Abstract
Earnings management is an opportunist behavior influenced by many factors. However, previous studies have not extensively investigated the impact of audit committee mechanisms and Chief Executive Officer (CEO) characteristics on real earnings management. This study aims to analyze the impact of audit committee mechanisms and CEO characteristics on real earnings management. The study utilizes secondary data from manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2022. The audit committee mechanism is proxied by using two measurements i.e. the number of audit committee meetings and the educational background of the audit committee, Meanwhile, CEO characteristics are proxied by the gender and the CEO's tenure. By applying multiple regression, this study finds that the number of audit committee meetings and CEO’s tenure have significant negative effects on real earnings management. Meanwhile, the background of the audit committee does not affect real earnings management. Interestingly, this study finds that male CEOs decrease real earnings management. Therefore, this research provides evidence that the number of audit committee meetings and CEO’s tenure play significant roles in reducing opportunistic behavior in a company.

Keywords: audit committee meetings, education background, male CEO, CEO’s tenure, real earnings management

INTRODUCTION
Earnings Management is a manipulative behavior that harms the economic, ethical, and moral systems, creating doubts about the financial reports issued by companies. Earnings management is an activity carried out by management in reporting unrealized profits using various real or accrual methods to receive favorable responses from stakeholders (Hastuti et al., 2016). It has become a significant concern due to its impact on stakeholders, who may blame it as a manipulative trick against regulations (Alfiyasahra et al., 2020; Hala, 2019;
Kapkiyai et al., 2020). It's also an opportunistic action, where managers utilize policies and information asymmetry to maximize expected satisfaction, often resulting in reported earnings not reflecting the true company conditions (Handriani, 2020).

Earnings management is divided into two types: accrual-based earnings management and real earnings management. Accrual-based earnings management involves changes in financial reporting processes, while real earnings management occurs due to deviations from actual business activities (Enomoto et al., 2015). Real earnings management is particularly intriguing post-Sarbanes Oxley Act (SOX) of 2002, as companies shifted from accrual-based to real earnings management (Cohen et al., 2007).

This study focuses on real earnings management, utilizing audit committee mechanisms and CEO characteristics as components. Audit committees play a vital role in communication and mediation among stakeholders like management, auditors, and boards of directors (S. A. H. M. Ali, 2022). They are crucial for oversight and the results of the audited financial statements increase users' confidence in making decisions (Butar Butar, 2020). The frequency of audit committee meetings is an essential component as it affects earnings management (Kapkiyai et al., 2020; Masmoudi, S. M., & Makni, Y. F. 2020; Najah & Mukhibad, 2022).

Audit committees oversee company performance and activities, such as on financial performance, internal control, ethics and compliance. Conducting an audit on the company can limit earnings management and increase public confidence in the company's performance and financial statements (Indarto & Ghozali, 2016). The members have diverse educational backgrounds, which influence their decision-making (Boshnak, 2021; Bilal et al., 2023). Knowledge of accounting is important for auditors to improve the quality of audits (Butar-Butar & Lily Indarto, 2018). Audit committees having accounting and financial background
are believed to have more competence to support the company. Education affects competence, thus impacting earnings management and audit report quality positively (Florencea & Kurnia Susanto, 2019).

CEOs, being influential figures, significantly impact company performance and are responsible for financial reports’ accuracy (Sonda & Sutrisno, 2022). According to Butar-Butar (2022) their characteristics will shape managerial abilities and reputation, such as gender, influence decision-making (Bouaziz et al., 2020; Eriandani, 2021; Hala, 2019; Harakeh et al., 2019; Wellalage & Locke, 2013). Male CEOs, often more individualistic and aggressive, may engage in riskier behaviors like earnings management (Roxas & Stoneback, 2004). Conversely, females may engage less in such behaviors (Bouaziz et al., 2020; Eriandani, 2021; Harakeh et al., 2019), although in highly incentivized environments, both genders may engage equally (Harris et al., 2019).

CEO tenure is the length of CEO position in a particular company. Studies of the effect of CEO tenure to earnings management is not conclusive; some studies find earnings management at both the start and end of CEO tenure (Chou & Chan, 2018; A. Ali & Zhang, 2015), while others find no significant relationship (Sonda & Sutrisno, 2022; Yahaya et al., 2022).

Previous studies focus on investigating the factors influencing accrual earnings management (Eriandani, 2021; Florencea & Kurnia Susanto, 2019; Hala, 2019; Hastuti et al., 2017; Qawasmeh & Azzam, 2020). This study investigates how the audit committee mechanism and CEO characteristics on real earnings management. Audit mechanism applies two measurements i.e. Number of meetings and educational background. Meanwhile, CEO characteristics are represented by the number of male CEOs and the tenure of CEOs. Limited studies have been investigated related to the effect of the audit committee mechanism and
CEO characteristics using those measurements on real earnings management. Therefore, this study supports the current literature of factors influencing real earnings management.

LITERATURE REVIEW

Agency Theory

Agency theory, initially introduced by Jensen & Meckling (1976) explains the relationship between two groups, namely principals and agents. Principals, who are typically shareholders, appoint agents, usually management, to make decisions and conduct company operations on their behalf. Principals expect agents to work in accordance with their wishes and hope that agents can generate profits from the capital invested by the principals. Principals play a role in supervision, control, and profit-making from the capital they invest, while agents are responsible for managing the company and making decisions (Alfiyasahra et al., 2020).

Audit Committee

The audit committee is an institution supporting the creation of good corporate governance (GCG). According to the Indonesia Institute of Audit Committee, the audit committee can improve the quality of supervision within the company and is expected to perform checks and balances, which are among the main tasks of the audit committee to assist the board of commissioners in its supervisory function to reduce opportunistic behavior of managers which benefits themselves (Butar Butar, 2019). The audit committee also has the task of ensuring the quality of financial reports within the company, so that the audit committee can conduct investigations to minimize earnings management within the company (Kapkiyai et al., 2020). Therefore, there are fundamental regulations for forming an audit committee, as stated in Bapepam-LK Regulation No. IX.I.5, which has now changed to OJK
Regulation No. 55 of 2015, and IDX Regulation No. I-A, which mandates that a public company must have an audit committee.

The audit committee has several regulations, one of which is the regulation issued by the Financial Services Authority No. 55, which mandates that the audit committee must hold meetings at least once every 3 months or 4 times a year. The regulation also specifies meeting requirements, stating that at least half of the listed number of audit committee members must attend the meeting. According to research conducted by Ali (2022), audit committee meetings are held an average of 7.4 times per year, with a minimum of 4 and a maximum of 15 times per year.

In conducting supervision, the audit committee requires members who can conduct audits. This is also regulated by Financial Services Authority Regulation No. 55, which states that an audit committee must have at least one member with a background in accounting and finance, as the work of the audit committee is always related to the fields of accounting and finance.

CEO Characteristics

The CEO plays a crucial role in the preparation of a company's financial reports. Although the CEO is directly involved in earnings management, the CEO is considered the most responsible for it, especially considering the pressure from shareholders that can influence the CEO to engage in opportunistic actions such as earnings management (Chou & Chan, 2018; Eriandani, 2021). CEOs have the authority to access operational information and all company activities, which can enhance their ability to manipulate earnings (Qawasmeh & Azzam, 2020).

Female CEOs, according to Hala (2019), exhibit a negative relationship with earnings management because they tend to avoid risks, thereby reducing the intensity of earnings
management. Women are considered more careful and persuasive, thus they can produce more transparent reporting (Butar Butar, 2020a). Bouaziz et al. (2020) suggest that women are more cautious, leading to lower earnings management in companies they lead. Previous research by Harakeh et al. (2019) provides evidence of a negative relationship between female directors and earnings management.

CEO tenure affects how a CEO leads a company. With longer tenures and experience, CEOs can improve management effectiveness and contribute to the company (Chou & Chan, 2018). Deng et al. (2018) found a negative relationship between CEO tenure and earnings management. As director tenure increases, the level of discretionary accruals decreases (Kim & Yang, 2014).

**Number of Audit Committee Meetings and Real Earnings Management**

Agency theory suggests that there is a difference in interests between principals and agents that can lead to agency problems, particularly when principals do not receive detailed information about agent performance, commonly referred to as moral hazard. One way to reduce this asymmetry is through the audit committee. The number of audit committee meetings is useful for increasing management efficiency and not for engaging in opportunistic actions that support their own goals (Kapkiyai et al., 2020). According to Najah & Mukhibad (2022), the number of audit committee meetings affects the level of committee oversight and has implications for transparency and accountability. The number of audit committee meetings reduces earnings management actions and can improve the quality of financial reports (S. A. H. M. Ali, 2022). The more frequently the audit committee holds meetings, the more often it monitors management through financial reports and company activities, which could potentially uncover errors or manipulations by management. Based on a review of previous literature, the following hypothesis is formulated:
H1. The number of audit committee meetings has a negative effect on real earnings management.

**Educational Background of Audit Committee on Real Earnings Management**

Agency theory explains that humans have limited or bounded rationality. Therefore, agency theory supports the idea that the audit committee should have adequate competence to conduct supervision. To reduce opportunistic actions by managers, companies need effective management mechanisms, from independent commissioners to competent audit committees to oversee the company (Nugraheni, 2023). Educational background influences how someone perceives an event. Based on previous research, it has been found that the educational background of the audit committee has a negative effect on earnings management (Bilal et al., 2023; Boshnak, 2021; Salleh & Haat, 2014). Educational background influences how the audit committee conducts supervision and monitors financial reports and company activities (Salleh & Haat, 2014). Agency theory states that the educational background of the audit committee is crucial; an accounting education background supports the audit committee in analyzing financial statements and identifying or reducing fraud within the company. Based on a review of previous literature, the following hypothesis is formulated:

H2. The educational background of the audit committee has a negative effect on real earnings management.

**CEO Gender on Real Earnings Management**

Agency theory explains that humans always avoid risks. Observing how CEOs respond to and manage risks is crucial, as there are differences in how male and female CEOs respond to and manage risks and issues within the company. Therefore, it is important to explicitly determine whether there is an influence of gender on a problem and risk, which in this study is real earnings management (Mensah & Boachie, 2023). Gender is one aspect that
influences someone's decision-making tendencies. Gender has also been a concern of previous researchers, such as the study by Na & Hong (2017), which shows that companies led by male CEOs tend to report higher earnings management. Another study by Hala (2019) investigated the more conservative tendencies of women by examining the influence of female CEOs on companies and found that women have a negative effect on earnings management and can reduce earnings management practices, as women have more careful oversight. Similarly, a study by Bouaziz et al. (2020) states that women are more ethical than men and tend to avoid risks, resulting in lower earnings management. A study by Harakeh et al. (2019) shows that female CEOs have a fair position and act as mediators in earnings management conflicts. Since many studies have been conducted on female CEOs, researchers are curious about the opposite scenario, the role of male CEOs. Based on a review of previous literature, the following hypothesis is formulated:

H3. Male CEO has a positive effect on real earnings management.

**CEO Tenure on Earnings Management**

Agency theory explains that humans tend to think of themselves. In this case, CEOs, as representatives of the agent, may have a tendency to benefit themselves (Setyawan & Anggraita, 2018). Opportunistic CEO restrict the information disclosed to principals and use this information advantage for their own benefit (Butar Butar & Murniati, 2021). The tenure of office becomes one of the debated gaps as to whether the CEO's tenure provides opportunities and influence for the CEO to prioritize themselves by engaging in real earnings management. CEO tenure is a factor that influences earnings management, as shown by Eriandani (2021) CEOs who have been in office for a long time tend to focus more on improving the company and want to contribute more to its development compared to newly appointed CEOs. Previous research shows that CEOs engage in earnings management at the
beginning of their tenure, which can affect public perception of their leadership (A. Ali & Zhang, 2015). Therefore, it can be concluded that the longer a CEO's tenure, the smaller the earnings management actions. Based on a review of previous literature, the following hypothesis is formulated:

H4. Longer CEO tenure has a negative effect on real earnings management.

METHODS

Population and Sample

The population for this study consists of manufacturing companies listed on the Indonesia Stock Exchange from 2020 to 2022. Real earnings management, audit committee, and CEO characteristics data were manually collected from the annual reports of companies accessed through www.idx.co.id. If the data were not available on the www.idx.co.id website, the researcher searched for it on the company's website. The following are some of sample criteria:

1) Manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the years 2020-2022
2) Manufacturing company that possesses CEO characteristic data
3) Manufacturing company that has audit committee data

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the years 2020-2022.</td>
<td>147</td>
<td>147</td>
<td>147</td>
<td>441</td>
</tr>
<tr>
<td>2.</td>
<td>Manufacturing companies that lack information about the characteristics of their CEO</td>
<td>26</td>
<td>25</td>
<td>21</td>
<td>72</td>
</tr>
<tr>
<td>3.</td>
<td>Manufacturing companies that do not have data on the audit committee</td>
<td>24</td>
<td>22</td>
<td>27</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Data that meet the criteria</td>
<td>97</td>
<td>100</td>
<td>99</td>
<td>296</td>
</tr>
</tbody>
</table>
Real Earnings Management

The measurement of real earnings management in this study uses the concept developed by (Roychowdhury, 2006), namely abnormal cash flow from operations. According to Ningsih (2015), using real activities is considered to better reflect influence than using operational accruals, and manipulation can be indicated through absolute abnormal cash flow from operations. The regression of normal cash flow from operation is as follows:

\[
\frac{CFO_t}{TA_{t-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{TA_{t-1}}\right) + \alpha_2 \left(\frac{S_t}{TA_{t-1}}\right) + \alpha_3 \left(\frac{\Delta S_t}{TA_{t-1}}\right) + \epsilon_t
\]

Explanation:
- \(CFO_t\): Company's operating cash flow in year t
- \(TA_{t-1}\): Total assets of the company in year t-1
- \(S_t\): The company's sales in year t
- \(\Delta S_t\): The change in the company's sales in year t minus sales in year t-1
- \(\alpha\): Regression coefficient
- \(\epsilon_t\): Error term in year t

Number of Audit Committee Meetings

The number of audit committee meetings mandated by the Financial Services Authority requires the audit committee to hold meetings at least 4 times a year as regulated in Financial Services Authority Regulation No. 55 of 2015. Research conducted by Kamarudin & Wan Ismail (2014) indicates that the effectiveness of the audit committee can be measured by the frequency of its meetings. Therefore, the frequency of audit committee meetings in this study is measured as follows:

\[NACM = \sum \text{Audit Committee meetings in one year}\]
Educational Background of Audit Committee

The educational background of the audit committee members indicates a significant reduction in earnings management and decreases the likelihood of material misstatement (DeZoort & Salterio, 2001; Juhmani, 2017). Regulation No. 55 of 2015 stipulates that the audit committee must have at least 1 member with a background in accounting and finance. Therefore, this research is measured by the following formula:

\[
EBAC = \frac{\Sigma \text{Members of Audit Committee with Accounting/Financial Background}}{\Sigma \text{Members of the Company's Audit Committee}} \times 100
\]

Gender of CEO

The gender of the CEO is measured using a dummy variable, '1' for male and '0' for female. The creation of this dummy variable is because there have been few studies previously to examine the role of male CEOs.

CEO Tenure

CEO tenure is measured by how long a CEO has held the position

Hypothesis testing in this study was carried out using multiple linear regression tests, with the following equation model.

\[
ABSCFO = \alpha + \beta_1 NACM + \beta_2 EBAC + \beta_3 GEN + \beta_4 TEN + \varepsilon
\]

RESULTS AND DISCUSSION

Results

Descriptive statistics

Initially, there were 296 manufacturing companies that met the criteria, but this was reduced to 190 after the researcher tested using classical assumption tests. Below is the descriptive statistics table of the 190 research samples:
The dependent variable in this study is real earnings management, with a minimum value of 0.01 and a maximum value of 0.19. This indicates that the absolute abnormal cash flow operations (ABSCFO) tested using 190 manufacturing companies ranged from a minimum of 1% to a maximum of 19%. The average ABCFO is 0.0592 with a standard deviation of 0.03615, indicating that the average real earnings management conducted using cash flow proxies in manufacturing companies is 5.92%.

The first independent variable is the number of audit committee meetings (NACM), calculated by the number of audit committee meetings per year. It can be seen that the meetings conducted by the audit committee in manufacturing companies per year range from a minimum of 2 to a maximum of 35, with an average of 7.13 meetings and a standard deviation of 5.786.

The second independent variable is the educational background of the audit committee (EBAC), calculated by the proportion of the audit committee with an accounting and finance background. It can be observed that in manufacturing companies, they have a minimum of 20% of the audit committee with an accounting background and a maximum of
100% with an accounting background. On average, companies have 0.57930 of the audit committee with an accounting background, with a standard deviation of 0.25511.

The third independent variable is the gender of the CEO, measured with a dummy variable that indicates whether the CEO of the company is male or not. It can be seen that the minimum value of this variable is 0 and the maximum value is 1. The average gender of the CEO is 0.92, indicating that out of 190 manufacturing companies surveyed, 0.92 CEOs are male, with a standard deviation of 0.270.

The fourth independent variable is the CEO's tenure, measured by how long the CEO has been in office. It can be observed that the minimum value is 0 and the maximum value is 51, indicating that the shortest CEO tenure is 0 years or less than 1 year, and the longest is 51 years, with an average CEO tenure of 9.52 years and a standard deviation of 12.789.

**Fit Model Test and Coefficient of Determination**

The F-test result has a significance value of 0.001, which is smaller than 0.05, indicating that the research model conducted is strong and significant. Meanwhile, the Adjusted R-squared in this study is 0.076. This means that the independent variables in this study can explain 7.6% of the dependent variable, and the rest can be explained by other variables.

**Table 3. Coefficient Determination Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.309</td>
<td>0.095</td>
<td>0.076</td>
<td>0.3475</td>
</tr>
</tbody>
</table>

- a. Dependent Variable: Real Earnings Management
- b. Predictors: (Constant), NACM, EBAC, GEN, TEN

**Hypothesis Testing**

The table 4 presents the result of the hypothesis testing:
Table 4. The Hypothesis Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NACM</td>
<td>0.003**</td>
<td>-3.012</td>
</tr>
<tr>
<td>EBAC</td>
<td>0.618</td>
<td>0.500</td>
</tr>
<tr>
<td>GEN</td>
<td>0.022*</td>
<td>-2.314</td>
</tr>
<tr>
<td>TEN</td>
<td>0.054*</td>
<td>-1.936</td>
</tr>
<tr>
<td>R2</td>
<td>0.076</td>
<td></td>
</tr>
</tbody>
</table>

** Significant at the 0.01 level; * Significant at the 0.05; It is a 2-tailed test.

DISCUSSION

**Hypothesis 1: Number of Audit Committee Meetings and Real Earnings Management**

Based on table 5, the variable representing the number of audit committee meetings has a p-value of 0.003 and a t-value of -3.012. The significant p-value at the 1% level supports Hypothesis 1, which states that the number of audit committee meetings has a negative effect on real earnings management. These results indicate that the higher the number of audit committee meetings, the lower the level of real earnings management.

This finding aligns with previous research by (Ali, 2022; Kapkiyai et al., 2020; Masmoudi, S. M., & Makni, Y. F. 2020), which suggests a negative relationship between the number of audit committee meetings and real earnings management. This occurs because frequent audit committee meetings allow for more analysis and oversight. However, this study contradicts the findings of Alfiyasahra et al. (2020), who suggested that audit committee meetings merely fulfill regulatory obligations and may not always perform their duties effectively.

**Hypothesis 2: Educational Background of the Audit Committee and Real Earnings Management**
The p-value of the educational background of the audit committee variable is 0.618, with a t-value of 0.500. The p-value is greater than the significance level of 0.05, indicating that the educational background of the audit committee has no significant effect on real earnings management, leading to the rejection of Hypothesis 2.

This finding is consistent with research by Florencea & Kurnia Susanto (2019), which found no relationship between the educational background of the audit committee and real earnings management. However, it contradicts the findings of Bilal et al. (2023), and Salleh & Haat (2014), which suggested that the educational background of the audit committee negatively affects real earnings management. Educational background of the audit committee does not affect the real earnings management. Financial reports are prepared by the directors of the company, hence they are responsible for the earnings figures. Hence, directors have stronger effects on company performance as opposed to the audit committee's educational background.

**Hypothesis 3: CEO Gender and Real Earnings Management**

The p-value of the CEO gender variable is 0.022, with a t-value of -2.314. The significant p-value at the 5% level contradicts Hypothesis 3, which states that male CEOs have a positive effect on real earnings management. Instead, the results suggest that male CEOs have a negative effect on real earnings management.

This finding presents a new phenomenon, as males have traditionally been considered to have a positive effect on earnings management due to characteristics conducive to such practices, as indicated by research presented by (Na & Hong, 2017; Puspa & Adhariani, 2018; Wellalage & Locke, 2013). This suggests a new paradigm that female CEOs tend to commit to earnings management. Male CEOs are more rational and consider the impact and consequences of such behavior making them avoid real earnings management.
Hypothesis 4: CEO Tenure and Real Earnings Management

The p-value of the CEO tenure variable is 0.054, with a t-value of -1.936. This indicates that CEO tenure has a significant negative effect on real earnings management. The negative sign aligns with Hypothesis 4, which predicts that the longer the CEO's tenure, the lower the level of real earnings management.

These results are supported by Chou & Chan (2018), Deng et al. (2018) and Eriandani (2021), which suggest that CEOs with longer tenures will improve the company, enhance management effectiveness, and have a negative impact on earnings management.

CONCLUSIONS AND IMPLICATIONS

Conclusion

This study aims to examine the influence of audit committees and CEO characteristics on real earnings management, proxied by the number of audit committee meetings, the educational background of the audit committee, CEO gender, and CEO tenure. The results of this study are as follows: 1) the number of audit committee meetings has a significant negative effect on real earnings management; 2) the educational background of the committee has no significant effect on real earnings management; 3) male CEO gender has a significant negative effect on real earnings management; 4) CEO tenure has a significant negative effect on real earnings management.

Recommendations

This study has several implications. First, it provides new insights into the impact of audit committees and CEO characteristics, which have been underexplored in Indonesia. Previous studies have analyzed the effect of the audit committee on earnings management (Florencea & Kurnia Susanto, 2019; Juhmani, 2017; NGO & LE, 2021; Salleh & Haat, 2014),
or CEO characteristics on earnings management (Arun et al., 2015; Bouaziz et al., 2020; Nurmayanti et al., 2022; Puspa & Adhariani, 2018). Applying real earnings management and using two variables provide a comprehensive picture of factors influencing the opportunistic behavior through real earnings management.

Second, this study also suggests observing the effects of audit committees and CEO characteristics to minimize opportunistic earnings management. Additionally, it recommends adding other proxies to examine the impact of audit committees and CEO characteristics on earnings management, such as company characteristics or the risk committee mechanism.

REFERENCES


