Ownership Structure and Dividend Policy in Nonfinancial Company

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Abstract. This study aims to analyze the influence of ownership structure on dividend policy in non-financial companies listed on the Indonesia Stock Exchange during the period of 2009-2013. The theoretical framework applied to analyze this research model is the theory of agency that is based on the existence of agency correlation, as the result of the separation of ownership and management performed by the manager. Tested ownership structure covers to largest shareholders, institutional shareholders and individual shareholders. Hypothesis testing is conducted by using a multiple regression models with a sample of 149 observations of non-financial companies listed on the Indonesia Stock Exchange during the period of 2009-2013 that have a constant profit during that period. The study provides empirical evidence consisting of: (1) largest shareholders are positively correlated and significant on dividend policy, (2) institutional shareholders are positively correlated and significant on dividend policy, (3) individual shareholders are negatively correlated and significant on dividend policy, (4) ratios, such as return of assets, firm size, and firm age, have significant effect on dividend policy.

Keywords: dividend policy, individual shareholder; institutional shareholder; ownership structure.

Introduction

A dividend is one of the considerations that make a person/corporation decide to invest in a certain company. A dividend is the distribution of profit of a company to its shareholders (Sartono, 2001). Thus, each shareholder will receive a dividend of their shareholding in accordance with the dividend payment policy that has been set by the company. The dividend is given in the form of cash (cash dividend) and stock. The cash dividend is more attractive to investors as it is the main return that will determine the value of shares for the owner of the investor. For that reason, every companies have always had a goal to make profits from the various aspects of their business, either producing goods or provide services (Fatimatuzahra and Kusumastuti, 2016) including privately owned companies which have small and medium size (SME’s), not only producing profit but also strengthening their position in terms of competitive advantage to face the ASEAN Economic Community (Sutopo, 2016).

According to Brigham and Houston (2001), the distribution of dividend made by the company shows the liquidity level of the company, in addition, it serves to maximize the company’s share price. A manager, as the authority recipient of the owner of the company should define policies that can improve the value of interests of shareholders that is maximizing the company’s stock price. Dividend payout policy is one of the important decisions made by the company, as it relates to the investment planning in the future. Therefore, a company that will pay the dividends are faced with a wide range of considerations, among others: the need to withhold a portion of profits for re-investment that may be more profitable, the financing needs, the liquidity of the company, the nature of shareholders, certain targets relating to the dividend payout ratio, and other factors associated with the dividend policy.

The background of this study using dividend payout ratio (DPR) as the dependent variable is that Parliament essentially...
determines the portion of profits to be distributed to shareholders, and which will be retained as part of retained earnings. Miller and Modigliani have developed irrelevant dividend, which is then followed by several studies that discuss the payment of dividends and variations in dividend payment policy by focusing on market imperfections. Brigham (2006) also says that managers believe that investors prefer companies that follow a stable dividend payout ratio.

One of the most cited reasons why companies pay dividends is the hypothesis of Free Cash Flow or commonly abbreviated as FCF, which is based on the idea that there is a conflict of interest between managers and shareholders. Instead of taking action in the interests of shareholders, managers may allocate the company’s resources for their own benefits. Therefore, FCF is able to create agency problem because FCF can be used to fund a number of projects that are less profitable. To solve this agency problem, Easterbrook (1984) and Jensen (1986) in Thanatawee (2013), suggest to restoring the company’s FCF to the shareholders by paying a dividend. Easterbrook (1984) in Thanatawee (2013) argues that the dividend is required to raise more frequent external funds, and thus, can be further monitored by the external parties. According to Jensen (1986), dividend reduces the amount of cash that may be wasted by the managers. Accordingly, the dividend can be used as a kind of mechanism to reduce the agency cost. This becomes the background of the use of Free Cash Flow (FCF) as the control variable in this study.

Signaling theory, that was first developed by Ross (1977) and Bhattacharya (1979) in Kusuma (2004), states that market has sufficient information related to the company’s activities. One of which is associated with the dividend that basically explains that the dividend is utilized by managers to provide a signal regarding the prospects of the company’s performance, therefore, the increase/decrease of the dividend is considered to have a charge of information about the positive/negative prospects of the company’s performance. The market reacts positively/negatively to the increase/decrease in dividends. Dividend payments is a signal for external investors referred to the prospects of a company in the future. Miller and Modigliani (1961) argue that an increase in the dividend beyond normal is a signal to investors implying that the company’s management has good expectations in the future. A dividend reduction is considered as a signal of “difficulties” in the future.

Agency theory developed by Jensen and Meckling (1976) basically explains that dividend serves as a means of monitoring the behavior of management, and, therefore, it contributes to minimizing the agency cost arising from a potential conflict of interest/agency conflict between shareholders (the company owners) and agents (managers). Based on this idea, the market will react positively/negatively on the increase or decrease of dividends. Meanwhile, the agency cost is the cost emerging in order to control or monitor the actions of managers to comply with the basic interests. The basis of the agency cost model is when managers consciously are not able to take actions in accordance with the interests of investors/shareholders, consequently, the shareholders use certain mechanisms to control the actions of the managers. One of those actions is through dividend payment with a high payout.

The occurrence of agency conflict cannot be separated from the influence of the ownership structure. In a company that has a dominant particular ownership structure, subsequently, the company will have its own interest that is beneficial for that dominant ownership structure. The structures of share ownership in a public company include institutional ownership and individual ownership. Institutional ownership consists of the ownership of shares owned by the government, financial institutions, corporations, foreign institutions, trust funds, and other institutions. Individual ownership is the ownership of each individual on the shares of a company (Thanatawee, 2013).

Although there is a lot of empirical evidence on the correlation between ownership structure and dividend in the US and other developing countries that has been documented, there is still a lack of literature such as the problem of the market in developing countries, chiefly, in Indonesia. Indonesian capital market offers an attractive atmosphere to explore this issue for several reasons. First, Asia, including Indonesia, is characterized as a country with low shareholder protection as well as the ownership structure of Indonesian corporates that is highly concentrated (La Porta et al., 2000). Second, it is recorded that the companies in East Asia, including Indonesia, are partially owned and controlled by individuals, families, and related partners (Claessens et al., 2000). These characteristics
can increase the agency cost, FCF, while the dividend payment is more likely to be used as a mechanism that helps to reduce the institutional problems. Furthermore, Limpaphayom and Ngamwuttikul (2004) in Thanatawee (2013) state that, Thailand stock companies are owned by five biggest shareholders, the majority is held by institutions holding 27% substantial average of the total outstanding share.

This research needs to be completed because most research with similar theme has been conducted for countries with advanced markets, especially the United States. Only a few studies have been conducted on markets in developing countries, such as Thailand (Thanatawee, 2013). In that study, it is said that the institutional differences between these two countries include the corporate management system between Thailand and developed country. However, there is no indication whether the differences in the practice of institutional governance, regulation, and the company, are included into the differences of the correlation between ownership and corporate dividend. This research will try to correctly answer the questions by using the framework of the simultaneous equation to study the characteristics of the correlation between ownership as indicated by the board ownership (shareholding percentage owned by the board members) and the dividend policy.

**Empirical Evidence**

Thanatawee (2013) conducted a study entitled "Ownership Structure and Dividend Policy: Evidence from Thailand". This journal aims to test whether there is an empirical correlation between the ownership structure of the company’s dividend policy. In analyzing the data, this journal uses three models of computation. These models include: Descriptive Statistics, Logit Regressions, Tobit Regressions, and Possible Endogeneity Test. Likewise, these four models are used for the data processing of this study. They are expected to show the correlation between the two main concepts studied.

The result of that previous research indicates two points of conclusion. The first point reveals that companies in Thailand have extremely high concentrated ownership structure and mostly owned by institutions. Through the control variables including ROA, SIZE, and RETE, this has positive effects on the dividend policy as well as on the Dividend Payout Ratio (DPR). The Dividend Payout Ratio was also found to have positive effects on MTB but have negative effects on LEV. Meanwhile, FCF does not have a significant correlation to the dividend policy of the companies in Thailand. The second point reveals that the higher concentration of ownership as an institution, compared to the individual, the highest ownership would rather pay dividend and have positive relation with the DPR. Additionally, whether the dividend is paid or not, and whether the Dividend Payout Ratio is high and low, it is more controlled by the higher concentration of ownership of the domestic institutions/individuals rather than foreign institutions/individuals.

Suwendra Kumar (2007) conducted a study entitled "Analysis of The Effects of Ownership Structure, Investment Opportunity Set (IOS), and Financial Ratios on Dividend Payout Ratio (DPR)". The purpose of the study is to test two agents based on the hypothesis regarding the effects of ownership concentration on dividend policy by using a large sample of Japanese companies. In analyzing the data, it applies three models of computation, namely, Payout Regressions, Endogeneity of Ownership, and Dividend Change Regressions to measure the correlation between variables. It aims to determine how far is the influence of the ownership structure, investment opportunity set (IOS), and financial ratios such as return on assets (ROA) and debt to equity ratio (DER) on the dividend payout ratio (DER) in companies with foreign direct investment (FDI) and in companies with domestic capital investment (DCI). In analyzing the data, it only uses one calculation model, that is multiple regression. This model will also be applied in this study for the data processing.

In that thesis, there are two points of conclusion; first, on the domestic investment companies, it is only ROA affecting DPR significantly; therefore, ROA should be maintained, since it becomes the most dominant concern and affects the DPR. Furthermore, the second point is that on the foreign investment companies, the management stock ownership, IOS, ROA, and DER significantly influence DPR, thus, the scale of the management stock ownership, IOS, ROA, and DER should be maintained to attract investors.

**Research Method**

To observe the effect of ownership structure on dividend policy in the companies
listed on Indonesia Stock Exchange during 2009-2013, this study applies three types of variables. The first is bound or dependent variable. The dependent variable in this study is the dividend payout ratio (DPR). The second one is the control variable. Control variables in this study are the return on assets, free flow cast, firm size, market to book ratio, leverage, retained earnings to equity, and firm age. Then the last one is free variable or the independent variable. The independent variables in this study are the largest shareholder, institutional shareholder and individual shareholder. To follows (Nachrowi and Usman, 2006): see the effect of the correlation, the analysis model is used to process these three variables with a mathematical model as follows:

\[
N \times T = \text{amount of panel data}
\]

To estimate the parameter of the model with panel data, there are some techniques suggested, i.e.: Pooled Least Square, Fixed Effect Method (FEM), and Random Effect Method (REM). In choosing which model that would be used, the Chow Test and Hausmann Test are performed. Chow Test is a test in order to choose the model approach that should be applied in accordance with the equation model used, whether the pooled least squares or the fixed effect. While in choosing which approach that fits the model equation between the fixed effect and random effect, the specifications developed by Hausman can be used. The Hausman Test applies Chi Square value, so that the method selection decision of the panel data can be determined statistically.

### Panel Data Analysis

Descriptive statistical analysis can be used to determine the characteristics and the rationality of the observation data used for each research variable. The following table shows the descriptive statistics, i.e. mean, maximum value, minimum value, and the standard deviation of the variables in the equation evaluating the effects of the ownership structure on dividend policy of the research sample data presented in Appendix 1. The research variables are the ownership structure (TOP, INST, and INDV), the dividend policy (DPR), and the financial ratios (ROA, FCF, SIZE, MTB, LEV, RETE, AGE).

Table 2 indicates the multicollinearity test using matrix correlation method which aims to test whether the regression model is correlated with the independent variables. The effective regression model should not emerge any correlation among the independent variables (Ghozali, 2009). Multicollinearity is the condition indicating the existence of the correlation among the independent variables. If the case of multicollinearity appears, the research will not work. To analyze the presence or the absence of multicollinearity, the correlation coefficient of each independent variable should be observed. If the correlation coefficient among each independent variable is greater than 0.8, then, the multicollinearity occurs.

The result of the correlation analysis using the correlation matrix above indicates a perfect correlation that has a negative value or opposite orientation. The perfect
correlation occurs between INST variable and INDV variable. In addition, the perfect correlation has a significance level at $\alpha = 1\%$. This indicates that between the INST variable and INDV variable, there is a very strong and perfect association, in other words, by knowing the value of the INST variable, therefore, the value of INDV variable also can be identified, and vice versa.

As mentioned earlier that if the multicollinearity problem arises, the research will be not working. This happens because in order to be able to do the multiple linear regression model test, there should not be any symptom of multicollinearity on the independent variable. Therefore, one of the independent variables having the symptom of multicollinearity must be removed, in this case, it might be the INST variable or INDV variable. In order to able to continue the research and examine the multiple linear regression models, I (we) chose to eliminate the INST variable and kept using the INDV variables. The explanation about this will be proved at the section of result analysis.

Table 3 shows the result of Chow Test proving that this study applies the panel data of Pooled Least Square, that refers to the cross-section data with time series (pool data) which are then combined and treated as one observation entity used to estimate the model with Ordinary Least Square method. Table 4 shows the result of the regression using Pooled Least Square method.

### Table 1. Descriptive Statistics of The Research Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPR</td>
<td>0.5856</td>
<td>0.0000</td>
<td>135.04</td>
<td>0.0000</td>
<td>6.05069</td>
</tr>
<tr>
<td>TOP</td>
<td>0.5022</td>
<td>0.51</td>
<td>0.9687</td>
<td>0.0873</td>
<td>0.21803</td>
</tr>
<tr>
<td>INST</td>
<td>0.6895</td>
<td>0.7172</td>
<td>0.9939</td>
<td>0.1011</td>
<td>0.18747</td>
</tr>
<tr>
<td>INDV</td>
<td>0.3104</td>
<td>0.2828</td>
<td>0.8989</td>
<td>0.0061</td>
<td>0.18747</td>
</tr>
<tr>
<td>ROA</td>
<td>0.1230</td>
<td>0.0943</td>
<td>0.8715</td>
<td>0.0001</td>
<td>0.10574</td>
</tr>
<tr>
<td>FCF</td>
<td>0.1278</td>
<td>0.0837</td>
<td>23.9001</td>
<td>-0.4212</td>
<td>0.88063</td>
</tr>
<tr>
<td>SIZE</td>
<td>12.2400</td>
<td>12.2008</td>
<td>14.3304</td>
<td>9.4860</td>
<td>0.71329</td>
</tr>
<tr>
<td>MTB</td>
<td>4.2756</td>
<td>1.4153</td>
<td>203.9964</td>
<td>-93.49</td>
<td>15.26139</td>
</tr>
<tr>
<td>LEV</td>
<td>0.5267</td>
<td>0.4977</td>
<td>6.50</td>
<td>0.04</td>
<td>0.38308</td>
</tr>
<tr>
<td>RETE</td>
<td>0.3935</td>
<td>0.5313</td>
<td>71.21</td>
<td>-65.02</td>
<td>3.84033</td>
</tr>
<tr>
<td>AGE</td>
<td>1.4909</td>
<td>1.5185</td>
<td>2.1959</td>
<td>0.7782</td>
<td>0.22776</td>
</tr>
</tbody>
</table>


### Table 3. Result of Chow Test

Redundant Fixed Effects
The T-Test shows how independent one independent variable is, including the largest shareholder (TOP), institutional shareholder (INST), individual shareholder (INDV), dividend policy (DPR), and the financial ratios of the company (ROA, FCF, SIZE, MTB, LEV, RETE, AGE) in describing the variation of the dependent variables, in this case, the Dividend Pay Out Ratio (Ghozali, 2006). This test is conducted to test whether individually, (each of) the independent variables have a significant effect on the dependent variables. Besides, T-Test is an examination of the regression coefficient of each independent variable on the dependent variable to determine how significant the influence of
the independent variables on the dependent variables.

Based on the Table 4 above, it is shown that the probability of the significance of the independent variables, both, TOP and INDV has significant value, that is 0.0032 for the TOP variable and 0.0000 for the INDV variable. In addition, of the control variables that exist in this study, the variables of return on assets (ROA), firm size (SIZE), and firm age (AGE) also have a significant value or p-value ≤ α, i.e. respectively 0.0000 each.

Whereas, the other control variables such as free cash flow (FCF), market-to-book ratio (MTB), leverage (LEV), and retained earnings to equity (RETE), are not significant.

Table 4 also shows the phenomenon of agency cost indicating the association between the shareholdings and the dividend policy made by the company manager (Audita, 2014). The result of this study indicates the direction of the correlation of each independent variable (ownership structure) on the dependent variable (dividend policy). In TOP variable, there is a positive correlation on the DPR variable, while the INDV variable has negative correlation. This means that the largest external shareholding in the company will be beneficial for reducing the agency problem. The majority of the shareholders can perform its function to oversee the policies and activities of the manager without bringing up a conflict of interest among the holders of the share blocks. The managers will not be able to freely determine their interests for the management purposes only. This is also in accordance with Truong and Heaney (2007), that when a non-insider shareholder of a significant share, the company will be more pleased to offer dividend, especially if the profitability condition of the company is high with small debt.

This condition is certainly opposed to the individual shareholder variable (INDV), which has a negative correlation with the dividend policy (DPR). This condition contrasts with the largest shareholder (TOP). An individual shareholder is usually characterized by the managerial ownership, which means, the more proportionate the share in a company, the more the potential of agency conflict emerges. By realizing the negative association of the INDV variable on DPR, then, it can be identified that INST variable has a positive correlation, because, both, the variables of INST and INDV have perfect multicollinearity in the opposite direction. This made me (us) discard the individual shareholder variable (INDV) in the early part of this research model testing. The result of this research indicates that the correlation between institutional shareholder and dividend policy also reinforces the statement saying that there is a tendency, that the larger the institutional shareholder, the more the company pays the taxes (Grinstein, Y., & Michaely, R, 2005).

Furthermore, the financial ratios used as the control variables, i.e. the variables of ROA, FCF, MTB, and LEV, have a negative correlation with the DPR variable. The negative correlation of ROA on DPR contracts with what is proposed by Thanatawee (2013), whereas for the negative correlation of FCF, MTB, and LEV is in line with that proposed by Thanatawee (2013). Furthermore, a positive correlation can be found in the variables of SIZE, RETE, and AGE on DPR. This is in line with Thanatawee (2013) indicating a positive association among SIZE, RETE, and AGE on DPR. The positive correlation between AGE and DPR is in accordance with the theory stating that if the age of a company is getting higher, then the company should be well-established.

**Conclusions**

Generally, this study is conducted to observe whether there is an influence between the ownership structure on the company’s dividend policy in non-financial companies listed on the Indonesia Stock Exchange of 2009-2013 period. The result of this study indicates that the ownership structure, proxied by the variables of largest shareholder, institutional shareholder and individual shareholder, has a significant effect on dividend policy, in which, the variables of largest shareholder and institutional shareholder have a positive correlation on the dividend policy, while the individual shareholder has a negative correlation on the dividend policy.

However, of a number of present control variables, there are only the variables of Return on Assets, Firm Size, and Firm Age that have a significant influence on dividend policy, in which the variable of Return on Assets has a negative correlation on the dividend policy, moreover, the variables of Firm Size and Firm Age have positive correlation on dividend policy. Furthermore, there is no significant effect of the variables of Free Cash Flow, Market to Book Ratio, Leverage, and Retained
Earnings to Equity, on dividend policy.

As a suggestion, the issuers should pay more attention to the capital structure by considering whether they have to use their own capital or use long-term liabilities. This is due to the use of these two sources that have different capital cost implications. The size of the capital costs will affect the profitability, which in turn, will affect the dividend policy of the company. For the investors, the company's ability to give dividend is a prospect in the future. This is a positive signal implying that the issuers are the eligible entity to be considered as an investment agent.

References


