



The effect of earnings management on investment efficiency moderated by ceo remuneration

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ABSTRACT

The purpose of this research is to analysis the effect of earnings management on investment efficiency, and also included remuneration CEO as moderating variable. The object of this study is manufacturing company listed on Indonesia Stock Exchanges from 2017 to 2020. The research data are processed through the statistical application of Statistical Product and Service Solutions (SPSS) 25 and Smart PLS (Partial Least Square) 3.2.9. The research results found that earnings management has no significant effect on investment efficiency. Moreover, research results also found that CEO remuneration can moderate the relationship between earnings management and investment efficiency. The findings of this study are beneficial for corporate governance in making investment decisions as well as protecting investors by reflecting the transparency of financial statements to avoid managerial opportunistic. A strong mechanism for management is important in preventing opportunism, due to certain earnings management motivations will be carried out in order to increase the amount of compensation incentives. The novelty of this research provides new insight into how CEO remuneration moderates the relationship between earnings management and investment efficiency.



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PENDAHULUAN

Financial reporting for each company has the aim of achieving an efficient capital allocation and reducing the misuse of the company's capital resources. Likewise, information in the company's financial statements is a necessity for investors in making investment decisions (Widayanti et al., 2014). The profit information reflected will be used by investors to decide whether to place funds in a viable company. Investment is said to be efficient if the investment is made as needed and avoids underinvestment and overinvestment problems. Underinvestment is a condition where the company does not have sufficient resources available to finance investment in the sense of missing investment opportunities. Meanwhile, overinvestment is a condition where the company is not able to allocate capital appropriately, in the sense that the company invests more than the predetermined target (Bzeouich et al., 2019).

Earnings management is a deliberate process to direct earnings reporting to a certain level by the limits of financial accounting standards (Wirakusuma, 2016). Earnings management is the motivation of company managers to reduce the quality of earnings to be reported for personal gain but contrary to the company's economic performance to interested stakeholders for the sake of attracting investors (Kapoor and Goel, 2017). Earnings management has the potential to harm the company's external parties because the quality of financial reports is low or does not reflect actual conditions, thus indicating that the company's management does not allocate investor funds appropriately. This causes investors to generate unreasonable returns (Yapono and Khomsatun, 2018).

A case related to earnings management that occurred in a manufacturing sector company was PT Tiga Pilar Sejahtera Food Tbk (now PT. FKS Food Sejahtera). The company's financial statements in 2017 are alleged to have overstated Rp 4 trillion in inventories, fixed assets, and receivables as well as several related allegations that there were no adequate disclosures to the company's stakeholders. This is evidenced by PT Ernst & Young Indonesia that the action of earnings management is to change the profit that the company should have lost so that the loss appears smaller on the income statement. This action is carried out to maintain the company's impression for investors and company stakeholders. In conditions of overstated earnings, it tends to cause direct costs to investors in the form of inefficient

investments. Therefore, earnings management, which is generally seen as a target to attract external parties from the company, can also influence the company's decision to identify better projects. Earnings management practices in companies in the form of overstatements on related accounts, reduce the quality of financial statements. Research suggests that a poor financial information environment can exacerbate levels of information asymmetry and increase underinvestment but fail to reduce costs associated with managerial control and overinvestment problems (Houcinel and Kolsi, 2017). The low quality of financial reporting will increase management discretion and managers will have difficulty in assessing optimal investments. Turning to high-quality financial reporting, meaning that company information is getting better reflected so that these conditions can help make investment decisions more efficient because of the smaller information asymmetry that occurs.

In the context of earnings management and investment efficiency, the role of corporate governance also significantly affects investment efficiency. The moderating role of the board in the form of board size, board independence, structure, duality and gender diversity can reduce earnings management practices and positively influence investment decisions and allocation of capital resources (Bzeouich et al., 2019). This suggests that earnings quality plays a more prominent role in guiding firms to choose appropriate investments, when the corporate governance environment is strong. The research has obtained results and concluded that it is not comprehensive because it does not cover all corporate governance mechanisms of the company. Therefore, this type of research was conducted to provide empirical evidence with a more comprehensive corporate governance, namely CEO remuneration as a moderator of the relationship between earnings management and investment efficiency.

Thus, the authors are interested in conducting research with the aim of exploring the effect of earnings quality as proxied by earnings management practices on investment efficiency. In addition, it also analyzes the relationship between CEO remuneration which is predicted to have a moderating effect on earnings management and investment efficiency.

RESEARCH METHOD

The object of this research was selected using purposive sampling technique, by collecting samples according to the specified criteria. The conditions to be fulfilled in the selection of the research sample are manufacturing companies that are officially listed on the Indonesia Stock Exchange for 4 years starting from 2017 to 2020 and also publish a complete annual report during the research year. The reason for choosing a manufacturing company as the object of research is because manufacturing companies play an important role in Indonesia's economic growth and are more likely to engage in earnings management practices than other companies.

The type of data used is secondary data obtained through intermediary media, namely on the capital market website (www.idx.co.id) and also through the website of the company concerned. After that, the selected sample will be processed through the statistical application of Statistical Product and Service Solutions (SPSS) 25 and Smart PLS (Partial Least Square) 3.2.9.

Variable Operational Definition

Investment Efficiency Measurement

Investment efficiency is measured by using the model of Richardson (2006) which computed by calculating the investment derived from the sum of all capital expenditures, research and development and acquisitions, reduced by income from PPE (Property, Plant and Equipment).

$$\text{Investment}_{i,t} = \text{CAPEX}_{i,t} + \text{ACQ}_{i,t} + \text{RD}_{i,t} - \text{SalesPPE}_{i,t}$$

Where :

- Investment_{i,t} : Total investment in one year
- CAPEX_{i,t} : Capital Expenditures
- ACQ_{i,t} : Company acquisition activity in one year
- RD_{i,t} : Research and Development Expenditures
- SalesPPE_{i,t} : Revenue from sales of PPE

Earning Management Measurement

The earning management measurement begins by measuring the rate of discretionary accruals. In this study, the accrual value is obtained from the difference between net income and operating cash flow (Kothari et al., 2005).

$$DAC_{i,t} = \frac{TAC_{i,t}}{TASS_{t-1}} - NDA_{i,t}$$

$$TAC_{i,t} = N_{i,t} - CFO_{i,t}$$

Where :

- DAC_{i,t} : Corporate discretionary accruals
- TAC_{i,t} : Total accruals
- NDA_{i,t} : Non-discretionary accruals
- N_{i,t} : Net profit
- CFO_{i,t} : Cash flow from the company's operating activities

The difference in the discretionary accrual model lies in the non-discretionary accrual measurement approach. The discretionary accrual measurement model using the model Kothari et al., (2005).

$$NDA_{i,t} = a_1 \frac{1}{TASS_{t-1}} + a_2 \left(\frac{REV_{i,t} - REC_{i,t}}{TASS_{i,t-1}} \right) + a_3 \left(\frac{PPE_{i,t}}{TASS_{i,t-1}} \right) + a_4 \left(\frac{ROA_{t-1}}{TASS_{i,t-1}} \right) + \varepsilon$$

Where :

- REV_{i,t} : Change in sales between year t and year t-1 of firm i
- REC_{i,t} : Change in receivables between years t and t-1 of firm i
- PPE_{i,t} : Gross value of fixed assets
- ROA_{t-1} : Ratio of net income to total assets of period t-1

Moderating Variable

The CEO's remuneration is used as a moderating variable in the form of rewards such as salaries, goods, allowances received by directors and commissioners directly. This remuneration is a reward or incentive given by the company owner for the performance of the management. Based on the statement above, this research uses the following formula (Abdullah, 2006) :

$$RM = \text{Log}(\text{Total Remunerasi})$$

RESULTS AND DISCUSSION

Outlier Test Results

The outlier test results identified 52 data classified as outliers. Based on sample selection and elimination of outliers, the total research data tested from 864 data to 812 data.

Descriptive Statistical Results

Table 1. Descriptive Statistics Result

	N	Minimum	Maksimum	Mean	Std. Dev.
Investment Efficiency	812	-0,053	0,583	0,035	0,049
Earnings Management	812	-3,388	17,838	-0,389	0,833
CEO Remuneration (millions rupiah)	812	33	99.372	20.351	21.355
Firm Size (millions rupiah)	812	8.278	98.191	63.057	27.853
Return on Asset	812	-4,799	0,716	-0,001	0,302
Leverage	812	0,048	90,990	0,892	4,583
Capital Investment Expenditures	812	-0,173	0,559	0,026	0,049

Source: Data processed, 2022

The result of investment efficiency can be stated that every manufacturing company is not attentive in making efficient investments, so the company should focus on business operations rather than business expansion. The result of discretionary accruals with the model of Kothari et al., (2005) show a negative value, it can be concluded that the average manufacturing companies listed on the Indonesia Stock Exchange are indicated to practice earnings management but tend to be inconsiderable. In other hand, CEO remuneration has an average value of Rp. 20,350,976,774. The CEO's remuneration is disclosed in the annual report regarding the determination procedure and the amount of the remuneration. Thus, from these results it is stated that each company has a different remuneration policy and a policy in determining the amount of remuneration. The company provides remuneration according to the company's standards or capacity even based on the income generated.

Moreover, this study has provide four control variables which company size shows the average value of Rp 63.056.648.894. This means that on average, manufacturing companies are classified as medium or small companies (according to Indonesia's Capital Market Supervisory Agency). Following, return on assets shows an average of -0.001, represent that the average manufacturing company generates a profit of -0.1% of the total assets used. The ROA number is negative, indicating that the manufacturing company is not categorized as healthy. This can be caused by management decisions in allocating the use of assets owned and the inability to generate profits. Leverage is stated that the average debt owned by manufacturing companies is close to but below 100%, so it can be categorized that the performance is quite good in terms of debt management. However, the results also show that some manufacturing companies still depend on external debt to finance their operations. In the capital investment expenditures, it has an average value which states that the average manufacturing company has a high level of capital investment expenditure so that it is more likely to avoid agency problems.

Results of P Values and Hypotheses

Table 2. Results of P Values and Hypotheses

Variabel	B	t-statistic	P-Value	Conclusion	Hypotheses
EMK -> EFF_INV	-0,053	1,461	0,145	Not Significant	H ₁ Rejected
EMK*RM -> EFF_INV	-0,005	2,000	0,046	Significant	H ₂ Accepted
FS -> EFF_INV	-0,026	1,725	0,085	Not Significant	-
ROA -> EFF_INV	0,032	1,448	0,148	Not Significant	+
LEV -> EFF_INV	0,218	2,448	0,015	Significant	+
CIE -> EFF_INV	0,956	51,950	0,000	Significant	+

Source: Data processed, 2022

This study finds that earnings management has no significant effect on investment efficiency. These results mean that earnings management actions do not affect management in making investments. Thus, H₁ is rejected. The investment efficiency of a company is not affected by the earnings management practices carried out by the company's management. This is due to earnings management practice will directly affects the effectiveness of earnings information and investor's decision making to place funds in the company, with the hope that the company can make efficient investments or place funds in a proper place and a reasonable return. To achieve efficiency, investments must be made based on need and avoid capital shortages or excesses. Therefore, managers must be able to choose the right investment opportunities for the company (Purwanto, 2015). Thus, it can be concluded that company management tends to have practices other than earnings management in attracting investors and has a good way of managing or allocation of capital to achieve the expected investment.

Meanwhile, the earnings management on investment efficiency moderated by the CEO's remuneration shows the results have a significant effect. Thus, H₂ is accepted. These results mean that the amount of remuneration received by a commissioner or director of a company can motivate managerial opportunistic behavior that will affect the company's investment efficiency. Bonus motivation is called one of the motivations for earnings management by adjusting reported earnings to achieve relatively large bonuses. Thus, the assessment of the remuneration received must meet the needs, be appropriate and acceptable in order to increase a strong control mechanism for management so as preventing opportunism which increase the amount of compensation incentives. Another

statement obtained in the theory of managerial productivity is that workers are morally entitled to receive wages that are exactly equal to their marginal product. This is known as labor value theory wherein marginal product refers to the extra output, return or profit generated per unit of gain from performance. From this theory, it states that each type of input or labor will be paid for by the value of its marginal product (Ellerman, 2021). Thus, the directors and commissioners as workers in the company must have competitive market power in the sense of also contributing to achieving profits. This reflects that they will receive the same payment as their marginal product, which means the CEO will continue to be employed and receive the same bonus or remuneration according to the work that does not deviate.

CONCLUSION

This study finds that earnings management has no significant effect on investment efficiency which means that earnings management actions do not affect management in making investments that are not optimal. Thus, it can be concluded that company management tends to have ethical practice in attracting investors and allocation of capital to achieve the expected investment. Meanwhile, the measurement of earnings management on investment efficiency moderated by the CEO's remuneration shows the results have a significant effect. Bonus motivation is a motivation for earnings management by adjusting reported earnings to achieve relatively large bonuses. Thus, the assessment of the remuneration received must meet the needs, be appropriate and acceptable in order to increase a strong control mechanism for management so as preventing opportunism which increase the amount of compensation incentives. The findings of this study are beneficial for corporate governance in making investment decisions as well as protecting investors by reflecting the transparency of financial statements so as to avoid managerial opportunistic. Strong control mechanism for management is important in preventing opportunism, due to certain earnings management motivations will be carried out in order to increase the amount of compensation incentives. As such, the novelty of this research provides new intuition into how CEO remuneration moderates the relationship between earnings management and investment efficiency.

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