Board Gender Diversity, CEO Characteristics, And Earning Management In The Banking Sector

Dara Salsabilla¹, Yossi Diantimala²*, Indayani³, and Dinaroe⁴
¹,²,³,⁴Faculty of Economics and Business, Universitas Syiah Kuala, Banda Aceh, Indonesia

Email Address:
dara_s@mhs.usk.ac.id, ydiantimala@usk.ac.id*, indayani@usk.ac.id, dinaroe@usk.ac.id
*Corresponding Author

Abstract: The study examines the effect of board gender diversity and CEO characteristics – CEO age, CEO tenure, and CEO compensation – on earning Management in the banking sector listed on the Indonesian Stock Exchange in 2019-2022. The data of 188 bank–years was obtained from banks’ annual reports taken from the IDX and the bank's official website. Data were analysed by using descriptive statistics and panel data regression. The data fit in with the Common Effect Model (CEM). The results show that earnings management in the banking sector is not caused by gender diversity but is affected significantly by CEO age and tenure. The results support the upper echelon theory. The results fill the gap of previous studies, especially in the banking sector, and provide insight into the role of board gender diversity on earning Management in developing countries that can synthesise the outcome to learn from their governance system.

Keywords: Earning Management; Board Gender Diversity; CEO Characteristics; Banking Sector.

INTRODUCTION

The banking industry is more ambiguous because of the high leverage levels and asset finance structure that encourages managers to do information asymmetry and managerial discretion. There is also conflict between the interests of creditors and investors. Investors are forced to participate in high-risk activities to increase the prosperity of stakeholders and creditors at the expense of a drop in deposit value (Aldayannis & Simko, 2022). According to (Abdou et al., 2021) and (Chaity & Islam, 2022) when there is a lack of corporate governance, the manager has more freedom to falsify earnings. Several cases of the bank’s earning manipulation occurred in 2002 to 2003. Bank Lippo Tbk provided reports to the public and the Jakarta Stock Exchange management (JSE). In 2011, there was a case of fictitious cash reports at Bank BRI Tapung Raya carried out by top Management as the
branch head for his benefit. From 2019 to 2020, Bank Bukopin manipulated financial reports revision about the net income (Islami et al., 2019).

Conflicts of interest and information imbalance could occur in this principal-agent relationship. Conflict of interest occurs when agents use this knowledge asymmetry to further their interests at the expense of the principal's welfare because of their position within the organisation. In publicly traded organisations, the shareholders act as the principals depending on the reports the managers as the agents have provided, like annual and financial reports; additionally, the managers actively participate in the daily operations. Due to managers' incentives to provide discretionary disclosure, companies' financial reports are susceptible to Management (Allayannis & Simko, 2022).

The structure of on- and off-balance-sheet asset and debt portfolios, for example, as well as bank reporting and accounting standards, are all factors that contributed to the financial crisis 2008. Banks can regulate the openness or opacity of their financial reports, for instance, by choosing the level of various important income statement accounts, such as provisions for loan losses. While it may not be the primary cause of the events, earnings management may still impact the most appropriate estimate of financial risk based on observable bank features that impact bank efficiency (Proença et al., 2020).

The performance of the banking sector in Indonesia in 2022 shows that the ratio of nonperforming loans is still high and has yet to return like in 2019. Nonperforming loans are a problem in the loan payment process. As shown below, Figure 1 represents the performance growth of the banking industry in Indonesia for the period 2019-2022 from the official report of Otoritas Jasa Keuangan (OJK) 2022.

![Figure 1. Performance Growth of the Banking Sector in Indonesia for Period 2019-2022](image)

Source: Data Processed from Otoritas Jasa Keuangan (OJK) (2023)

It is, therefore, not surprising that companies have come under severe scrutiny to boost gender diversity on corporate boards, especially after corporate governance incidents at Enron and WorldCom in the United States and, shortly after that, the global financial crisis from 2007 to 2009. Over the past ten years, there has been an increased interest in the impact of women's representation on corporate boards (Brahma et al., 2021). Alexandra Askandar,
vice president of PT Bank Mandiri Tbk, is an example of a woman who rose to the top of the board of directors. Suppose the association between female board members and managers and the effectiveness of earnings management is established. In that case, it will add to the body of evidence to help corporations understand the value of having female top-level executives, directors and managers on boards (Li et al., 2021).

In a survey conducted by Badan Pusat Statistik (BPS) in 2022, the role of women in managerial positions, the overall percentage is shown in Figure 2, decreased in 2021 and 2022. (Grandy et al., 2020) stated that even in times of crisis, women's leadership roles have been demonstrated to be critical; in 2019, working conditions for women employees and women leaders became more complex in the financial industry. However, extensive studies of how women affect a company's financial risk in Indonesia still need to be included. Therefore, doing an in-depth study on the role of women on Indonesian boards of directors is a very significant and fascinating issue to do in order to provide references for Indonesian businesses (Leviana et al., 2019).

![Figure 2. Percentages of Women in Managerial Positions 2019-2022 in Indonesia](source: BPS Data Processed (2023))

Many previous studies focused on the relationship between CEO characteristics and earnings management in industrialised nations in several sectors (Borgi et al., 2021; Kalkhouran et al., 2017; Neifar & Ajili, 2019). However, (Alqatamin et al., 2017) showed conflicting and unclear evidence regarding how a manager's personal qualities and earning management techniques relate. From several studies above, no dominant factors influence earnings management. Each researcher reveals different factors. Likewise, the analysis methods in the research above used different measurements. These reasons supported inconclusive results. (Biswas et al., 2022) studied the board gender diversity within the CG framework in Indian banks. They found that gender diversity does not necessarily constrain the manager's opportunistic behaviour. However, there has been little focus on the issue of gender diversity on the board, which is prominent in developing countries. Therefore, this study examines the effect of board gender diversity and CEO characteristics – CEO age, CEO tenure, and CEO compensation – on earning Management in the banking sector listed in Indonesia as a developing country.

This study contributes to the knowledge of earning management by examining the relationship between CEO traits and board gender diversity, particularly in Indonesia. The study's findings also seek to close the gap regarding profit management in financial organisations. There are still few studies like this one that look at and integrate CEO traits and corporate governance features related to profit management in Indonesian banking.
organisations. This study investigates combining CEO traits factor and board gender diversity in earning Management. This study also employs more control variables such as size, profitability, leverage and Liquidity.

THEORETICAL REVIEW

Upper Echelon Theory. According to the upper-echelon hypothesis, management background traits can partially predict business results (strategic decisions and performance levels), and top executives operate as crucial decision-makers in corporate organisations. Based on the unique qualities of their executive team, businesses with similar traits and the same market conditions may succeed at varying levels. Upper echelon theory's central tenet is that decision-makers at the top make choices based on their perception of the situation they find themselves in. “top management team” refers to all managers at or above the vice president, or usually the top, a pair of levels of the management structure. Senior Management comprises the CEO, CFO, all directors, and corporate secretaries. The term "top management team" refers to all managers at or above the vice president, or usually the top two rungs of the management structure. Senior Management comprises the CEO, CFO, all directors, and corporate secretaries (Bouaziz et al., 2020).

They are earning Management. The term "earnings management" is set as disclosure management in a judgmental way in the financial reporting process to deceive the actions of the business or sway the conclusion of agreements that rely on accounting data for their gain. According to this view, earnings management is opportunistic since it could be more helpful for shareholders (Biswa et al., 2022).

Users of financial statements are frequently misled by reported profit results at this stage. Earnings management has a negative impact on earnings quality and reduces the credibility of a company's financial statements. There are two primary methods for manipulating earnings: accrual-based and natural earnings management (Li et al., 2021). According to (Charity & Islam, 2022), technically, adjusting the accrual components in the financial statements is how accrual earnings management is done because the accrual component can manipulate numbers through the accounting method used by the desires of the person who records and prepares the financial statements.

(Qi et al., 2018) found that top Management prefers accrual over natural earning management. The accrual component does not need tangible proof of cash; therefore, adjusting its size does not need to be supported by money the company has received or given out. For instance, to calculate the depreciation cost, we need to know its cost, useful life, and depreciation method. Although the valuable life and depreciation method can be changed by management policy, the cost value is set and cannot be altered.

Board Gender Diversity. Experts argue that a diverse board is essential for maintaining resources like human capital, advice, communication channels, and the legitimacy of board members (Brahma et al., 2021). According to the agency's perspective, diversity strengthens the job of monitoring. Gender diversity on boards benefits creativity, critical thinking, minimising bias, and enhancing problem-solving abilities.

Having female directors on boards is frequently regarded as a sign of gender diversity. Therefore, appointing female directors can improve oversight and lessen the opportunistic conduct of managers. They think their female directors are better at monitoring because of this, and board gender diversity enhances managerial accountability, including CEO accountability and board meeting participation (Gallucci et al., 2020).
CEO Characteristics. A CEO with more excellent expertise and understanding may reduce the likelihood of managing profitability through good Management (Hsu et al., 2021; Wang et al., 2019). The idea concedes that a CEO's disposition affects their decisions regarding strategy. CEOs can impact a company's financial reporting, strategy, and value emergence through their unique skills and personal traits.

The CEO's demographics significantly impact strategic decisions by changing their fundamental beliefs and philosophical morals (Brahma et al., 2021). In the same context, (Khuong & Vy, 2017) emphasised that CEO characteristics can predict their behaviour and how they will affect the organisation's performance. In this study, the researcher will examine four factors: age, tenure, compensation, and CEO traits.

Board Gender Diversity and Earning Management. A study by (Biswas et al., 2022) discovered that the benefits of having a gender-diverse board outweigh the disadvantages of its absence. There is a positive correlation between the gender diversity of boards and earning management practices. However, it failed to discourage the earning management board gender diversity of Indian commercial banks because there are not enough female directors on the board (Galletta et al., 2022). Gender diversity does not significantly affect environmental performance. (Fan et al., 2019) also found that banks are particularly likely to distort results when there are comparatively few women directors. (Sheedy & Lubojanski, 2018) discovered that earnings management is not significantly impacted by board gender diversity.

H1: Board gender diversity negatively influences bank earning management.

CEO Age and Earning Management. A study by (Bouaziz et al., 2020) found that CEO age and remuneration have no discernible impact on earnings management. According to (Gupta et al., 2018) and (Qi et al., 2018), managers getting close to retirement are less willing to take risks than younger managers. Younger managers are more concerned with making the older adult better. In particular, the low clarification of financial statements and the need to fulfil revenue goals based on projections from analysts suggest that companies with older CEOs are less hostile in managing earnings.

H2: CEO age negatively influences bank earning management.

CEO Tenure and Earning Management. (Bouaziz et al., 2020) found in research that tested CEO tenure on earnings management practices that CEOs tend to do earnings management to maximise revenue in their beginning years of the appointment in the company because new CEOs generally have the motivation to show their performance capabilities to shareholders at the beginning of their term of office. Meanwhile, negative results were found regarding CEO tenure and earning management (Alhmood et al., 2020; Deng et al., 2018). The newly appointed CEO is making a concerted effort to persuade stakeholders of his capacity to enhance the organisation's operations. CEOs take this action to dispel the notion among market participants that they lack competence.

H3: CEO tenure positively influences bank earning management.

CEO Compensation and Earning Management. Studies by (Assenso-Okofo et al., 2021) established a beneficial link between CEO pay and profit management. The study's
findings also imply that CEO bonus compensation rises as an outcome of earnings management, which implies that managers may engage in earnings management to raise their salaries. (Bouaziz et al., 2020) suggested that remuneration and earnings management had a detrimental relationship.

**H4:** CEO compensation positively influences bank earning management.

**METHODS**

This study analyses the effect of board gender diversity and CEO characteristics on earning Management in the banking sector from 2019 to 2022.

**Samples.** This study uses secondary data from the banking industry's annual reports listed on the Indonesia Stock Exchange's official website and the bank's official website from 2019 to 2022. The data is gathered through documentation, specifically by gathering available data from the company's annual and financial reports. The collected data includes relevant journals, books, a thesis, and annual reports. Descriptive statistics tests and panel data regression hypothesis testing have been employed to analyse the data in this study.

The sampling technique used in this study is non-probability sampling, using total sampling in which the entire population becomes the sample (Sugiyono, 2018). The sampling criteria in **Table 1** consist of banking sectors listed on the IDX from 2019 to 2022. Since there are 47 companies and four years of research, the total number of observations studied is 188.

**Table 1. Sampling Criteria**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Observation Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banks listed in IDX and publish annual reports for the year</td>
<td>2019-2022</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>Total number of samples</td>
<td></td>
<td>188</td>
</tr>
</tbody>
</table>

Source: Data processed (2023)

**Variable Operationalisation.** The amount of discretionary accrual is used as a proxy to assess bank earning management, which is the dependent variable in this study. Specifically, with a customised cross-sectional accruals approach presented by (Biswas et al., 2022) below:

\[
TA_{i,t} = N_{i,t} - CFO_{i,t} \quad \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \ cd
\[ DAC_{it} = \frac{TA_{it}}{AT_{it-1}} - NDA \]  

Where \( DAC_{it} \) is discretionary accruals; \( TA_{it} \) is total accrual bank; \( CFO_{it} \) is cash flow operating bank; \( AT_{it-1} \) is total asset bank; \( N_{it} \) is net profit bank; \( \Delta REV_{it} \) is change in revenues from the preceding year; \( \Delta REC_{it} \) is change in net accounts receivables from the preceding year; \( PPE_{it} \) is property, plant, and equipment bank; and \( NDA \) is non-discretionary accrual.

This study looks at four independent variables: CEO compensation, tenure, age, and gender diversity on the board. The ratio of the number of female board members to the total board size is used to calculate board gender diversity. The CEO's age is determined by the logarithm of their total years. The logarithm of the years their current company has employed the CEO determines their tenure. The logarithm of the total income in rupiahs, including bonuses, allowances, and other payments, determines their compensation. In the meantime, the natural log of the total assets is used to compute size, the control variable. The other is profitability, calculated by dividing net income by shareholder equity (ROE). Leverage also acts as a control variable calculated by total debt to total assets. Last is Liquidity, calculated by the current assets divided by current liabilities. The variable operationalisation is presented in detail below in Table 2.

**Table 2. Variables Operationalisation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Operational Definition</th>
<th>Measurement</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Earning Management</td>
<td>The actions managers take to generate accounting profits that do not show the actual situation through managerial policies related to accounting methods and procedures.</td>
<td>[ DAC_{it} = \frac{TA_{it}}{AT_{it-1}} - NDA ]</td>
<td>(Biswa et al., 2022)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Board Gender Diversity</td>
<td>The number of female board members is divided by the total of board members.</td>
<td>BGD = Female directors/Total Directors</td>
<td>(Damak, 2018)</td>
</tr>
<tr>
<td>3.</td>
<td>CEO Age</td>
<td>The total number of CEO age.</td>
<td>Age = Log (Age)</td>
<td>(Gupta et al., 2018)</td>
</tr>
<tr>
<td>4.</td>
<td>CEO Tenure</td>
<td>The total years the CEO has served in the position.</td>
<td>Tenure = Log (Tenure)</td>
<td>(Pham, 2023)</td>
</tr>
<tr>
<td>5.</td>
<td>CEO Compensation</td>
<td>The total amount the CEO earns in exchange for doing their job.</td>
<td>Compensation = Log (Compensation)</td>
<td>(Bouaziz et al., 2020)</td>
</tr>
<tr>
<td></td>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Size</td>
<td>Bank Size</td>
<td>Size = Ln (Total asset)</td>
<td>(Gallucci et al., 2020)</td>
</tr>
<tr>
<td>7.</td>
<td>Profitability</td>
<td>Measure the company’s financial performance</td>
<td>ROE = Net income/total shareholder equity</td>
<td>(Li et al., 2021)</td>
</tr>
<tr>
<td>8.</td>
<td>Leverage</td>
<td>Total liabilities divided by total assets are a proxy for a breach of a debt commitment.</td>
<td>DER = Total debt/Total equity</td>
<td>(Abdou et al., 2021)</td>
</tr>
</tbody>
</table>
Liquidity. The ability for a company to convert the assets or pay off its due

\[ \text{LDR} = \frac{\text{Total loans}}{\text{Total Deposits}} \]  
(Kharabsheh et al., 2022)

Hypothesis Testing Design. This study used panel data regression analysis as the analytic technique operated by EViews 10.0. The panel data test analysis used are Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To select which model is appropriate, we test the goodness of fit of each model. There are three steps in the testing stage to test the panel data model: the Chow Test, Hausman Test, and Lagrange Multiplier Test. Chow test compares CEM and FEM. The Hausman test compares FEM and REM. The Lagrange Multiplier test compares CEM and REM. The panel data regression is as follows:

\[ \text{EM}_{it} = \alpha_{it} + \beta_1 \text{BGD}_{it} + \beta_2 \text{CEO}_A_{it} + \beta_3 \text{CEO}_T_{it} + \beta_4 \text{CEO}_C_{it} + \text{SIZE}_{it} \text{PRO}_{it} + \text{LEV}_{it} + \text{LIQ}_{it} + \varepsilon_{it} \quad i = 1, 2, \ldots, N; t = 1, 2, \ldots, T \]  

Where: \( \text{EM}_{it} \) is Earning Management; \( \text{BGD}_{it} \) is Board Gender Diversity; \( \text{CEO}_A_{it} \) is CEO Age; \( \text{CEO}_T_{it} \) is CEO Tenure; \( \text{CEO}_C_{it} \) is CEO Compensation; \( \text{SIZE}_{it} \) is Size; \( \text{PRO}_{it} \) is Profitability; \( \text{LEV}_{it} \) is Leverage; \( \text{LIQ}_{it} \) is Liquidity.

RESULTS

The Results of Descriptive Statistics. Descriptive statistics analysis is necessary for research to analyse data by describing it through minimum values, maximum values, averages, and standard deviations.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{EM}_{it} )</td>
<td>188</td>
<td>-0.019</td>
<td>0.920</td>
<td>-1.420</td>
<td>0.195</td>
</tr>
<tr>
<td>( \text{BGD}_{it} )</td>
<td>188</td>
<td>0.192</td>
<td>0.750</td>
<td>0.000</td>
<td>0.188</td>
</tr>
<tr>
<td>( \text{CEO}<em>A</em>{it} ) (in years)</td>
<td>188</td>
<td>57.060</td>
<td>72.000</td>
<td>32.000</td>
<td>6.710</td>
</tr>
<tr>
<td>( \text{CEO}<em>T</em>{it} ) (in years)</td>
<td>188</td>
<td>6.030</td>
<td>31.000</td>
<td>0.000</td>
<td>6.470</td>
</tr>
<tr>
<td>( \text{CEO}<em>C</em>{it} ) (in million rupiahs)</td>
<td>188</td>
<td>73.700</td>
<td>727.000</td>
<td>1.900</td>
<td>129,000</td>
</tr>
<tr>
<td>( \text{SIZE}_{it} )</td>
<td>188</td>
<td>30.439</td>
<td>35.241</td>
<td>21.733</td>
<td>2.427</td>
</tr>
<tr>
<td>( \text{PRO}_{it} )</td>
<td>188</td>
<td>0.019</td>
<td>0.312</td>
<td>-0.954</td>
<td>0.188</td>
</tr>
<tr>
<td>( \text{LIQ}_{it} )</td>
<td>188</td>
<td>4.654</td>
<td>36.794</td>
<td>0.003</td>
<td>4.040</td>
</tr>
</tbody>
</table>

\( \text{EM}_{it} \) = Earning management; \( \text{BGD}_{it} \) = Board Gender Diversity; \( \text{CEO}_A_{it} \) = CEO Age; \( \text{CEO}_T_{it} \) = CEO Tenure; \( \text{CEO}_C_{it} \) = CEO Compensation; \( \text{SIZE}_{it} \) = Bank Size; \( \text{PRO}_{it} \) = Profitability; \( \text{LEV}_{it} \) = Leverage; \( \text{LIQ}_{it} \) = Liquidity.

Table 3 shows the earning minimum value of -1.420, which means it performed earnings management by lowering the profit (income minimisation). While the maximum value in this study is 0.920, this indicates that, compared to other banks, the bank managed its earnings by maximising income or profit. The sample study's average mean value of -0.019 suggests that earnings management should be practised by minimising profit or income with different motives depending on specific interests; this can occur due to several
motivations from Management, for example, motivation bonuses, debt motivation, share sales motivation, director turnover motivation and the regulation (Abdou et al., 2021; Hewitt et al., 2020). As a result of these motivations, managers carry out Management practices to maximise their profits. The best discretionary accruals are discretionary accruals that are close to 0; there are several banks where the value of discretionary accruals is 0.000, indicating little effort to increase the profit figure. To fully capture the extent of discretion, the researcher uses the earning management value.

However, the ratio of the number of women to the total number of directors on the board determines the independent variable, which is the gender diversity of the board. The table shows that board gender diversity in the bank sample is still lacking because, on average, it is only 19.212 per cent and acts as an attribute. However, the maximum value of 75 per cent indicates more than half of the women on board in the sample.

The CEO age variable is measured by the total number of CEOs in years. The table shows that the minimum CEO age is 32, which means the youngest CEO is 32 and the oldest is 72. CEO age data is valid; on average, CEOs in the sample are around the same age and older in their mid-fifties. The CEO tenure variable is measured by the total years the CEO has served in the current company's position since the appointment. The table shows a CEO who has served in the position for less than a year, and a CEO in the sample has served for 31 years. On average sample, CEOs have served in the position for more than six years. The minimum CEO tenure over one year served in the position has the lowest earning management value, -1.420. Moreover, for the maximum discretionary accruals, which is 0.920, the CEO has served in the position for 31 years.

The salary, bonus, and allowance calculate CEO compensation and other compensation received by the CEO in Rupiah. The table shows that, on average, the CEO received Rp.73,700,000,000 in total compensation. The maximum compensation a CEO can receive in the study's sample is Rp.727,000,000,000. In contrast, according to a rough survey by The Wall Street Journal, the minimum CEO compensation in Indonesia is around two billion dollars per year. Hence, on average, they have met the minimum CEO compensation.

The natural log of total assets measures bank size. The table shows that the minimum value of SIZE is 21.733, and 35.241 is the maximum value. The mean value of SIZE is 30.439, and the standard deviation is 2.427; this indicates that the sample is around the size and the data is valid and reasonable. Profitability is calculated by net income divided by shareholder's equity (ROE). The table shows that by the minimum standards of Bank Indonesia Regulation, the profitability of the sample study, on average, is 1.913 per cent, predicated as healthy.

Leverage is measured by the total debt to total assets (DER). The table shows the average LEV in a sample of the study is 465.451 per cent; this condition is fair and reasonable for the banking sector because banks model in the form of savings and loans; also, there is a significant investment in fixed assets in the form of a branch network. Liquidity is measured by the current assets divided by current liabilities (LDR). The table shows that the average LIQ in the sample study is 92.222 per cent, which is predicted to be fairly good and meets the minimum standards of the Bank Indonesia Regulation.
Table 4. Goodness of Fit

<table>
<thead>
<tr>
<th>Chow Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects Test</td>
<td>Cross-section F</td>
<td>0.854</td>
<td>46133</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>48.703</td>
<td>46</td>
<td>0.364</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hausman Test</th>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>13.685</td>
<td>8</td>
<td>0.090</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LM Test</th>
<th>Null (no rand. effect)</th>
<th>Cross-section</th>
<th>Period</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td>One-sided</td>
<td>One-sided</td>
<td>Breusch-Pagan</td>
<td>3.561</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Noted: Based on the Chow Test, the Prob Cross-section value is 0.725, more than 0.050, so the CEM model was selected. Based on the Hausman Test, the Prob Cross-section value is 0.090, more than 0.050, so the REM model was selected. Based on the LM Test, the Breusch-Pagan Cross-section Prob value is 0.059, more than 0.050, so the CEM model was selected.

**Table 4** shows the results of the Goodness of Fit Test. First is the Chow test done; the value of Cross-section F is 0.725. If the value is more than 0.050, then it shows that Common Effect Model (CEM) is better than the Fixed Effect Model (FEM). The next test is the Hausman test, which shows the prob value is 0.090, more than 0.050, for which the Random Effect Model (REM) is selected. Lastly, the Lagrange Multiplier test needs to be done. **Table 4** shows that the probability value is 0.059, more than 0.050, so the chosen model is the Common Effect Model (CEM).

**T-test Results.** **Table 5** displays the significant results of each independent variable on the dependent variables. The t value of board gender diversity (BGD) is 2.543, while the significant value is 0.012. Board gender diversity does not influence bank earning management. Therefore, the first hypothesis (H1) is rejected. CEO age (CEOA) has a t value of -3.624, with a significance value of 0.000. Hence, it indicates that CEO age negatively influences bank earning management. Hence, the second hypothesis (H2) is accepted.

CEO tenure (CEOT) has a value of t 3.723 with a significance of 0.000, meaning that CEO tenure influences bank earning management. So, the third hypothesis (H3) is accepted. CEO compensation (CEOC) has a t value of 691 and a significance value of 0.000, which means that CEO compensation does not influence bank earning management. Therefore, the fourth hypothesis (H5) is rejected. Bank size (SIZE), Profitability (PRO), Leverage (LEV) and Liquidity (LIQ) have significance values of more than 0.050; all control variables have insignificant effects on bank earning management.
Table 5. The Results of Panel Data Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.026</td>
<td>0.025</td>
<td>1.063</td>
<td>0.289</td>
</tr>
<tr>
<td>BGD&lt;sub&gt;t&lt;/sub&gt;</td>
<td>0.732</td>
<td>0.288</td>
<td>2.543</td>
<td>0.012</td>
</tr>
<tr>
<td>CEOA&lt;sub&gt;t&lt;/sub&gt;</td>
<td>-66.966</td>
<td>18.477</td>
<td>-3.624</td>
<td>0.000</td>
</tr>
<tr>
<td>CEOT&lt;sub&gt;t&lt;/sub&gt;</td>
<td>265.458</td>
<td>71.284</td>
<td>3.723</td>
<td>0.000</td>
</tr>
<tr>
<td>CEOC&lt;sub&gt;t&lt;/sub&gt;</td>
<td>0.034</td>
<td>0.050</td>
<td>0.691</td>
<td>0.490</td>
</tr>
<tr>
<td>SIZE&lt;sub&gt;t&lt;/sub&gt;</td>
<td>-0.011</td>
<td>0.028</td>
<td>-0.417</td>
<td>0.676</td>
</tr>
<tr>
<td>PRO&lt;sub&gt;t&lt;/sub&gt;</td>
<td>-0.208</td>
<td>0.132</td>
<td>-1.579</td>
<td>0.116</td>
</tr>
<tr>
<td>LEV&lt;sub&gt;t&lt;/sub&gt;</td>
<td>-0.007</td>
<td>0.005</td>
<td>-1.350</td>
<td>0.179</td>
</tr>
<tr>
<td>LIQ&lt;sub&gt;t&lt;/sub&gt;</td>
<td>0.065</td>
<td>0.035</td>
<td>1.863</td>
<td>0.064</td>
</tr>
</tbody>
</table>

EM<sub>t</sub> is Earning Management; BGD<sub>t</sub> is Board Gender Diversity; CEOA<sub>t</sub> is CEO Age; CEOT<sub>t</sub> is CEO Tenure; CEOC<sub>t</sub> is CEO Compensation; SIZE<sub>t</sub> is Bank Size; PRO<sub>t</sub> is Profitability; LEV<sub>t</sub> is Leverage; LIQ<sub>t</sub> is Liquidity.

**F-Test Results.** The F test is conducted to identify whether all independent variables simultaneously significantly affect the dependent variable or otherwise. The result of the simultaneous test can be seen in Table 6. The Prob value (F-statistic) is 0.000 less than 0.050; it can be said that the independent factors affect the dependent variable concurrently. Thus, it can be inferred that the control factors, CEO Age, CEO Tenure, CEO Compensation, and Board Gender Diversity, all impact Bank Earning Management.

Table 6. The Results of F-Test

<table>
<thead>
<tr>
<th></th>
<th>R-squared</th>
<th>Adjusted R-squared</th>
<th>F-statistic</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.226</td>
<td>0.180</td>
<td>4.844</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: Eviews (2023)

**DISCUSSION**

**The Effect of Board Gender Diversity on Bank Earning Management.** Board gender diversity does not influence bank earning management; this finding is aligned with the study of (Sheedy & Lubojanski, 2018), which discovered that female directors at the upper level are unwilling to act differently because they have acclimatized to a male-dominated culture. This suggests that having a diverse gender representation on the board does not always mean managers will behave less freely. Men dominate the sample research of banking boards. As a result, the gender diversity of the board does not always prevent the manager from acting opportunistically. The percentage of women employed in the banking sector is over 50 per cent in many countries (the US, Brazil, Japan, and others). However, this study found evidence that the number is less than 25 per cent, comparable to Biswas et al. (2022). Because of this, female directors in positions of authority are likely used to a culture where they are held to the same oversight standards as their male colleagues (Fan et al., 2019).

Due to their reluctance to do due diligence, women in senior positions in banks behave similarly to their male counterparts since they are aware of the environment in which their involvement is restricted. This is also true since there are few female directors in the sample
study, mostly just one. According to the critical mass hypothesis, the presence of a minority gender on the board must reach a particular level of at least three before it becomes typical. Because they are perceived as symbols or representatives of women when only some females are at the top level on the board, so they are less likely to perform their active monitoring role (Menicucci & Paolucci, 2022).

Social and practical ramifications support the efforts to foster gender diversity and equality on corporate boards. They may motivate governments in other nations to take action to control the discrimination against women. Encouraging women's selection to board directors is a notable effort (Damak, 2018). A greater diversity on the board can address agency-related problems like information asymmetry and earnings manipulation by reducing the influence of female representation on corporate boards. Furthermore, this shows that the study's sample of bank boards needs to be more diverse, which limits the ability of gender-diversity boards to discourage earning Management.

The Effect of CEO Age on Bank Earning Management. CEO age influences bank earning management. This study result is similar to previous studies by (Nurmayanti et al., 2022) and (Saputri, 2021). The data sample shows that mostly the CEO age is around 50 years above; it validates the idea that older people are more moral and reluctant to take risks than younger people since it demonstrates that senior CEOs are less likely to be more motivated to manipulate accounting results and are less likely to act unethically (Qi et al., 2018).

The Effect of CEO Tenure on Bank Earning Management. CEO tenure significantly affects earning Management. This result is in line with the study of (Bouaziz et al., 2020), which found a significantly positive link between CEO tenure and earning management, stating that the CEO was initially in charge of deceiving the accounting results. The study of (Vernando & Rakhman, 2018) found that the CEO overstated earnings in the early years of his services. However, the study did not find that the CEO overstated earnings in the final year of his services. New CEOs are generally motivated to show their performance capabilities to shareholders at the beginning years of their service in the company. This study found that the minimum tenure of a CEO who has served in the position for less than one year has the lowest earning management value, -1.420. As we consider in the analysis, CEO tenure in the early years is the CEO who served from 0-2 years. In the data observation, a CEO with a maximum value tenure of 31 years has the maximum discretionary accruals of 0.920. (Neifar & Ajili, 2019) found that CEOs performed earnings management at the end of their tenure years, which increases profits when the CEO retires based on company performance. Furthermore, (Baker et al., 2019) found that CEOs performed earnings management, which increases earnings while approaching the end of retirement to increase the probability of serving on the board of directors when the CEO is entering retirement age.

The Effect of CEO Compensation on Bank Earning Management. CEO compensation indicates that it insignificantly affects bank earnings management. This finding is aligned with the previous study by (Jessica et al., 2021), which found that compared to a CEO with huge remuneration, the CEO with lesser compensation has more guts to control profits. Also, this study's result supports the agency theory, whereas the agent-principal relationship affects the company's Management. The minimum compensation in the sample study has met the minimum compensation a CEO can receive in Indonesia, according to a survey of The Wall Street Journal (Career Journal), which is Rp1.8 million. Therefore, there is no implication for earning management
practice in this study. However, in Indonesia, there is no exact data on the compensation received by the CEO because there is no transparency (disclosure). Meanwhile, it contradicts the study of (Al-Shammari, 2021), which resulted in a significant coefficient on the variable.

**The Effect of Size on Bank Earning Management.** This study's results show that size as a control variable insignificantly influences bank earning Management because all banks are regulated and listed; their size barely matters when managing earnings. Additionally, this study indicates that a bank's size big or small does not affect how earnings are managed. The results of this study are consistent with the earlier research of (Alhmood et al., 2020) and (Pattanayak, 2017).

**The Effect of Profitability on Bank Earning Management.** The study outcomes demonstrate that profitability insignificantly influences bank earning Management. This study suggests that Management prefers to avoid carrying out earning Management using profit as a tool because it is vulnerable to being analysed by outsiders. Similarly, the previous studies of (Alzoubi, 2018) and (Sari & Rudy, 2020) documented a negative and insignificant association between profitability and accrual earning management.

**The Effect of Leverage on Bank Earning Management.** This study shows that leverage, as a control variable, insignificantly influences bank earning Management. Similar results to those of (Ibrahim's, 2020) previous study found a negative connection between debt and earnings management. In contrast, (Wimelda & Chandra, 2018) and (Bouaziz et al., 2020) have shown that leverage has a favourable and little impact on managing earnings.

**The Effect of Liquidity on Bank Earning Management.** The study's findings indicate that Liquidity insignificantly influences bank earning management. Because Management only sometimes takes Liquidity into account while performing profit management or because of other factors, Liquidity does not significantly affect how the bank manages its earnings. Also, Bank Indonesia regulates the limit ratio of banks' LDR. This finding aligns with the study of (Mulyaningtyas & Handayani, 2022).

**CONCLUSION**

On average, the sample carried out earnings management practices by slightly lowering profit, which could have done better to increase the profit, with different motives of the Management. The ratio of board gender diversity on average of the sample is still lacking; in this study, the board gender diversity does not influence earning Management. Female leadership roles are probably acclimated to a culture in which they are monitored in the same manner as the male. Female in senior positions in banks behave similarly to their male counterparts since they are aware of the environment in which their involvement is restricted. When a few female directors are on the board, they are viewed as symbols or representatives of women, hence less inclined to carry out their active monitoring function. The research emphasises and adds to the discussion about the advantages of having more women in positions of authority and decision-making in monitoring and controlling roles. Greater diversity on the board can be used to address agency-related problems like information asymmetry and earnings manipulation by influencing female representation on corporate boards.

The CEO age has a negative, significant effect on bank earning management. According to this study, older CEOs are less likely to distort accounting output, according to the negative coefficient intentionally. The CEO tenure has a significant effect on bank
earning management. The sample study, on average, has been in the current position for around six years. It supports the idea that they are less likely to practice earning Management. The CEO compensation has no significant effect on bank earning management.

**Limitation.** This study used a sample of the banking sector listed on the Indonesian Stock Exchange. Only three CEO characteristics were examined: age, tenure, and compensation. As for corporate governance attributes, just one board member is gender diverse. The remaining per cent of other variables not used in this study significantly influence bank earning management.

**Suggestion.** This study suggests that because the CEOs in the sample study have met the minimum compensation CEOs can receive in Indonesia, and it supports principal-agent problems of conflict of interest; there is no implication to the earning management practice. Future researchers can develop more extended periods of study to have better insight into earning management issues. They can also develop the study of gender diversity or the role of women on other dependent variables, such as financial performance sustainability reporting disclosure in various sectors. They may consider broadening the scope globally, use samples from other sectors in other countries besides Indonesia, and add CEO characteristics such as CEO gender, expertise, turnover or other variables that are not used in this study of earning Management for further studies as well as corporate governance attributes like ownership structure, board independence, board of meetings, etc.

**REFERENCES**


Pham, N. H. (2023). CEO Characteristics And Bank Performance: Case Of Vietnamese