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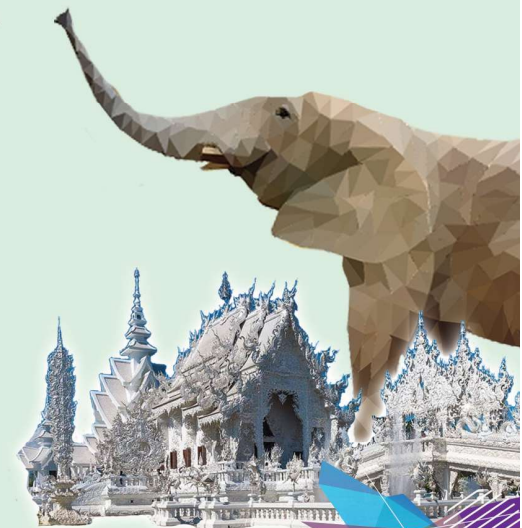
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ANALYSIS THE IMPACT OF CAPITAL STRUCTURE AND PROFITABILITY ON DIVIDEND POLICY: CASE STUDY OF MANUFACTURING FIRM IN INDONESIA

Miswanto Miswanto¹, Fajar Ardy Prasetyo²

^{1,2} Sekolah Tinggi Ilmu Ekonomi (STIE) YKPN Yogyakarta, Indonesia
Email: miswanto.ykpn@gmail.com¹; fajardyp@yahoo.com²

ABSTRACT

This research was done to test the impact of capital structure and profitability on dividend policy. This research examines manufacturing firms listed in IDX (Indonesia Stock Exchange) period 2011–2014. The companies studied are 120 manufacturing firms. The main source of research data is from Indonesia Capital Market Directory (ICMD). Sampling in this study takes purposive sampling method. The analysis system uses multiple linear regression and panel data. The results of research on the effect of capital structure to dividend policy indicates that Book Debt to Asset Ratio and Long Term Debt to Equity Ratio have a negative effect on dividend policy. Book Debt to Equity Ratio has a positive impact on dividend policy. The results of research on the effect of profitability to dividend policy indicates that Return on Asset, Return on Equity, and Net Profit Margin do not have a positive impact on dividend policy. The findings of this study are that the capital structure influences dividend policy, but profitability does not influence dividend policy.

Keywords: *Capital structure, debt, dividend, equity, profitability.*

INTRODUCTION

Competition in the increasing stringent business world makes companies, especially manufacturing companies, try to rise the value and performance of the firm. To increase the value and performance of the firm, it can be done through increasing the prosperity of ownership or shareholders. In choosing an alternative funding to finance, the activities of the firm to be considered is how the firm can create a favorable combination between the uses of funding sources. The source of corporate funding comes from internal sources and external sources. Internal sources of the firm are self-generated funds within the firm while external sources are funds from creditor and owner or shareholder.

The capital structure has an impact on the dividend policy because the capital structure reflects the ability of the company to fulfill all debt obligations indicated by what part of its own capital taken to pay the debt. Debt is one of the funding source which will cause the company to bear the fixed burden of interest and debt installment. The proportion of debt that is getting bigger on the capital structure shows a big burden on the company to pay interest and principal installments (Huda, 2013; Sulistyowati, Suhadak, & Husaini, 2014).

Profitability affects dividend policy because profitability is a firm's ability to make profit so that dividend will be divided if the firm earns profit. The earnings after-tax are partially distributed as dividends to shareholders and others held in the retained earnings. Dividends received by shareholder's increase, the shareholder's prosperity will increase. Therefore, the company's goal to prosper shareholders can be achieved. One of the firm's goals is to prosper the owner of the company (shareholder) very closely related to the firm's ability to earn profit (Wati, 2015).

The dividend policy is a part of the firm's funding decisions. The dividend policy shows a decision about whether the profits earned by the firm will be given dividends to shareholders or will be withheld to raise capital for future investment financing. Dividends distributed to shareholders are highly dependent on the results of the agreement of participants in the common meeting of shareholders. If the retained earnings mean that the profits are reinvested for use in supporting the business activities of the company.

The company tries to seek an optimal dividend policy. Brigham and Houston (2016) state that the optimal dividend policy shows a dividend policy which can create a balance between corporate growth and dividends. When management decides how much profit to share with shareholders, they should always keep in mind that one of the company's goals is to maximize shareholder wealth. Shareholder prosperity can be achieved if shareholders earn dividends. Dividends paid depend on the policies of each firm. Thus they require a more serious consideration from the firm management. The dividend policy is fundamentally used to determine how much profit is shared with the shareholders as dividend, and which will be retained as retained earnings. However, dividend policies in some com-

panies have not been able to support the achievement of corporate goals to maximize shareholder's wealth (Darminto, 2008). In consideration of making a dividend policy, study into the effect of capital structure and profitability on dividends needs to be done. Study in several countries shows that the capital structure and profitability influence dividend policy. In Indonesia, the results of study on the effect of capital structure and profitability on dividend policy show different results. Some of the results of the study show that the capital structure and profitability have an impact but some others have no impact on dividend policy. Based on the description of the background of the problem above, the problems in this study can be formulated as follows: 1) Do the variables in capital structure have an impact on the dividend policy on manufacturing firms listed on IDX? 2) Do the variables in profitability have an impact on dividend policy on manufacturing firms listed on IDX?

Capital structure variable can be measured by Book Debt to Asset Ratio (DAR), Long-term Debt to Equity Ratio (LDER) and Book Debt to Equity Ratio (DER) and profitability variable can be measured by Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM) (Van Horne & Wachowicz, 2009). Based on the problems which have been formulated, this study aims to: 1) Know the impact of variables in capital structure: DAR, LDER and DER on dividend policy in manufacturing companies listed on IDX. 2) Know the impact of variables in profitability: ROA, ROE and NPM on dividend policy in manufacturing companies listed on IDX.

LITERATURE THEORY AND HYPOTHESES

Capital Structure

The capital structure is a proportion or combination of debt, preferred stock, and equity common stock (Brigham & Houston, 2016; Ross, Westerfield, Jaffe, & Jordan, 2016). Measurement of capital structure can be done through the calculation of corporate leverage level, which illustrates how much debt-financed company assets. The optimal capital structure shows a capital structure that maximizes the price of equity common stock, and usually the debt ratio is lower than the ratio that maximizes the expected earnings per share (EPS) (Brigham & Houston, 2016).

Capital structure shows the determination of the composition of capital, the comparison between debt and capital itself. In other words, the capital structure is result of financing decisions which essentially decide whether they use debt or equity to fund the company's operations (Syamsuddin, 2009). Leverage is the use of external sources of funds by the firm and the consequence that the firm must bear the fixed burden of interest and debt repayments. The leverage ratios consist of:

$$\text{DAR} = \frac{\text{Debt}}{\text{Total Assets}} \quad (\text{Syamsuddin, 2009})$$

$$\text{LDER} = \frac{\text{Total long-term Debt}}{\text{Shareholders' Equity}} \quad (\text{van Horne \& Wachowicz, 2009})$$

$$\text{DER} = \frac{\text{Debt}}{\text{Shareholders' Equity}} \quad (\text{Syamsuddin, 2009})$$

Profitability

Profitability is the firm's ability to create a profit. Shareholders in the company want to rate returns, which consist of results and capital gains (Brigham & Houston, 2016). The higher the firm's ability to generate profits, the higher the rate of return for received shareholders, and the higher the value of the firm. It can also be said that profitability is the firm's ability to generate net income from business activities in the accounting period.

According to Van Horne and Wachowicz (2009) if there is an excess of funds derived from operating profit after being used to fund all investment opportunities, the surplus will be shared to shareholders as investors in cash dividends. Sutrisno (2017) states that the company sets a dividend payout ratio target based on its profit target. If the profit target is achieved and has stabilized, then the company will adjust the amount of dividend to be paid to reach the target set. Profitability ratio is the ratio to quantify the ability of the firm and seek earning. The ratio also quantifies of the effectiveness of a firm's management level. Profitability ratios consist of (Husnan & Pudjiastuti, 2018):

$$\text{ROA} = \frac{\text{Earning after Tax}}{\text{Total Assets}} \times 100\%$$

$$\text{ROE} = \frac{\text{Net profit after tax}}{\text{Shareholders' Equity}} \times 100\%$$

$$\text{NPM} = \frac{\text{Earning after tax}}{\text{Net Sales}} \times 100\%$$

Dividend Policy

Dividend policy is something that cannot be separated from the company's funding decisions. The dividend policy shows a decision on whether the profits earned by the firm will be shared to shareholders as dividends or to be retained as retained earnings for future business development decisions (Sartono, 2016). Dividend policy is a concern for 2 (two) important reasons: 1) Payment of dividends can affect the stock price, and 2) Retained earnings are generally the main and most important source of additional capital for the company's growth.

These two reasons are two sides of the company's interests that must be taken seriously. By considering this, company management must make careful decisions in making dividend policies to be chosen. The dividend policy needs to be analyzed and decided more wisely, because if dividends are distributed to shareholders, this will reduce the amount of internal funds that will be used to expand the firm's operations (Ross *et al.*, 2016).

Signaling Theory

The company manager is obliged to give a signal about the condition of the company to shareholders. Giving these signals is as a matter of responsibility to them. The signal theory explains that companies have incentives to provide financial information to shareholders. The company's encouragement to give information is due to symmetrical information between insiders and outsiders because the company knows more about the company and its future conditions or prospects than outsiders (especially investors and creditors) (Weston & Copeland, 2010).

The announcement of dividends as a mean to send a real signal to external firms and markets about the work of the firm in the present and future is an appropriate but expensive way. After receiving the signal through the announcement of the dividend then the market will react to the announcement of the dividend change paid so that it can be said the market captures information about the prospect of the company contained in the announcement. The better the condition and performance of the company will produce a positive signal for investors and creditors (Ross *et al.*, 2016).

Theory Debt Covenant Hypothesis

Theory Debt Covenant Hypothesis argues that the level of the desired loan size of the firm is greater, the firm must strive to show good performance to the debtholders. It is intended that debtholders believe the security of the funds is guaranteed, and confident that the company can repay the loan with interest. Therefore, the company tends to be not conservative when it seeks to raise large funds from debtholders (Ross *et al.*, 2016).

Loans made by the company will greatly affect the profits owned by the company. Meanwhile, profit owned by the company is very influential on dividends. Thus, loans or debts incurred by the firm will affect shareholder dividends. The effect of leverage on dividends can also be explained by the thought of a debt covenant hypothesis (Kalay, 1982) which discloses firms using high leverage will cause the company to reduce or not increase its dividend payout.

Agency Theory

Jensen and Meckling (1976) state that the creditor is principal and the management of the firm is agent. The principal gives decision-making authority to the agent. When a shareholder appoints managers or agents as managers and decision makers for the company, then the agency relationship emerges. The agency theory from Jensen and Meckling (1976) refers to the fulfillment of the main objectives of financial management that is to maximize shareholders' wealth. The inability or unwillingness of management to increase shareholder wealth leads to so-called agency problems.

According to Jensen and Meckling (1976), agency problems happen if people force to trigger conflict and selfishness when some interests meet in a joint activity. Motivated principals enter into contracts to endow themselves with ever-increasing profitability, while agents are motivated to maximize their economic and psychological needs. Agency costs are costs related to supervision to ensure that management responds consistently in accordance with company contractual agreements between creditors and companies that represent shareholders. Agency costs can increase if the difference in interests between shareholders, managers and creditors increases as well. Increased disclosure will reduce agency costs and information gaps (Marston, 2003).

Agency problems between company managers as agent and shareholders can be avoided or minimized by dividend policy (Jensen and Meckling, 1976). The more dividends a company wants to pay, the more likely it is to reduce the retained earnings. Dividend payments also play a role in the monitoring mechanism because it makes managers have to provide funds that may be obtained from outside the company which will certainly be able to reduce agency costs.

The Impact of Capital Structure to Dividend Policy

Citing research from (Sulistiyowati *et al.*, 2014) and Al-Najjar (2011) constructed on agency theory (Jensen & Meckling, 1976), DAR has a significant effect on the positive direction towards the DPR. When the DAR increases, the DPR will increase, when the DAR decreases, the DPR will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when DAR increases, the DPR decreases, DAR decreases then the DPR will increase. The results of the study (Sulistiyowati *et al.*, 2014) that DAR negatively affect the DPR.

By using agency theory as stated by Jensen and Meckling (1976), Sulistiyowati *et al.* (2014) show that LDER has a significant effect on the positive direction towards the DPR. When the LDER increases, the DPR will increase, when the LDER decreases, the House will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when LDER increases, the DPR decreases, LDER decreases then the House will increase. The consequence of the study (Sulistiyowati *et al.*, 2014) that the LDER negatively impact on the DPR.

By using agency theory (Jensen & Meckling, 1976), Sulistiyowati *et al.* (2014) also show that DER has significant influence with positive direction toward DPR. When DER increases, the DPR will increase, when DER decreases so the House will also decrease and based on the thought of covenant hypothesis (Kalay, 1982) when DER increases, DPR decreases, DER decreases then DPR will increase. The consequence of the study (Sulistiyowati *et al.*, 2014) that the DER has a positive impact on the DPR.

The Impact of Profitability to Dividend Policy

The signal theory presented by Miller and Mondigliani states that dividend increase gives a signal to investors that firm has good income and good performance in the future. Based on the theory, it can be shown that high income through assets owned as reflected by the value of return on assets has a positive impact on profit policy given to shareholders as dividend. This is due to the increased ability of companies to get profits. Therefore, the value of the company will certainly increase and provide a good signal to investors. The signal is that the firm is able to get profits. The theory is in line with the study of Yudhanto and Aisjah (2013) about influence Return on Assets, Net Profit Margin, Return on Equity, Earning per Share (EPS) on Dividend Policy and Wati (2015) about impact of Debt to Equity Ratio, Return on Asset, Collateral Asset, and Asset Growth on Dividend Policy.

ROE as one of the profitability ratios is a very important indicator for investors to help investors in measuring and knowing the company's ability in obtaining net profit related to dividend distribution. Dividend policy taken by the company is certainly inseparable from the valuation of earning on equity. Earnings on equity are usually measured by return on equity. Companies with high return equity have the ability to share high dividends. Therefore, a rise in the company's return on equity is expected to attract investor interest. Based on the above explanation, it can be indicated that ROE is in line with signaling theory proposed by Miller and Mondigliani, that the higher the profit, the higher the welfare of shareholders through high distributed dividends. The theory is in line with research of Yudhanto and Aisjah (2013).

NPM is a measure of the percentage of each sale value that results in a net profit or profit rate. Based on signaling theory which states that the level of profits obtained by the company increases, it shows that the performance of management in managing the company is increasing as well. Assessment of a firm's achievements can be seen from the firm's capability to get profits. The high level of profitability becomes the determinant of corporate value. Corporate value is very important because high corporate value will cause high shareholder wealth (Brigham & Houston, 2016). The theory is in line with the study results of Yudhanto and Aisjah (2013).

Hypothesis Formulation

Based on several reviews and results of the study described above, this first study hypothesis can be written as follows.

- H_1 : The impact of capital structure on dividend policy:
 H_{1a} : Book Debt to Asset Ratio (DAR) has a negative impact on dividend policy (DPR).
 H_{1b} : Long Term Debt to Equity Ratio (LDER) has a negative impact on dividend policy (DPR).
 H_{1c} : Book Debt to Equity Ratio (DER) has a positive impact on dividend policy (DPR).
 H_2 : The impact of profitability on dividend policy:
 H_{2a} : Return On Asset (ROA) has a positive impact on dividend policy (DPR).
 H_{2b} : Return On Equity (ROE) has a positive impact on dividend policy (DPR).
 H_{2c} : Net Profit Margin (NPM) has a positive impact on dividend policy (DPR).

Hypothesis Framework

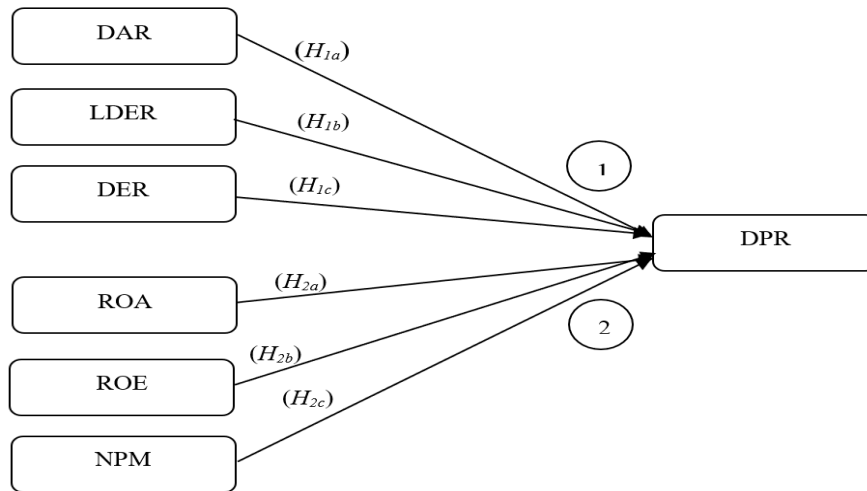


Figure 1. Hypothesis framework

RESEARCH METHOD

The type of research conducted in this paper is explanatory research which is a study that aims to analyze the relationships among variables or how variables has effects on other variable (Umar, 2007). The population observed in this study are all manufacturing firms listed in IDX period 2011–2014. By using the purposive sampling method, the selected manufacturing firms are 120 companies. By using the sampling method, the sample criteria obtained are expected to be truly in accordance with the research that will be conducted. The sample in this research covers three sectors of manufacturing company: 1) Basic Industrial & Chemical Sector, 2) Various Industries Sector, and 3) Consumer Goods Industry Sector.

This study uses data regression panel and secondary data. Data regression panel is a composite data between time series and cross section. Secondary data is data collected by researchers from existing sources. In this study, the data analysis used is quantitative method to analyze the relationship among variables based on financial and economic theories, supported by statistical and econometric analysis, and then processed by computer using Statistical Product and Service Solutions (SPSS) program to obtain the result of this analysis. This study uses multiple linear regression analysis with least squares method. This analysis is used to estimate the parameters of the regression model used to examine the effect of several independent variables, named: capital structure variables (DAR, LDER, and DER) and profitability variables (NPM, ROA and ROE) on the dependent variable of dividend policy (DPR). Tests conducted in this research are: descriptive statistical analysis, and classical assumption test consisting of: 1) Multicollinearity test, 2). Heteroscedasticity test, and 3) Test of Normality, and multiple regression test (Algifari, 2015; Ghozali, 2013).

The above hypotheses are tested using two linear multiple regression models. The first hypothesis is tested with the first regression model and the second hypothesis is tested with the second regression model. The first model regression equation is formulated as follows.

$$DPR_{it} = \alpha_0 - \alpha_1 DAR_{it} - \alpha_2 LDER_{it} + \alpha_3 DER_{it} + e_{it}$$

The second model regression equation is formulated as follows.

$$DPR_{it} = \alpha_0 + \alpha_1 ROA_{it} + \alpha_2 ROE_{it} - \alpha_3 NPM_{it} + e_{it}$$

FINDINGS

Descriptive Statistics Analysis

Result of descriptive statistics analysis of model I as follows. N shows the amount of data observed. The amount of data observed in DAR, LDER, DER and DPR is 455, 449, 455 and 440. DAR has minimum value 0.008; maximum value 1.162; average value (mean) 0.460; and standard deviation (Std. Dev.) of 0.204. LDER has a minimum value of 0.002; maximum value 5.037; average value (mean) 0.357; and a standard deviation of 0.592. DER has a minimum value of 0.009; maximum value 11,254; average value (mean) 1,231; and the standard deviation (Std. Dev.) of 1.389. DPR has a minimum value of 0.001; maximum value 2,194; average value (mean) 0.380; and standard deviation (Std. Dev.) of 0.323. The descriptive statistics data in model I can also be shown in Table 1. The descriptive data in model II can also be shown in the Table 2.

Table 1
Summary of Descriptive Statistics in Model I

Variable	N	Minimum	Maximum	Mean	Std. Dev.
DAR	455	0.008	1.162	0.460	0.204
LDER	449	0.002	5.037	0.357	0.592
DER	455	0.009	11.254	1.231	1.389
DPR	440	0.001	2.194	0.380	0.323

Notes: N = the amount of data observed, DAR = Book Debt to Asset Ratio, LDER = Long Term Debt to Equity Ratio, DER= Book Debt to Equity Ratio, DPR= Dividend Payout Ratio and Std. Dev. = standard deviation.

The results of statistical analysis of descriptive model II as follows: ROA has a minimum value of -0.083; maximum value of 0.456; average value (mean) 0.070; and a standard deviation of 0.087. ROE has a minimum value of -0.174; maximum value 1,238; average value (mean) 0.112; and a standard deviation of 0.160. NPM has a minimum value of -0.623; maximum value 31,871; average value (mean) 0.323; and standard deviation 2,930. DPR has a minimum value of 0.024; maximum value 1.830; average value (mean) 0.368; and a standard deviation of 0.298. Table 2 shows Summary of Descriptive Statistics in Model II

Table 2
Summary of Descriptive Statistics in Model II

Variable	N	Minimum	Maximum	Mean	Std. Dev.
ROA	118	-0.083	0.456	0.070	0.087
ROE	120	-0.174	1.238	0.112	0.160
NPM	118	-0.623	3.871	0.323	2.930
DPR	110	0.024	1.830	0.368	0.298

Notes: N = the amount of data observed, ROA = Return on Assets, ROE = Return on Equity, NPM = Net Profit Margin, DPR = Dividend Payout Ratio and Std. Dev. = standard deviation.

The result of multicollinearity test of model I and II shows that there is no multicollinearity among independent variables in the multiple regression model. The result of heteroscedasity test of model I and II using glesjer test shows that the level of significance of the independent variables is all greater than 0.05. By using of these results, it can be stated that there is no variance inequality so there is no problem of heteroscedasticity in regression model. Based on Central Limit Theorem (Cooper & Emory, 1995) that the sampling distribution curve for sample size 30 or more has a normal distribution.

Summary of regression coefficients, *t test*, *R adjusted test*, and *F test* are stated in Table 3. Using Table 3, Model I can be made the following regression equation: $DPR_{it} = 0.580 - 0.778 DAR_{it} - 0.148 LDER_{it} + 0.183 DER_{it} + e_{it}$. The equation can be interpreted and explained as follows:

- The constant of a positive value of 0.580 suggests that the DPR tends to increase by assuming DAR, LDER and DER remain.
- The negative DAR regression coefficient states that the decrease of DAR by one unit will increase the DPR by 0.778 with the judgement that the other independent variables do not change.
- The negative value LDER regression coefficient states that the decrease of LDER by one unit increases the DPR by 0.148 with the judgement that the other independent variables do not change.

- d) The positive DER regression coefficient states that the increase of DER by one unit will increase the DPR of 0.183 with the judgement that the other independent variables do not change.

It can be concluded that DAR and LDER have negative influence on DPR, while DER has positive effect to DPR.

In the Table 3, Model II the regression equation is obtained like this: $DPR_{it} = 0.283 + 0.661 ROA_{it} + 0.131 ROE_{it} - 0.058 NPM_{it} + e_{it}$

The equation can be interpreted and explained as follows:

- The constant of a positive value of 0.283 states that the DPR tends to increase by assuming ROA, ROE and NPM remain.
- The positive ROA regression coefficient states that the increase of ROA by one unit will increase the DPR of 0.661 with the assumption that the other independent variables do not change.
- The positive ROE regression coefficient states that the increase of ROE by one unit will increase the House by 0.131 with the assumption that the other independent variables do not change.
- Negative NPM regression coefficient states that the decrease of NPM by one unit will increase the DPR by 0,058 assuming other independent variables do not change.

It can be stated that Return on Assets (ROA) and Return on Equity (ROE) have a positive impact on Dividend Payout Ratio (DPR), while NPM has a negative impact on Dividend Payout Ratio (DPR).

Coefficient Determination Test Results

Based on the Table 3 below, model I known DAR, LDER, and DER influenced by 6.7% against the DPR. Based on the above table model II known ROA, ROE, and NPM have an effect of 2.1% on DPR.

Table 3
Multiple Regression Tests

Variables	Coeff. of Reg.	$t_{statistic}$	p -value	$Adj\ R^2$	F_{test}	Prob F_{test}
Model I						
C	0.580	8.545	0.000	0.067	4.776	0.003
DAR	-0.778	-3.099	0.002			
LDER	-0.148	-1.584	0.115			
DER	0.183	2.788	0.006			
Model II						
C	0.283	5.017	0.000	0.021	1.512	0.219
ROA	0.661	0.536	0.594			
ROE	0.131	0.289	0.774			
NPM	-0.058	-0.064	0.949			

Notes: C = Constan, DAR = Book Debt to Assets Ratio, LDER = Long tTerm Debt to Equity Ratio, DER = Book Debt to Equity Ratio, ROA = Return on Assets, ROE = Return on Equity, and NPM = Net Profit Margin.

DISCUSSION

In above Table 3, result of F_{test} for model I got the calculated value of F equal to 4,776 with probability equal to 0,003. Since the probability is much less than 0.05. Therefore, the regression model can be used to estimate the DPR. This means that the DAR, LDER, and DER variables simultaneously affect the DPR. Result of F_{test} for model II got calculated value of F equal to 1,512 and F_{table} equal to 2,68 and probability value 0,219. So $F_{table} > F_{calculated}$ can be concluded that ROA, ROE, and NPM variables together do not have an effect on to DPR.

As seen in the Table 3, t_{test} with using a 5% alpha level, the DAR variable is significant because it has a value smaller than the significance level or $0.002 < 0.05$. Thus, the hypothesis H_{1a} which states that DAR has a negative impact on the DPR is supported. Using a 5% alpha level, the LDER variable is not significant because it has a value greater than the significance level or $0.115 > 0.05$. Hence, the hypothesis H_{1b} which states that LDER has a negative effect on the DPR is not supported. Using a 5% alpha level, the DER variable is significant because it has a value smaller than the significance level or $0.006 < 0.05$. Referring to the t_{test} , the coefficient on the regression equation of Model 1 can be interpreted as follows. The regression coefficients on the DAR and DER variables can be used to predict DPR variable, but the regression coefficient on the avariable LDR cannot be used to estimate DPR variable. Hence, the hypothesis H_{1c} which states that DER has a positive effect on the DPR is supported. In all three hypotheses, the supported hypothesis is more than the unsupported one. Therefore, capital structure has impact on dividend policy and the results of this study are in accordance with the results of study conducted by Jensen and Meckling (1976), Kalay (1982), Gayathridevi, and Malikarjunappa (2012), and Sulistyowati *et al.* (2014).

As seen in the table above, t_{test} with using a 5% alpha level, the ROA variable is not significant because it has a value greater than the significance level or $0.594 > 0.05$. Thus, the hypothesis H_{2a} which states that ROA has a positive impact on the DPR is not supported. Using a 5% alpha level, the ROE variable is not significant because it has a value greater than the significance level or $0.774 > 0.05$. Thus, the hypothesis H_{2b} which states that ROE has a positive impact on the DPR is not supported. Using a 5% alpha level, the NPM variable is not significant because it has a value greater than the significance level or $0.949 > 0.05$. Thus, the hypothesis H_{2c} which states that NPM has a positive effect on the DPR is not supported. Referring to the t_{tests} , all of the regression coefficients in the regression equation of Model II cannot be used to predict the DPR variable. Therefore, the results of the study are not in line with the results of research done by Yudhanto and Aisjah (2013), Wati (2015), and Tarieq (2015). However, the results of this study are in accordance with the results of research done by Purnama and Sulasmiyati (2017) that the profitability has not a positive effect on the DPR. The findings of this study are that the capital structure influences dividend policy, but profitability does not influence dividend policy.

Hypotheses 2 (H_2) is not supported. It is possible because the earning is measured by earning after tax. Earning measured by earning after tax has the following weaknesses. First, depreciation is expense that is not paid by cash and the allocation of depreciation expense is influenced by company policy. If the company wants to pay lower taxes in the early periods, the company allocates greater depreciation expenses in the period to ensure its earning is lower. Lower earning makes lower paid taxes. Second, the corporation tax rate is determined by the government. Therefore, earning after tax is less reflective of the performance achieved by the company. To minimize the weaknesses in the measurement of the earning, the earning should be measured by earnings before interest, taxes and depreciation. Some researchers use earnings before interest, taxes and depreciation to measure earning, and their research results are better (Alti, 2006; Weigl, 2011).

CONCLUSION

This research examines manufacturing firm listed in IDX period 2011-2014. The companies studied are manufacturing firms listed on the Indonesia Stock Exchange and as many as 120 companies. This study tests the impact of capital structure on dividend policy hypothesized that DAR has a negative influence on DPR, Long Term Debt to Equity Ratio (LDER) has a negative influence on dividend policy (DPR), and Book Debt to Equity Ratio (DER) has a positive dividend policy (DPR). The results of the statistical analysis of this study that DAR is supported significantly has a negative impact on the DPR, the Long Term Debt to Equity Ratio (LDER) is not supported to influence the DPR, and Book Debt to Equity Ratio (DER) is supported significantly has a positive impact on dividend policy (DPR). In all three hypotheses, the supported hypothesis is more than the unsupported one. Therefore, in manufacturing firms, capital structure has effect on dividend policy.

This study also tests the effect of profitability on dividend policy hypothesized that Return on Asset (ROA) has a positive effect on dividend policy (DPR), Return on Equity (ROE) has a positive effect on dividend policy (DPR), and Net Profit Margin (NPM) has a positive impact on dividend policy (DPR). The results of the statistical analysis of this study that ROA, ROE and NPM have a positive impact on the DPR is not supported. Therefore, in manufacturing firms, profitability does not have impact on dividend policy.

Limitations of this research are follows. The first, factors affecting dividend policy are numerous, but this study only analyzes the effect of capital structure and profitability. The second, in this study the financial statements of manufacturing firms listed on IDX used only the period 2011–2014. The third, or the last, based on *F-test*, jointly ROA, ROE, and NPM have no effect on dividend policy, so for further research it is expected to retest and add data period. This study, earning is measured by earning after tax. Since earning after tax has weaknesses, subsequent research suggests that earning is measured by earnings before interest, taxes, and depreciation or earning is measured by cash-based profit. Earning after tax is accounting profit that is strongly influenced by the accounting calculation method used in that period.

Based on the conclusions and limitations of the research that has been presented then it can be given the suggestions as follows. For the company, it is expected that the company in taking decision on the dividend policy is more considered by looking at the condition and the state of the company. For investors, it is expected that investors can consider the decision to invest by looking at the performance of companies, especially in firms that are able to give dividends, because firms that are able to pay dividends have better prospects for the future. For other parties, it is expected that further research can be developed again by adding factors that affect dividend policy and increase the number of samples with long periods.

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