Factors that influence on dividend policy

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Abstract

Dividend is an interesting topic to discuss, since dividend is considered as expenses by a company, but it is an income for shareholders. Some companies regularly pay dividend, but some does not. This research aimed to investigate the factors that influence on dividend policy. Samples in this research are banking and manufacturing companies listed on the IDX (Indonesia Stock Exchange) from the years 2008-2010. The dependent variables of the study is dividend payout ratio (DPR) and the independent variables consist of insider ownership; other firm ownership; shareholder dispersion, company growth; profit margin; return on assets; return on equity; and free cash flow. We use multiple regressions to analyze the data. For sample banking companies, the results shows that factor that influence on dividend policy is ROE, but the others do not have. For sample manufacturing companies the results shows that factor that there are no factors that has influence on dividend policy

***Keyword**: Agency Theory, Growth, Net Profit Margin, Return on Asset, Return on Equity, Dividend.*

INTRODUCTION.

A company has several stakeholders. One of them is stockholders that earn two kind of income, namely capital gain (loss) and dividend. They can earn capital gain (loss) anytime, but only yearly earn dividend as regular income. Investors have many alternative investments in which one of them is investment in stock especially for public companies are one of investments. Public companies have to earn profits for the last of three years in order to be able to register at stock exchange. They sell stocks to public to get the funds and invest in to increase the capacities or to open new branch or to increase their working capital. The purpose is to increase their profit and finally to increase their dividends.

Public companies do not pay dividend regularly including companies listed at the Indonesian Stock Exchange (IDX). IDX classifies listed companies into manufacturing industry, banking industry, insurance industry, wholesale and retail trade industry, real estate and property industry, and other industries. Some companies in certain year did pay dividends, but other years did not pay. Most of them does not pay dividend. There are many factors that affect on it. Indeed, most stockholders and potential investors expect to earn dividend every year.

Based on agency theory, managers have to pay dividends to minimize the conflict between principal and agent. The greater dividends, the lower conflict. It means that managers have to work in the behalf of shareholders by paying dividends to maximize shareholder wealth.

Demsey and Laber (1992) argue that conflicts of interest between shareholders and agents are influenced by insider ownership (ownership of the company). The greater insider ownership, the lower conflict of interest. Insider ownership is also known as managerial ownership (Managerial Ownership). Remuneration of managerial ownership is a program that is used to reduce the agency conflict between shareholders and managers.

Monitoring mechanism by institutional owners have an important role in controlling their investments in the company in order managers still stay in tune with what shareholders really want.

Institutional ownership is the percentage of ownership held a number of institutional investors such as investment companies, banks, insurance companies, and college grants (Bathala et al., 1994). This study not only the use of institutional investors, but also use the percentage of shares owned by other companies, such as social institutions, state enterprises or private firms, known as the ownership of other companies.

Transaction costs are influenced by the growth of the company (Perry & Rimbey, 1995, and Demsey & Laber, 1992). The company has many opportunities to invest when they arrive at the high growth point. Many investment opportunities that require a large amount of funds and companies must seek external funding sources. By obtaining external funding sources are causing transaction costs. High transaction costs cause companies to reconsider the existing investment opportunities that may be better used for funding from internal cash flow for investment (Holder, Langlehr & Hexter, 1998). High transaction costs are also influenced by business risk faced by the company (Demsey & Laber, 1992). Investors tend to expect high profits from their investments invested in high-risk firms, which consequently creates high transaction costs. If the company bears the high transaction costs as a result of the high level of risk faced, companies do not pay large dividends to cover the required investment funds, so that they can use internal resources for investment rather than bear the large amount of transaction costs.

The cash dividend payment to shareholders depends on available cash position. Sutrisno (2001) argues that there are several factors that affect dividend policy, but only cash position (cash position) which influences significantly. Position of really cash available for shareholders will be reflected in free cash flow which is owned by the company. Free cash flow (free cash flow) describes the level of the company's financial flexibility.

Based on the above explanations, it is important to analyze which factors would affect on dividend policy. The objective of the study is to analyze the effect of free cash flow, profitability, agency factors, and transaction cost factors on dividend policy.

LITERATURE REVIEW.

Dividend Policy

Dividend policy is a decision whether the company's profits earned will be distributed to shareholders as a dividend or be retained in the form of retained earnings to finance investment in the future. If the company chooses to distribute profits as dividends, it will reduce retained earnings and further reduce the total sources of internal funding or internal financing. Conversely, if a company has to withhold profits, then the ability of the formation of an internal fund will be even greater (Sartono, 2008).

The Company has two alternative treatments to profits. Profit in this case is the profit after tax (after-tax earnings / EAT) can be distributed to shareholders in dividends or it could be reinvested in the form of retained earnings. There is dividend payout ratio to measure the size distribution of dividends. Keown (2005) states that dividend payout ratio is the amount of dividends paid relative to net income or earnings per share.

Some important factors that affect dividend policy including the availability of funds, the investment opportunities that are owned by the company, and the preference of investors to dividends or capital gains, ie whether investors prefer income as dividends or capital gains. Revenue to be gained from investment stock investors on the stock exchange is in the form of dividends or capital gains. Dividend is the income received by investors for shares they owned when the company set aside part of its net income. Moderate capital gain is income received by investors if there is excess sales price over the purchase price when they sell these shares.

Factors Affect on Dividend Policy

Some companies keep paying dividend regularly. Some did pay in certain year, but did not pay. There several factors that influence on dividend policy.

Agency Factor

Agency relationship is defined as a contract, namely one or several person (principal) employs another person (agent) to carry out a number of services and delegate authority to take decisions to the agent. Within the framework of financial management, agency relationship exists between shareholders by managers, shareholders with a creditor (lender) or all three relationships (Suhartono 2004).

Agency problems can arise if the manager of a company has less than 100 percent of the company's common stock. If a form of private enterprise and managed by the owner, then it can be assumed that the owner-manager will take every action possible to improve welfare, especially measured in terms of increased wealth of individuals and facilities such executive perks, lavish office transport facilities and so on. However, if the owner-manager is reducing its ownership rights by forming a company and sell some shares to other parties (outsiders), then the conflict of interest could soon appear.

As an example is the owner-manager may

not be more persistent in maximizing shareholder value as its share of the wealth has been diminished, or perhaps he set for himself a large salary, or increase the facility executive. Possibility of a dispute between the two groups (managers as agents and principals as shareholders from the outside) is one form of agency problems and finally affects on the dividend. Greater insider ownership, lower conflict of interest, greater dividend paid and vice versa.There are 3 factors included in agency factors.

a) Insider Ownership, or managerial ownership is the magnitude of ownership shares held by the parties within the company. Increased level of ownership may reduce the external financing and make corporate managers more accountable for costs incurred due to the behavior enrich themselves (Ghosh and Ariff, 2004). According to Downes and Goodman (1999) notion of insider ownership is the shareholders who are also meaningful in this case as the owner of the company from management that actively participate in decision making at a company. Domash (2009) say that insider ownership is the number of shares owned or controlled by the managerial enterprise. Further Domash (2009) say that insider ownership is usually expressed as a percentage of outstanding shares owned by company insiders (managers, commissioners and directors).

Hirschey (2009) uses inside equity as a term for insider ownership and defined as shares held by management and employees. When the shares owned by the major insider, sustainability means operating company continuously can be more predictable. This is because if the managers and employees have significant ownership in the company's drive to run the company more real in terms of maximizing firm value. The greater the greater insider ownership information held by management as well as owners, so that this results in the smaller agency costs, because the owner and serves as the management so that the cost of supervision is reduced. (Suwaldiman and Azis, 2006). The cost of the agency itself is a cost associated with management oversight to ensure that management behaves in a manner consistent with the company's contractual agreement with its creditors and shareholders (Horne, 2007).

Ownership structures affect dividend policy. The more diversified ownership structure the higher the dividend payout. State-owned and private companies have the tendency not to distribute dividends. While public companies typically distribute dividends (Megginson, 1997).

b) Other Firm Ownership, of a company is outside companies, such as social institutions of government (state) companies, or private companies. Most of the holdings of other companies may result in relatively large changes in stock prices, because companies tend to do buying and selling the same stock at the same time. Monitoring mechanisms have important roles in controlling the ownership of a company.

This is related to other investors the company's decision to protect the value of their investment that has been spent in the company, because outside shareholders to monitor managers are always in line with shareholders really want. That's why a higher percentage of ownership of other companies within the company will result in companies paying higher dividend payout ratio to shareholders outside. Outside shareholders expect a higher dividend payout ratio as income. Gursoy and Erdogan (2002) concluded that greater concentrated ownership, better the performance of companies (measured by price earning ratio). Shleifer and Vishny (1986) argue that dividend payment is one way to compensate blockhoder (institutional ownership) that has monitored the performance of the company.

c) Shareholder Dispersion, is the spread of ownership of common stock. Dispersion of ownership is calculated by the formula variance to show the spread of share ownership. The greater the dispersion of stock ownership was increasingly unconcentrated in certain groups. In accordance with agency theory, shareholders are increasingly spread will lead to difficulties in the monitoring process so that companies will create a settlement of agency problems through dividend payments and will reduce the amount of retained earnings (Taswan, 2003). Laber, (1992) in Fauzan, (2002) examined the influence of agency costs on dividend payout ratio. He concluded that shareholders dispersion is positively related to dividend payout ratio.

Transaction Cost Factor

Dividends are considered as income by stockholders and by paying dividend, they assumed that management has done an appropriate action in line with interest of stockholders and this can minimize the conflict between them. Along with an increased dividend payout ratio, this affects the availability of the company's cash flow, so that management was forced to seek external funding sources to finance their investments. These external costs will cause the cost of the so-called transaction costs. There is a single factor in transaction cost factor, namely, Firm Growth.

Growth of a firm is the growth of assets that are used for operational activities. The theory of free cash flow hypothesis presented by Jensen (1976) in Nugraheni (2008) states that companies with higher growth opportunities have a free cash flow is low because most of the funds are used to invest in projects that have positive NPV. Managers in business enterprises with respect to growth prefers to invest after-tax income and expects better performance in the company's overall growth.

According to the residual theory of dividends, the company will pay a dividend, if it just does not choose profitable investment opportunities, so that it can be concluded that there is a negative relationship between growth and dividend payments.

Profitability Factor

Hanafi (2004) suggests that the profitability ratio is the ratio to measure the ability of companies to make profits at the level of sales, assets, and certain stock of capital. There are three ratios that are often used, namely Profit Margin (PM), Return on Equity (ROE) and Return on Investment (ROI).

Net Profit Margin (NPM)

Net profit margin is the company's ability to generate net income of certain sales levels. Net profit margin is high indicates the ability of companies to make high profits on certain sales levels, whereas a low net profit margin shows the inefficiency of management.

Return on Assets (ROA)

Return on asset shows the rate of return of the entire business or investment that has been done. This ratio measures the ability of companies throughout the entire funds invested in assets which are used for the operation of the company to generate profits.

Return on Equiy (ROE)

Return on Equity measures the company's ability to generate net income based on a certain capital. High figures for return on equity showed a high level of profitability. According to Hanafi (2004) return on equity ratio does not account for dividends and capital gains to shareholders.

Free Cash Flow

According to Brigham and Houston (2001) free cash flow is operating cash flow minus equity investment company required. Free cash flow includes all cash flows into and out of the company, and do not change with accrual items, there in including changes in working capital and capital investment (Christy, 2006). Basically free cash flow is a shareholder rights are distributed in the form of dividends (Sartono, 2001), so it can be said that free cash flow is net cash flow (net) that are not reinvested because no profitable investment opportunities available.

According to Brigham and Earhart (2008) Free cash flow is cash available for distribution to investors after the company made all investments in fixed assets and working capital are supposed to maintain continuous operations. Free cash flow is cash flow to fund all projects that have positive net present value when discounted at the relevant cost of capital (Jensen, 1986).

Jensen (1986) states that the agency problems caused by free cash flows between managers and owners can be reduced by the presence of debt. This happens because the company will owe more priority to make interest and principal payments, which means that the manager is bound by a promise to pay cash flows in the future to creditors.

RESEARCH METHOD.

The population in this study is the banking and manufacturing companies have been listed at the Indonesia Stock Exchange (IDX) for the period of 2008 through 2010. There are 31 banking companies and 133 manufacturing companies listed on the Indonesia Stock Exchange (IDX).

Sampling method used was purposive sampling method with criteria: (a) the Companies publish its financial data; and (b) the companies have insider ownership data, other firm ownership, ownership dispersion, the company's growth, profitability ratios, and free cash flow.

In this study, we used dependent variable (the dividend policy) measured by dividend payout ratio (DPR). DPR can be calculated by the formula:

$$DPR = \frac{\text{Dividen per Share}}{\text{Net Income per Share}}$$

Independent variables used in the study as follows.

a) Insider Ownership

Insider Ownership is the owner and manager of the company which consists of directors and commissioners which can calculated by the formula:

$$\text{Insider} = \frac{\textit{The Number of Share owned by the commissioners and directors}}{\textit{Total Stock}}$$

b) Other Firm Ownership

Ownership of other companies can be measured on the percentage of shares owned by outside companies, such as social institutions, state enterprises or private companies.

c) Shareholder Dispersion

Shareholder Dispersion variance is calculated with the *formula,* due to the large value of *variance* indicates that data is increasingly concentrated ownership of shares in one or several shareholders. *Variance* is a measure of spread around the arithmetic mean. *Shareholder Dispersion* is calculated as follows:

$$\textit{Variance} = \frac{\sum_{i=1}^{n}(X1-X)2}{n-1}$$

Description:

X1: the percentage shareholding of the group.

X : average stock ownership

n : number of data

d) Company Growth

The growth rate a firm can be seen from the increased profitability of the company each year. The company's growth rate is calculated by the formula:

$$g = r \text{ x } ROE$$

Description:

G : growth rate

R : ratio of profit detention (profit retention rate)

ROE : return on equity

e) Net Profit Margin

Net Profit Margin to calculate the extent of the company's ability to generate net income of certain sales levels.

$$\text{Net Profit Margin (NPM)} = \frac{\textit{Profit After Tax}}{\textit{Net Sales}}$$

f) Return on Assets

Return on asset shows the rate of return of the entire business or investment that has been done.

$$\text{Return on Asset (ROA)} = \frac{\textit{Earning before interest and tax}}{\textit{total assets}}$$

g) Return on Equity

Return on Equity measures how much net income resulting from investment in the company's shareholders.

$$\text{Return on Equity (ROE)} = \frac{\textit{Earning after interest and tax}}{\textit{equity}}$$

h) Free Cash Flow

Free cash flow (FCF) is represented by the ratio of free cash flow divided by total assets.

$$\text{Free Cash Flow (FCF)} = \frac{\textit{Operating cash flow} - \textit{dividends}}{\textit{Total Asset}}$$

We used multiple regressions as analysis method with formula as follows.

Y=α+β1X1+β2X2+β3X3+β4X4+ β5X5+β6X6+β7X7+β8X8+e

Description:

Y = Dividend Payout Ratio

A = Constanta

β1…8 = Regression Coefficient

X1 = Insider Ownership

X2 = Other Firms Ownership

X3 = Shareholder Dispersion

X4 = Growth

X5 = Net Profit Margin

X6 = Return on Assets

X7 = Return on Equity

X8 = Free Cash Flow

e = Error item

RESULTS AND DISCUSSION.

In this section, we present the results with the beginning of descriptive statistics, the results of multiple regression and the discussion for (a) banking industry; and (b) manufacturing industry.

Banking Industry

Description statistics on dividend policy, insider ownership, other firms ownership, shareholder dispersion, growth, net profit margin, return on asset, return on equity, free cash flow for banking industry can be seen in the following table.

Table 1. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
INSIDER	26	.00	67.42	12.96	22.9
OTHER	26	.00	98.67	45.84	35.1
DISPERSION	26	.00	49.91	19.02	16.1
GROWTH	26	-27.7	161.9	35.78	45.7
NPM	26	.27	41.04	16.95	9.4
ROA	26	.16	6.33	2.54	1.22
ROE	26	1.16	40.65	22.37	10.4
FCF	26	-.26	8.02	.317	1.57
DPR	26	5.65	90.32	40.00	20.0

We used multiple regressions to analyze the effect of all independent variables on dependent variable for banking industry and the results as follows.

Table 2. The Results of Multiple Regression for Baking Industry

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768[a]	.590	.397	.768[a]

a. Predictors: (Constant), FCF, INSIDER, DISPERSION, GROWTH, OTHER, NPM, ROE, ROA
b. Dependent Variable: DPR

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5947.32	8	743.42	3.1	.03[a]
Residual	4134.9	17	243.23		
Total	10082.2	25			

Coefficients[a]

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	46.9	11.56	4.058	.001
INSIDER	.155	.187	.826	.420
OTHER	.084	.114	.736	.472
DISPERSION	.333	.232	1.434	.170
GROWTH	-.01	.088	-.159	.876
NPM	.968	.699	1.385	.184
ROA	4.77	3.309	1.440	.168
ROE	-2.1	.586	-3.51	.003
FCF	-3.5	2.786	-1.23	.230

Based on the table 2, we find out that the only variable that affects on dividend policy is return on equity. Greater return on equity, lower dividend paid. The other independent variables do not affect on it.

Manufacturing Industry

Descriptive statistics on dividend policy, insider ownership, other firms ownership, shareholder dispersion, growth, net profit margin, return on asset, return on equity, free cash flow for manufacturing industry can be seen in the following table.

Table 3. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
INSIDER	64	.00	25.5	3.19	7.79
OTHER	64	.00	98.2	58.18	31.61
DISPERSION	64	.00	66.9	21.58	18.36
GROWTH	64	-74.0	657.4	77.94	143.27
NPM	64	1.45	29.2	8.98	5.79
ROA	64	2.54	56.9	16.27	11.08
ROE	64	2.79	83.8	29.78	18.03
FCF	64	-4.98	.53	-.15	.94
DPR	64	4.81	66.9	30.9	16.51

We used multiple regressions to analyze the
effect of all independent variables on
dependent variable for manufacturing
industry and the results as follows.

Table 4. The Results of Multiple Regression for Baking Industry

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.417[a]	.174	.054	16.05985

a. Predictors: (Constant), FCF, INSIDER, DISPERSION, GROWTH, OTHER, NPM, ROE, ROA
b. Dependent Variable: DPR

ANOVA[b]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2988.48	8	373.56	1.45	.198[a]
Residual	14185.53	55	257.92		
Total	17174.01	63			

Coefficients[a]

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	37.9	6.42	5.91	.00
INSIDER	.29	.28	1.06	.3
OTHER	.02	.07	.27	.79
DISPERSION	-.17	.12	-1.45	.15
GROWTH	-.008	.02	-.50	.62
NPM	-.103	.58	-.18	.86
ROA	.339	.50	.67	.50
ROE	-.327	.25	-1.31	.2
FCF	-2.83	2.24	-1.26	.21

Based on the table 4, we find out that none variable that affects on dividend.

For banking industry, only return on equity influences on dividend policy. It means that in banking industry, greater return on equity, manager pays lower dividend, because manager choose to use internal source of fund (retained earnings) to finance long term investments than use external sources. For manufacturing industry, return on equity does not influence on dividend policy. It means that the whole companies and stockholders in manufacturing industry do not care about dividend payment to stockholders. Stockholders are better to have capital gain than dividend received. Potential investors who purchase the stocks of manufacturing industry prefer to pursue capital gain than dividend payments.

Other variables, namely, insider ownership, other firms ownership, shareholder dispersion, growth, net profit margin, return on assets, and free cash flow do not influence on dividend policy for both banking industry and manufacturing industry. It means that the whole companies in banking industry and manufacturing industry do not account those variables to pay dividends to the stockholders.

CONCLUSION

Based on results and discussion, it can be concluded as follows:

a) For banking industry, the only variable that affects on dividend policy is return on equity, while other variables, namely insider ownership, other firms ownership, shareholder dispersion, growth, net profit margin, return on assets, and free cash flow do not influence on dividend policy.

b) For manufacturing industry, there are no variables that affect on dividend policy.

In this study, some limitations which might affect the results of this study as follows:

a) We use small number of companies as samples in the study, because we analyze only in the year 2008 to 2010 and most of them did not pay dividend. This might not represent the real condition.
b) Indonesian stock exchange (IDX) is weak form of capital market which represented by small transaction and the price of stocks do not represent the whole information.

By considering the limitations, some recommendation as follows:
a) Add the samples by using longer period (for example ten years) in order to represent the real condition of companies in both banking industry and manufacturing industry that pay dividends.
b) Add the independent variable, namely, business risk theoretically which also affects on dividend policy.

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