta.

Nurwani. (2017). Pengaruh Likuditas dan Profitabilitas terhadap Kebijakan Dividen: Studi pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia, *Jurnal Riset Finansial Bisnis, Vol.1, hlm. 1-8.*

Prawira, I. Y., Dzulkirom, AR. M., dan Endang, M. G. W. (2014). Pengaruh Leverage, Likuiditas, Profitabilitas dan Ukuran Perusahaan terhadap Kebijakan Dividen: Studi pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia, *Jurnal Administrasi Bisnis, Vol.15, hlm. 1-7.*

Safariyan, F. (2015). Pengaruh Arus Kas, Likuiditas, Rentabilitas, Ukuran Perusahaan dan Risiko Perusahaan terhadap Kebijakan Dividen: Studi pada perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia, *Jurnal Online Fakultas Ekonomi, Vol.2, hlm. 1-15.*

Sjahrial, D. (2014). *Manejemen keuangan lanjutan edisi revisi.* Jakarta: Mitra Wacana Media

Sudana, I. M. (2015). *Manajemen Keuangan Perusahaan Teori dan Praktek*. Jakarta : Erlangga

Subramanyam, K. R. (2017). *Analisis Laporan Keuangan. Jakarta*: Salemba empat

Sugiyono. (2014). *Metode Penelitian Bisnis*. Bandung: Alfabeta.

Sutrisno. (2017). *Manejemen Keuangan Teori Konsep dan Aplikasi*. Yogyakarta: Ekonisia.

Wicaksono, S., dan Nasir, M. (2014). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan Manufaktur yang Terdaftar di Bei eriode Tahun 2011-2013, *Jurnal akuntansi Fakultas Ekonomika dan Bisnis Universitas Diponegoro, Vol.3 No.4.*

Widarjono, A. (2017). *Ekonometrika Pengantar dan Aplikasi Disertai Panduan Eviews*. Yogyakarta: UPP STIM YKPN

Zahidda, D. (2017). Pengaruh Profitabilitas, Likuiditas, Posisi Kas terhadap Kebijakan Dividen: Studi pada Perusahaan Food Beverage, *Jurnal Ilmu dan Riset Manajemen, Vol.6, No.2.*