



**Article Type:** Research Paper

# Determinant of earnings management practices in manufacturing companies

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**DOI:** [10.18196/jai.v25i1.19503](https://doi.org/10.18196/jai.v25i1.19503)

**CITATION:**

Mulia, F. K., Leniwati, D., & Wicaksono, A. P. N. (2024). Determinant of earnings management practices in manufacturing companies. *Journal of Accounting and Investment*, 25(1), 210-230.

**ARTICLE HISTORY**

**Received:**

10 Aug 2023

**Revised:**

20 Sep 2023

30 Dec 2023

26 Jan 2024

**Accepted:**

05 Feb 2024



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**JAI Website:**



**Abstract**

**Research aims:** This study aims to examine the effect of audit committees, independent commissioners, and the presence of women on boards, such as the chief executive officer and chief financial officer, on earnings management practices.

**Design/Methodology/Approach:** This research used a quantitative method with a final panel data sample of 25 companies in the manufacturing sector for three years from 2020 to 2022. Hypothesis testing employed the regression model with the Common Effect Model (CEM) test. Sampling was conducted using secondary data on the Indonesia Stock Exchange (IDX) and each company's website.

**Research findings:** The results of the study demonstrated that independent commissioners, independent audit committees, audit committee expertise, audit committee activities, and audit committee size yielded a significant effect on earnings management practices, while female CEOs and female CFOs had no significant impact on earnings management practices.

**Theoretical contribution/Originality:** This research develops a theory that previously did not exist; in this research, the authors used asymmetric information theory to test the independent and dependent variables. Additional variables by suggestions in previous research are provided; therefore, it is hoped that this can strengthen the results of prior research.

**Practitioner/Policy implication:** The practical implication of this research is that the existence of an independent audit committee with a positive influence on earnings management can improve the company's financial performance, make it easier for managers or internal company parties to make better decisions in the future, and meet performance targets set by other parties, such as investors and creditors. Profit management can also be used to obtain tax benefits. During the previous pandemic, the government implemented tax compensation for taxpayers who met the criteria.

**Keywords:** Audit Committee; CEO Female; CFO Female; Earnings Management; Independent Commissioner

## Introduction

Earnings management is an attempt by company managers to intervene or influence the information in financial reports to deceive stakeholders who want to know the performance and condition of the company (Prasojo & Fatayati, 2018). Since external parties use the company's financial reports as a reference for making decisions in managing the resources entrusted to them, managers also have an obligation to provide investors with financial reports Profits created by the company are one of

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the good metrics that investors use to measure the performance of the company. Profitability affects a company's worth and sets a standard for investors. Because the stock market will react more strongly if profits are strong, the share price of the company will be impacted if the stock market reaction declines. Investors place a high value on profits, so management uses them as a goal for managing earnings and obtaining exclusive benefits for itself (Delima & Herawaty 2020).

In Indonesia, there have been various accounting manipulation practices in recent years. These cases included cases involving BUMN Karya issuers, namely PT Waskita Karya Tbk (WSKT) and PT Wijaya Karya Tbk (WIKA), whose financial reports did not match real conditions (www.liputan6.com 2023).

Cases related to earnings management do not only occur on a national scale. Previously, this also happened to Toshiba Corp in Japan in 2015, where it was stated that Toshiba had exaggerated its operating profit by 151.8 billion yen (USD 1.22 billion) for several years, or three times the initial estimate (www.liputan6.com 2015). The latest international case in March 2023 is the Adani Group from India, which is suspected of committing corruption and stock fraud to a total of \$110 billion, which Hindenburg reported. As a result of this incident, the Adani Company canceled a \$2.5 billion share sale last February. This case proves that the company's earnings management is less than optimal, allowing irresponsible individuals to commit acts of corruption and financial manipulation on a large scale. This has an impact on reducing public trust in the company (edition.cnn.com 2023).

In his research, Trisanti (2021) has proved that while the presence of women as CEOs provided no influence on earnings management practices, women as CFOs impacted earnings management practices. Meanwhile, this research revealed that women as CEOs and CFOs did not influence the decline or increase in earnings management in companies.

Handriani (2020), in her research on the influence of independent commissioners' audit committee characteristics on earnings management practices in manufacturing companies in Indonesia in the 2013-2018 period, found that independent commissioners had a significant positive effect on earnings management practices and audit committees. It also produced a significant influence on earnings management practices in Indonesia. This aligns with the findings of this research that independent commissioners influenced earnings management practices, and the characteristics of the audit committee also affected earnings management practices.

Furthermore, several factors influence earnings management. Research by Solihah and Rosdiana (2022) examined the influence of independent commissioners on earnings management. A further study conducted by Kaoje and Babangida (2023) investigated the characteristics of audit committees on earnings management. Also, Trisanti's (2021) research inspected the influence of women serving as CEOs and women serving as CFOs on earnings management.

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At the senior manager level in the United States, gender diversity greatly benefits earnings management practices (Chen & Gaviious, 2016). In the same way, companies whose top management is dominated by women will be more successful than companies where top management usually consists of men. However, in developing countries, the opposite happens. For example, research in China reported that gender differences at the chief executive level did not affect management practice earnings. In contrast, company profits in China are more influenced by other variables, such as age, education level, and environment (Cumming et al., 2015). In Indonesia, several researchers have studied the relationship between gender and job quality. Handajani et al. (2014) uncovered that female CEOs and CFOs tend to avoid earnings management, resulting in better earnings quality. This finding is consistent with the research of Hasnawati et al. (2019), which discovered that female CFOs yielded a significant negative impact on earnings management.

Based on the results of previous research, it was unveiled that there is a research urgency based on suggestions from Handriani (2020), who stated that it is necessary to carry out a further research agenda with similar research involving the number of meetings, gender, and accounting policy data in Indonesia which will continue to be finalized. Hence, to the data sample, the authors also added the number of meetings held by independent commissioners in a year and the influence of gender on earnings management in a manufacturing company. The addition of gender here is also adjusted to the journal of Trisanti (2021) for the gap, which asserted that future research efforts should be made not only to have one proxy but also to add proxies or other methods to make EM practices more accurate. Therefore, in this research, the authors combined the gaps between these two studies.

From the above phenomenon, it can be concluded that it is necessary to use gender variables for women who serve as CEOs and women who serve as CFOs. It is expected that adding this variable can strengthen and correct the shortcomings of previous research.

## **Literature Review and Hypotheses Development**

Information exerts a significant influence on the decision-making processes employed by individuals in both corporate and governmental contexts. Individual judgments are influenced by two types of information: public information, which is freely accessible, and private information, which is accessible to a limited number of people. When one party has greater knowledge than the other, there is information asymmetry. This is due to the fact that some information is confidential and is shared only by those with access to it, not by others who could utilize it to make better judgments. For more than a century, formal economic models and decision-making procedures have been predicated on the idea of perfect information, ignoring information asymmetries. Most economists believe that markets with ideal information will behave almost the same as markets with few imperfections. This is an assumption consistent with the known defects of information (Crawford et al., 2018).

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According to Atmaja (2017), asymmetry theory demonstrates that connected parties do not receive equal access to information about a company's risks and potential. Nonetheless, some parties are more knowledgeable than others. Asymmetric information signifies a situation where one party possesses greater information than the other. The range of the information imbalance is very high to very low, which has a substantial impact on investment choices.

In general, managers have more access to information than other stakeholders, such as investors. This phenomenon leads to the practice of information sharing or the exchange of information between managers and investors. This makes it possible for investors with restricted information access to benefit from current possibilities. The distribution of information gained thus results in an asymmetry, with managers serving as information producers and shareholders and stakeholders in general as information recipients.

Information asymmetry can give rise to moral hazard because shareholders may have incomplete awareness of the activities carried out by investment principals. This can enable actions that do not follow ethics and align with conflicts of understanding between the parties involved (Siegrist & Chambaz, 2012). In addition, information asymmetry can cause differences in interests between principals and agents, thereby creating a situation where both parties seek to exploit the interests of the other for personal gain. Various indices, such as company size, company age, and proportion of shares accessible to the public, can be used to assess the magnitude of information asymmetry.

### Hypotheses Development

Independent commissioners are independent members of the board of commissioners who are not tied to controlling shareholders, other commissioners, or directors. In addition, they are free from business relationships or different types of relationships because they can affect their ability to act independently or solely in the interests of the company (Handriani 2020).

This variable has continuity with information asymmetry theory because independent commissioners do not own company shares, either directly or indirectly. The percentage of independent commissioners is multiplied by the number of commissioners on the sample company's board of directors (Handriani, 2020).

***H<sub>1</sub>***: *The number of independent commissioners has a significant negative effect on earnings management.*

Based on OJK Financial Services Authority Regulation (2015) No. 55/POJK 04/2015 (www.ojk.go.id 2015), the board of commissioners forms the audit committee. It assists the board of commissioners in its duties and functions. The audit committee must monitor managers as they prepare financial reports. It is hoped that this will prevent

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managers from committing fraud while preparing financial statements. In Hypothesis 2, the characteristics of the audit committee with the dimensions of size, independence, expertise, and auditor activity influence earnings management.

*H<sub>2</sub>: Audit committee affects earnings management.*

The size or number of the audit committee is consistent with information asymmetry theory. More audit committees mean more control in overall financial reporting and more audit committees involved in the corporate governance process. Wan Mohammad et al. (2016) found that the number of audit committees significantly affects earnings management in companies. According to Badolato et al. (2014), the size of the audit committee, which is related to the number of committee members, can reduce management profits. This is because audit committee members are highly capable of supervising management. Kaoje and Babangida (2023) revealed that the number of audit committees has a significant effect on earnings management and can increase supervision of management.

*H<sub>2a</sub>: The number of audit committees has a significant negative effect on earnings management.*

The quantity of independent audit committees aligns with the principles of information asymmetry theory, as these committees serve as an extension of the board of commissioners to oversee accounting procedures and management financial reporting. The audit committee must be independent from other parties to operate professionally. This variable indicates how independent the audit committee is from the company's board of directors. This variable is the percentage of audit committee members who are not executive directors and do not have transactions with parties related to the company (Handriani, 2020). Kaoje and Babangida (2023) exposed that independent audit committees did not significantly affect earnings management. In other words, an independent audit committee cannot supervise management optimally.

*H<sub>2b</sub>: The number of independent audit committees has a significant positive effect on earnings management.*

Having an audit committee composed of individuals with expertise in finance and accounting corroborates with the principles of information asymmetry theory. This is because if audit committees are to work productively, they need members with accounting or financial expertise. If the audit committee has expertise in accounting and finance, they will be more professional in monitoring the process of management preparing financial reports. From an efficiency perspective, an audit committee with this expertise can reduce management's opportunistic profits. This variable denotes how independent the audit committee is from the company's board of directors. Elliott (2007) assessed the expertise of audit committee members on an ordinal scale of 1–4.

There are four methods used to evaluate the audit committee's capabilities. The authors divided it into four levels. On a scale of 3 and 4, the audit committee has experience as controllers and accountants, financial directors or experts in the financial sector, managers outside the financial industry, and experts outside the business sector. The number of audit committees that received the appropriate score was calculated and then divided by the number of audit committees. Audit committee expertise data was collected from public company annual reports. The percentage of committee members with accounting or financial competence is the audit committee expertise.

*H<sub>2c</sub>: The number of audit committee expertise has a significant negative effect on earnings management.*

The frequency of meeting activities conducted by the audit committee will be consistent with the principles of the information asymmetry theory. When the audit committee holds meetings as often as possible, they are expected to monitor the process of preparing financial reports well, which in turn improves the quality of financial statements. The audit committee can improve earnings quality by supervising the selection of auditors, demanding high audit quality, reviewing the adequacy of internal controls, monitoring the internal audit function, and reviewing the company's accounting disclosures and policy choices. This variable was calculated using the method proposed by Handriani (2020), determining the number of audit committee meetings with the board of commissioners and external auditors in one year. It was rated on a scale of 1–7 with factors such as relationship with external auditors, access to financial reporting and monitoring of compliance with IFRS, review of the effectiveness of internal controls, relationship with internal auditors, relationship with commissioners, relationship with directors, and the number of audit committee meetings of at least three times. The authors gave a score of seven after all audit committee tasks were completed.

*H<sub>2d</sub>: The number of audit committee activities has a significant negative effect on earnings management.*

A woman serving as CEO would be consistent with the idea of information asymmetry. Research has shown that female leaders are more democratic and consider more details to improve policies. According to Eddleston and Powell (2012), the presence of women on the board of commissioners is significant because women have more control over business operations and provide advice to directors. This task indirectly influences the company's reported earnings management practices because the board of commissioners can regulate company directors' policies and actions related to financial reporting. If more women are on the board of commissioners, the possibility of earnings management will decrease. This differs from the results of research (Trisanti 2021) that shows that women serving as CEOs did not significantly influence earnings management practices in a company. This variable denotes how the presence of women in top positions, such as Chief Executive Officer, can affect the increase or decrease in earnings

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management. As such, the authors used a dummy variable, namely 1 for a woman as CEO and 0 otherwise.

*H<sub>3</sub>: The number of women as CEOs has an insignificant negative effect on earnings management.*

Women serving as CFOs will align with the theory of information asymmetry. Chief financial officers should be responsible for determining whether women's influence on earnings management practices is low because women are creative, transparent, and careful in what they do. Previous studies have shown that female members possess higher ethical decision-making skills and can reduce earnings management practices (Handajani et al., 2014). In addition, women are known to be more careful than men when making decisions. Women generally tend to conduct more thorough risk assessments before making important decisions for the company. It is clear that these women have helped the company and become a strength for the company during uncertain global business conditions (Khan & Absul Subhan, 2019). According to Trisanti (2021), women who serve as CFOs significantly influence earnings management practices in a company. This variable measures the impact of female representation in high-ranking positions, such as Chief Financial Officer, on the manipulation of financial earnings. Therefore, the authors employed a dummy variable, specifically assigning a value of 1 to indicate a female CFO and 0 for any other case.

*H<sub>4</sub>: The number of women as CFOs has an insignificant negative effect on earnings management.*

### Control Variable

Company size in total assets will be in line with information asymmetry theory. A company's size is based on the value of its assets (Biais et al., 1999). Because company wealth is a concern for stakeholders in the distribution of wealth, the size of company wealth exhibits the size of political costs.

Departing from the hypothesis development elucidated above, the framework of this research can be observed in Figure 1.

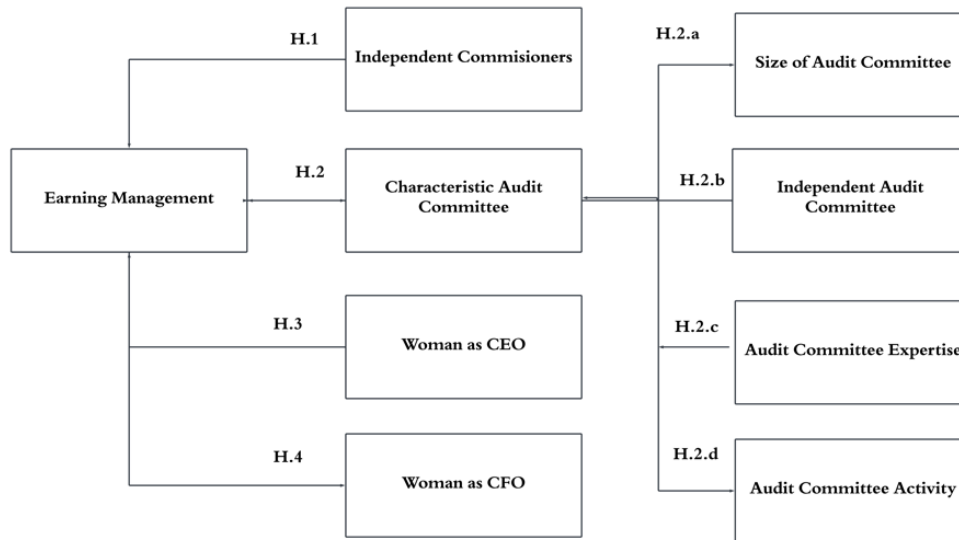


Figure 1 Research Model

## Research Method

### Data Selection and Data Sources

This research aims to determine the influence of independent commissioners, audit committee characteristics, CEO gender, and CFO gender on earnings management practices, along with a control variable in the form of company size, which was obtained by the company's total asset value. This research employed a quantitative approach with a population of 184 manufacturing sector companies listed on the Indonesian Stock Exchange in the 2020-2022 period.

This research used panel data. Panel data is a combination of time series and cross-section data. Then, the researchers utilized the EViews program to test the data regression model. The EViews program uses three methods, namely the Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). In addition, the authors used panel data regression estimation to determine the most appropriate technique from several tests to be carried out. First, the Chow test was used to select the best model between the Common Effect Model (CEM) or Fixed Effect Model (FEM) methods (Handriani, 2020).

However, in this research, there was unbalanced panel data, which is the impact of residual errors that were previously made due to the large amount of data that was not detected by the system. As such, in this case, the Common Effect Model (CEM) was used. Moreover, to test the data, this research utilized EViews 10 software.



**Research Model**

The modified version of the Jones model believes that any changes in credit sales during the event period result from earnings management. This is based on the reasoning that managing revenue by applying discretion over revenue recognition on credit sales is more complicated than working income by using discretion over revenue recognition on sellers. The modified John model has the following formula in Model 1 (Suyono, 2017).

$$TA_{it} = N_{it} - CFO_{it} \dots\dots\dots (1)$$

The ordinary least square regression equation estimates the value of total accruals (TA) using the formula in Model 2.

$$TA_{it} / A_{it-1} = \beta_1(1 / A_{it-1}) + \beta_2 (\Delta REV_t / A_{it-1}) + \beta_3 (PPE_t / A_{it-1}) + e \dots\dots (2)$$

Based on the regression coefficient above, Non-Discretionary Accruals (NDA) could be calculated using the formula in Model 3.

$$NDA = \beta_1(1 / A_{it-1}) + \beta_2(\Delta REV_t / A_{it-1} - \Delta REC_t / A_{it-1}) + \beta_3 (PPE_t / A_{it-1}) \dots\dots\dots (3)$$

Furthermore, Discretionary Accrual (DA) could be gauged by Model 4.

$$DA_{it} = TA_{it} / A_{it-1} - NDA \dots\dots\dots (4)$$

Total accrual in the formula above was obtained from the total net income minus the total cash flow from operations for that year. Then, the ordinary least square regression equation states that there are  $\beta_1, \beta_2$ , and  $\beta_3$ , where this equation will not differentiate data from time differences and individuals in panel data because the formula includes a sign (it). Total accrual divided by total assets  $-1$  indicates the procedure for NDA. Finding  $\beta_1$  was obtained by dividing 1 by the company's total assets in the previous year.  $\beta_2$  was obtained from the average income value for that year divided by the company's total assets in the last year. For  $\beta_3$ , it was attained from the amount of PPE divided by the company's total assets in the previous year. The higher the PPE value compared to the asset value, the higher the proportion of these assets is in fixed assets. Following that, with fixed assets with a high value, depreciation costs will arise, routinely incurred every month. Then, for the NDA formula, there is a difference; at  $\beta_2$ , there is the average reduction in receivables for that year divided by the company's total assets in the previous year.

In addition, independent variable 1 in this research is the independent commissioner. The value of this variable was obtained by dividing the number of independent commissioners in that year by the total members of the board of commissioners in the company (Model 5).

$$Independent\ Commissioner = \frac{Number\ of\ Independent\ Commissioners}{The\ total\ number\ of\ members\ of\ the\ Board\ of\ Commissioners} \dots\dots\dots (5)$$

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Independent variable 2 is the size of the audit committee. The value of this variable was attained from the number of audit committees in that year (Model 6).

*Size of Audit Committee* = *the number of Audit committee members* ..... (6)

Independent variable 3 is the independent audit committee. The value of this variable was gained from the number of independent audit committees each year (Model 7).

*Independent AC* = *The number of independent audit committees* ..... (7)

Independent variable 4 is audit committee expertise. The value of this variable was acquired from the number of audit committees per score divided by the total number of audit committee members (Model 8).

*Audit Committee Expertise* =  $\frac{\text{Sum of audit committees per score}}{\text{Sum of audit committees}}$  ..... (8)

Independent variable 5 is audit committee activity. The value of this variable was obtained from the number of meetings held by the audit committee each year (Model 9).

*Audit committee meeting activity* = *number of audit committee meetings held each year.* ..... (9)

Independent variable 6 in this research is women serving as CEOs. The authors used a dummy variable, namely 1 for a woman as CEO and 0 otherwise.

The independent variable in this research is the presence of women in the role of Chief Financial Officers (CFOs). The authors employed a dummy variable, specifically assigning a value of 1 to indicate a female serving as Chief Financial Officer (CFO) and 0 otherwise.

In addition, the control variable in this research is company size. The value of this variable was obtained from the company's total assets each year (Model 10).

*Company size* = *total assets*..... (10)

**Result and Discussion**

The research sample was taken using a purposive sampling technique with a final panel data sample of 25 companies for three years. This was due to unbalanced panel data. The total model employed in this research was 552 observations. The research sample criteria are presented in Table 1.

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**Table 1** Research Sample Criteria

Descriptions	Firm Year Observation
IDX listed company (184x3)	552
(-) Companies that did not have an annual report (43x3)	(129)
(-) Unable to open company web list (6x3)	(18)
(-) Incomplete annual report (14x3)	(42)
(-) No 2022 annual report (16x3)	(48)
Companies affected by residual errors	(290)
Number of observations (Manufacturing company for the 2020-2022 period)	25

**Descriptive Statistics**

Table 2 reveals that in this study's sample, the highest score of independent commissioners was five people, while the lowest number of independent commissioners was one person. On average, 1.88 independent commissioners concluded that the data fell into the homogeneity data category or that the distribution of independent commissioner data was still relatively small in a sample population.

**Table 2** Descriptive Statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
DACs	-4.440305	29.72783	16.67118	7.294084
INDEPENDENT_COMMISSIONERS	1	5	1.88	1.013246
INDEPENDENT_AC	0	3	1.04	0.978093
AC_EXPERTISE	1.666667	6.333333	3.083333	0.96225
ACTIVITIES_AUDIT	4	33	8.24	6.424433
SIZE_OF_AC	2	4	3	0.288675
GENDER_CEO	0	1	0.08	0.276887
GENDER_CFO	0	1	0.08	0.276887
COMPANY_SIZE	13.8008	29.62264	22.50345	5.658357

The maximum number of members on the independent audit committee was three. The minimum value for an independent audit committee was 0. On average, 1.04 independent audit committees determined that the data exhibited homogeneity, meaning that the spread of data among independent audit committees was still reasonably limited within the sample population.

While the highest value of audit committee expertise was 6.333333, the lowest value of audit committee expertise was 1.666667. The average number of values for audit committee expertise was 3.083333, indicating that the data were homogeneous and adequately represented the sample population.

The minimum value of audit committee activity was four, whereas the maximum value was 33. The mean audit committee activity value was 8.24, suggesting that the data fell within the homogeneity category or that the sample population's distribution of audit committee activity data remained relatively limited.

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For the size of the audit committee, its highest value was 4, while its lowest value was 2. On average, three values for the size of the audit committee infer that the data belonged to the homogeneity category or that its data distribution was still relatively small in a population sample.

Moreover, one was the highest value for women serving as CEOs. Zero was the lowest value for women serving as CEOs. The fact that, on average, 0.08 CEOs were female suggests that the data were heterogeneous or that the proportion of women functioning as CEs in the sample population was still relatively small.

While the highest value for women who serve as CFO was 1, its lowest value was 0. On average, 0.08 women serve as CFOs, which concludes that the data falls into the heterogeneity or data distribution of women serving as CFOs was still relatively minimal in the sample.

Lastly, the highest value of company size was 29.62264. Meanwhile, the lowest value of company size was 13.8008. There are 22.50345 values, on average, for company size, concluding that the data belonged to the category of homogeneity or the distribution of company size data was still relatively high in a sample population.

**Table 3** CEM Hypothesis Results and Statistical T-Test

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	71.73947	9.675582	7.414486	0.0000
INDEPENDENT_COMMISSIONERS	-3.286184	0.948235	-3.465578	0.0032
INDEPENDENT_AC	1.956898	0.897982	2.179218	0.0446
AC_EXPERTISE	-3.796023	0.822600	-4.614662	0.0003
ACTIVITIES_AUDIT	-0.486816	0.125314	-3.884777	0.0013
SIZE_OF_AC	-10.03498	2.713544	-3.698108	0.0020
GENDER_CEO	-1.914903	3.162751	-0.605455	0.5534
GENDER_CFO	-1.158467	3.045235	-0.380420	0.7086
COMPANY SIZE	-0.215917	0.184624	-1.169496	0.2593

In Table 3, explaining the results of the partial test or statistical t-test, it can be concluded that the independent commissioner variable yielded a significant negative effect with a probability of 0.0032. The coefficient value of -3.286184 (-328%) denotes that an increase in independent commissioners will reduce earnings management carried out by companies that, on average, perform positive earnings management. In other words, this hypothesis was accepted.

The independent audit committee variable had a significant positive effect with a probability value of 0.0446. The coefficient value of 1.956898 (195%) indicates an increased number of independent audit committees. Thus, on average, it will increase the profit management carried out by the company, meaning that this hypothesis was accepted.

In addition, the audit committee expertise variable produced a significant negative effect with a probability value of 0.0003. The coefficient value of -3.796023 (379%)

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denotes that when the number of audit committee experts increases, it will reduce earnings management carried out by companies that, on average, conduct positive earnings management. It means that this hypothesis was accepted.

A significant negative effect was produced by the audit committee activity variable, with a probability value of 0.0013. The obtained coefficient value of -0.486816 (48.6%) indicates that an increase in the number of audit committee activities is associated with a decrease in earnings management conducted by companies that, on average, engage in positive earnings management. This finding supports the acceptance of the hypothesis.

The variable representing the size of the audit committee had a statistically significant negative impact, with a probability value of 0.0020. The coefficient value of -10.03498 (100%) suggests that an increase in the number of audit committee activities leads to a reduction in earnings management conducted by companies that typically engage in positive earnings management. Therefore, this hypothesis has been confirmed.

Further, the variable representing female CEOs had a statistically insignificant and negative impact, with a probability value of 0.5534. The coefficient value was -1.914903 (191%), indicating the rejection of this hypothesis.

With a probability value of 0.7086, the variable women functioning as CFO had a negative and insignificant effect. The value of the coefficient was -1.158467 (115%), indicating that this hypothesis was rejected.

At last, the probability value for the insignificant negative influence of the company size variable was 0.2593. The coefficient value of -0.215917 (21%) indicated that the null hypothesis was rejected.

**Table 4** F-statistic and R-square Tests

Number of Observations	25
F-statistics	10.502860
Prob (F-Statistics)	0.000045
R-squared	0.840037
Adjusted R-squared	0.760055

Based on the results in Table 4, the value of the F-statistic was 10.502860 with a probability level of 0.000045 (<0.05); thus, it can be concluded that the simultaneous test or test of variables together was significant.

The modeling contribution in this research model was concluded with a reasonably high adjusted R-squared value, namely 0.760055 (76%). The predictor model used could explain variations in dependent changes (earnings management) of 76%. Meanwhile, the remaining 24% of the value is comprised of variables not used in this research.

**Classic Assumption Test**

Table 5 demonstrates that the Jarque-Bera Probability value yielded a value of 0.453379 (>0.05), indicating the data were normally distributed or the assumption of the data normality test was met.

**Table 5** Normality Test (Kolmogorov-Smirnov)

Observations	25
Jarque-Bera	1.582052
Probability	0.453379

Table 6 explains that the VIF values for all variables produced values of <10, and it can be concluded that the model was free from multicollinearity tests. For that, the multicollinearity test assumptions were fulfilled.

**Table 6** Multicollinearity Test

Variable	VIF
INDEPENDENT_COMMISSIONERS	1.74
INDEPENDENT_AC	1.45
AC_EXPERTISE	1.18
ACTIVITIES_AUDIT	1.22
SIZE_OF_AC	1.15
GENDER_CEO	1.44
GENDER_CFO	1.34
COMPANY SIZE	2.05
Mean-VIF	1.45

**Discussion**

In the data test results, independent commissioners significantly negatively affected the decline in earnings management. This was proven by the coefficient value of -3.286184 (-328%), indicating that when the number of independent commissioners increases, it will reduce earnings management carried out by companies that, on average, engage in positive earnings management. These findings align with research (Alfiyasahra & Challen, 2020; Handriani, 2020) but oppose the research results of (Arifin & Destriana, 2016).

Related to that, independent commissioners are expected to represent the interests of minority shareholders and other stakeholders because they have no affiliation with the company's interests. Financial reporting is a clear example that the activities carried out by management are not always in the interests of shareholders and other stakeholders. However, so that financial reporting is in the interests of various parties, control is needed by independent commissioners. This can be explained for several reasons; the first requirement for independent commissioners is by (www.ojk.go.id 2015). These regulations stipulate that the audit committee comprises at least one independent commissioner and two other members outside the company. To reduce the potential for expropriation of the rights of minority shareholders (i.e., public shareholders),

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regulations insist that the minimum percentage of independent commissioners is 30% who serve as independent commissioners.

Apart from that, this research also proved that an independent audit committee had a significant positive effect, meaning that an independent audit committee could improve earnings management significantly. This was confirmed by the coefficient value of 1.956898 (195%), denoting that when the number of independent audit committees increases, on average, the profit management carried out by the company will increase. This is because an independent audit committee tends to work more objectively. After all, it does not take sides with any party, including management, so the results of its review are more accurate in describing the condition of the company. From the results of the review, it can produce a report that the principal will later use for company decision-making. These results corroborate with research conducted by Alfiyasahra and Challen (2020). Meanwhile, this differs from previous research conducted by Handriani (2020), which revealed that independent audit committees did not affect earnings management.

Audit committee expertise, on the other hand, had a significant negative effect, which means that the audit committee's accounting expertise could significantly reduce earnings management. This was verified by the coefficient value of -3.796023 (379%), indicating that when the number of audit committee experts increases, it will reduce earnings management carried out by companies that, on average, carry out positive earnings management. This aligns with previous research (Abernathy et al. 2015; Handriani, 2020) but opposed the research results of (Alfiyasahra & Challen, 2020; Putri & NR, 2019). This finding signifies that the audit committee tends to be conservative as a corporate mechanism. Accounting conservatism has an essential role in limiting opportunistic management behavior. From an efficient perspective, an audit committee that has expertise in accounting and finance can reduce opportunistic earnings management. Based on the results of the statistical analysis, this research produces empirical evidence regarding earnings management in Indonesia.

Additionally, audit committee activity had a substantial adverse impact, indicating that it has the potential to mitigate earnings management substantially. This was demonstrated by the coefficient value of -0.486816 (48.6%), which indicates that an increase in the number of audit committee activities will result in a decrease in earnings management by companies that engage in positive earnings management on average. This finding aligns with prior investigations (Ichsany & Husain, 2019; Khairunnisa et al., 2020; Rinta, 2021). In contrast, prior investigations (Alfiyasahra & Challen, 2020; Handriani 2020; Ulina et al., 2018) have established that the activities of audit committees had no discernible impact on earnings management practices.

The audit committee size also produced a significant negative effect. In other words, the number of audit committees that met the written requirements could reduce earnings management significantly. This was evidenced by the coefficient value of -10.03498 (100%), indicating that when the number of audit committee activities increases, it will reduce earnings management carried out by companies that, on average, engage in

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positive earnings management. This is in line with previous research (Badolato et al. 2014; Handriani 2020; Rinta, 2021; Sofia & Dasmaran, 2021). However, this differs from previous research (Alfiyasahra & Challen, 2020; Ulina et al., 2018). Due to the extensive skills of audit committee members in supervising management, audit committee size may inhibit opportunistic earnings management.

Several aspects support the idea that this audit committee can influence earnings management practices. The audit committee is not a member of the Public Accounting Firm or other consulting services to the issuer or public company concerned in the last six months before being appointed by the board of commissioners. The audit committee is also not a group of people with the authority and responsibility to plan, lead, or control the activities of a public company within the last six months before being appointed by the board of commissioners. The audit committee does not have directly or indirectly shares in the issuer or company concerned.

Meanwhile, the negative effect was insignificant for women who served as CEOs, suggesting that the presence of women who served as CEOs had no impact on earnings management practices. This is established by the coefficient value of -1.914903 (191%). This agrees with previous research (Suciani & Purnama, 2019; Trisanti, 2021) but contradicts research (Fazriani et al., 2023; Ming & Hock Eam, 2016; Setyaningrum et al., 2019).

Women serving as CFOs also had an insignificant negative effect. In other words, the presence of women serving as CFOs did not affect earnings management practices. This is proven by the coefficient value of -1.158467 (115%). The above results are in harmony with previous research (Hasnawati et al., 2019; Setyaningrum et al., 2019; Suciani & Purnama, 2019; Trisanti 2021) but refute a study of (Chen & Gavius 2016; Khan & Abdul Subhan, 2019).

Furthermore, it is worth noting that the control variable representing the scale of the company had a negligible adverse impact. This implies that the magnitude of the company's total assets at the time did not have a substantial influence on its engagement in earnings management practices. This was demonstrated by the coefficient value of -0.215917 (21%). These findings are consistent with that of prior investigation (Arifin & Destriana, 2016). Contrary to the findings of prior research (Handriani 2020; Khairunnisa et al., 2020; Priharto et al., 2018; Taco & Ilat, 2016), which established a significant positive correlation between earnings management practices and company size, the present results indicate the exact opposite.

According to the research's practical implications, the company's financial performance can be enhanced, managers' or internal parties' ability to make better decisions going forward can be facilitated, and performance targets set by creditors and investors can be met. These benefits stem from the presence of an independent audit committee that positively impacts earnings management. As was the case during the previous pandemic, tax benefits can also be obtained through profit management. To help taxpayers with tax overpayment status make up for the overpayment, the government



introduced tax compensation for people who fit certain requirements, such as those in the tourism industry who saw a drop in revenue as a result of the epidemic. Due to the pandemic, individual taxpayers who were employed saw salary reductions; nevertheless, they could make up for this shortfall by using tax debt in the subsequent quarter. Effective management of earnings and adherence to relevant legislation might potentially lower an organization's tax obligations to the government.

## **Conclusion**

This research examined the influence of independent commissioners, audit committee characteristics, women serving as CEOs, and CFOs on earnings management practices using the Jones modification of the earnings management model. The authors used a sample of manufacturing companies listed on the IDX in 2020-2022.

This research concludes that independent commissioners, audit committee expertise, audit committee activities, and audit committee size produced a significant negative effect on reducing company profit management. Independent audit committees had a significant positive impact on improving company earnings management. Meanwhile, women who served as CEO and CFO did not influence the company's earnings management practices.

The practical implication of this research is that the existence of an independent audit committee with a positive influence on earnings management can improve the company's financial performance, make it easier for managers or internal company parties to make better decisions in the future, and meet performance targets set by other parties, such as investors and creditors. Profit management can also be used to obtain tax benefits, as it did during the previous pandemic. The government implemented tax compensation for taxpayers who met the criteria, such as those operating in the tourism sector who experienced a decreased income due to the pandemic, so taxpayers with tax overpayment status could compensate for the tax overpayment. With tax debt in the following period, individual taxpayers who work as employees experience salary cuts due to the pandemic so that taxpayers can compensate for the tax overpayment with tax debt in the following period. Having good earnings management and complying with applicable regulations can reduce the taxes that companies have to pay to the government.

Some limitations of this research are that the data sample period was only three years (2020-2022), influencing the results of the existing study. This research only focused on public companies in the manufacturing sector listed on the BEI. In addition, the data were in the form of an unbalanced panel, and the CEM test was used only.

Based on the conclusions and limitations resulting from this research, several suggestions can be addressed by future researchers. Researchers can change the data type to a cross-section over one year to minimize the existence of unbalanced panel data. The data taken should not only focus on one sector and add models to the data

testing, not only CEM. This is because the CEM test cannot differentiate between years and individuals.

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### Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



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