THE INFLUENCE OF LIQUIDITY, PROFITABILITY, AND LEVERAGE RATIO ON DIVIDENDS PAYOUT RATIO

(Empirical Study on Manufacturing Companies Listed in the Indonesia Stock Exchange on the Period of 2009 – 2011)

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The objective of this research is to find out the influence of liquidity, profitability, and leverage ratio on Dividend Payout Ratio in Manufacture companies listed on IDX period 2009-2011. The liquidity ratio is represented by Current ratio, profitability ratio is represented in Return on Investement (ROI), and leverage ratio is represented by Debt to Equity ratio. The data used in this research are financial reports of 13 manufacture companies period 2009-2011 obtained from ICMD. Purposive sampling technique is used in order to get sample which is appropriate with the define criteria. The analysis tool used is multiple linear regression analysis. The result of the research shows that Current ratio, ROI, and Debt to Equity ratio simultaneously have significant influence on Dividend Payout ratio. The result also indicate that partially ROI has positive and significant influence on Dividend Payout ratio.

Keywords: ***Dividend Payout ratio, Current ratio, Return on Investment, and Debt to Equity ratio***

I. INTRODUCTION

An investor is the entities or individualy who do investment on company have objective to increase their prosperity. The prosperity which is expected by the investor can be obtained by investment return in the form of dividend or capital gain. An investor surely expects stable dividend distribution from company to decrease the risk. In other side, a company which will distribute dividend should consider some factors such as: the amount of dividend that will be distributed, the type of dividend that will be distributed, and the stability of dividend distribution (Brigham and Houston, 2007).

A company, in managing its finance, always faces three important interrelated problems, they are investment decision, finance decision, and dividend distribution decision. Dividend policy is the decision to determine how the amount of devidend that should be given to the

shareholders. This policy starts from how the management treat the profit obtained by the company a part of net profit after tax is distributed to the investor in the form of dividend and another part are reinvested to company in the form of retained earnings.

Dividend policy is considered as efficient mecanism to solve the agency problem. Dividend policy has two main things, they are *dividend payout ratio (DPR)* and dividend stability. Dividend payout ratio is the comparation between dividend per share and earning per share. Higher dividend payout ratio means lower retained earning. Considerations regarding the dividend payout ratio supposedly related to the financial performance of company. If the company have good financial performance then it will be able to establish the amount of the dividend payout ratio in line with shareholders' expectations and of course without neglecting the company's interests to remain stable and grow.

Most of companies listed in Indonesia Stock Exchange are manufacture company, and all those company have dividend policy. Manufacture industry also more develop and have positive trend rather than other industry in this recent year. Company with good performance have competitive advantage and create maximize benefit, also can attract investor to invest in the company as one of company's strategy to facing competitors. Investor hope to get stable deviden from company to decrease the risk.

The purpose of this study mainly is to find out the influence of Profitability, Liquidity, and Leverage Ratio towards Deviden Payout Ratio in manufacture companies listed on Indonesia Stock Exchange during period 2009 until 2011.

II. RESEARCH QUESTIONS

The important things that can influence investor in determine their investment is dividend or capital gain. Dividen become important because its have relationship with distribution of profit in the future shown by *Dividen Payout Ratio (DPR).* So it can be use by investor as signal about company performance.

From above explanation, then the author formulate some research questions below:

1. Does the Liquidity Ratio (ROI) influence Dividend payout ratio?
2. Does the Profitability Ratio (Current Ratio) influence Dividend payout ratio?
3. Does the Leverage Ratio (Debt to Equity Ratio) influence Dividend payout ratio?

4. Does the Liquidity Ratio(CR), Profitability Ratio (ROI), and Leverage Ratio (DER) simultaneously influence Dividend payout ratio?

III. LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Definition of Dividends

An investor who invest their money in a company surely expected return or benefits obtain from their investment. The benefits which can be receive by investor or shareholder from their investment through buy company's shares are consist of two types, dividend and capital gain.

The definition of dividend according Meighs, Williams, and Bettner (2001) is distribution of assets (usually cash) by a corporation to its shareholders. While Edmonds, Edmonds, McNair, Olds, & Schneider (2006) defined dividens as earnings from equity investment.

Dividend Theories

There are three theories related with dividend such as:

1. Dividend Irrelevance Theory

   This theory stated by Modigliani-Miller (1961) that company's dividend did not have influence, both to company value and its cost of capital. Modigliani-Miller developed their theory under stringent set of assumptions, and under those assumptions, they proved that a firm's value is determined only by its basic earning power and its business risk. In other words, the value of company depends only on the income produced by its assets, not on how its income is split between dividends and retained earnings.

2. Bird In The Hand Theory

   The bird in the hand theory explains that investors prefer dividends (certain) rather than retained earnings (less certain). Therefore, firms should set a large dividend payout ratio to maximize firm share price. Gordon (1959) and Lintner (1956, 1962) present the bird in the hand theory which says that investors always prefer cash in hand rather than a future promise of capital gain due to minimizing risk.

3. Tax Preference Theory

A third theory, based on tax effects, was supported by Litzenberger and Ramaswamy (1979). This theory suggests that dividends are subject to a higher tax cut than capital gains. This theory further argues that dividends are taxed directly, while capital gains tax is not realized until a stock is sold. Therefore, for tax-related reasons, investors prefer the retention of a firm's profit over the distribution of cash dividends. The advantage of capital gains treatment, however, may lead investors to favour a low dividend payout, as opposed to a high payout.

Beside three dividend theories above, there are three other issues that could affect our views toward the three theories presented above. These issues are (1) the information content, or signaling, hypothesis, (2) the clientele effect, and (3) the relationship between dividend policy and agency costs.

1. Information content, or signaling, hypothesis

This theory underlie that dividend announcement have information content that can emerge stock price reaction. It has been observed that an increase in the dividend is often accompanied by an increase in the price of the stock, while a dividend cut generally leads to a stock price decline. This could indicate that investor, in the aggregate, prefer dividends to capital gains. It cause by asymmetric information between manager and investor, then the investor use dividend policy as indicator of company prospect. Increase in dividend payout consider as a favorable signal , then cause positive stock price reaction. Conversely, decrease in dividend payout consider as a signal of unfavorable company prospect, then it can cause negative stock price reaction (Brigham and Houston, 2011).

2. Clientele Effect

Different groups, or clienteles, of stockholders prefer different dividend payout policies. The group of shareholder who need current income, would want the firm to pay out a high percentage of its earnings. On the other hand, stockholders in their peak earning years prefer reinvestment, because they have no need for current investment income.

Relationship Between Liquidity Ratio and Dividend Payout Ratio

Liquidity company shows the company's ability to fund company's operations and pay off short-term obligations. Therefore investee companies which have good liquidity will allow better dividend payment. Suharli (2006) already provide initial thoughts on the effect of liquidity of the company's dividend policy. Liquidity company can be measured by financial ratios such as current ratio, quick ratio and cash-acid ratio. This study measures the liquidity of companies with using the current ratio.

H1 : The liquidity ratio influences the Dividends Payout Ratio

Relationship Between Profitability Ratio and Dividend Payout Ratio

Profitability is the ability of the company to generate profits (profit). This will be the basis for company's dividend distribution, whether it will be cash dividend or stock dividends. Profits of the company may be detained (as retained earnings) and can be divided (as dividends). Miller and Modigliani (1961) research results found that profitability have positively significant effect on dividend policy of the company.So the increase in net income of the investee company will increase the return on investment in the form of dividend income to investors.

H2 : The profitability ratio influences the Dividends Payout Ratio

Relationship Between Leverage Ratio and Dividend Payout Ratio

Rozeff (1982) states that companies with high operating leverage or high finance will provide a low dividend. The risk company will pay a low dividend, to reducing dependence on external funding. High capital structure of the company will compare the capital of creditors and shareholders. Higher capital structure owned by debt lead management to prioritize liability pay off first than dividends. Leverage ratio is the most commonly used is debt to equity ratio

Companies that have greater debt ratios should distribute smaller dividends because profits are used to pay off liabilities. Thus investors can learn about the company's liabilities to estimates investment income in the form of dividends, in the future. Brigham and Ehrhardt (2005) stated that the greater company's leverage, the company will tends to pay dividends lower.

H3 : The leverage ratio influences the Dividends Payout Ratio

Relationship Between Liquidity, Profitability and Leverage Ratios on Dividend Payout Ratio

For company, dividend is a cash outflow, so the stronger position of liquidity the stronger ability of the company to pay dividend. While the relationship between profitability and Dividend Payout Ratio is that through profitability, can be assessed the ability of the company to distribute its profits to shareholders. Company's ability to earn a profit is a key indicator in the company's ability to pay dividends, so the profitability is one of important determinants in the dividend distribution. Debt to Equity Ratio (DER) show the extent to which the company can pay its long-term liabilities. The greater the ratio of DER, it will be smaller profits to be received by the shareholders because the company is more focused on repayment of the loan. Suharli and Oktorina (2005) reveals that liquidity, profitability, and leverage of the company simultaneously can influence Dividend Payout Ratio (DPR).

H4: Liquidity, profitability and leverage ratios simultaneously influence Dividend Payout Ratio

IV. RESEARCH METHOD

Population and Sample

The population which will be used in this research is manufacture companies which are listed in Indonesia Stock Exchange (IDX) from period 2009 until 2011 amounted 146 companies. In this study, the sampling method was done by using non-random sampling (non-probability sampling technique) with a purposive sampling method. Withdrawal of samples by purposive sampling technique based on the following criteria:

1. The manufacturing companies that is listed on the Indonesia Stock Exchange during the period of study is 2009-2011
2. Distribute cash dividend for 3 consecutive years during the period 2009-2011
3. Having a complete financial statement in form of Rupiah presented in the study period 2009-2011
4. Companies that become research sample should be profitable consecutively during the study period
5. Provide data about variable current ratio, debt to equity ratio, and return on investment on their financial report during the study period.

Using purposive sampling technique then acquired 13 companies that meet the criteria and will be used as samples in this study.

Definition of Variables

Variable which are used in this research consist of:

1. Dependent variable

   This research uses dependent variable, which is Dividend Payout Ratio (DPR). Dividend Payout refers to the proportion of earning distibuted. It is often expressed as a ratio or percentage of net earnings (Subramanyam and Wild, 2009). The calculation of Dividend Payout Ratio can be expressed by using this following formula.

$$DPR = \frac{Cash\ Dividends\ Per\ Share}{Earning\ Per\ Share}$$

Subramanyam and Wild, 2009

2. Independent Variable

   Current Ratio

   Current ratio (CR) is ratio that indicates the extent to which current liabilities are covered by those asssets expected to be converted to cash in the near future (Brigham and Houston, 2011). This ratio is calculated by dividing current assets by current liabilities.

$$CR = \frac{CURRENT\ ASSETS}{CURRENT\ LIABILITIES}$$

Brigham and Houston, 2007

Debt to Equity Ratio

Debt to Equity Ratio (DER) measure the relation of debt to capital sources. This ratio is related to the use of own equity and credit and also to know the ratio of company ability to pay off its debt. It is defined as:

$$\text{DER} = \frac{TOTAL\ DEBT}{SHAREHOLDERS'EQUITY}$$

Subramanyam and Wild, 2009

Return on Investment

Return on Investment (ROI) refer to relation between income and invested capital. It allows us to compare companies on their success with invested capital and assess a company's return relative to its capital investment risk (Subramanyam and Wild, 2009). It reflects more accurately the return on the actual investment needed and is therefore a better measure of profitability than ROA. The calculation of ROI can be expressed by using this following formula.

$$ROI = \frac{Net\ Income}{Total\ Paid\ in\ Capital} \text{ x } 100\%$$

Dahmash et.all, 2012

Data analysis model that is used to analyze the relationship between the independent variable on the dependent variable in this study is the Multiple Regression Analysis by using SPSS 17.00. It is used to forecast how the condition of dependent variable, if two or more independent variables as predictor factor are manipulated. This analysis is used to determine the effect of the independent variable (X) in this case is the current ratio (X1), Return on Investment (X2), and Debt to Equity Ratio (X3) on the dependent variable (Y) in this study is the Dividend Payout Ratio. Model of this research is:

$$\boldsymbol{Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e}$$

Explaination:

Y = Dividend Payout Ratio

α = Coefficient of constanta

β = Coefficient of regression from each variable

X_1 = Current Ratio

X_2 = Return on Investment

X_3 = Debt to Equity Ratio

e = error

V. DISCUSSION

Analysis of Multiple Linier Regression

According to the result of data processing, which applies software SPSS 17, a summary is written in table below:

Table 1 Regression Analysis

Variable	Coefficient Std β	Coefficient β	$T_{calculate}$	Sig	Information
Constant		6.862	3.297	0.002	
CR	0.028	0.062	0.159	0.875	Non Significant
ROI	0.233	0.134	2.416	0.026	Significant
DER	- 0.069	- 0.231	- 0.383	0.704	Non Significant
$\alpha = 0.05$ $R^2 = 0.453$ R = 0.673 Adjusted $R^2 = 0.421$ F calculated = 8.763 Sig. F = 0.001					

Source: Result of SPSS 17 analysis

The dependent variable in this regression is the Dividend Payout Ratio (Y) while the independent variable is the current ratio (X1), Return on Investment (X2), and Debt to Equity Ratio (X3). Regression model based on the results of the above analysis as follows:

$$Y = 6.862 + 0.062\ X_1 + 0.134\ X_2 - 0.231\ X_3 + e$$

Coefficient of Determination (R^2)

Based on the results of multiple linear regression on the table, the value of R^2 of 0.453. These results indicate that in the form of the regression equation, the independent variables can explain the variation in the dependent variable amonted by 45.3% while the remaining 54.7% is explained by other variables outside of this study.

Table 2 Coefficient Determination Analysis

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.673[a]	.453	.421	15.50596	2.046

a. Predictors: (Constant), DER, ROI, CR

b. Dependent Variable: DPR

F Test Result

Table below show the result of F test.

Table 3

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12890.899	3	6445.450	8.763	.001[a]
	Residual	30891.916	35	735.522		
	Total	43782.815	38			

a. Predictors: (Constant), DER, ROI, CR

b. Dependent Variable: DPR

Hypothesis	Value	Decision
H_O : $\beta i = 0$ (There is no significant influence simultaneously from variables CR, ROI, and DER toward DPR) H_A : $\beta i \neq 0$ (There is significant influence simultaneously from variables CR, ROI, and DER toward DPR) $\alpha = 0.05$	F = 8.763 Sig. = 0.001 F_{table} = 2.870	Reject H_O

Based on table 4.14, F_{table} is obtained amounted 2.870, while $F_{calculate}$ is 8.763. It shows that $F_{calculate}$ exceeding F_{table} (8.763 > 2.870). Then, when the probability compare with $\alpha = 0.05$, it is less than $\alpha = 0.05$ (0.001 > 0.05. From those comparison, it can be decide that H_O is rejected. This show that there is a significant influence significant influence

simultaneously from variables Current Ratio (CR),Return on Investment (ROI), and Debt to Equity Ratio (DER) toward Dividend Payout Ratio (DPR).

T Test Result

The test result influence from variables Current Ratio (CR),Return on Investment (ROI), and Debt to Equity Ratio (DER) partially toward Dividend Payout Ratio (DPR) can be seen in table below.

Table 4

T Test Result

Independent variables	$t_{calculated}$	Significant	Information
Current Ratio	0.159	0.875	Non Significant
Return on Investment	2.416	0.026	Significant
Debt to Equity	- 0.383	0.704	Non Significant

Source: Result of SPSS 17 analysis

The influence of Current Ratio (CR), Return on Investment (ROI), and Debt to Equity Ratio (DER) partially toward Dividend Payout Ratio (DPR) can be describe as follow:

a. Current Ratio (X_1)

Current Ratio has a coefficient regression which amounted 0.062. Analysis using SPSS software, obtained that the result of $t_{calculated}$ amounted 0.159, it is lower than t_{table} (0.159 < 2.02809). The probability of Current Ratio variable higher than 0.05 (0.875 > 0.05). It can be determine that H_O is accepted. In conclusion, Current Ratio variable (X_1) have non significantly influences on Dividen Payout Ratio.

b. Return on Investment (X_2)

Return on Investment has a coefficient regression which amounted 0.134. Analysis using SPSS software, obtained that the result of $t_{calculated}$ amounted 2.416, it is higher than t_{table} (2.416 > 2.02809). The probability of Return on Investment variable lower than 0.05 (0.026 < 0.05). It can be determine that H_O is rejected. In conclusion, Return on Investment variable (X_2) have significantly influences on Dividen Payout Ratio.

c. Debt to Equity Ratio (X3)

Debt to Equity Ratio has a coefficient regression which amounted - 0.231. Analysis using SPSS software, obtained that the result of $t_{calculated}$ amounted - 0.383, it is higher than t_{table} (0.383 >2.02809). The probability of Debt to Equity Ratio variable is lower than 0.05 (0.704 > 0.05). It can be determine that H_O is accepted. In conclusion, Debt to Equity Ratio (X_3) have non significantly influences on Dividen Payout Ratio.

VI. CONCLUSION

1. Current ratio, return on investment, and debt-to-equity ratio has significant influence simultaneously towards Dividend Payout Ratio (DPR). This condition is indicated by the coefficient of determination stating that simultaneously current ratio, Return on Investment, and Debt to equity ratio influence Dividend Payout Ratio (DPR)amounted to 45.3%.
2. Return on Investment (ROI) has a positive and significant influence on the Dividend Payout Ratio (DPR), while the Current Ratio has positive but not significant influence on the Dividend Payout Ratio (DPR) and Debt to Equity Ratio (DER) has negative but not significant influence on the Dividend Payout Ratio (DPR) based on partial test results partial (statistic t test).
3. The value of R^2 of 0.453. These results indicate that in the form of the regression equation, the independent variables can explain the variation in the dependent variable amounted by 45.3% while the remaining 54.7% is explained by other variables outside of this study.

VII. SUGGESTIONS

I. For investors, may consider the amount of the ROI in investing in the company. Because variable ROI based on the results of the study have a significant influence on the Dividend Payout Ratio.

II. For the management of the company, to maintain shareholder loyalty the company's ability to earn profits should be maintained and enhanced so the company's ability to pay dividends can be maintained

III. For scholars (academic) who wish to conduct further research on Dividend Payout Ratio,better to use different object of research, study period, and factors that are different from this study so that can enrich the research about dividend.

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