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The Effect of Profitability, Company Size, and Investment Opportunity Set on Dividend Policy With Liquidity as a Moderating Variable

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ABSTRAK

This study aims to analyze the effect of profitability, company size, and Investment Opportunity Set (IOS) on dividend policy and to examine liquidity as a moderating variable in industrial and chemical companies listed on the Indonesia Stock Exchange (IDX) for the 2020–2024 period. The study uses a quantitative approach with secondary data in the form of annual reports and company financial statements. The analysis includes multiple linear regression and Moderated Regression Analysis (MRA). The main regression results indicate that profitability, company size, and IOS each have no significant effect on dividend policy, with significance values of 0.121; 0.613; and 0.519, respectively. Simultaneously, the model produces an F of 1.260 with a significance of 0.359. In the MRA model, the interaction of company size with liquidity and the interaction of IOS with liquidity are reported to be significant, while the interaction of profitability with liquidity is not significant. However, there is a discrepancy between the number of descriptive observations and the number of observations in the regression output that needs to be verified before the article is submitted.

INTRODUCTION

Dividend policy is a financial decision related to determining the portion of a company's profits to be distributed to shareholders and the portion to be retained to support operational and investment activities. This decision is crucial because it relates to both shareholder interests and the company's funding needs.

In industrial and chemical companies, dividend distribution can be influenced by working capital needs, business development, and investment opportunities. Profitability reflects a company's ability to generate profits, company size indicates the scale of its resources, and the Investment Opportunity Set (IOS) reflects available investment opportunities. Liquidity also has the potential to moderate the relationship between these variables and dividend policy.

This study aims to analyze the influence of profitability, company size, and IOS on dividend policy, both partially and simultaneously, and to test the role of liquidity as a

moderating variable in industrial and chemical sector companies listed on the IDX during the 2020–2024 period.

RESEARCH METHODS

This study uses a quantitative approach with secondary data sourced from the annual financial reports and annual reports of industrial and chemical companies listed on the Indonesia Stock Exchange during 2020–2024. The population mentioned in the thesis is 178 companies. The sample selection used purposive sampling based on research criteria established by the author. The thesis lists 32 companies, representing 160 observations, for a five-year period.

The dependent variable is dividend policy (Y), the independent variables include profitability (X1), company size (X2), and Investment Opportunity Set (X3), while liquidity (Z) is a moderating variable. Analysis techniques include descriptive statistics, multiple linear regression, t-test, F-test, coefficient of determination, and Moderated Regression Analysis (MRA). The analysis was performed using SPSS 26.

RESULTS AND DISCUSSION

Descriptive statistics

Descriptive statistics in the thesis report 160 valid observations. The average profitability value is 0.03577; firm size is 22.02401; IOS is 0.83833; dividend policy is −0.10075; and liquidity is 1.60241. Details of the statistics included in the manuscript are presented in Table 1.

Table 1. Descriptive statistics of research variables

Variables	N	Minimum	Maximum	Average	Standard deviation
Profitability	160	−0.092	0.166	0.03577	0.055735
Company size	160	13,789	29,988	22.02401	5,335168
iOS	160	−1,910	3,670	0.83833	1,187084
Dividend policy	160	−0.568	0.195	−0.10075	0.169069
Liquidity	160	0.059	4,112	1.60241	0.952043

Source: Author's thesis, SPSS 26 output.

The influence of profitability, company size, and IOS on dividend policy

The t-test results on the main regression model show that profitability has a coefficient of 17.206 with a significance value of 0.121. Firm size has a coefficient of 0.048 with a significance value of 0.613, while IOS has a coefficient of -0.202 with a significance value of 0.519. All three significance values are greater than 0.05, indicating that each variable does not have a significant partial effect on dividend policy in the reported model.

Table 2. Results of partial tests of the main regression model

Variables	Coefficient B	t	Sig.	Conclusion
Profitability	17,206	1,764	0.121	Not significant
Company size	0.048	0.529	0.613	Not significant

iOS	−0.202	−0.679	0.519	Not significant

Source: Author's thesis, SPSS 26 output.

Simultaneous test and coefficient of determination

The F-test yielded an F-value of 1.260 with a significance level of 0.359. Because the significance level is greater than 0.05, profitability, firm size, and IOS simultaneously do not significantly influence dividend policy in the reported model. The R-value is 0.592, the R-square is 0.351, and the adjusted R-square is 0.072.

Table 3. Summary of main regression models

Model statistics	Mark
R	0.592
R Square	0.351
Adjusted R Square	0.072
F	1,260
Significance of F	0.359
Standard Error of Estimate	1,170126

Source: Author's thesis, SPSS 26 output.

The role of liquidity as a moderating variable

The MRA equation listed in the thesis is: LNY = 10.676 − 7.384X1 − 0.959X2 + 3.834X3 − 13.887Z − 1.435X1Z + 0.966X2Z − 3.281X3Z + e. Based on the MRA coefficient table in the thesis, the profitability–liquidity interaction has a coefficient of −1.435 with a significance of 0.842; the company size–liquidity interaction has a coefficient of 0.966 with a significance of 0.019; and the IOS–liquidity interaction has a coefficient of −3.281 with a significance of 0.025.

Table 4. Results of Moderated Regression Analysis

MRA Components	B	Sig.	Description based on Sig. value.
Profitability (X1)	−7,384	0.513	Not significant
Company size (X2)	−0.959	0.019	Significant*
iOS (X3)	3,834	0.035	Significant*
Liquidity (Z)	−13,887	0.026	Significant*
X1 × Z	−1,435	0.842	Not significant
X2 × Z	0.966	0.019	Significant*
X3 × Z	−3,281	0.025	Significant*

Source: Author's thesis, SPSS 26 output.

Significance follows the values in the MRA coefficient table in the thesis. Final interpretations need to be confirmed after verifying the SPSS output and number of observations.

The moderation findings indicate that liquidity is related to the relationship between firm size and dividend policy, as well as between IOS and dividend policy. However, these results

should be interpreted with caution, as the regression output shows a residual degree of freedom of 7 and a total of 10, indicating 11 observations, compared to the 160 observations in the descriptive statistics. This discrepancy needs to be resolved before drawing final conclusions.

CONCLUSION AND SUGGESTIONS

Based on the reported main regression results, profitability, firm size, and IOS do not have a significant partial effect on dividend policy. Simultaneously, these three variables also show no significant effect in the main model. In the MRA model, the interactions between firm size and liquidity and IOS and liquidity are reported to be significant, while the interaction between profitability and liquidity is insignificant.

This study has limitations in the form of differences in the number of observations between descriptive statistics and regression output. Authors are advised to review the data, sample selection, variable transformation, and SPSS output before submitting the article. Future research could include other relevant variables and expand the scope of the research sector or period.

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