

The Influence Of Investment Opportunities Set On The Profit Predictive Information In Profit Management

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Abstract: This study aims to examine the effect of moderation on the investment opportunity set on the relationship between earnings management and the predictive content of earnings management. Earnings management is now predicted to affect future profitability because earnings management now affects the level of earnings quality in the current year. In the end, the quality of earnings now affects the quality of earnings the following year and affects the level of profitability of the company as well. This study also aims to look at the effect of moderation of investment opportunity sets on the relationship between present earnings management on the company's future profitability. If the company has a high set of investment opportunities, monitoring from outside shareholders will become low. Lack of control results in high-profit management. Therefore, moderation of investment opportunity sets strengthens the effect of earnings management and ultimately affects the future profitability of the company. The research was conducted on manufacturing companies listed on the Indonesia Stock Exchange in 2012-2017. This study found evidence that earnings management which has predictive content on earnings is the company's profitability (ROI). This study indicates that there is indeed an interaction effect between current earnings management and investment opportunity sets on the company's future profitability

Index Terms: earnings management, profitability, the investment opportunity set.

1 INTRODUCTION

Earnings management research has been a concern for practitioners, regulators, and academics for years. Earnings management is expected to affect the credibility of financial reporting and lead to misleading information for investors. Earnings management is often associated with the level of earnings or business achievement of an organization. This is because the level of profits obtained is related to management achievements in addition to the prevalence that the manager's bonus depends on the size of the profits obtained. Therefore, managers have an interest in their performance through the level of profits achieved by the company. The implication is that managers try to do several actions which can affect the company's profits to achieve its interests (earnings management). Earnings management will affect earnings quality, which is the degree of correlation between corporate accounting income and economic income (Kallunki and Martikainen, 2003). The main role of accounting reporting is to communicate financial information effectively to outsiders in a credible manner and time. To do this, managers have the opportunity to manage considerations in accounting reporting. Managers can use their knowledge of business to develop the effectiveness of financial statements as a way to communicate with potential investors and creditors. Earnings management also occurs when managers have an interest in misleading users of their financial statements (both internal and external) by discretionary accounting choices in financial statements (Kallunki and Martikainen, 2003). Earnings management is assumed to be able to predict future profitability because companies try to manage annual earnings up/down by using discretionary accruals, in case they believe that the next year's earnings will be lower/higher.

When the company is in difficult conditions, it is necessary to adjust higher profits. Whereas, adjusting the lower profits when it is in good condition (Subhita and Subhita, 2010). Therefore, there are indications that earnings management has predictive information content on future earnings. The company tries to achieve efficiency to achieve future prospects, thus influencing the company's investment opportunity set, which has implications for manager behavior and decision making (Chen et al., 2010). Managers have specific information or knowledge about investment choices for the efficiency of choices for the desired investment (Jensen and Meckling, 1995). Companies with high investment opportunity sets tend to do earnings management (Chen et al., 2010). Control shareholders have a strong incentive to maximize corporate value and discipline managers when they retain substantial cash flow rights as a control over the company (Claessen, Djankov, Fan, & Lang, 2002), which limits the transfer of company resources by the controlling shareholders (Chen et al., 2010) so that controlling shareholders act as an effective control mechanism that can reduce agency problems between shareholders and managers (Claessens et al., 2002). Investment opportunities in companies with high shareholder cash flow rights tend to lack earnings management (Chen et al., 2010). Investment opportunities in companies with high deviations between cash flow rights and control rights of shareholders tend to do earnings management (Chen et al., 2010). The above description suggests the influence of the company's investment opportunity variable (IOS) which affects the relationship between earnings management which produces predictive information content in the future. This study develops research from Shubita and Shubita (2010), which examines the incremental information generated from earnings management. The difference in this research is to consider the effect of the company's investment opportunity set. When a company has an investment opportunity set, then earnings management behavior can be affected. This earnings management ultimately affects the company's future profitability. So this study investigates the effect of company investment opportunities in earnings management when earnings management has predictive information on company

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profitability. Another difference is that this research was conducted in Indonesia. The study was conducted on public companies listed on the Indonesia Stock Exchange in 2012-2017. Research on the content of earnings management information in Indonesia is still rarely conducted. The information content of earnings management ultimately influences future profitability. The company has an interest in managing its profitability as a positive signal to investors. Related to profitability, it means that management thinks about providing long-term information. While doing earnings management means more to short-term orientation. Therefore, management needs to understand earnings management behavior, so that it is not trapped in short-term earnings only, but must consider long-term profits and information generated in the long run.

2.LITERATURE STUDY AND HYPOTHESIS DEVELOPMENT

Profit Management

Accounting data play an important role in many aspects. Accounting data also plays a role in the interpretation of the term exchange in contracting activities which provides the certain impetus for managers to organize or manage accounting data for their purposes. On the other hand, accounting earnings is part of accounting data and becomes a reference in the decision making process and important policies for the makers and users of financial statements. Accounting profit is also widely believed to be the main information available in an organization's financial statements. Agency theory also emphasizes that accounting figures play an important role in suppressing conflicts between company owners and managers or managers. From this, it is clear that managers have the motivation to manage financial data in general and profits or earnings in particular. Everything is inseparable from what is referred to as efforts to obtain personal benefits or benefits. The importance of accounting earnings information is also used as a reference for the manager's bonus program because accounting profit is a measure of performance. The importance of accounting earnings information both for companies in general and for managers motivates for companies/managers to manage earnings. Earnings management is influenced by the motivation of the emergence of earnings management.

Earnings management and incremental information content on earnings

It has been mentioned earlier that earnings management affects earnings quality, which is the degree of correlation between corporate accounting income and economic income (Kallunki and Martikainen, 2003). In this case, earnings management is done by discretion over accounting choices, which in turn affects the quality of financial statements. Though it needs to be emphasized if financial reporting aims to provide financial information effectively to outside parties in a credible manner and time. Because managers use their knowledge of business to develop the effectiveness of financial statements as a way to communicate with potential investors and creditors, the quality of financial statements is questionable. Earnings management is assumed to be able to predict future profitability because companies try to manage by using discretionary accruals to manage annual earnings up/down, if they believe that next year's earnings will be lower/higher. From the description above, it can be assumed that earnings

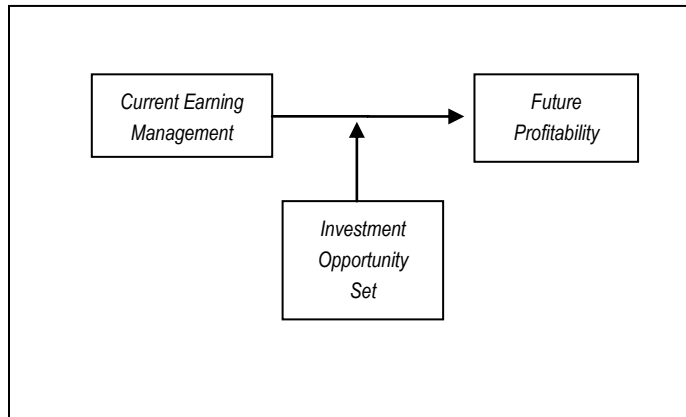
management has predictive information content on the company's profitability. Therefore the first hypothesis that can be drawn is: H1: Earnings management affects the company's future profitability.

Effect of investment opportunity sets on earnings management

Positive accounting theory states that companies organize themselves in the most efficient conditions depending on legal factors and institutional environment, technology and the level of competition in the industry to maximize future prospects (Watts and Zimmerman, 1986). Because the company strives to achieve efficiency to achieve future prospects, it influences the company's investment opportunity set, which has implications for manager behavior and decision making (Chen et al., 2010). Managers have specific information or knowledge about investment choices for the efficiency of choices for the desired investment (Jensen and Meckling, 1995). Agency costs increase because managers might maximize their utility and increase the prosperity of their expectations at the expense of other claim holders rather than profit maximization (Rickleby, Smith, & Zimmerman, 1997). From the description above, the hypothesis can be formulated as follows: H2: There is an influence of low (high) investment opportunity set influencing low (high) earnings management. This study presumes that when managers carry out earnings management to maximize their interests, these actions indirectly affect the quality of financial statements to make future predictions. That is, earnings management will affect the predictive information content of financial statements, in this case, the company's profitability. However, managers in doing discretion accounting choices are also faced with choices to increase the value of the company for the benefit of shareholders. Management that has private information will discretion accounting choices that consider maximizing their utility as well as maximization of investment choices for the benefit of the company. Therefore, the investment opportunity set chosen by the manager's influences discretion in earnings management and ultimately affects earnings quality. In this study, the investment opportunity set is expected to strengthen (weaken) earnings management when the company is in bad condition (good) so that the predictive information content on earnings becomes bad (good). The hypothesis drawn from the description is: H3: There is an influence between the interaction of present earnings management and the investment opportunity set with future profitability.

Framework of Thinking

Earnings management has predictive information content so that it can influence the level of the company's future profitability. Current earnings management can affect the level of current profit. Earnings generated in the current year affect the level of future profits. Profitability is the company's ability to make a profit. Therefore, earnings management has predictive information content that affects the company's ability to obtain future earnings. The investment opportunity set is an investment opportunity for the company by considering its expenditure choices. Investment opportunities made by the company consider the company's ability in financial terms. So in this study, the variable set of investment opportunities predicted to interact with earnings management affects the company's future profitability. General description of the flow of thought in this study are as follows:



3. RESEARCH METHODOLOGY

The Reseach Types and Data Sources

The type of data in this study used secondary data. The research data was taken from a database of financial statements of public companies listed on the Indonesia Stock Exchange. The company which was the object of research was a public company in Indonesia in 2012-2017 because it was the latest data so that research results would be better. The taken samples were manufacturing companies that during the research period remain listed on the Indonesia Stock Exchange because manufacturing companies were the largest sector

Research Model

The main objective of this research is to examine whether companies which tend to do earnings management and have a high investment opportunity set have low predictive information content. This is because companies that tend to do earnings management produce financial reports that are less quality. Hypothesis one states that earnings management affects the company's future profitability. To answer this hypothesis a regression equation is used: $PROF_{i,t+1} = \alpha_0 + \beta_1 DAC_{it} + \epsilon_{it}$ The second hypothesis states that there is an influence of low (high) investment opportunity sets affecting low (high) earnings management. The research model used is: $DAC_{it} = \alpha_0 + \beta_1 IOS_{it} + \epsilon_{it}$ Hypothesis three states that companies that have high (low) earnings management

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		433
Normal Parameters ^a	Mean	.0000000
	Std. Deviation	2.21719926
Most Extreme Differences	Absolute	.034
	Positive	.021
	Negative	-.034
	Kolmogorov-Smirnov Z	.710
Asymp. Sig. (2-tailed)		.694

a. Test distribution is Normal.

tendencies with high (low) investment opportunity sets have low (high) profitability levels. To answer this hypothesis a

regression equation is used: $PROF_{i,t+1} = \alpha_0 + \beta_1 DAC_{it} + \beta_2 DAC_{it} * IOS_{it} + \epsilon_{it}$ Information: $PROF_{i,t+1}$ = *i* company profitability in *t+1* year DAC_{it} = Management of *i* company profits in *t* year IOS_{it} = Set of corporate investment opportunities

Testing data and hypotheses Data Testing

Before testing the hypothesis, the data from the research sample were the first tested with the classic assumption test. The classical assumption test is a statistical requirement that must be met in ordinary linear least square (OLS) multiple linear regression analysis. The classic assumption tests conducted were *multicollinearity* test, *heteroscedasticity* test, normality test, autocorrelation test, and linearity test.

Hypothesis Testing

The first to third hypothesis is the hypothesis of the relationship of variables in the study. Therefore, the used hypothesis testing in this study was regression testing. Regression testing was carried out with SPSS 16.

4. DISCUSSION

Data description

The research sample used manufacturing companies listed on the Indonesia Stock Exchange. The number of manufacturing companies registered among 2012-2017 years was 143 companies with a total of 433 data test samples. Table 1 shows the descriptive statistics of the sample tested with the time series model.

Table 1
Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
LnDAC	433	9.71	23.44	18.4150	2.26167
Profitability	640	-86.62	62.16	3.4932	11.82251
Market to Book Ratio	639	-17.62	130.60	2.6285	9.08852
Valid N (listwise)	433				

This table shows that the average company has a profitability of 3.4932 with a value ranging from -86.62 to 62.16. The average market to book ratio is 9.08852 with a range between -17.62 to 130.60. The level of earnings management has an average of 18.44150 with a range of 9.71 to 23.44.

Data Test Results

Before testing the hypothesis with linear regression the classical assumption test was performed, namely the normality test, the *multicollinearity* test, and the *heterokedasticity* test. This test was done so that the hypothesis was not biased in drawing conclusions.

Normality Test

Testing for normality used the Kolmogorov-Smirnov test and homogeneity of variants using statistics. The results can be seen from the following table.

The data was stated as normal distribution, if the level of statistical significance of the test results > 0.05. Likewise for

homogeneity of variance, the statistical test results fulfill a significance level > 0.05. The results of normality and homogeneity test of earnings management variants are presented in The results of the normality test with the Kolmogorov-Smirnov test show a level of significance statistically > 0.05, which is equal to 0.694, so the data is normally distributed. Therefore, the normality assumption is fulfilled, that is, the data is normally distributed.

Multicollinearity Test

The *multicollinearity* test aims to test whether there is a correlation between the independent variable and the dependent variable in a regression model. The multicollinearity test in this study was conducted by looking at the value of the variance inflation factor (VIF) obtained the following results:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	-10.631	3.898		-2.728	.007		
LnDAC	.850	.210	.190	4.038	.000	.996	1.004
Market to Book Ratio	.145	.059	.115	2.437	.015	.996	1.004

a. Dependent Variable: Profitabilitas

There is no *multicollinearity* data if the VIF value is less than 10 or the tolerance factor value is more than 0.1. Based on the table above it can be seen that the VIF value of 1.004 is less than 10 and the tolerance value of 0.996 is more than 0.1. In conclusion there is no *multicollinearity* in this research data.

Heterokedasticity Test

Heterokedasticity test aims to test whether in the regression equation whether there is an inequality of variance from one observation residual to another. The testing used the Glejser test. The Glejser test results are shown in the following table. Heterokedasticity Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
1 (Constant)	-2.424	2.890		-.839	.402
LnDAC	.440	.156	.131	2.819	.005
Market to Book Ratio	.213	.044	.225	4.823	.000

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Dependent Variable: Res

Heterokedasticity test results indicate if the regression of residuals with the tested variable is significant (LnDAC = 0.005; Market to Book Ratio = 0,000). In conclusion the data used in the hypothesis test did not experience variance homogeneity.

Autocorrelation Test

Autocorrelation test shows that the confounding variable at a particular observation correlates with the confounding variable at another observation. The existence of autocorrelation causes the estimator is no longer efficient. One of the tests of autocorrelation symptoms is done by the Durbin-Watson test, if $Du < Dhit < (4 - Du)$ then autocorrelation does not occur. The results of the autocorrelation test with durbin-watson showed a value of 1.954 d. The test value is between -2 and 2, so it can be concluded that autocorrelation did not occur. The autocorrelation test results are as follows: Autocorrelation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.228 ^a	.052	.048	9.87311	1.954

a. Predictors: (Constant), Market to Book Ratio, LnDAC

b. Dependent Variable: Profitabilitas

Hypothesis Test Results

The first hypothesis states that earnings management affects the profitability of the company. The results of this equation regression test indicate if there is an influence of current earnings management on future profitability. Full results are shown in the following

Model Summary^b

R	R Square	Adjusted R Square	Std. Error of the Estimate
.197 ^a	.039	.037	9.92950

Model Summary^b

R	R Square	Adjusted R Square	Std. Error of the Estimate
.197 ^a	.039	.037	9.92950

a. Predictors: (Constant), LnDAC

b. Dependent Variable: Profitabilitas

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1721.576	1	1721.576	17.461	.000 ^a
	Residual	42494.410	431	98.595		
	Total	44215.986	432			

a. Predictors: (Constant), LnDAC

The result of the regression test shows the value of the statistical test F is 17,461 (p-val = 0,000). This value confirms that the model used in the study concluded can explain the research objectives. The adjusted R2 value is 0.037, which means that the independent variables used in the equation explain the dependent variable by 3.7%, the rest is explained by variables outside the equation. Regression Test Results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-10.825	3.919		-2.762	.006
LnDAC	.883	.211	.197	4.179	.000

a. Dependent Variable: Profitabilitas

The test results indicate if the coefficient per variable tested shows the level of significance statistically α (0.05). Coefficient LnDAC is 0,833 (0,001). The regression test results confirm the hypothesis that earnings management now influences future profitability. The second hypothesis states that there is an influence of low (high) investment opportunity sets affecting low (high) earnings management. The results of this equation regression test indicate if there is an influence of current earnings management on future profitability. Complete results are shown in the following table Model Test Results

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.064 ^a	.004	.002	2.25962

a. Predictors: (Constant), Market to Book Ratio

b. Dependent Variable: LnDAC

ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.098	1	9.098	1.782	.183 ^a
	Residual	2200.639	431	5.106		
	Total	2209.738	432			

a. Predictors: (Constant), Market to Book Ratio

b. Dependent Variable: LnDAC

The results of regression testing showed the value of the F statistical test was 1.782 (0.183). This value does not confirm that the model used in the study concluded can explain the research objectives. Value adjusted R 2 of 0.002, which means that the independent variables used in the equation explaining the dependent variable of 0.2%, the rest is explained by variables outside the equation.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	18.363	.115		159.320	.000
Market to Book Ratio	.018	.014	.064	1.335	.183

a. Dependent Variable: LnDAC

The test results show that the coefficient of the tested variable does not indicate a level of statistical significance α (0.05). Market to Book Ratio coefficient of 0.018 (0.183). The regression test results do not confirm the hypothesis which states that earnings management now affects future profitability. The third hypothesis states that there is an influence between the interaction of present earnings management and the investment opportunity set with future profitability. The third hypothesis regression test results obtained as follows: Model Test Results

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.241 ^a	.058	.054	9.84047

a. Predictors: (Constant), LnDACxIOS, LnDAC

b. Dependent Variable: Profitabilitas

Statistical test results show that the research model has a statistically significant F value (8,723). The adjusted R² value is 0.054, which means that the independent variables used in the equation explain the dependent variable by 5.4%, the rest is explained by variables outside the equation. Regression test results showed a constant value of -9,981. The test results also show a positive and statistically significant influence of the interaction variables between current earnings management and investment opportunity sets with earnings management (0.003). These results confirm the third hypothesis which states that there is an influence between the interaction of current earnings management and investment opportunity sets with future profitability. Regression Test Results

Coefficients^a

D		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-9.981	3.894		-2.563	.011
	LnDAC	.808	.211	.181	3.831	.000
	LnDACxIOS	.010	.003	.140	2.972	.003

a. Dependent Variable: Profitabilitas

This study aims to obtain evidence whether earnings management now affects future profitability. Earnings management is now predicted to have predictive information content, thus affecting the company's future profitability. The test results show there is an influence of current earnings management on future profitability. That is, there is an incremental information content in earnings management, so that the earnings management behavior of the company in a certain year can affect the company's future profitability. This should be a concern for management as well as *stakeholders*,

because the incentive to conduct earnings management can affect the quality of information on the company's future earnings. This study also examines whether investment opportunity sets are a proportion of a company's spending choices for investment. Companies with high opportunity sets have low monitoring from outside shareholders. Therefore, because the control from outside shareholders is weak, the company predicts earnings management. Hypothesis testing results of the influence of present earnings management interactions with investment opportunity sets on future profitability show significant results. That is, companies with a set of high investment opportunities will encourage the emergence of earnings management and ultimately affect future profitability.

5. CONCLUSIONS AND SUGGESTIONS

This study aims to examine the effect of moderation on the investment opportunity set on the relationship between earnings management and the predictive content of earnings management. In this study found evidence that earnings management has predictive content on earnings in this case is the company's profitability (ROI). This study indicates that there is indeed an interaction effect between current earnings management and investment opportunity sets on the company's future profitability. This study still has many shortcomings, for subsequent research it can be recommended to use IOS proxy in a composite manner, because in this study using IOS proxy individually. Profitability variables also need to be considered to review the predictive information lag, because Kalunki and Martikainen (2003) state that the effect of earnings management on incremental information content is seen in the 2nd to 3rd lag. Suggestions for improvement in this study are also related to earnings management variables, which might be considered only taking samples that show that the company is doing earnings management. This study uses all good samples that have strong and weak tendencies in earnings management. It is expected that the researchers influence the results of hypothesis testing. Therefore in subsequent studies it is best to only use a sample of companies that tend to do earnings management. Other factors can be considered in subsequent studies by looking at the effect of shareholder control rights. This variable is closely related to the investment opportunity set variable.

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