

EFFECT OF PROFITABILITY AND INVESTMENT OPPORTUNITY SET OF CASH DIVIDEND POLICY WITH THE LIQUIDITY AND LEVERAGE

**(Studies in Non-Financial Companies That Listed on
Indonesia Stock Exchange Period 2005-2009)**

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ABSTRACT

This research aim to examine the effect of profitability and investment opportunities of the cash dividend policy by using the liquidity and leverage as a moderating variable. The sample in this study amounted to 114 companies that are non-financial firms that distribute cash dividend period 2005-2009.

The research data was analyzed using linear regression analysis and moderated regression analysis with SPSS version 16.0. The results of this research indicates that profitability variable proxie by ROA has a positive effect on company cash dividend policy. IOS was analyzed by confirmatory factor analysis also has a positive effect on the company's cash dividend policy. For moderating variable is found that liquidity proxie by Current Ratio and leverage proxie by Time Interest Earned Ratio is not a moderating variable.

Keyword: Cash Dividen Policy, Profitability, IOS, Liquidity, Leverage.

I. INTRODUCTION

I.1. Background

When a company decides to invest the company will need funds. Sources of funding can be obtained either from internal and external funds. At the time the company decided to use external financing, the company will be dealing with the interests of shareholders or investors. In general, the investor has the main objective to improve the well-being that is the expected return as much as possible with a certain risk of the investment that they do, both in the form of cash dividends, stock dividends, or capital gains.

Payment of cash dividends is a return on their investment in the company, due to the payment of cash dividends to boost investor confidence in the company, thereby reducing the uncertainty of investors in their funds into the company.

Dividend policy is a decision that was not easy for the company management. According to Black (1976) dividend policy is a puzzle that is hard to explain, and always raises a big question mark for investors, creditors, even in academic circles. Determination of the exact amount to be paid as dividends is a difficult financial decisions for the management (Ross, 1977), because the decision of the company regarding cash dividends diintegrasikan with financing decisions and investment decisions.

Profitability is the net profit level obtained by the company in its operations. Dividends are a partial payment from the company's net profit, and the company will distribute dividends if the company make a profit. Companies that have stable profits can specify the level of dividend payments with confidence. Miller and Modigliani (1961) argues that the profitability of a significant positive effect on dividend policy of the company.

Suharli and Oktorina (2005) examined the predicted rate of return on investments in equity securities through profitability, liquidity, and debt of public corporations. The results showed the level of profitability and liquidity has a positive relationship with dividend policy. Meanwhile, the level of leverage is negatively related to dividend policy.

Based on the research Suharli (2007) demonstrated empirically that positively impact profitability on dividend policy and strengthened the liquidity variable. Whereas leverage, Rozeff (1982) in Suharli (2006) stated that the company is operating or financial leverage high will give a low dividend. Sadalia and Saragih (2008) said that the investment opportunities or often called the Investment Opportunity Set (IOS) can affect the company's shareholders on dividends received. If the condition is very good company then the management will tend to prefer the new investment rather than

paying high dividends. Funds that would otherwise be paid as a cash dividend to shareholders will be used to purchase a profitable investment.

Some form of proxy for IOS has been shown to have a relationship with the funding policy and dividend policy. The results Suharli (2007) shows that investment opportunities can negatively affect the cash dividend policy which strengthened liquidity variables. Leverage the company will affect the size of the dividends paid to the company's high leverage on debt repayment in the future, cash dividends paid would be lower.

This study aims to test whether the profitability, iOS influence on corporate cash dividends, and whether the presence of variable liquidity and leverage as a moderating variable will strengthen or weaken the effect of profitability and the company's IOS to the cash dividend.

I.2. Problem formulation

Based on the background of the problems that have been described, the issues to be addressed in this study are:

1. Is cash dividend policy affects the profitability of the company?
2. Is investment opportunities affect dividend policy of the company?
3. Is liquidity moderating influence of profitability on corporate dividend policy?
4. Whether the liquidity of the investment opportunity moderating influence on corporate dividend policy?
5. Is moderating influence profitability leverage against company dividend policy?
6. Is moderate leverage effect of investment opportunities on corporate dividend policy?

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

II.1. Theory of Dividend Policy

Cash dividend policy is a decision whether profits from the company will be distributed to shareholders as dividends or be retained by the company in the form of retained earnings to finance investment in the future (Sartono, 2001). The shareholders want the company distributed cash dividends on profits generated, while the manager wants reinvested earnings. However, when managers use the profits to invest in investments that are not profitable, it will result in losses for the company, which would cause the value of the company will go down and the company's performance will get worse. Therefore, many companies prefer to use the company's net profit as cash dividend to be paid so that the decline in value of the company through an unfavorable investment undertaken by managers can be avoided (Pramastuti, 2007) in (Cecilia, 2010).

Some theories are relevant in the dividend policy proposed by Suharli and Harahap (2004), among others:

1. *Dividen Irrelevance Theory*
2. *Bird in the Hand Theory*
1. *Clientele Effect Theory*
4. *Dividend Signalling Theory*

II.2. Effect the profitability of the cash dividend

Denis and Osobov (2005) in Cecilia (2010), that the higher profitability of the company will have a high tendency in the payment of dividends. It is also obtained in the study Suharli (2005) based on his research that the profitability level has a direct relation to the payment of dividends to investors. Thus the hypothesis can be formulated researchers are:

H1: Profitability affect dividend policy of the company in a positive

II.3. Investment Opportunity influence the cash dividend

Management will tend to prefer the new investment rather than paying high dividends if the company is very good condition. Funds that would otherwise be paid as a cash dividend to shareholders will be used to purchase a profitable investment, even to address the underinvestment problem. Instead, the company experienced slow growth in higher dividends tend to overcome the problem of overinvestment. The results Wirjolukito et al (2003) which measures the utilization of investment opportunities using a net increase in fixed assets found no association parameter estimation and variable direction of investment opportunities on dividend policy is positive. Norpratiwi (2005) examined how the influence of investment opportunity set on stock returns that companies publish their financial reports consistently from the period 2001-2003. Based on the results of the four tests conducted IOS proxy variables Norpratiwi (2005) in general can be shown that there is a significant correlation between the ratio of IOS proxies with stock return.

Because of the inconsistent results of previous studies, the researchers wanted to test whether investment opportunities affect dividend policy, with a hypothesis that can be formulated thus researchers are:

H2: investment opportunities affect dividend policy of the company in a negative cash

II.4. Liquidity As Variable Moderation

Companies that have better liquidity it will be able to pay more dividends. At the company posted higher profits (high profitability), plus a better liquidity, the greater the amount of the dividends. In companies that invest more funds will cause the amount of cash dividends paid is reduced, but both capable of eliminating the liquidity (weaken) the hypothesis since then the company may defer payment of short-term debt (Suharli, 2007)

Thus hypotheses can be formulated regarding the liquidity moderating effect of profitability on dividend payment policy is:

H3a: Liquidity moderate the effect of profitability on corporate dividend policy.

H3b: Liquidity moderate the effect of investment opportunities on dividend policy of the company.

II.5. Leverage as a moderating variable

In relation to the cash dividend, the company has a greater leverage ratio should share dividends in smaller quantities due to profits earned are used to pay off liabilities. Wirjolukito et al (2003) found that the capital structure is proxied by DER, negatively affect dividend policy. While research Suharli and Harahap (2004), Suharli and Oktorina (2005) and Suharli (2006) find that leverage has no effect on the amount of cash dividends.

Inneke (2008) found that IOS and profitability moderate the relationship development policy to leverage corporate dividends. Research results found that the lower the Investment Opportunity Set (IOS) of the company, the more powerful influence of dividend policy on firm leverage. The study also found a negative effect of dividend policy on firm leverage.

Because of the inconsistency of previous studies, the researchers intend to test again whether the leverage effect on cash dividend policy. However, in this study leverage a moderating variable, ie whether the company's leverage to strengthen or weaken the relationship between profitability and IOS on corporate dividend policy.

Based on these explanations, the hypothesis is formulated as follows:

H4A: Leverage moderate the effect of profitability on corporate dividend policy

H4b: Leverage moderate the effect of investment opportunities on corporate dividend policy.

III. METHODS

III.1. Research's Sample

The criteria for the study sampled companies are:

1. Non-financial companies listed on the Indonesia Stock Exchange (BEI) and publishes its financial statement as of December 31 in the year 2005 to 2009
2. The company announced a cash dividend during the observation period 2005-2009.
3. The financial statements are presented in the currency.

III.2. Data Collection Method

This study is a secondary data of listed companies in Indonesia Stock Exchange. Secondary data from this study in the form of financial statement data from the Indonesia Stock Exchange during the observation period 2005-2009.

III.3. Operational Definition and Measurement

1. Dependent Variables

dividend policy is proxied by the House (dividend payout ratio) by using the formula (Hanafi and Halim, 2003):

$$DPR = \text{DPSI, } t / \text{Epsi, } t$$

2. Independent Variables

a. Profitability

1. ROA

This ratio measures the company's ability to generate net income under a certain level of assets. The ROA formula used is (Hanafi and Halim, 2003): $ROA = \text{Net income} / \text{Total assets}$

2. ROE

This ratio measures the company's ability to generate profits based on certain share capital. ROE formula (Hanafi and Halim, 2003):

$$\text{ROE} = \text{Net Income} / \text{Total Equity}$$

3. Gross Profit Margin (GPM)

calculate the extent of the company's ability to generate profits from the gross sales. Gross Profit Margin formula (Sartono, 2001):

$$\text{GPM} = \text{Gross Profit} / \text{Sales}$$

4. Net Profit Margin (NPM)

This ratio calculates the amount of net income earned by the company for sale. Formula Net Profit Margin (Sartono, 2001):

$$\text{NPM} = \text{Net income} / \text{Sales}$$

b. IOS

1. Rasio *Market Value to Book Value of Asset* (MVABVA)

This proxy is used to measure the growth prospects of the company based on the number of assets used in the operations. MVABVA formula is:

$$\text{MVABVA} = \frac{\text{Assets} - \text{Total Equity} + (\text{Shares} \times \text{Closing Price})}{\text{total Assets}}$$

2. Rasio *Market Value to Book Value of Equity* (MVEBVE)

The difference between market value and book value of equity investment opportunities the company suggests. The formula used (Norpratiwi, 2004):

$$\text{MVEBVE} = \frac{\text{Shares Outstanding} \times \text{Closing price of shares}}{\text{Total Equity}}$$

3. *Capital Expenditures to Book Value of Asset (CAPBVA).*

The formula used (Saputro, 2003):

$$\text{CAPBVA} = \frac{\text{book value of Fixed Assets}_t - \text{Book Value of Fixed Assets}_{t-1}}{\text{Total Assets}}$$

4. *Capital Expenditures to Market Value of Asset (CAPMVA).*

This ratio is used to measure the ratio between the difference in the value of fixed assets of the company this year with the previous year, with appreciation of investors which is reflected by the level of market valuation on the economic value of the company. The formula used (Saputro, 2003):

$$\text{CAPMVA} = \frac{\text{book value of Fixed Asset}_t - \text{Book Value of Fixed Assets}_{t-1}}{\text{Assets} - \text{Total Equity} + (\text{Shares Outstanding} \times \text{Closing price of shares})}$$

3. Variable Moderation

a. *Liquidity*

1. *Current ratio*

Current Ratio measures a company's ability to meet its short-term debt using the assets

smooth. The formula used (Hanafi and Halim, 2003):

$$\text{CR} = \text{Current Assets} / \text{Current Liabilities}$$

2. *Quick ratio*

$$\text{Qr} = (\text{Current assets} - \text{inventory}) / \text{Current liabilities}$$

3. *Cash ratio*

This ratio measures the amount of cash available compared with current liabilities. Calculation formula is (Sawir, 2005):

$$\text{Cash ratio} = (\text{Cash} + \text{Marketable Securities}) / \text{Current liabilities}$$

b. *Leverage*

1. DER

DER is a consideration between total debt to equity (Sartono's, 2001).

The formula used (Sartono, 2001): $DER = Debt / Equity$

2. DAR

This ratio measures the company's ability to meet its obligations. The

formula used (Sartono, 2001): $DAR = Total Debt / Total Assets$

3. *Time Interest Earned Ratio*

This ratio is the ratio of earnings before interest and taxes (EBIT) to interest expense. The formula used (Sartono, 2001):

$TIE = EBIT / Interest Expense$

III.4. Methods of data analysis

(1). **Normality test** will be performed using Kolmogorof Sminov (KS). Normal distribution of data if the p-value test Kolmogorof Sminov > 0.05 (Ghozali, 2006).

(2). **Autocorrelation test** aims to test whether a linear regression model is no correlation between the error bullies in period t-1 (previous). Autocorrelation test used is the Durbin-Watson (DW test).

(3). **Heteroscedasticity test** used is the glacier. Heterokedastisitas problem does not occur if the test results unstandardized residual values > 0.05 (Ghozali, 2006).

(4). **Multicollinearity test** aims to test whether there is a correlation between the regression model of independent variables (independent). Multicollinearity is said to be free if the VIP value <10 and tolerance values > 0.1 (Ghozali, 2006).

(5). **Hypothesis Test**

On hypotheses 1 and 2 used a simple linear regression, while equation used is:

Hypothesis 1 : $Y = \alpha + \beta_1 X_1 + e_i \dots \dots \dots (1)$

Hypothesis 2 : $Y = \alpha + \beta_1 X_2 + e_i \dots \dots \dots (2)$

Keterangan:

Y : *Dividend Payout Ratio* (DPR) X₁ : Profitability
X₂ : IOS b₁, b₂ : Regression coefficients

For hypotheses 3 and 4 are used Moderating Regression Analysis (MRA), while the equation is:

$Y = a + b_1 X_1 + b_3 X_3 + e$ (3) $Y = a + b_1 X_1 + b_3 X_3 + b_4 X_1 \cdot X_3 + e$ (4)

$Y = a + b_2 X_2 + b_3 X_3 + e$ (5) $Y = a + b_2 X_2 + b_3 X_3 + b_5 X_2 \cdot X_3 + e$ (6)

$Y = a + b_1 X_1 + b_6 X_4 + e$ (7) $Y = a + b_1 X_1 + b_6 X_4 + b_7 X_1 \cdot X_4 + e$ (8)

$Y = a + b_2 X_2 + b_6 X_4 + e$ (9) $Y = a + b_2 X_2 + b_6 X_4 + b_8 X_2 \cdot X_4 + e$ (10)

Keterangan:

Y : *Dividend Payout Ratio* (DPR) X₁ : Profitability
X₂ : IOS X₃ : Liquidity X₄ : *Leverage*

IV. HYPOTHESIS TESTING AND DISCUSSION

IV.1. Pearson Correlation and regression backward

Entire proxy ratios of profitability, liquidity, leverage. In this research will then be tested using the correlation matrix (Pearson Correlation) so it can be seen in Table 1 below:

----- Table 1 here-----

Based on Table 1 it can be seen that no one has a significant correlation with the alternative that researchers take a backward regression. Results of backward regression can be seen in Table 2 below:

----- Table 2 here -----

IV.2. Confirmatory Factor Analysis for the Joint Proxy iOS

Results of the CFA can be seen in Table 3 below

----- Table 3 here -----

IV.3. Descriptive Statistics

Results of descriptive statistics can be seen in Table 4 below:

----- Table 4 here-----

IV.4. Normality Test Results

Normality test results can be seen in Table 5 below:

----- Table 5 here-----

IV.5. Autocorrelation Test Results

Autocorrelation test results can be seen in Table 6 below:

----- Table 6 here-----

IV.6. Multicollinearity Test Results

Multicollinearity test results can be seen in Table 7 below:

----- Table 7 here -----

IV.7. Heteroskedasticity Test Results

Heteroscedasticity test results can be seen in Table 8 below:

-----Table 8 here-----

IV.8. Hypothesis 1 Test Results

Results of regression hypothesis 1 can be seen in Table 9 below:

-----Table 9 here-----

Based on the regression results in Table 9 above, shows that the first hypothesis with the equation $Y = b_1 X_1 + e$ obtained *Adjust R Square* value of 0.491 indicates that 49.1% DPR variable that can be explained by the variable profitability (ROA), while the remaining 50.9 % explained by other variables not included in this equation. F statistic value of 284.03 with a significance value of $p = 0.000 < 0.05$. Because the significance probability is much smaller than 0.05, it significantly affects the profitability of cash dividend policy. The test results also showed the value of the coefficient b_1 of 0.220 and 16.853 t statistic with a significance value $0.000 < 0.05$,

which means that there is a positive and significant impact on the profitability of variable cash dividend policy. The test results in line with the hypotheses that have been made that the profitability's effect of the cash dividend is positive which means that **the hypothesis is accepted.**

IV.9. Hypothesis 2 Test Results

Hypothesis 2 regression results can be seen in Table 10 below:

-----Table 10 here-----

Based on the regression results in Table 10 it can be seen that the second hypothesis with the equation $Y = b_2X_2 + e$ obtained adjusted R square value of 0.255, indicating that 22.5% DPR variable that can be explained by the IOS variable, while the remaining 74.5% is explained by the variables others are not included in this equation. F statistic value of 65.855 with a significance value of $p = 0.000 < 0.05$. Because a significant probability of less than 0.05, this means that the IOS affect cash dividend. Test results also showed that the value of coefficient b_2 of 0.509 and t-statistic value of 8.115 with a significance value $0.000 < 0.005$ which means that there are positive and significant influence of the IOS variable dividends in cash. This suggests that the greater the dividends paid IOS is also getting bigger. Due to the different coefficients towards the direction in which it has been hypothesized that **the second hypothesis is rejected.**

IV.10. Hypothesis 3a Test Results

Hypothesis 3 regression results can be seen in Table 11 below:

-----Table 11 here-----

For the statistical value of F on the fourth equation is equal to 8.623 with a significance level of $0.000 < 0.05$, which indicates that the profitability, liquidity and interactions together influence the dividend policy. The F value decreased prior to the interaction test is 12.818 in the third equation. In the fourth equation coefficient (b_0) of 0.027 and

t-statistic 0.000 10.135 with a significance level of <0.05 was significant. Coefficient (b1) of 0.9093 and a t-statistic 0.000 4.016 with a significance level of <0.05 was significant, the profitability has a significant positive effect on dividend policy in cash. Coefficient (b3) is 0.000 and the t-statistic -0.450 with a significance level of $0.653 > 0.05$ is not significant, then the negative effect of liquidity does not significantly affect the cash dividend policy. Value of the interaction coefficient (b4) of -0.003 and -0.541 with a t-statistic significance level $0.589 > 0.05$ is not significant. Coefficient $b_{\rightarrow 4}$ is the result of the interaction between profitability and liquidity. So for the third hypothesis which states that liquidity profitability moderating influence on dividend policy is not significant, then **the third hypothesis (a) is rejected.**

The next step was followed by the Sharma models by regressing the liquidation of DPR can be seen in Table 12 below:

-----Table 12 here-----

test results obtained in Table 12, the value of the regression coefficient -0.004 with a significance level of $0.000 < 0.05$. Because the result is not significant then the liquidity variable but as a moderating variable exogenous variables, prediction, intervening, antecedent or suppressor.

IV.11. Hypothesis 3b Test Results

3 b the regression results shown in Table 13 below:

-----Table 13 here-----

Statistical value of F on the sixth equation is equal to 3.556 with a significance level of $0.015 < 0.05$, which indicates that the IOS, liquidity and interactions together influence the dividend policy. The statistical F value decreased prior to the interaction test is 3.888 at the fifth equation. Coefficient (b0) of 0.030 and 9.508 with a t-statistic of 0.000 significance level <0.05 was significant. Coefficient (b2) of 0.001 and 2.728 with a t-statistic of 0.007 significance level <0.05 is significant, then the iOS influence on

dividend policy. Coefficient (b3) of 0.001 and 0.703 with a t-statistic significance level of $0.483 > 0.05$ is not significant, it does not significantly affect the liquidity of the cash dividend policy. Value of the interaction coefficient (b5) of 2.881 and t-statistic -1.681 with a significance level of $0.094 > 0.05$ is not significant. Coefficient $b_{\rightarrow 5}$ is the result of interaction between IOS and liquidity. So for the third hypothesis (b) which states that moderate the effect of liquidity on investment opportunities cash dividend policy is not significant, then **the third hypothesis (b) is rejected.**

The next step is to regress between liquidity and DPR can be seen in Table 14 below:

-----Table 14 here-----

test results obtained in Table 14, the value of the regression coefficient -0.508 with a significance level of $0.000 < 0.05$. Because the result is not significant then the liquidity variable but as a moderating variable exogenous variables, prediction, intervening, antecedent or suppressor.

IV.12. Hypothesis 4a Test Results

4a regression results shown in Table 15 below:

-----Table 15 here-----

Statistical value of F on the eighth equation is equal to 9.276 with a significance level of $0.000 < 0.05$, which indicates that profitability, leverage and interactions together influence the dividend policy. The F value decreased prior to the interaction test is 13.132. Coefficient (b0) of 0.026 and t-statistic 0.000 12.367 with a significance level of < 0.05 was significant. Coefficient (b1) of 0,100 and 5,104 t-statistic of 0.000 with a significance level of < 0.05 was significant, significantly affect the profitability of the cash dividend policy. Coefficient (b6) of 3.300 and a t-statistic of 0.000 with a significance level of $1.000 > 0.05$ is not significant, then the leverage does not significantly affect the cash dividend policy. Value of the interaction coefficient (b7) of

0.000 and t-statistic -1.233 with a significance level of $0.219 > 0.05$ is not significant. Coefficient $b_{\gamma 7}$ is the result of the interaction between profitability and leverage. So for the fifth hypothesis which states that leverage does not significantly moderate the effect of profitability on dividend policy then **the fourth hypothesis (a) is rejected.**

The next step is to regress *the leverage* with DPR can be seen in the table below:

-----Table 16 here-----

test results obtained in Table 16 with their value regression coefficient is 9.366 with a significance level $0,000 < 0.05$. Because the result is significant then the liquidity variable not a moderating variable but as *an exogenous, a prediction, a intervening, an antecedent or suppressor* variables.

IV.13. Hypothesis 4b Test Results

Hypothesis 4b regression results can be seen in the table below:

-----Table 17 here-----

F statistic values on the tenth equation is 2.355 with a significance level of $0.073 > 0.05$, which indicates that the IOS, leverage and interaction together does not affect the cash dividend policy. The F value decreased from 3.494. Coefficient (b0) of 0.032 and t-statistic 0.000 14.344 with a significance level of <0.05 was significant. Coefficient (b2) of 0.001 and 2.412 with a t-statistic significance level of $0.017 < 0.05$ is significant, then the IOS significantly affects the cash dividend policy. Coefficient (b6) of -8.813 and -0.351 t-statistic with a significance level of $0.726 > 0.05$ is not significant, then the leverage does not significantly affect the cash dividend policy. Value of the interaction coefficient (b8) of -1.309 and -0.325 with a t-statistic significance level $0.745 > 0.05$ is not significant. Coefficient $b_{\gamma 8}$ is the result of interaction between IOS and leverage. Obtained from the test results did not significantly moderate the effect of leverage between IOS and cash dividend policy. Then for the sixth hypothesis which states

leverage moderating influence on policy IOS cash dividends is not significant, then **the fourth hypothesis (b) is rejected.**

The next step is to regress *the leverage* with DPR can be seen in the table below:

-----Table 18 here-----

with the test results obtained in Table 4:19 regression coefficient -0.247 with a significance level of $0.00 < 0.05$.

V. CONCLUSION, LIMITATION, DAN RESEARCH IMPLICATIONS

V.1. Conclusion

1. Hypothesis 1 suggests that the hypothesis is **accepted**. Profitability is proxied by Return on Assets (ROA) affect positively the cash dividend policy.
2. Hypothesis 2 shows the results of testing the hypothesis that the hypothesis is **rejected** stating that iOS negatively affect corporate dividend policy.
3. Hypothesis 3 in this research were divided into two,
 - a. Hypothesis 3a shows that the hypothesis is **rejected**.
 - b. Hypothesis 3b also shows that the hypothesis is **rejected**.
4. Hypothesis 4 in this research is also divided into two,
 - a. Hypothesis 4a shows that the hypothesis is **rejected**. Because of *the leverage* variable is not a moderating variable.
 - b. Hypothesis 4b also shows that the same results with the previous hypothesis that the hypothesis is **rejected**.

V.2. Limitation

Several limitations to this study are:

- a. Regression results in this research mostly produce *Adjusted R Square* value is quite low and formulated several hypotheses rejected.
- b. Several hypotheses were rejected because of alleged improper use of proxies.

V.3. Research Implications

The results provide additional evidence about the influence of profitability, iOS, liquidity, and *leverage* on the cash dividend policy of a company that may be useful to investors in making the investment. In addition, this research is expected to be a reference in the field of financial accounting. Particularly regarding the moderating variable on dividend policy of the company.

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Attachment

Table 1
Pearson Correlation

No	Variable	Pearson Correlation	Significant
A	Profitability Ratio		
	ROA	0,074	0,179
	ROE	0,056	0,306
	Gross Profit Margin	-0,015	0,783
	Net Profit Margin	0,005	0,929
B	Liquidity Ratios		
	Current Ratio	-0,026	0,638
	Quick Ratio	-0,022	0,691
	Cash Ratio	-0,003	0,951
C	Leverage Ratio		
	Debt to Equity Ratio	-0,002	0,971
	Debt to Asset Ratio	0,002	0,975
	Time Interest Earned Ratio	-0,039	0,479

Source: Data processed 2011

Table 2
Backward

Variable		Model	T	Sig.	
A. Profitability	1	(Constant)	4.346	.000	
		ROA	1.230	.220	
		ROE	.004	.997	
		GPM	-.433	.665	
		NPM	-.732	.464	
	2	(Constant)	4.435	.000	
		ROA	1.628	.104	
		GPM	-.434	.665	
		NPM	-.746	.456	
		3	(Constant)	4.784	.000
	ROA		1.604	.110	
	NPM		-.877	.381	
	4	(Constant)	4.759	.000	
		ROA	1.347	.179	
	5	(Constant)	8.543	.000	
B. Liquidity	1	(Constant)	7.026	.000	
		CR	-.149	.882	
		QR	-.001	.999	
		CSHR	.192	.848	
	2	(Constant)	7.084	.000	
		CR	-.546	.586	
		CSHR	.283	.778	
	3	(Constant)	7.118	.000	
		CR	-.472	.638	
	4	(Constant)	8.543	.000	
	C. Leverage	1	(Constant)	3.134	.002
			DER	-.071	.943

		DAR	-0.043	.966
		TIE	-0.718	.473
2		(Constant)	6.340	.000
		DER	-0.153	.878
		TIE	-0.724	.470
3		(Constant)	8.263	.000
		TIE	-0.709	.479
4		(Constant)	8.543	.000

Source: Data processed 2011

Table 3
CFA

Communalities				
IOS	MVABVA	MVEBVE	CAPBVA	CAPMVA
Communalities	0,960	0,960	0,929	0,929
Eigenvalue				
Factor	1	2	3	4
Eigenvalue	2,016	1,760	0,144	0,80

Source: Data processed 2011

Table 4
Descriptive Statistics

Variable	N	Average	Value Min.	Value Max.	Standard deviation
DPR	334	0.0444	-0,9385	1.0591	0.0949
Profit	334	0.0890	-0.0212	0.4067	0.0811
IOS	334	4.5928	0.1406	66.1499	7.1563
Liquidity	334	2.7829	0.2392	39.6172	3.7295
Leverage	334	3.8178	-0.5353	116.25	104.826

Source: Data processed 2011

Table 5
Normality Test Results

	K-S test	Asymp. Sig.	p-value	Conclusion
DPR	5.710	0.000	P<0,05	Distribution is not normal
ROA	2.495	0.000	P<0,05	Distribution is not normal
IOS	5.056	0.000	P<0,05	Distribution is not normal
CR	4.769	0.000	P<0,05	Distribution is not normal
TIE	6.505	0.000	P<0,05	Distribution is not normal

Source: Data processed 2011

Table 6
Autocorrelation Test Results

Equation	DW	Information
III	2,007	There is no positive and negative autocorrelation
IV	2,008	There is no positive and negative autocorrelation
V	2,023	There is no positive and negative autocorrelation
VI	2,019	There is no positive and negative autocorrelation
VII	2,013	There is no positive and negative autocorrelation
VIII	2,009	There is no positive and negative autocorrelation
IX	2,018	There is no positive and negative autocorrelation
X	2,018	There is no positive and negative autocorrelation

Source: Data processed 2011

Table 7
Multicollinearity Test Results

	Tolerance	VIF	Conclusion
Equation 3			
ROA	0.989	1.011	Not occur multicollinearity
CR	0.989	1.011	Not occur multicollinearity
Equation 4			
ROA	0,544	1,837	Not occur multicollinearity
CR	0,274	3,652	Not occur multicollinearity
ROAxCR	0,210	4,772	Not occur multicollinearity
Equation 5			
IOS	0.999	1.001	Not occur multicollinearity
CR	0.999	1.001	Not occur multicollinearity
Equation 6			
IOS	0,313	3,199	Not occur multicollinearity
CR	0,284	3,525	Not occur multicollinearity
IOSxCR	0,180	5,547	Not occur multicollinearity
Equation 7			
ROA	0.940	1.064	Not occur multicollinearity
TIE	0.940	1.064	Not occur multicollinearity
Equation 8			
ROA	0.763	1,310	Not occur multicollinearity
TIE	0.279	3.585	Not occur multicollinearity
ROAxTIE	0.241	4,154	Not occur multicollinearity
Equation 9			
IOS	1,000	1.000	Not occur multicollinearity
TIE	1,000	1.000	Not occur multicollinearity
Equation 10			
IOS	0.922	1.084	Not occur multicollinearity
TIE	0.349	2.863	Not occur multicollinearity
IOSxTIE	0.340	2.944	Not occur multicollinearity

Source: Data processed 2011

Table 8
Heteroskedasticity Test Results

Pengujian	Variable	Significance	Conclusion
Equation 3	ROA	0.577	Free heterocedastisity
	CR	0.450	Free heterocedastisity
Equation 4	ROA	0.789	Free heterocedastisity
	CR	0.960	Free heterocedastisity
	ROAxCR	0.766	Free heterocedastisity
Equation 5	IOS	0.459	Free heterocedastisity
	CR	0.469	Free heterocedastisity
Equation 6	IOS	0,782	Free heterocedastisity
	CR	0,868	Free heterocedastisity
	IOSxCR	0,865	Free heterocedastisity
Equation 7	ROA	0,587	Free heterocedastisity
	TIE	0,437	Free heterocedastisity
Equation 8	ROA	0,576	Free heterocedastisity
	TIE	0,613	Free heterocedastisity
	ROAXTIE	0,922	Free heterocedastisity
Equation 9	IOS	0,470	Free heterocedastisity
	TIE	0.264	Free heterocedastisity
Equation 10	IOS	0,519	Free heterocedastisity
	TIE	0,596	Free heterocedastisity
	IOSxTIE	0,877	Free heterocedastisity

Source: Data processed 2011

Table 9
Hypothesis 1 Test Results

Variable	Equation 1			Hypothesis
	Coeff. Value	t-Statistics	Sig.	Accepted
Profitability (ROA)	0,220	16,853	0,000	
R Square	0,493			
Adjusted R Square	0,491			
F	284,03			
Sig	0,000			

Source: Data processed 2011

Table 10
Hypothesis 2 Test Results

Variable	Equation 2			Hypothesis
	Coeff. Value	t-Statistics	Sig.	Rejected
IOS	159,501	8,115	0,000	
R Square	0,259			
Adj R Square	0,255			
F	65,855			
Sig	0,000			

Source: Data processed 2011

Table 11
Hypothesis 3a Test Results

Variable	Equation 3			Equation 4		
	Coefficient	T	Sig.	Coefficient	T	Sig.
Constanta	0,028	12,068	0,000	0,027	10,135	0,000
(ROA)	0,085	4,907	0,000	0,093	4,016	0,000
Liquidity (CR)	0,000	-1,741	0,083	0,000	-0,450	0,653
Interaction				-0,003	-0,541	0,589
R Square	0,077			0,078		
Adj. R Square	0,071			0,069		
F	12,818			8,623		
Sig.	0,000			0,000		

Source: Data processed 2011

Table 12
Hypothesis 3a Moderation Test Results

Variable	Coefficient	Adj R Square	F Value	T Value	Sig (p)
Liquidity (CR)	0,004	0,189	73,596	8,579	0,000

Source: Data processed 2011

Table 13
Hypothesis 3b Test Results

Variable	Equation 5			Equation 6		
	Coefficient	t	Sig.	Coefficient	T	Sig.
Constanta	0,034	13,16 7	0,000	0,030	9,508	0,000
IOS	0,000	2,380	0,012	0,001	2,728	0,007
Liquidity (CR)	0,000	-1,144	-1,359	0,001	0,703	0,483
Interaction				2,881	-1,681	0,094
R Square	0,035			0,047		
Adj. R Square	0,026			0,034		
F	3,888			3,556		
Sig.	0,022			0,015		

Source: Data processed 2011

Table 14

Hypothesis 3b Moderation Test Results

Variable	Coefficient	Adj R Square	F Value	T Value	Sig (p)
Liquidity (CR)	0,004	0,189	40,768	7,234	0,000

Table 15
Hypothesis 4a Test Results

Variable	Equation 7			Equation 8		
	Coefficient	t	Sig.	Coefficient	t	Sig.
Constanta	0,026	12,475	0,000	0,026	11,367	0,000
(ROA)	0,090	5,075	0,000	0,100	5,104	0,000
Leverage (TIA)	-2.561	-1,902	0,058	3,300	0,000	1,000
Interaction				0,000	-1,233	0,219
R Square	0,079			0,083		
Adj. R Square	0,073			0,074		
F	13,132			9,276		
Sig.	0.000			0,000		

Source: Data processed 2011

Table 16
Hypothesis 4a Moderation Test Results

Variable	Coefficient	Adj R Square	F Value	T Value	Sig (p)
Leverage(TIE)	9,366	0,062	21,447	4,631	0,000

Source: Data processed 2011

Table 17
Hypothesis 4b Test Results

Variable	Equation 9	Equation 10
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	Coefficient	t	Sig.	Coefficient	t	Sig.
Constanta	0,032	14,513	0,000	0,032	14,344	0,000
IOS	0,001	2,422	0,016	0,001	2,412	0,017
Leverage (TIE)	-1.539	-1,039	0,300	-8,813	-0,351	0,726
Interaction				-1,309	-0,325	0,745
R Square	0,031			0,032		
Adj. R Square	0,022			0,018		
F	3,494			2,355		
Sig.	0.032			0,073		

Source: Data processed 2011

Table 18
Hypothesis 4b Moderation Test Results

Variable	Coefficient	Adj R Square	F Value	T Value	Sig (p)
Leverage (TIE)	8,33	0,056	14,172	3,765	0,000

Source: Data processed 2011