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Earnings Management Analysis Using Market Reaction, Financial Statement Disclosure Level, Managerial Skills And Litigation Risk in Indonesia Financial Companies

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Abstract: *Earnings management is defined as an attempt by company managers to intervene or influence information in financial statements with the aim of tricking stakeholders who want to know the company's performance and condition. This study aims to analyze the affect of market reaction, level of disclosure of financial statements, managerialskills, and litigationrisk on earnings management. The sample of this study was 29financial industry classification companies listed on the Indonesia Stock Exchange in 2018-2021 so that the number of samples (n) = 116.Earnings management measurement using discretionary accrual with the Modified Jones Model. The results of this study show that market reaction variables, the level of disclosure of financial statements, and managerialskills affect earnings management. While the litigation risk variable does notaffect earnings management.*

Keywords: Market Reaction, Financial Statement Disclosure Level, Managerial Skills, Litigation Risk, Earnings Management.

I. INTRODUCTION

Every company has a goal to get profit. It's a major concern for an investor to know the company's good or bad performance. Profit information is often used as a target for engineering opportunistic actions of management to maximize its satisfaction, but this activity can be detrimental to investors. Earnings management is defined as an attempt by company managers to intervene or influence information in financial statements with the aim of tricking stakeholders who want to know financial performance (Sulistyanto, 2018). Managers or preparers of financial statements perform earnings management in the financial reporting process in a company because they hope to benefit from these actions.

The case of Earnings management that occurred in Indonesia was at PT. AsuransiJiwasraya (Persero), has a potential loss obtained from the case, reaching IDR 13.7 trillion. The Audit Board of The Republic of Indonesia (BPK) has conducted two investigations against PT. Asuransi Jiwasraya throughout 2010-2019, as a result jiwasraya modified its financial statements in 2006. Not only that, The Audit Board of The Republic of Indonesia (BPK) also assessed that there were irregularities in the net profit bookkeeping carried out by Jiwasraya in 2017. When viewed from this case, this study uses a discriminatory accrual measure to determine the existence of earnings management in a company.

A factor that affects earnings management is profit information. Earnings information is something that is highly considered by investors in making decisions to buy or sell stocks. Investors sell or buy shares through the capital market. Capital Market is an activity concerned with public offering and trading of Securities. The capital market determines prices by looking at the financial information that companies have. More than that, the company will do everything possible to attract investors or influence market reaction, one of which is by taking earnings management actions. According to Scott (2000) one of the motivations for earnings management actions by company management is to influence the market or investor perception (stock price effects). It is expected that the market reaction will be stronger for the announcement of corporate earnings information that enlarges profits. This is what causes the alleged market reaction to affect earnings management carried out by company management.

Another factor that affects earnings management is the disclosure of financial statements. Managers can manage profit information to present financial statements in accordance with Indonesia financial accounting standards which does not violate established rules. To detect the presence of earnings management, you can use the analysis of the level of disclosure of financial statements. The level of disclosure of financial statements is information contained in financial

statements and supplementary information that includes notes to financial statements, events after reporting, management analysis of future operations, financial forecasting and operations, and additional financial statements (Kirana et al., 2016). Good disclosure of financial statements is expected to minimize management's chances of carrying out earnings management actions. Furthermore, because through the analysis of the level of disclosure of financial statements can detect earnings management actions carried out by management.

Another factor that can affect earnings management is managerial skills. Managers who have skills are considered to have the ability and integrity as well as experience so that they can make their own decisions for their company. Managers who have proficiency will easily misuse and manipulate information that is unknown to the owner by carrying out opportunistic actions (Kodriyah and Putri, 2019). Earnings management carried out by managers in the process of preparing financial statements is expected to be able to influence the level of profit conveyed in the financial statements.

Litigation risk is also can be affected earnings management. Strict legal regulations are expected to minimize earnings management practices and good audit quality is expected to reveal the manipulation of financial statements (Atiqah, 2012). Auditors who make mistakes in the implementation of the audit process, then the auditor will be at risk of getting lawsuits from third parties such as investors. The risk of getting a lawsuit from an external party who feels aggrieved is called litigation risk.

Four factors that are estimated to be able to affect earnings management. The first factor is market reaction, where market reaction as a form of investor or public reaction to the profits obtained by a company. This factor encourages companies to carry out earnings management. The next factor is the level of disclosure of financial statements which is able to detect earnings management seen from compliance with Indonesia financial accounting standards. Furthermore, managerial skills, namely the ability and integrity of managers in managing the company, the more capable managers are estimated, the higher the manager to do earnings management. The last factor is the risk of litigation, namely the risk of getting lawsuits from external parties who feel aggrieved, therefore it is estimated that the risk of litigation can affect earnings management actions. Therefore, in this study, researchers looked for the influence of these four factors on earnings management.

II. LITERATURE REVIEW & HYPOTHESIS

2.1 Agency Theory

According to Jensen and Meckling(1976) defines the agency relationship of one or more owners (principal) by contracting other people (agents) to carry out a service activity in the form of delegation of decision-making authority to agents. The agent acts in accordance with the principal's interest i.e. improving the company's performance to maximize the value of the company. Agency relationships arise when one or more people (principal) hire other people (agents) to provide services and then delegate decision-making authority to the agent. Stakeholdershare internal and external parties that include both from the government, competing companies, surrounding communities, the international environment, institutions outside the company, company employees, and so on whose existence affects and is influenced by the company.

2.2 Signal Theory

According to Asih(2000), profit information reported by management is a signal of future profits, therefore users of financial statements can make predictions on the company's future profits. In the context of signal theory that earnings management is such as to provide positive signals to various external parties so that there is an increase in company value or an increase in stock prices (Morris, 1987). The company's drive to provide information is because there is an information asymmetry between the company and outsiders because the company knows more about the company and its future prospects than outsiders (investors and creditors).

2.3 Earnings management

In general, earnings management is defined as an attempt by company managers to intervene or influence information in financial statements with the aim of tricking stakeholders who want to know the company's performance and condition. Earnings management occurs when managers use certain decisions in the financial statements and change transactions to change the financial statements so as to mislead stakeholders who want to know the economic performance obtained by the company toinfluence the results of contracts that use accounting figures reported in the financial statements. Scott (2000) identified four patterns carried out by management to manageprofits as followsTakinga bath,Incomeminimization, Incomemaximization, and Income smoothing.Earnings management analysis often focuses on the use of discretionary accrual. Managers choose

managers who prefer to use accruals to manipulate profits because they are more difficult to detect than accounting methods, if management makes accruals can be done simply by transferring profits from one period to another.

2.4 Market Reaction

According to Scott (2000), one of the motivations for company management to carry out earnings management is to influence the market, namely investor perception (stock price effects). The reaction of investors is seen from abnormal stock returns after earnings information is announced. An investor is said to get an abnormal return (also called unexpected return or excess return) if he gets an actual return that is greater than the expected return using the CAPM model (Puspitaand Kusumaningtyas, 2017). When a company has a high discriminatory accrual value, the market reacts by appreciating in the form of a decrease in the value of cumulative abnormal return (CAR). Research conducted by Handoko (2019) states that earning management has a negative effect on abnormal stock returns. Based on the description above, the hypothesis proposed is as follows:

H1: Market reaction affects earnings management.

2.5 Financial Statement Disclosure Rate

The level of disclosure of financial statements is information contained in financial statements and complementary communications that can provide sufficient information and explanation about the results of a business unit's activities. The level of disclosure of financial statements will help shareholders in understanding the contents and figuresreported in the financial statements (Kirana et al., 2016).Companies with low disclosure rates tend to do more earnings management and companies that do earnings management tend to have low disclosure quality.Kurniawati (2011) who found evidence that the level of disclosure of financial statements affects earnings management. Based on the description above, the hypothesis proposed is as follows:

H2: The level of Financial Statement Disclosure affects Earnings management.

2.6 Managerial Skills

Managerial competency is a skill or personal characteristic that helps achieve high performance in management tasks (Puspita and Kusumaningtyas, 2017). Earnings management is carried out by managers in the process of preparing financial statements in order to influence the level of profit conveyed in the financial statements so that it is expected to increase the value of the company in a certain period (Kirana et al., 2016). Previous researchers such as Isnugrahadi (2009), Utami (2013), and Wicaksono et al. (2013) succeeded in proving that there is an influence of managerial skills on earnings management. Where a reliable manager who is motivated to take opportunistic actions will be better able to take advantage of opportunities that exist to do earnings management. From the above thoughts the researcher produces the following hypothesis:

H3: Managerial Skills affects Earnings management.

2.7 Litigation Risk

Litigation is the process by which an individual or entity takes a dispute, case to court and settles a claim or compensation for damages. Companies are at risk of litigation from various parties who feel aggrieved by the company's operations. Lawsuits and litigation can be caused by many factors such as company compliance factors with rules, environmental factors and the presence of financial statements that are not in accordance with actual conditions so that it will harm interested parties. Juanda (2012) stated that litigation claims can arise from various parties such as investors, creditors and other parties. Interested parties have the right to demand rights that should be fulfilled by management as the manager of the company. Litigation risk is a risk that has the potential to incur a lot of costs because it deals with legal issues. The trigger for litigation or legal claims is related to the non-fulfillment of the interests of investors and creditors. In previous research conducted by Ningsih (2013), Sari (2015) showed that litigation risk affects earnings management. Likewise, the results of research conducted show that litigation risk affects earnings management because litigation risk is a company risk.Research conducted by Kirana et al. (2016) found another fact that even litigation risk had no affects earning management,this indicates that the high and low risk of company litigation will not have an impact on the company's earnings management. Based on the description above, the hypothesis proposed is as follows:

H4: Litigation risk affectsearnings management.

III. METHODOLOGY

3.1 Population and sample

The population that is the object of this study is financial sector companies listed on the Indonesia Stock Exchange (IDX) in 2018–2021. While the sample of this study was selected by purposive sampling method, which is a sampling technique with certain considerations. With the following criteria: (1) Financial Sector Companies listed on the Indonesia Stock Exchange (IDX) during 2018-2021; (2) All Financial Sector Companies whose financial statements go public and have been audited; (3) Financial Sector Companies that publish annual reports consistently and completely in 2018-2021; (4) Companies that have complete data related to research variables;(5) Presenting data on the company's financial statements using Indonesian Rupiah (IDR).

3.2 Measurement

3.2.1 Dependent variables

Earnings management in a research can be a goal variable or vice versa be an independent variable. Earnings management is measured using the Jones method modified by Dechow (1995) which is as follows:

1) calculate the total accrual (TAC) net profit of year t minus operating cash flow year t with the following formula:

$$TAC = NIit - CFOit$$

Furthermore, the total accrual (TA) is estimated with the Ordinary Least Square as follows:

$$\frac{TA_{it}}{A_{it-1}} = \beta 1\left(\frac{1}{A_{it-1}}\right) + \beta 2\left(\frac{\Delta Rev_{it}}{A_{it-1}}\right) + \beta 3\left(\frac{PPE_{it}}{A_{it-1}}\right) + \varepsilon$$

2) With the regression coefficient as in the formula above, the nondiscretionary accruals (NDA) are determined by the following formula:

$$NDA_{it} = \beta 1\left(\frac{1}{A_{it-1}}\right) + \beta 2\left(\frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}}\right) + \beta 3\left(\frac{PPE_{it}}{A_{it-1}}\right)$$

3) Finally, discretionary accruals (DA) as a measure of earnings management are determined by the following formula:

$$DAit = TAit/A_{it-1} - NDAit$$

Description:

DAit : Discretionary Accruals of the company i in the period of years t
NDAit : Nondiscretionary Accruals of the companyi in the period of year t
TAit : Total accrual company i in the period of year t
NIit : Net profit of company i in the period of year t
CFOit : Cash flow from operating activities of the companyi in the period year t
Ait-1 : Total assets of company i in the period of year t-1
ΔRevit : Company i revenue in year t minus company i revenue in year t-1
PPEit : Property plant and equipment company i in the period of year t
ΔRecit : The accounts receivable of company i in year t minus the revenue of company i in year t-1.

3.2.2 Independent variable

1) Market reaction

According to Jogiyanto (2011) the actual calculation of return, as follows:

$$R_{it} = \frac{P_t - P_{t-3}}{P_{t-3}}$$

2) Level of disclosure of financial statements

The disclosure index for each sample companyis obtained as follows:

a. Scores each disclosure item dichotomously, where if an item is expressed it is given a value of one and if it is not expressed it will be given a value of zero.
b. The scores obtained by each company are added up to get a total score.
c. The measurement of the disclosure index of each company is carried out by dividing the total score of each company by the total expected score.

3) Managerial skills

Managerial proficiency is measured using the Data Envelopment Analysis (DEA) method to determine the relative efficiency level ofDecisionMakingUnits(DMU). The inputs used in this study are total assets, number of workers, days sales outstanding (DSO). While the output used is sales. The model used to calculate efficiency with the DEA approach is as follows:

$$\max\theta = \frac{\sum_{I-1}^{s} U_i Y_{ik}}{\sum_{j-1}^{m} v_j x_{jk}}$$

4) Litigation risk

Litigation can be measured using the Debt to Equity Ratio (DER), the higher the DER ratio, the higher the level of litigation risk owned by the company (Zuhriyah, 2017). Here are the methods for measuring litigation risk:

$$DER = \frac{\text{Amount of Debt}}{\text{Total Equity}}$$

3.3 Data Analysis Technique

The formula to determine the effect of independent variables on multiple linear regression tests.Theregression model is as follows:

$$DAC = a + b_1 CAR + b_2 TPLK + b_3 DEA + b_4 DER + e$$

IV. RESULT AND DISCUSSION

4.1 Descriptive statistics

Descriptivestatisticalanalysisisusedtoprovideanoverviewordescriptionofresearchvariables.The following table 1 is the result of the descriptive statistical test:

Table 1. Descriptive Statistic Result

Variable	N	Minimum	Maximum	Mean	Standard Deviation
DAC	116	-107.14	500.80	6.4321	60.05723
PLK	116	29.00	46.00	38.4655	3.64854
CAR	116	-0.06	0.14	0.0011	0.02628
DEA	116	0.00	2.59	0.4109	0.49643
DER	116	0.04	16.08	4.6730	3.03428

Source: Data processed, 2023

Based on Table 1, the number of data samples taken is 166 financial companies that are listed on the IDX in 2018- 2021. The earnings management (DAC) shows a minimum value of -107.014 and a maximum value of 500.80. The average value of DAC variable is 6.4321 with a standard deviation of 60.05723. Level of disclosure of financial statements (PLK) shows a minimum value of 19.00 and a maximum value of 46.00. The average of PLK variable is 38.4655 with a standard deviation of 3.64854. Market reaction (CAR) shows a minimum value of -0.06 and a maximum value of 0.14. The average of CAR variable is 0.0011 with a standard deviation of 0.02628. Managerial skills (DEA) shows a minimum value of 0.00 and a maximum value of 2.59. The average of DEA variable is 0.4109 with a standard deviation of 0.49643. Litigation risk (DER) shows a minimum value of 0.04 and a maximum value of 16.08. The average of DER variable is 4.6730 with a standard deviation of 3.03428.

4.2 Classical Assumption Test

Table 2. Classical Assumption Result

Variable	Tolerance	p-value
Market Reaction	0.958	0.531
Financial Statement Disclosure Rate	0.978	0.081
Managerial Skills	0.989	0.817
Litigation Risk	0.969	0.881
Sig. (2-tailed)	0.000	
Durbin-Watson	2.032	
F count	28.370	
Adjusted R^2	0.488	

Source: Data processed, 2023

Based on table 2, the results of the classical assumption test, show that there is no multicollinearity because the value of tolerance > 0.1. Heteroskedasticity doesn't occur because in table 2 p-value for all variable is more than 0,05. While for the autocorrelation test result Durbin-Watson value is 2,032, because DU<DW<4-DU (1.769<2.032<2.231) there is no autocorrelation. The number of samples is greater than 30, it is a large sample according tothe Centra Limit Theorem (CLT) assumption.

The value of F count (28.370) and has significance value 0.000 explain that the regression model is a fit model. From the table 2, an Adjusted R^2 value of 0.488 is obtained, meaning that 48.8% of Earnings management variables can be influenced by Market Reaction, Financial Statement Disclosure Level, Managerial Skills, and Litigation Risk. While the other 51.2% can be influenced by other factors outside the model (variables) in this study.

4.3 Hypothesis Test Result

Test the hypothesis using multiple linear regression tests, the results of the hypothesis test can be seen in the table3 below.

Table 3. Hypothesis Test Result

Variable	t	Significance	Information
(Constant)	-7.505	0.000	
Market Reaction	-7.196	0.000	H1 Accepted
Financial Statement Disclosure Rate	8.039	0.000	H2 Accepted
Managerial Skills	3.320	0.001	H3 Accepted
Litigation Risk	0.536	0.593	H4 Rejected

Source: Data Processed, 2023

Based on the results of the table 3, market reaction affectsearningsmanagement. H1 is accepted because a significance value of 0.000 is less than a significance level of 0.05.This is in line with research conducted byHandoko (2019), which states the influence between market reaction and profit management. When a company has a high discriminatory accrual value, the market reacts by appreciating in the form of a decrease in the value of cumulative abnormal return (CAR).

From the table of multiple linear regression analysis results the level of financial statement disclosure affects earnings management, with a significance value of 0.000 smaller than the significance level of 0.05, then H2 is accepted. The results of this study are in line with research conducted by Kurniawati (2011). Companies with low disclosure rates tend to do more earnings management and companies that do earnings management tend to have low disclosure quality.

From table 3 above shows that managerial skills affectsearningsmanagement with a significance value of 0.001 smaller than a significance level of 0.05, then H3 is accepted. This result is in line with previous research such as Isnugrahadi (2009); Utami (2013); Wicaksono et al. (2013). Where a reliable manager who is motivated to take opportunistic actions will be better able to take advantage of opportunities that exist to do profit management.

Table 3 shows that litigation risk does notaffect earnings management, because the significance value of 0.593 is greater than the significance level of 0.05, then H4 is rejected. The results of this study are the same as the research conducted by Kirana et al. (2016). This indicates that the high and low risk of company litigation will not have an impact on the company's earnings management. This is because auditors are tasked with revealing manipulations in financial statements, so that litigation risks do not affect Earnings management.

V. CONCLUSION

The result show market reaction, the level of financial statement disclosure, and managerial skills affect earnings management, whereas litigation risk does not affect earnings management.Market reaction can prompt companies to take earnings management actions. This is because the market reaction will be stronger to the announcement of company profit information that increases profits than to the announcement of company profit information that reduces profits. The level of disclosure of financial statements affects earnings management because the increase in disclosure of financial statements will help shareholders understand the contents and figuresreported in the financial statements. Managerial skills affects earnings management, this is because the more capable the manager will easily misuse and manipulate information that is not known to the owner by carrying out opportunistic actions.Litigation risk does not affect earnings management, this is because rationally managers will avoid losses due to litigation by reporting finances conservatively, because profits that are too high have the potential for higher litigation risk.

Another research can explore other variables in other companies to increase empirical testing power on factors affecting Earnings management. For further researchers, it is expected to increase the period to be used as a sample to be studied because the longer the observation time interval, the greater the opportunity to obtain reliable and accurate information. For investors who will add their investments in order to be able to analyze the company's financial statements before investing so as not to be deceived by cases of profit manipulation.

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