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## **Searching for Determinants of Pay or Not to Pay Cash Dividend in Indonesia**

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*A dividend decision of a firm is an outcome of various considerations. These considerations differ across time and industry. Based on asymmetric information – agency theory thought, this study re-examines various variables that have a bearing on the dividend decision of a firm. In addition to examining the impact of corporate fundamentals on dividend policy, this study also analyzes the effect of expropriation trigger variables (family ownership, cash funds, the level of diversification and Related Party Transaction/RPT) on a dividend policy. The results of panel logistic regression indicate that Cash Funds, RPT, Profitability, Size, Growth, Debt and Macroeconomics variables are the determinants of the dividend policy for Indonesian listed public companies, observed during 2002 to 2010.*

**Keywords:** *dividend policy-pay and not pay cash dividend, expropriation, asymmetry information, agency theory, family ownership, cash funds, level of diversification, related party transaction, panel data analysis*

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### **Introduction**

One of the primary subjects of corporate finance is the firm's dividend policy, which has usually been considered in association with a firm's financing and investment decisions. The relation amongst these two decisions has arisen essential questions: Should companies pay cash dividend? How much should they pay as cash dividend? What are the variables that affect pay or not to pay cash dividend?

Researchers have attempted to provide answers to those questions but still, consistent answers remains undiscovered. Lintner (1956) claims that firms target their dividend payout ratio in consequence of current earnings and

past dividends, so that firms have stable dividend policies. Miller and Modigliani (1961) on the contrary state that dividend policy is irrelevant to firm value based on rigid assumptions of market perfections, zero transaction costs, and indifferent behaviour of investors. However, Miller and Scholes (1982) argue that in the real world, dividend decision is determined more by high taxes on dividends than capital gains and the imperfections of capital market.

This research becomes an alternative research for studies of determinant of dividend policy, that have been done in several emerging countries. Boanyah et al. (2013) evaluates variables that affect dividend pay out policy for all 10 manufacturing companies listed on

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Ghana Stock Exchange covering the period 1997-2006, while Rehman (2012), analyzes 63 engineering firms listed on KSE covered 1996 to 2008 time period, which represent more than 90% of total engineering industry and Imran (2011) analyzes 50 firms listed in KSE that announced dividend in 2009. Boanyah et al (2013) and Rehman (2012) use panel data regression method, while Imran (2011) uses OLS regression to evaluate determinant of dividend payout policy. Fundamental variables used in their study are last year dividend per share, earning per share, profitability, cash flow, sales growth, firm size and liquidity.

Chen and Dhiensiri (2009) analyzes the determinants of corporate dividend policy using sample of firms listed on the New Zealand Stock Exchange (NZSE). They find dividend pay out ratio were positively related to the degree of insider ownership and growth in revenues. Tsuji (2010) explores the determinants of dividend policy of firms in the Japanese industry are yield, size, and after tax earnings to total asset ratios. Imran (2011) investigates the factors determining the dividend payout decisions in the case of Pakistan engineering sector by using the data of 68 firms listed on the Karachi Stock Exchange from period 1996 to 2008. The result suggests that the previous dividend per share, earning per share, profitability, cash flow, sales, growth, and size of the firm are the most critical factors determining dividend policy in the engineering sector of Pakistan. As explained above existing theories about determinant of dividend policy still give various prediction, while there are only few support from empirical evidences, especially in Indonesia where research about these issues are very few, as far as we know. We also consider macroeconomics and tax as fundamental variables analyzed in this research. Those stated above become our first research gap.

Most of research studies in emerging market focus on agency problems, corporate governance and investor protection. In the Indonesian context, we found several studies analyzing dividend policy, which Indonesian companies included in their samples. For examples, Mitton (2004) analyzes 365 firms from 19 coun-

tries and found firms with stronger corporate governance and investor protection had higher dividend payouts. La Porta et al. (2000) develop agency models of dividends, one of which is outcome model that dividends is paid because minority shareholders pressure corporate insiders to disgorge cash. Tests on a cross section of 4,000 companies from 33 countries with different levels of minority shareholder rights support that model. Ferris et.al (2009), examine 28,435 firm-year observations from 23 countries, find evidence of catering among firms incorporated in common law countries but not for those in civil law nations, considering investor protection is better in common law than civil law countries. Truong and Heaney (2007) investigate 8,279 listed firms drawn from 37 countries. They examine the interaction between the largest shareholders and dividend policy that was subject to the level of legal protection provided to minority shareholders in country where the firm operates.

In addition to the focus on the influence of fundamental variables to dividend policy, this study also raises the issue of agency, as observed in emerging countries. Expropriation can occur through dividend policy (La Porta et al. 2000). The second gap of this research is the examination of the impact of several expropriation variables to dividend policy (to pay or not pay cash dividend). Those variables are family ownership ((Faccio et al. (2001), Guggler (2001), Guggler and Yurtoglu (2003), Chen et al. (2005), Truong and Heaney (2007), Officer (2010) and Wei et al. (2011)); Cash Fund (Jensen (1986), and Harford et al. (2008)); Business Diversification (Lins and Servaes (1999), Claessens et al. (2006), Fukui and Ushijima (2007), Lin and Su (2008), and Lee et al. (2009)), and Related Party Transaction ((Cheung et al., (2006), Riyanto and Toolsema (2008), Djankov et al. (2008), and Ariffin et al. (2010)).

The relationship among variables was analyzed using logistic panel regression, which become our third gap research. One of advantages of using panel data is control of the diversity of individuals that are not performed by studies of time series and cross section. Without control of individual heterogeneity, the estimated

coefficients might be biased. Panel data also provide more information and variations, lesser collinearity among variables, higher and more efficient degree of freedom (Baltagi, 2001).

The remaining paper is organized as follows: Section 2 presents the existing literature. Section 3 describes the data and sample selection. Section 4 discusses the results of the study and section 5 presents the conclusion.

## Literature Review

The motivation of top executives in determining the dividend policy is still the subject of debate in the corporate finance literature. Various theories are developed to explain the reason for the company to pay or not to pay dividends. Several previous studies have focused only on the determinants of dividend policy in general views of the fundamental aspects of the company (Dennis and Osobov (2008), Al-Kuwari (2010), Lee (2010), and Ahmed and Javid (2009)). Several other studies have linked the dividend to the potential but limited expropriation, by focusing only on the concentration of ownership (Truong and Heaney (2007), Wei et al. (2011)). This study aims to contribute to the theory of dividends from expropriation by considering aspects of the empirical context of Indonesia considering to some variables that potentially leads to the expropriation.

The information asymmetry theory is based on the assumption that corporate insider controls the information about the company's future profitability as compared to outside shareholders. Outsiders can not fully rely on temporary accounting data to determine the profitability of the company in the future (Miller and Rock (1985), and Bhattacharya (1979)).

La Porta et al. (2002) state that information asymmetry problems that cause a conflict of interest between corporate insiders and outside investors in the modern corporation, and this is also has become the research focus of Berle and Means (1932) and Jensen and Meckling (1976). According to La Porta et al. (2002) the parties of the insider and outsider depends on the ownership structure of the company. Research conducted by La Porta et al. (1998) in 27 countries

show only the US, UK, Canada, Australia and Japan companies - public companies tend to have dispersed ownership structure.

In dispersed ownership structure, the proportion of shares held by insider are less than the proportion of shares held by outsider. Shares ownership are scattered in the public investors. La Porta et al. research (2002), show the proportion of insider ownership in countries with dispersed ownership structure varies from 50% (Japan) to 10% (United States). They also suggest that the ownership structure of public companies in 22 other countries in general tend to be concentrated. Variations in the proportion of insider ownership reaches 40% to almost 100%. While the shares sold to the public only around 5% - 40%.

Insider-outsider conflicts that happen in dispersed ownership structure firms is between the managers and the public shareholders (Rozeff (1982)), Easterbrook (1984), and Jensen (1986)). Managers know company's prospects better than public shareholders. In companies with concentrated ownership structures, the majority shareholder who are also corporate insiders are effectively able to control the decisions of managers (La Porta et al. (2002)). Manager elected by majority shareholders, who are primarily families. Claessens et al. (2000) conduct a study of 2,980 companies from nine countries of East Asia proved that companies belonging to the same business groups tend to have a manager who still has family ties to the founding shareholders. Thus the agency problem is not as bad as occurs in countries with dispersed ownership structure.

Although the conflict between public shareholders and managers are not dominant in companies with concentrated ownership structure, but the majority shareholders can apply policies that detrimental to minority shareholders. Insiders-Outsiders conflicts of interests in companies with concentrated ownership structure is the majority shareholder (co-manager) to minority shareholders (public investors). Shleifer and Vishny (1997) suggest that controlling insiders divert corporate assets to private interests against the interests of outside investors. Johnson et al. (2000) define tunneling as the transfer



value or operating performance. Kalcheva and Lins (2007) show that companies with lower minority shareholder's protection will have lower firm value if they maintained too much cash. Harford et al. (2008) support them adding other evidences namely escalation of capital expenditures and acquisitions.

Descriptions above show the relationship between the accumulation of cash with the possibility of expropriation through dividend policy. Accumulated cash and dividend restrictions are necessary to keep companies from losing profitable investment opportunities. Yet on the other hand the majority shareholder role in determining financial decisions, including the decision to pay or not to pay dividends. The accumulation of high cash creates big opportunity for shareholders to abuse the company's cash flow. The accumulation of high cash opens up the possibility of expropriation through dividend policy. Cash fund affects pay or not to pay cash dividend.

Deprivation of minority shareholders' rights may also occur through business diversification. The condition of information asymmetry causes the corporation to diversify its business or increase its business portfolio with aim of collecting internal funds that is cheaper than public funds. However, many previous studies indicated that diversification did not increase the firm value to the research context of US, UK, Germany and Japan (Lang and Stulz (1994), Berger and Ofek (1995), and Lins and Servaes (1999). Though, Khanna and Palepu (1997; 2000) assume that diversification would be more valuable in the developing capital markets. Levels of information asymmetry that occurs in developing capital markets tend to be higher than the established capital markets. Diversification positively impacts firm value. Diversification allows companies not to rely on external capital market, due to the availability of funds derived from internal capital markets. Divisions which have high cash flow but low investment opportunities fund divisions with low cash flow but profitable investment opportunities<sup>4</sup>.

The condition of information asymmetry allows the majority shareholder to easily exploit companies for personal gain. The opportunity is getting bigger if investor legal protection is weak (Claessens et al. 2006). Claessens et al. (2006) use a sample of publicly traded companies from 7 countries in Asia. They prove there was a negative impact of level of diversification on firm value. Proved by Fukui and Ushijima (2007) for a sample of Japanese public companies. They conclude it was due to unrelated diversification. Meanwhile, Lee et al. (2009) prove that diversification is only useful in times of crisis. After the crisis period was exceeded there is no difference between the value of multi-segment firms and single-segment firms.

Based on the argument above there is possibility of expropriation through dividend policy due to the high level of diversification. Business diversification has opened the opportunity of an adverse corporate exploitation of minority shareholders (Faccio et al. (2001), Claessens et al. (2006). Owners of equity of group companies spread their fund on companies in one business group. Diversification affect pay or not to pay cash dividend.

Insiders create their company into a public company and turn it into a public fundraiser. Public company exploitation occur when shareholder of company resources are transferred for personal gain This transfers decrease the company's capability to generate profit. Dividends are part of corporate profits paid out to shareholders (Shleifer and Vishny (1997).

The possibility of expropriation can also occur through the apply of Related Party Transactions (RPT). RPT is an instrument that is typically used when controlling shareholder transfers company resources to other companies which are in the same business. The presence of business group with pyramid structure open up the possibility of expropriation. Pyramid structure demonstrates ownership structure with top down control chain with ultimate owners (controlling shareholders) at the top of pyramid. They control all of the companies in each layer simultaneously (La Porta et al. 1999).

<sup>4</sup> Besides regarded as a tool for creating internal capital markets, diversification is also considered as a means to reduce firm specific risk. Therefore, diversification will enhance shareholder value.

Pyramid structure separates control rights and cash flow rights owned by controlling shareholders that are located in layers of the pyramid (La Porta et al. 2000). The result is tendency of expropriation if cash flow rights and control rights are not proportional. Controlling shareholders can divert company resources through their control point.

Djankov et al. (2008) state the transfer of company resources to other companies resources that are in the same business group as self-dealing<sup>5</sup>. Djankov et al. (2008) conduct a study on the legal protection for minority shareholders from 78 countries and find evidence that self-dealing found in countries with low legal protection for minority shareholders. The presence of a majority shareholder (controlling) causes self dealing transaction will be easy to do. The mechanism of self-dealing led to the price set in the Related Party Transaction may not correspond to the market value (Cheung et al. (2006), Riyanto and Toolsema (2008), Djankov et al. (2008), and Ariffin et al. (2010).

Some studies showed that RPT did not always have a negative impact on firm value. Cheung et al. (2009) analyze both RPT that are propping (profitable for companies/minority shareholder) and tunneling (detriment of minority shareholders). They used samples of Chinese public companies and prove that in overall RPT has a negative impact on firm value. Cheung et al. (2006) prove that the market reacted negatively to the company announcing RPT. Berkman et al. (2009) reveal that companies issue warranty on their affiliate have low firm values.

Nevertheless controlling shareholders can use negative RPT to seize the rights of minority shareholders. If company resources are diverted for personal benefit of the controlling shareholders, it will reduce its ability to generate profits. RPT affect pay or not to pay cash dividend.

Dividend payment leads to reduce funds managed by insiders. This prevents insiders misuse company's cash flow (Jensen (1986), Lang and Litzenberger (1989), Gugler and Yurtoglu (2005) state that dividend payment is a tool to limit the expropriation against minority shareholder rights.

Ownership concentration and establishment of policies that do not pay dividends suggests the possibility of expropriation. Conversely, policies that pay dividends indicates that the majority shareholders/controllers do not intend to exploit minority shareholders. Gugler and Yurtoglu (2005) prove this by showing the effect of an increase or decrease in the level of dividend payments on firm value based on ownership structure. Officer (2010) attest firms with low growth rates and high cash flow dividend announcement will have higher return than other firms. As with Gugler and Yurtoglu (2003), Officer (2010) interpret that market reacted positively because of dividend payment, the insiders have less money to be misused for his own benefit. Their research focus only on the companies that pay dividends. So the behavior of companies that do not pay dividends are not analyzed.

Companies with high investment growth would require more internal funds to finance investment opportunities. They are likely to pay little or no dividends. The prediction is consistent with the pecking order hypothesis propose by Myers and Majluf (1984)<sup>6</sup>. Companies with high growth will be negatively related to dividend policy. (Fama and French (2001), Desmukh (2003) and Aivazian et al. (2003), Al Kuwari (2010)).

Firm life cycles also used to determine company investment opportunities (Bulan and Subramanyam (2009)). Companies in mature stage are considered to have slower growth than those which in their introduction or growth stages (Grullon et al. (2002); De Angelo et al.

<sup>5</sup> Self-dealing transaction is a transaction between companies that are in the business transaction was carried out under the control of one or more parties who still have family ties.

<sup>6</sup> Pecking order hypothesis suggests that firms finance investment using internal funds, if they need external financing they use debt before issuing shares to reduce information asymmetry costs and other transaction costs (Myers (1984) and Myers and Majluf (1984))

(2006). Such companies have no incentive to accumulate reserves funding because of the growth that has been declining and little capital outlay. This allows them to set policies that pay dividends or increase dividend payments. Instead, the companies which are still growing tend to build up reserves to meet funding needs. They inclined to hold majority of their earnings and pay dividends with a low rate or not pay at all. Fama and French (2001), De Angelo et al. (2006), Dennis and Osobov (2008), suggest that dividend policy is negatively related to firm growth.

Large companies tend to have better access to capital markets and raise funds at a lower cost and have less constraint compared to smaller companies. Dependence on the internal funds decreases with an increase in the size of the company. Thus, large companies tend to be more able to pay dividends than other firms. This is evidenced by the Fama and French (2001), Deshmukh (2003), Denis and Osobov (2008), and Al Kuwari (2010).

Companies with debt financing have commitment to make payment both interest and principal. Failure to meet those obligations would cause the company to be liquidated. Risks associated with the level of leverage will lead to lower dividend payments or no dividend payment. Rozeff (1982) shows that firms with high financial leverage tend to have a low level of payments to reduce the transaction costs associated with external financing. Al-Kuwari (2010) and Lee (2010) proved the same phenomenon.

The decision to pay dividends usually starts from the profit. Level of profitability is one of the most important factors that may affect corporate dividend decision (Lintner (1956)). Pecking Order hypothesis may be an explanation of the relationship between the profitability and the level of dividend. Considering the cost of issuing debt and external financing, it is less optimal for less profitable firms to pay dividends. In contrast, companies with high profitability will be able to pay dividends better and generate internal funds (retained earnings) to finance investment. Fama and French (2001) interpret their findings that the positive rela-

tionship between profitability and dividends was consistent with the pecking order hypothesis. This is also supported by Denis and Osobov (2008), Al Kuwari (2010), and Lee (2010).

Fama and French (2001) argue that companies tend to pay dividends is a company with a large size, low growth opportunity and high profitability. This is supported by Denis and Osobov (2008) for sample of companies that originated from the US, Canada, UK, Germany, France and Japan.

The important output of the macroeconomics is GDP. If macroeconomics is in a good condition it will have a positive impact on GDP. High GDP provides an opportunity for any company to be able to generate more profit. As stated by Lintner (1956) and reconfirmed by Brav et al. (2005) profitability is a determinant variable for companies to pay cash dividend for their shareholders. To analyze the effect of macroeconomic on dividend policy, this study uses companies sales data sector scaled by each GDP sector in each year during the study period. Thus, it will show the development of the company's market share based on macroeconomic conditions.

Brennan (1970) develops the capital asset pricing models with additional premium based on the dividend yield (tax adjusted return model). He states that investors want a higher rate of return for stocks with a high dividend yield as well as compensation for the tax from dividends disadvantage. Empirical results are mixed as Brennan (1970) prove the existence relation of pre-tax return and the dividend yield. Black and Scholes (1974), Miller and Scholes (1982) do not get results that support tax-adjusted return model (Chang and Rhee (1990), examine the impact of differential personal taxes on capital gains and dividend income and show a positive relationship between financial leverage and dividend policy measures. The results suggest that firms with high payout ratios tend to be debt financed, while firms with low payout ratios tend to be equity financed.

Various recent studies on corporate dividend policy have been associated with dividend tax imputation. It is a corporate tax system where the tax paid by the company will reduce shareholders income tax. Dividend imputation tax



also occurs in Indonesia. Act No. 36 of 2008 gave rise to new provisions in the form of withholding tax which is final on dividends distributed to individual taxpayers in the country. This provision is stipulated in Article 17 paragraph (2c). The law determines the authority granted to government regulation rate with the maximum rate allowed is 10% and it is final. This new provision makes PPh (Personal Income Tax) as the object of Article 23 is reduced because previously, rate of dividends tax is 15% and it is not final properties. These changes make provision for withholding tax on dividends received by individual taxpayers in the country to be simpler and more certain

Several studies have tried to see the effect of dividend imputation system on corporate dividend policy. Pattenden and Twite (2008) used Australian data to analyze the dividend policy on two different tax systems. Dividend imputation system was introduced in Australia in 1987. They use the 306 companies with the time period 1982-1997. Based on logistic regression analysis, Pattenden and Twite (2008) obtained results that support the role of taxes on dividend policy. The introduction of dividend imputation increased dividend payout and dividend payment.

Twite (2001) used Australian data indicated that tax changes lead to changes in the company capital structure. The existence of dividend imputation provides an incentive for companies to reduce the level of funding from debt and increase external funding. Various studies on the link imputation tax in various countries as quoted by Pattenden and Twite (2008) show that tax has a role in the initiation of dividend payment in Canada (Khoury and Smith (1977) and England (Poterba and Summers (1984)).

Results of research conducted by Michaely (1991) using US data do not support the research conducted in Australia. The results showed no difference among premium of stocks that pay dividends for a period of time before or after the tax reform.

Chen and Dhiensiri (2009) conducted a study of the impact of dividend imputation tax in the context of public companies New Zealand. They used data for 1995-1997 to analyze

the impact of dividend imputation tax rate varies based on the amount of dividends paid by the company. The results show no effect of dividend imputation tax on dividend policy of the company.

Various studies linked dividend policies with company fundamentals, such as growth, company life cycles, size, debt and profitability. Some other connected dividend policy studies with macroeconomics condition and tax systems. Growth, life cycles, size, debt and profitability affect pay or not to pay cash dividend.

## Research Method

The sample companies are drawn from Indonesian Capital Market Directory. The period of the study is nine years from 2002 to 2010. Companies from banking and non-banking financial institutions industry were excluded from the sample. In Indonesia government company must pay dividend therefore we exclude government public company from sample. Companies with negative equity are also removed from the study sample, in line with research Fama and French (2001), and Denis and Osobov (2008). Our sample is unbalanced panel consists of 2239 firm-year observations.

The nature of the data allows us the use of panel techniques. The panel logistic regression model differs from a normal time-series or cross section model by attaching the double subscript to each variable. The general form of the panel data model can be written in logistic model as:

$$\ln \frac{p(\text{div})}{(1-p(\text{div}))} it = \alpha + \beta_1 FAM_{it} + \beta_2 CF_{it} + \beta_3 DIVER_{it} + \beta_4 DRPT_{it} + \beta_5 DTAX_{it} + \beta_6 ROE_{it} + \beta_7 SIZE_{it} + \beta_8 DER_{it} + \beta_9 GROWTH_{it} + \beta_{10} MACRO_{it} \quad 1)$$

The explanatory variables used for the determination of dividend policy are explained in Table 1, whereas the dependent variable is a dummy variable. Companies that pay cash dividends is given a value of 1, and 0 for not paying dividends.

Table 1. Description of variables

Variables	Description
Fam	Family ownership All individuals and companies whose ownership is recorded (ownership > 5% shall be recorded), which is not a public company, state, financial institutions and the public (individuals whose ownership is not required to be noted).
CF	Cash Fund Proportion of cash to total net assets
Diver	Diversification In this study, the level of corporate diversification measured by the number of business segments owned by the corporation.
DRPT	Dummy Related Party Transaction Any company that does have a conflict of interest transaction shall make disclosure. RPT will therefore use a dummy variable 1 for companies that do RPT and dummy 0 for firms that do not perform RPT.
DTAX	Dummy Tax Dummy variables, 1 for the year in which the tax law changed (years 2009-2010) and zero for the other years (2002-2006).
ROE	Return On Equity Net income per total equity
SIZE	Ln total assets
DER	Debt to Equity ratio
GROWTH	Companies with lots of opportunities investment of is measured with low ratio retained earnings to total asset who, and vice versa to companies with chance of investment.
MACRO	Macroeconomics condition Company's market share of sales divided by GDP sector in which they operate

## Result and Discussion

This study examines the determinant of dividend policy on Indonesian public company. The study analyzes how the influence expropriation variables on the probability of dividend payment. These variables are the proportion of family ownership, cash funds, the level of diversification, and the dummy Related Party Transaction. Besides expropriation variables we also conduct a test on how company fundamentals effect corporate dividend policy.

The research model apply random effects panel logistic regression. Several tests are conducted to consider the procedural best model. *F* test indicated that Fixed Effect model outperforms OLS; Breuch Pagan test indicated that there is a diversity of individuals so that Random effect model should be used instead of OLS. Last test is to use the Hausman test which is basically a procedural technique to determine whether or not unique error component (shows the diversity of individuals observed) is correlated with the independent variable. Hausman test results show significant results so that the error is correlated with the independent variable. The best model is supposed to be Fixed Effect model (Fixed Effect model result is not included in this paper).

Fixed Effect model test results showed that variables that has negative impact on dividend

payment are *DRPT* and *Debt*. Company growth has positive influence as well as macroeconomic conditions.

Nevertheless Fixed Effect model generated by processing data using STATA 10 software reduce as much 1,313 observations out from 2,239 observation, or nearly 60% of the total number of observations thus leaving only 926 observations. Taking into account the conditions of Indonesia business environment which is prone of expropriation and legal system that did not protect minority shareholders, causing the individual diversity of factors that are not observed should be random. If the legal system provides good protection to the shareholders, as well as the law enforcement that goes well, then it should be difficult for controlling shareholders to seek to expropriate. The possibility of individual diversity factors that are not observed to be more limited, and its effect on the dependent and independent variables relationships will be fixed. Taking into account these conditions, this study using Random Effect Model, as can be seen at Table 1. *F* Test, Hausmann test and Breuch Pagan test still remain to be done as a general procedure.

Software Stata 10 does not provide the goodness of fit measure,  $R^2$  so it is used hit ratio, by comparing the number of correct predictions to the total number of observations. Hit ratio is 1,203/2,239: 0.537.

Table 2. Statistic Descriptive

	dividend	Fam	CF	Diver	Rpt	Tax	roe	Size	der	growth
observation	2239	2239	2239	2239	2239	2239	2239	2239	2239	2239
Mean	.2952211	.6550678	.0856009	2.660563	.1201429	.3550692	.0436183	6.652989	2.106379	.0658436
SD	.456244	.2416182	.0978178	1.450406	.3252012	.4786412	1.41561	1.692758	3.973872	.8259011
Min	0	0	0.008423	1	0	0	-4.20332	1.79	0.023862	0.0062
Max	1	0.99000	0.725716	9	1	1	4.290448	11.63	9.236	3.55

Table 3. Random effect logistic panel regression

$$\ln \frac{p(div)}{1-p(div)}_{it} = \alpha + \beta_1 FAM_{it} + \beta_2 CF_{it} + \beta_3 DIVER_{it} + \beta_4 DRPT_{it} + \beta_5 DTAX_{it} + \beta_6 ROE_{it} + \beta_7 SIZE_{it} + \beta_8 DER_{it} + \beta_9 GROWTH_{it} + \beta_{10} MACRO_{it}$$

The results obtained by the panel logistic models, The dependent variable is the company paying dividends, is a dummy variable = 1 for firms that pay dividends and 0 for no pay. Fam is a portion of family ownership, DF is Cash Fund, Diver is Diversification Level, DRPT is a dummy variable = 1 for firms that do Related Party Transaction and 0 for no perform RPT, Dtax is dummy variable tax = 1 for tax policy year 2009-2010, 0 for 2002-2008, ROE is the ratio of net income to total equity, Size is ln of total assets, DER is the ratio of debt to total equity, Growth is retained earnings / total assets, Makro is macroeconomics variable : a sales and GDP ratio in which the company operates.

Independen Variables	Hypothesis Predicted Direction	Coef.
FAM	-	-.0087769 (0.9870000)
DF	-	<b>3.5059650***</b> <b>(0.0000000)</b>
DIVER	-	-.0096190 (0.9260000)
DRPT	-	<b>-.4806327**</b> <b>(0.0370000)</b>
DTAX	+	.1024654 (0.5280000)
ROE	+	<b>.2473669**</b> <b>(0.0600000)</b>
Lnasset	+	<b>.4761716***</b> <b>(0.0000000)</b>
DER	-	<b>-.1896293***</b> <b>(0.0000000)</b>
Growth	+	<b>2.0368430***</b> <b>(0.0000000)</b>
Macro	+	<b>4.9408250**</b> <b>(0.0190000)</b>

\*\*\* significant at  $\alpha = 1\%$

\*\* significant at  $\alpha = 5\%$

\* significant at  $\alpha = 10\%$

Table 2 shows the statistics descriptive of this study. Based on Table 3 it can not be concluded that there is expropriation through the corporate dividend policy. This is demonstrated by the effect of accumulated cash dividend policy which is positive and significant. It is contrary to the expropriation hypothesis that states the more accumulated cash the smaller probability of dividend payment will be. Hoarding cash would open the opportunities for abuse of corporate cash funds (Jensen (1986)). It is also contrary to the results of research of Dittmar (2003), Dittmar and Smith (2007) and Kusnadi (2011). The finding demonstrates that there is a tendency of companies to consider financial flexibility problems. In conditions of informa-

tion asymmetry, the company will suspend its dividend payments as a precaution motive. Thus, only those companies that have good financial flexibility pay dividends ((Myers and Majluf (1984), Opler et al. (1999), Han and Qiu (2007), Bates et al. (2009)). This study showed that cash has positive influence on the probability of dividend payment.

Table 3. shows fundamental variables, profitability, size, growth and macroeconomic provide a positive and significant effect on the probability dividend payment. While variable debt negatively affects the probability dividend payment. This is consistent with previous studies.

Table 4. Company pay-not pay dividend based on the ammount of cash fund to total assets proportion range

Dividend Policy		Range cash fund to total asset			Total
		Low	Medium	High	
Not pay	Sum	512	782	284	1578
	%	32,4%	49,6%	18%	100%
Pay	Sum	48	337	276	661
	%	7,2%	51%	41,8%	100%
Number of Companies		560	1119	560	2239
Percentage		25%	50%	25%	100%

Source : Indonesia Capital Market Directory

Table 5. Company pay-not pay dividend based on growth range

Dividend Polity		Company growth range			Total
		Low	Medium	High	
Not pay	Sum	203	824	551	1578
	%	12.9%	52,2%	34.9%	100%
Pay	Sum	357	295	9	661
	%	54%	44.6%	1.4%	100%
Number of companies		560	560	560	2239
Percentage		25%	50%	25%	100%

Source: Indonesia Capital Market Directory

In Table 4 it can be seen that the range cash to total assets owned by the companies when setting pay and no pay policy can be divided into 3 groups (three quartile), varies from low (lowest quartile), medium and high (medium and highest quartile). Low proportion is the ratio of cash to total assets of less than 0.01602143, medium is between 0.01602143 to 0.11776360 and the highest is 0.11776360 above. Based on 2,239 observations, 1,578 are firms in the sample set a policy of not paying dividends and the remaining 661 are companies that set a policy of paying dividend.

As many as 32% of company that not pay dividend have low proportion of cash to total assets, while 7% of dividend paying company are those with low cash funds. Whilst companies set policy to pay dividends, 41% of the observations have high cash fund. When companies set policy not to pay a dividend, only 18% of those have high cash fund. It explains why cash fund has a positive effect on the probability of dividend payment.

The determination of company's growth is based on the ratio of retained earnings to total assets (De Angelo et al. (2006) and Bulan and Subramaniam (2009)). Thus the firms with low RE/TA are high growth companies. Logistic panel regression in Table 3 shows growth significant and positively influence the probability

of dividend payment. This implies that companies with slower growth has a greater potential to pay dividends.

Based on the total number of observations, range of company growth can be divided into 3 groups: high-growth companies have RE/TA ratio (retained earnings/total assets) to -0.066602, medium growth was between -0.066603 - 0.24075590- and lowest growth are over 0.24075590. As many as 54% of dividend paying company, are those with low growth, only 1,4% are high growth. While 12.9% of not paying dividend company are low-growing firms and 34% of which are high growth firms. This proves that the probability of companies to pay dividend is increase while companies' growth is decreasing.

In addition to cash and companies growth of the company, the probability of dividend payment is also influenced by profitability and firm size. As seen in Table 3 the influence of these two variables on dividend policy is positive and significant. Table 5 and Table 6. shows how the variation of the profitability and the size of the company when the company set a policy to pay or not to pay dividends.

The profitability range is divided into 3 groups: companies with low profitability are on the range of up to 0.00017684 ROE ratios, medium profitability range was between

Table 6. Company pay-not pay dividend based on profitability range

Dividend Policy		Company profitability range			Total
		Low	Medium	High	
Not Pay	Sum	541	755	282	1578
	%	34.3%	47.8%	17.9%	100%
Pay	Sum	19	364	278	661
	%	2.8%	55.1%	42.1%	100%
Number of companies		560	1119	560	2239
Percentage		25%	50%	25%	100%

Source : Indonesia Capital Market Directory

Table 7. Company pay-not pay dividend based on size range

Dividend Policy		Size Company Range			Total
		Low	Medium	High	
Not pay	Sum	488	765	325	1578
	%	30.9%	48,5%	20,6%	100%
Pay	Sum	74	357	230	661
	%	11,2%	54,0%	34,8%	100%
Number of companies		562	1122	555	2239
Percentage		25,1%	50,1%	24,8%	100%

Source : Indonesia Capital Market Directory

0.00017685 to 0.14926071 and highest profitability are firms with ROE above 0.14926071. Table 6. shows that only 2.8% of dividend paying company are low profitability firms and as many as 34.3% not paying dividend company are low profitability firms. As many as 42.1 % of dividend paying companies are high profitability firms and only 17.9% of are companies with high profitability when they set not to pay dividend. It proves companies that have high profitability tend to pay dividends. The results are consistent with the Fama and French (2001), Dennis and Osobov (2008), Al Kuwari (2010) and Lee (2010).

Firm size were divided into 3 groups: small, medium and large. Small companies with up to 5.47 lnasset, medium-sized firms are between 5.48 to 7.72, and large-sized companies with lnasset above 7.72.

Table 7 shows that only 11.2% of dividend paying companies are those with low asset. While 30,9% of not paying dividend companies are small size firms. It shows that the larger the size of the company led to the higher probability of dividend payment. These conditions are consistent with the Fama and French (2001), Deshmukh (2003) and Osobov (2008), and Al Kuwari (2010).

The probability of the company to pay the dividends is also affected by the amount of debt held by the company, as can be seen on Table

8. The results of logistic regression analysis panel in Table 1 shows that the effect of debt on the probability of the company paying the dividends is negative and significant. This is consistent with studies Al Kuwari (2010) and Lee (2010). Table 8 shows that only 15.1% of dividend paying companies paying the dividends have high debt ratio, while, as many as 28.8% of not paying dividend companies are companies with high debt ratios.

Macroeconomic condition has a significant positive effect on the probability of dividend payment. Macroeconomic conditions will have a positive impact on gross domestic product and will provide an opportunity for companies to increase their business profits. The higher operating income the greater probability of companies to provide dividend.

Changes in tax regime in Indonesia did not provide a statistically significant effect on dividend policy. This is in line with of Michaely (1991) and Chen and Dhiensiri (2009), but in contrast to Pattenden and Twite (2008). Limitations of this study is in the use dummy variable to distinguish years where the rules changed the taxation of dividends. By simply using dummy year there is still possibility that there are factors other than taxes explain dividend policy. Tax as one of the independent variable does not affect dividend policy, so there is possibility of other forms of analysis such as event study as

Table 8. Company pay-not pay dividend based on debt range

Dividend Policy		Debt Range			Total
		Low	Medium	High	
Not Pay	Sum	386	738	454	1578
	%	24,5%	46,8%	28,8%	100%
Pay	Sum	176	385	100	661
	%	26,6%	58,2%	15,1%	100%
Number of companies		562	1123	554	2239
Percentage		25,1%	50,1%	24,8%	100%

Source : Indonesia Capital Market Directory

Tabel 9. Event and RPT Distribution based on Dividend Policy for the period from 2002 to 2010

Dividend Policy		Conflict of Interest Related Party Transaction		Total
		Not perform RPT	Perform RPT	
Not Pay Dividend	sum	1384	194	1578
	%	87,7%	12,3%	100%
Pay Dividend	sum	586	75	661
	%	88,7%	11,3%	100%
Total	sum	1970	269	2239
	%	88%	12%	100%

Source : Bapepam Annual Report

used by Pattenden and Twite (2008) could give different results on the effect of changes in tax policy on corporate dividend policy.

Table 9 shows that Related Party Transactions (RPT) has a significant negative effect on the probability of the company to pay the dividend. RPT were considered in this study is a transaction with a conflict of interest, where there are differences in the economic interests of companies or public companies with the personal economic interests of directors member, board member or major shareholders that may adversely affect issuers or public companies. Including economic difference with the affiliated parties of the director, commissioner, or major shareholders. RPT open up possibility of insiders (as a majority shareholder or the company and its executives) expropriate the outsiders (public shareholders).

If the company is faced with a condition in which the best option is to do a conflict of interest transactions, the management must seek approval prior to public shareholders through the General Meeting of Shareholders. In addition the company is also required to submit disclosure documents to Bapepam-LK (Jakarta Capital Market Regulator) in conjunction with the announcement of the implementation of the independent shareholders' general meeting.

Although Bapepam has set an affiliate transaction conflict of interest in Bapepam and LK IX.E.1 which is basically intended to prevent the expropriation but its effectiveness is questionable. This is due to the ownership structure of listed companies in Indonesia are generally concentrated, causing the majority shareholder as the insider has a major role in determining the company's financial strategy, including the approval of the affiliate transaction conflict of interest. RPT leads to reduced probability of firms to distribute dividends.

Table 9 shows throughout the study period from 2002 to 2010 there were 269 cases of conflict of interest transactions with affiliates (RPT). A total of 194 cases performed at the company operates a policy of not paying dividends and as many as 75 cases are applied at the time of the company paying the dividends. The types of transactions with a conflict of interest includes the divestment of subsidiaries, purchase / sale of fixed assets and loan acceptance.

Based on the data in Table 9, it shown that the case of Related Party Transaction with conflicts of interest were reported publicly traded companies on Bapepam not too much, only 12.3% of companies that do not pay dividends and 11.3% occurred in companies that pay dividends. Nevertheless it is possible those RPTs

have adverse influence to public companies, because of the negative effect of RPT on dividend policy.

As revealed by Cheung et al. (2006) and Riyanto and Toosema (2008) that not all affiliate transactions will negatively impact public companies, but based on the test results of this study shows that RPT negatively affect the company's dividend policy; it also reveals that there is a trend companies use harmful RPT. In general RPT in Indonesian public company are purchase/sale of fixed assets. RPT would be detrimental if the price set is not favorable. Public companies can sell their assets in other non-public companies at a cheaper price when compared to non-RPT transaction. In contrast, non-public assets acquisitions by public companies carried a premium price, relatively more expensive when compared with RPT transactions (Cheung et al (2009)).

The two other variables that trigger expropriation are ownership and company's diversification level. Those variables does not give a significant effect on the probability of the company paying the dividends. It is contrary to study by Truong and Heaney (2007), Cesari (2009) and Wei et al. (2011). The study showed that the concentration of ownership will lead to expropriation through policies that do not pay dividends.

In accordance with the study of Chen et al. (2005) that in certain proportions, the ownership of the family did not show any significant effect on dividend policy. It has also been proven by Gugler (2005). It can not be concluded that the majority of family shareholders expropriate through the application of dividend policy.

It is possible that in general the majority shareholder does not expropriate the public shareholders. The company has a wealth of related families directly with companies that have an interest in running and overseeing management of the firm (Jensen and Meckling (1976) and Fama and Jensen (1983)) It is proved empirically by Maury (2006), Andres (2008) and Silva and Majluf (2008). Another possibility is that the expropriation was not done directly through dividend policy but through other access such as excessive compensation to execu-

tives as well as transfer pricing / assets to affiliated companies abroad (Vishny (1997)). If affiliate transactions profit beyond fines stipulated by Bapepam, the insiders remain expropriating although dividends are paid.

Ownership was determined using family ownership that was more than 5% than total company share. Another method such as determination of ultimate ownership through control right – cash flow right could be an alternative.

Based on the results of logistic regression panel there is no influence of level of diversification against company dividend policy. Both Tong (2009) and Subramaniam et al. (2011) proved that the cash value will be lower in the diversified company, regardless of the effectiveness of internal diversification. There is a possibility that the Related Party Transaction is more influential than the level of diversification (the number of business segments) in explaining the probability of the company paying the dividends. Forms of public ownership structure is more complex (structure and multi-layered pyramid) and provide great opportunities to divert resources (assets and profits) to public companies or non-public companies under the group of controlling shareholders.

## Conclusion

This study aims to determine whether there is a tendency of expropriation through dividend policy and to determine fundamental variables that influence probability Indonesian public companies to pay or not to pay cash dividend.

The results of this study found that in general, it can not be concluded that the public companies in Indonesia expropriate through dividend policy. Although the use of Related Party Transaction has a negative effect on the probability of dividend payment, but the accumulation of cash has a positive and significant influence on the probability of pay or not to pay dividend. These results are consistent with studies of Myers and Majluf (1984), and Opler et al. (1999), Fama and French (2001), De Angelo et al (2006), Han and Qiu (2007), and Bates et al (2009) that public companies with good financial flexibility will pay dividends. Companies

that pay dividends dominated by large size, high profitability and low debt and growth. There is indication that precaution motive is considered by Indonesian public companies.

Statistical testing to family ownership did not provide conclusive results, it is contrary to research Truong and Heaney (2007), Cesari (2009) and Wei et al. (2011), in which they show that family ownership is a trigger of not paying dividends. But those studies have not used logistic regression panel yet. In logistic regression diversity of individuals that may affect the relationship of independent and dependent variable is not controlled. Therefore the estimated coefficients may be biased. While these studies have used logistic panel regression, Chen et al. (2005) showed that in a certain proportion of ownership, family ownership did not show any significant effect on dividend policy

There are some possibilities related to insignificance of the proportion of family ownership in explaining the dividend policy of listed companies in Indonesia. Majority shareholder did not expropriate the public shareholders. Holders of a majority stake in the family has an interest in the sustainability of the company (Jensen and Meckling (1976) and Fama and Jensen (1983)). They will directly involve and supervise or even directly involved in the man-

agement of the company. This is evidenced empirically by Maury (2006), Andres (2008) and Silva and Majluf (2008).

Other possibilities result from the application of the panel data analysis using random effect models. Analysis of panel data to control diversity observed individuals who may make a family ownership does not affect the probability dividend payment. Expropriation is not done directly through dividend policy but through other access such as excessive compensation to executives as well as transfer pricing activities/assets to affiliated companies abroad (Shleiver and Vishny (1997)). This led to family ownership does not affect significantly the probability of the company paying the dividends. Besides, another method of calculating ownership could be a consideration for further research.

Based on the results of logistic regression panel, there is no effect on the level of diversification dividend policy. It is possible that the RPT is more influential than the company's dividend policy diversification level in public companies. Several fundamental variables show significant impact to dividend policy.

Fundamental variables that affect dividend policy are profitability, debt, size, growth and macroeconomics.

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