

## **EARNING MANAGEMENT: THE MODERATING EFFECT OF CORPORATE GOVERNANCE AND THE EFFECT MANAGEMENT OVERCONFIDENCE**

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**Abstract:** Many studies have discussed the determinants of earning management. However, most of these studies discuss external factors of management such as audit quality and quality of disclosure and as a determinant of earning management. Study that tries to examine the intrinsic factors such as managerial overconfidence effect on earning management has not been widely conducted, especially in companies listed on IDX, Indonesia. The present study aims to examine the effect of managerial overconfidence on earning management in companies listed on IDX. Furthermore, this study also aims to examine the corporate governance mechanisms as moderator variable on the relationship between managerial overconfidence and earning management. By using data analysis with the SEMPLS technique, the present study has succeeded to prove that managerial overconfidence affects earning management. Furthermore, this study also successfully provide evidence that corporate governance mechanisms such as independent audit committees and audit committee activities moderate the relationship between managerial overconfidence and earning management.

**Keywords:** *Managerial overconfidence, corporate governance, audit committee, earning*

### **INTRODUCTION**

Financial scandals like fraudulent financial reporting are never obsolete to be discussed. Recently at the end of 2019 two financial scandals were exposed involving a state-owned company, namely PT. Garuda Indonesia and PT. Jiwasraya. The two state-owned companies are allegedly polishing their financial reports to make them look good. PT. Garuda Indonesia, for example, based on the BPK findings, did accelerated revenue recognition. The practice of accelerating revenue recognition by PT. Garuda Indonesia can be categorized as an earning management practice, because it is manipulative and distorts information. Earning management is the act of manipulating financial reports by management to mislead or distort stakeholders (Healy & Wahlen, 1999).

Earning management practice can be done by shifting future income to current period income, or delaying the recognition of current period expenses for future periods (Demirtas & Rodgers Cornaggia, 2013).

Prior researches have provided some determinant factors of earning management. However, most of the prior studies discussed external factors such as audit quality (Ahmad et al., 2016; Becker et al., 1998; Ching et al., 2015; Nawaiseh, 2016); quality of disclosure (Alzoubi, 2016; Katmon & Farooque, 2017; Lobo & Zhou, 2001); corporate governance (Ali Shah et al., 2009; Gulzar, 2011); and compensation and incentives (Bergstresser & Philippon, 2006; Laux & Laux, 2009) as determinant factor for earning management. In fact, intrinsic factors such as management behavior also play a role in influencing earning

management (Malmendier & Tate, 2005). One of the factors of management behavior that can influence management decisions related to earnings management is management overconfidence.

Management overconfidence is the likelihood for a person to overestimate their ability, knowledge and accuracy of information, usually this makes their judgment about the likelihood of an event occurring higher than the actual incident (Bhandari & Deaves, 2006). The impact of management overconfidence on companies varies, but in general it is detrimental to the company. (Schrand & Zechman, 2012) found that companies with managerial overconfidence tended to misstatement their financial reports. (Banerjee et al., 2014) found that companies with management overconfidence often made risky investment decisions. Management who has overconfidence tends to be very optimistic about the company's future performance (Hribar et al., 2013). Therefore, management does not hesitate to make decisions that tend to be risky. It is not uncommon for risky decisions to be taken that in the future it will cause losses for the company. To cover up the wrong decision, the management finally did an earning management.

Several previous studies have provided some evidence for the effect of management overconfidence on earning management (Berry-Stölzle et al., 2018; Gao & Han, 2018; Hsieh et al., 2014; Li et al., 2018). (Hsieh et al., 2014) found that management overconfidence has a relationship with earning management in companies listed in Taiwan. (Li et al., 2018) found that management overconfidence has an effect on earning management in companies listed in the United States. Furthermore, (Li et al., 2018) found that management with overconfidence tends to practice accrual

earning management. (Li et al., 2018) argue that the effect of management overconfidence on earning management can be prevented through a corporate governance mechanism.

Although research on the impact of management overconfidence on earnings management has been conducted, a similar study on companies listed in Indonesia is still limited. In addition, research that tries to determine the relationship between management overconfidence, corporate governance and earnings management has never been conducted. Therefore, the author tries to conduct research that aims to determine the effect of management overconfidence and corporate governance on earning management.

One of the governance mechanisms that is thought to weaken the tendency for earnings management to occur is the existence of an independent audit committee. The audit committee has an important role in helping commissioners carry out oversight. The independent audit committee will conduct a review if it finds irregularities in the management report and provide recommendations to the commissioners on the findings.

The effectiveness of the independent audit committee in its supervisory duties can be seen from its activities. The existence of high activity from the audit committee shows the effectiveness of the audit committee's role in its task of overseeing management performance. The high activity of the audit committee, especially in supervisory activities, is thought to weaken the possibility of earning management by overconfident management.

This present study aims to examine the effect of management overconfidence on earning management in all companies except financial institutions listed on the IDX. Furthermore, this study was also conducted to examine the effect of

corporate governance on the relationship between management overconfidence and earning management. The results of this study are expected to contribute to increasing knowledge in the field of financial behavior. The results of this study are also expected to contribute to internal control and risk management in companies with management overconfidence.

## LITERATURE REVIEW

Since the last few decades earning management has been widely discussed and examined by both academics and practitioners in the financial sector. This is because the practice of earning management is considered by most groups to be detrimental to the company and stakeholders. Earning management is management's action to change financial reports to mislead and distort stakeholder decisions on the company's economic performance. Management's motivation for earning management is explained by agency theory. According to agency theory, as an agent running a company, management has more information than stakeholders, and therefore management has an incentive to undertake earning management for their personal gain.

Earning management is the act of changing or manipulating financial reports in order to mislead stakeholders. The purpose of doing earning management by management is generally to protect their personal interests. According to agency theory, management takes advantage of the information asymmetry condition to carry out earning management that benefits itself. Usually, earning management is done by shifting future income to the current period, or postponing the current period's expenses for future periods. Management as a decision maker in the company is

responsible for earning management. Therefore, management behavior should be one of the factors that influence earning management. One aspect of management behavior that is suspected of influencing earning management is management overconfidence.

Management overconfidence is a likelihood for managers to overestimate their capabilities and information on future company performance. Management with overconfidence has too high and irrational expectations regarding company performance or investment decisions (Malmendier & Tate, 2005). Therefore, management often makes risky investments (Hambrick & Cannella Jr, 2004), because they believe they will get high returns in the future. However, due to overconfidence, the investment decisions taken by management did not produce the expected return. Therefore, to cover mistakes in management decision making, overconfidence does earning management. This is supported by research conducted by (Hsieh et al., 2014) and (Li et al., 2018). They succeeded in proving that overconfidence management tends to perform earning management which results in an increase in profits. Based on the above explanation, the following hypothesis is proposed:

H1: Management overconfidence has a positive effect on earning management

Management who has overconfidence often makes risky investment decisions (Hambrick & Cannella Jr, 2004). To finance investment decisions, management often makes loans that are also risky. Due to large overconfidence, risky decisions made by management often fall short of management expectations, and therefore managers undertake earning management to cover them.

Hsieh et.all (2014) found that management who has a large overconfidence tends to perform earning

management. Therefore, Hsieh et.all (2014) suggest implementing an effective corporate governance mechanism such as an audit committee to prevent overconfidence management from making risky decisions and eventually making earning management.

Previous studies have shown that the presence of independent audit committee members can reduce earning management (Carcello & Nagy, 2004; Juhmani, 2017; Klein, 2002; Saleh et al., 2007). Independent audit committee members have no interest in management and work entirely in the interests of shareholders. Therefore, when the audit committee detects an unusual investment decision, the audit committee can provide advice to the commissioner to reprimand management. In addition, if it finds the possibility of an attempt to manipulate or manipulate the financial statements, the independent audit committee can direct its allegations to the external auditor. Therefore, having an independent audit committee member can reduce the possibility of earning management due to management overconfidence. Upon above arguments, the following hypothesis is proposed:

H2: The effect of management overconfidence in the presence of an audit committee member will diminish on earnings management.

Management who has overconfidence is known to have irrational too high expectations of their investment decisions (Wei et al., 2011). This makes overconfidence management tend to make high risk investments. Because they have high and irrational expectations, it is not uncommon for the company's actual performance to fall short of its expectations. Therefore, management performs earning management to cover failure. This is evidenced by (Schrand & Zechman,

2012) who found that management who has overconfidence results in more misstatement than rational management. Misstatement of financial statements or actions that lead to earning management can be prevented through corporate governance mechanisms, particularly the audit committee.

One of the audit committee's duties is to prevent disputes between management and external auditors regarding the company's financial statements (Klein, 2002). In addition, the audit committee is tasked with assisting the commissioners in supervising and controlling management. An active audit committee is expected to provide effective oversight of management (Saleh et al., 2007). An active and effective audit committee will hold many meetings or meetings with commissioners and external auditors to discuss management strategic decisions or financial reporting issued by management. Therefore, an effective audit committee activity can suppress earning management through better supervision of overconfidence management. This has been proven, among others, through the research of Saleh et.all (2007) and (Xie et al., 2003). Based on the above explanation, the following hypothesis is proposed:

H3: The audit committee activity weakens the influence of management overconfidence on earning management

## **METHOD**

This study uses all companies listed on the IDX as a population. The sample used in this study is all companies listed on the IDX except for financial institutions. Financial institutions were excluded from the sample because they are regulated by the OJK, and therefore irrational decisions due to overconfidence management can be reduced or minimized. The data used in this study is secondary data from the company's annual

reports. The annual report which is used as a data source is an annual report published in 2017 and 2018.

The sample selection method used purposive sampling. (Sekaran & Bougie, 2016) revealed that purposive sampling was carried out by taking samples from population groups based on certain criteria that had been determined and believed by a researcher. The criteria used in this study include: Samples in the study are all companies listed on the Indonesia Stock Exchange except financial institutions; The sample reports company annual reports for 2017-2018. The number of samples that are successfully obtained and used in this study are 736.

The dependent variable in this study is earning management. Earning management is defined as a deliberate action taken by management by changing financial reports to mislead stakeholders. In this study, earning management was measured using the modified Jones model (Dechow et al., 1995). The measurement using the modified Jones model can be calculated as follows: (a) Calculating total accruals by subtracting net income in year t from the total operating cash flows for year t. (b) Estimate the Total Accrual (TAC) with Ordinary Least Square (OLS) to get the regression coefficient. The formula is as follows:

$$NDA_{it} = \beta_1 \left( \frac{1}{A_{it-1}} \right) + \beta_2 \left( \frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{A_{it-1}} \right)$$

(c) After getting the regression coefficient, the next step is to calculate nondiscretionary accruals (NDA) with the following formula:

$$NDA_{it} = \beta_1 \left( \frac{1}{A_{it-1}} \right) + \beta_2 \left( \frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{A_{it-1}} \right)$$

(d) The final step is to calculate discretionary accruals (DA) as a measure of earnings management.

$$NDA_{it} = \beta_1 \left( \frac{1}{A_{it-1}} \right) + \beta_2 \left( \frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}} \right) + \beta_3 \left( \frac{PPE_{it}}{A_{it-1}} \right)$$

Management overconfidence as independent variable is defined as a

person's tendency to overestimate their ability or the accuracy of their information on their performance. Management overconfidence is measured using the five proxies used previously by (Ting et al., 2016). The proxies are as follows: a) CEO image, is given 4 points if the CEO image is at least half a page in size, 3 points if the CEO image size is less than half a page, 2 points if there is a picture of someone other than the CEO, and 1 point if there is no CEO image in the annual report. b) CEO education, points 1-7 are given starting with 1 if you do not complete high school to 7 if you have a doctorate. c) CEO experience is measured using a dummy variable, 1 point if you have experience as top management (managing director, general director, finance director, etc.) and given 0 points if you have never held a top management position before. d) The CEO network is measured by the number of CEO or other top management positions that are held in addition to the company e) Past performance is measured using the ratio of operating cash flows and total assets. The value of this proxy is 0 if the ratio is not correspondent to the management tenure, and 1 if the ratio is correspondent to the management tenure. The value of management overconfidence is obtained by accumulating the total points of five proxies.

The moderating variable in this study is the corporate governance mechanism, which is represented by the characteristics of the audit committee. The characteristics of the audit committee are measured using two proxies, namely the independence of the audit committee and the activity of the audit committee. Audit independence is measured by counting the number of independent members on the audit committee, while audit committee activity is measured by counting the number of audit committee meetings conducted.

The data analysis in this study was carried out with Structural Equation

Modeling-Partial Least Square (SEM-PLS) using the Warp-PLS version 5.0 PLS software. The data analysis technique used in this research is inferential analysis technique. Inferential statistical analysis is used to test the hypotheses that have been formulated. Before doing the hypotheses testing, the measurement model (outer model) and the model structure (inner model) have been done first.

**RESULT AND DISCUSSION**

In analyzing data using PLS, analysis of the outer model needs to be done. Outer model is done by testing convergent validity and discriminant validity. If all construct indicators produce a loading factor value > 0.70, then all construct indicators are said to be valid or if the resulting AVE value is > 0.50, then the construct meets the valid requirements (Sholihin & Ratmono, 2013).

Meanwhile, for discriminant validity testing, if the square root value of the AVE of each construct is greater than the correlation value between the construct and other constructs in the model, it is said to have good discriminant validity.

Based on the test results, the loading factor value is greater than 0.5. This shows that all indicators in this study have met the requirements for convergent validity. The measurement of reality of construct can be seen on Crombach alpha value or composite reliability. Based on the results of composite reliability and Cronbach's alpha, the values were above 0.5 for all variables. Therefore, it can be concluded that all variables have met the criteria for composite reliability.

After the outer model has been done, analysis of inner model should also be done. This test includes the model fit test, path coefficient, and R2. In the model fit test, there are 3 test indices, namely the average path

coefficient (APC), average R-squared (ARS) and average variance factor (AVIF) with the APC and ARS criteria accepted with the conditions p-value <0.05 and smaller AVIF. of 5 (Sholihin & Ratmono, 2013).

The test results obtained APC results of 0.158 with a p-value <0.001. Meanwhile, ARS has an index of 0.116 with p - value <0.001. Based on the criteria, APC has met the criteria because it has a p value <0.001. Likewise, the p value of ARS is p <0.001. The AVIF value that must be <5 has been fulfilled because based on this data the AVIF value is 1.034.

The following is the output of hypotheses testing results obtained based on data processing using the WarpPLS 5.0 program.

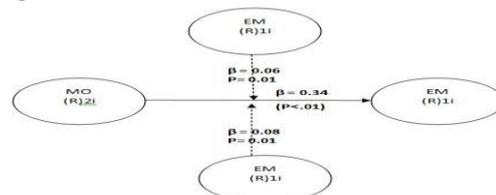


Figure 1 Hypotheses Testing Results

The table below summarizes the results of the hypothesis testing carried out using WarpPLS.

Table 1 Hypotheses Testing Results

Hypothesis	Path	Path Coefficient	p-value
H1	MO=>EM	-0.340	<0.001
H2	MO=>MO*IKA=>ME	-0.058	0.040
H3	MO=>MO*AKA=>ME	0.076	0.011

The first hypothesis in this study attempts to test whether management overconfidence affect earning management. The result of first hypothesis testing using WarpPLS showed a p value <0.05. This indicates that there is not sufficient evidence to reject hypothesis 1. In other words, the first hypothesis of this study is accepted. The results of testing the first hypothesis indicate that management overconfidence has a positive effect on

earning management. This means that the higher the management overconfidence owned by the manager, the higher the probability of earning management. This is in line with the results of research by (Hsieh et al., 2014) and (Li et al., 2018) which found that managers who have overconfidence tend to perform earning management.

The second hypothesis in this study tries to examine the effect of the number of independent audit committees on the relationship between management overconfidence and earning management. The results of testing the moderating variable with WarpPLS showed a p value  $<0.05$ . Therefore, the second hypothesis can be accepted. The results of testing the second hypothesis indicate that the influence of management overconfidence on earning management will be weakened by the presence of an independent audit committee. This confirms Hsieh et al.'s (2014) allegations that the presence of an independent audit committee as a corporate governance mechanism can weaken the possibility of managers who have overconfidence to carry out earning management.

The third hypothesis in this study attempts to examine the effect of audit committee activity on the relationship between management overconfidence and earning management. The results of testing the moderating variable with WarpPLS showed a p value  $<0.05$ . Thus the third hypothesis can be accepted. These results indicate that the existence of an effective audit committee can weaken the relationship between managerial overconfidence and earning management. The result is consistent with (Saleh et al., 2007) and (Xie et al., 2003) who found that an effective audit committee can reduce the likelihood of earning management.

## **CONCLUSIONS AND SUGGESTION**

This present study aims to

examine the effect of management overconfidence on earning management in all companies except financial institutions listed on the IDX. Furthermore, this study was also conducted to determine the effect of corporate governance on the relationship between management overconfidence and earning management. This study uses all companies listed on the IDX as a population. The sample used in this study is all companies listed on the IDX except for financial institutions. The data used in this study is secondary data from the company's annual reports. The annual report which is used as a data source is an annual report published in 2017 and 2018.

The results of the present study suggest that managers who have managerial overconfidence tend to do earning management. The moderating hypotheses testing results provide evidence that the relationship between managerial overconfidence may be weakened by the existence of corporate governance mechanism. The results of this study are expected to contribute to increasing knowledge in the field of financial behavior. The results of this study are also expected to contribute to internal control and risk management in companies with management overconfidence. Based on the results we can conclude that managerial overconfidence may lead to company's deterioration. Thus, it is important for the company to have an effective corporate governance mechanism to decrease the probability of earning management occurrence. Future research in this topic could investigate how other corporate governance mechanism such as ownership structure affects the relationship between managerial overconfidence and earning management.

## **REFERENCES**

- Ahmad, L., Suhara, E., & Ilyas, Y. (2016). The effect of audit quality on earning management within manufacturing companies listed on

- Indonesian stock exchange. *Research Journal of Finance and Accounting*, 7(8), 132–138.
- Ali Shah, S. Z., Butt, S. A., & Hassan, A. (2009). Corporate governance and earnings management an empirical evidence form Pakistani listed companies. *European Journal of Scientific Research*, 26(4), 624–638.
- Alzoubi, E. S. S. (2016). Disclosure quality and earnings management: Evidence from Jordan. *Accounting Research Journal*.
- Banerjee, S., Humphery-Jenner, M., Nanda, V. K., & Tham, T. M. (2014). Executive overconfidence and securities class actions. *Journal of Financial and Quantitative Analysis (JFQA)*, Forthcoming, 27th Australasian Finance and Banking Conference.
- Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research*, 15(1), 1–24.
- Bergstresser, D., & Philippon, T. (2006). CEO incentives and earnings management. *Journal of Financial Economics*, 80(3), 511–529.
- Berry-Stölzle, T. R., Eastman, E. M., & Xu, J. (2018). CEO overconfidence and earnings management: Evidence from property-liability insurers' loss reserves. *North American Actuarial Journal*, 22(3), 380–404.
- Bhandari, G., & Deaves, R. (2006). The demographics of overconfidence. *The Journal of Behavioral Finance*, 7(1), 5–11.
- Carcello, J. v, & Nagy, A. L. (2004). Audit Firm Tenure and Fraudulent Financial Reporting. In *AUDITING: A JOURNAL OF PRACTICE & THEORY* (Vol. 23, Issue 2).
- Ching, C. P., Teh, B. H., San, O. T., & Hoe, H. Y. (2015). The Relationship among Audit Quality, Earnings Management, and Financial Performance of Malaysian Public Listed Companies. *International Journal of Economics & Management*, 9(1).
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting Review*, 193–225.
- Demirtas, K. O., & Rodgers Cornaggia, K. (2013). Initial credit ratings and earnings management. *Review of Financial Economics*, 22(4), 135–145.
- Gao, Y., & Han, K.-S. (2018). The Influence of Managerial Overconfidence on Earnings Management. *경영교육연구*, 33(3), 425–442.
- Gulzar, M. A. (2011). Corporate governance characteristics and earnings management: Empirical evidence from Chinese listed firms. *International Journal of Accounting and Financial Reporting*, 1(1), 133.
- Hambrick, D. C., & Cannella Jr, A. A. (2004). CEOs who have COOs: Contingency analysis of an unexplored structural form. *Strategic Management Journal*, 25(10), 959–979.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.
- Hribar, P., KIM, J., Wilson, R., & Yang, H. I.-H. (2013). Counterparty

- responses to managerial overconfidence.
- Hsieh, T., Bedard, J. C., & Johnstone, K. M. (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting*, 41(9–10), 1243–1268.
- Juhmani, O. (2017). Audit committee characteristics and earnings management: The case of Bahrain. *International Journal of Accounting and Financial Reporting*, 7(1), 11–31.
- Katmon, N., & Farooque, O. al. (2017). Exploring the impact of internal corporate governance on the relation between disclosure quality and earnings management in the UK listed companies. *Journal of Business Ethics*, 142(2), 345–367.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400.
- Laux, C., & Laux, V. (2009). Board committees, CEO compensation, and earnings management. *The Accounting Review*, 84(3), 869–891.
- Li, C. A., Lin, T.-M., & Huang, Y. W. (2018). Managerial overconfidence, compensation induced risk taking, and earnings management. *The International Journal of Business and Finance Research*, 12(2), 1–26.
- Lobo, G. J., & Zhou, J. (2001). Disclosure quality and earnings management. *Asia-Pacific Journal of Accounting & Economics*, 8(1), 1–20.
- Malmendier, U., & Tate, G. (2005). CEO overconfidence and corporate investment. *The Journal of Finance*, 60(6), 2661–2700.
- Nawaiseh, M. E. (2016). Impact of external audit quality on earnings management by banking firms: Evidence from Jordan. *British Journal of Applied Science & Technology*, 12(2), 1.
- Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2007). Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting*.
- Schrand, C. M., & Zechman, S. L. C. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics*, 53(1–2), 311–329.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Sholihin, M., & Ratmono, D. (2013). *Analisis SEM PLS dengan WARPLS 3.0 (1st ed.)*. Penerbit Andi.
- Ting, I. W. K., Lean, H. H., Kweh, Q. L., & Azizan, N. A. (2016). Managerial overconfidence, government intervention and corporate financing decision. *International Journal of Managerial Finance*.
- Wei, J., Min, X., & Jiaying, Y. (2011). Managerial overconfidence and debt maturity structure of firms: Analysis based on China's listed companies. *China Finance Review International*.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295–316.