The Likelihood of Financial Reporting Fraud: Does the Gender of CEO, CFO, Board of Commissioners, and Audit Committee Matter?

Intan Kurnida Julianti¹, Fuad²

¹,²Department of Accounting, Universitas Diponegoro, Jl. Prof. Soedarto, SH., Tembalang, Semarang, Indonesia

*Corresponding author email: intankurnidajulianti@students.undip.ac.id

Abstract

The purpose of this study is to examine whether the presence of women in executive positions such as CEO, CFO, board of commissioners, and audit committee can reduce the occurrence of financial statement fraud. The sample was selected from manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2013 to 2022. The results of this study show that female CFOs and audit committees have a negative and significant influence. This indicates that the presence of women in the CFO position and the audit committee can reduce the occurrence of financial statement fraud in companies. This study offers a different perspective on the two-tier system of corporate governance in a developing country, namely Indonesia, about the impact of female CEO, CFO, board of commissioners, and audit committee on the occurrence of financial statement fraud. The practical implications of this research are first, the importance of promoting gender diversity of executives as a corporate governance mechanism. Second, it can provide recommendations or requirements for gender diversity as part of corporate governance mechanisms to create gender equality.

Keywords: Gender diversity, Board of Commissioners, Audit Committee, financial reporting fraud.

Abstrak


Kata kunci: Keberagaman gender, Dewan Komisaris, Komite Audit, kecurangan laporan keuangan.
1. INTRODUCTION

Financial reporting fraud is a form of material misrepresentation in financial reporting intentionally carried out by management, which can result in losses for investors and creditors (ACFE, 2014). A survey conducted by ACFE (2022) found that financial reporting fraud has the lowest proportion compared to other forms of fraud, such as corruption and asset misappropriation. However, its impact can lead to significant losses. The consequence of financial reporting fraud is that users of financial statements can be misled, as their analysis is not based on accurate information, thereby rendering decision-making invalid (Skousen et al., 2009). That is why companies require good corporate governance. One aspect of good corporate governance is the diversity in the composition of the executive team within a company (Isriani, 2020).

Diversity in the executive team in this study can be defined from various perspectives, one of which is the gender perspective (Gordini & Rancati, 2017). Gender diversity in the executive team in this study is defined as the gender diversity of chief executive officers, chief financial officers, board of commissioners, and audit committees. Gender diversity in companies is an important aspect in the process of company development because it can provide added value, namely an increase in contributions with the number of alternatives considered so that it can have an impact on creativity and innovation in the company (Dobija et al., 2022). Gender diversity in the executive team can encourage more effective and efficient creativity, innovation, and problem-solving (Carter et al., 2003). The ideal representation of women and men will produce useful discussions that will improve positive results both at the governance and company levels (García Osma et al., 2022; Lapointe-Antunes et al., 2022). Therefore, gender diversity in the executive team is expected to increase information openness and performance of the company, thus creating high-quality financial reports and realizing good corporate governance, as well as creating gender equality.

The business ethics literature overwhelmingly suggests that females are more ethical than males (Ho et al., 2015). Under gender socialization theory, men and women bring different values, ethical views, and attitudes to the workplace because gender roles are determined during childhood and reinforced over time through social norms (Dawson, 1992). As a result, gender differences can influence leadership style, communication skills, and ethical decision-making (Roxas & Stoneback, 2004). Women have several strengths that men do not have, namely sharp business intuition, nurturing employees, detail and caution in making decisions that generally consider business risks and the impact they cause (Thornton International Ltd, 2021), thus women play an important role in company development that can increase contributions so that it can affect creativity and innovation in the company (Dobija et al., 2022). Therefore, women in executive positions can play a role in making better decisions (Wahid, 2019) as well as implementing more comprehensive strategies in companies (Rahmanto & Dara, 2020) that it is expected that women in executive positions can create more ethical business practices, which have an impact on reducing fraudulent practices in companies.

The topic of women’s gender in the executive team is interesting in this study for several reasons. First, gender diversity can lead to a broader executive perspective (Smith et al., 2006) so that various aspects are considered in presenting financial report information with higher
quality. Second, women have better teamwork and more inclusive communication styles that increase objectivity in decision-making (Harakeh et al., 2019). Third, women tend to be more ethical than men, stronger ethical standards of women leaders lead to stronger ethical leadership in preventing fraudulent practices (Ho et al., 2015). Fourth, women are more caring so they pay attention to social issues and support greater social responsibility (Al-Shaer & Zaman, 2016) which can create higher-quality financial reporting (C. Liu, 2018; Wahid, 2019). Fifth, women avoid risks more than men when making financial decisions (Hanousek et al., 2019). Individuals who avoid risks tend not to commit financial fraud. Women are less likely to manipulate financial statements because they have high risk (Harakeh et al., 2019).

The increasing presence of women in executive positions in companies in recent years has resulted in research with diverse results on the gender role in financial reporting fraud. Hoang et al. (2019); Maula & Rakhman (2018); Setyaningrum et al. (2019) assert that female CEOs in companies have lower risk levels than male CEOs. Women are also more trustworthy than men and tend not to engage in fraudulent practices in financial statements and women tend to have a feminine leadership style, therefore they try to minimize violations of financial reporting rules. Meanwhile, Deruvensi & Kristianti (2022); and Harris et al. (2019) reported that female CEOs do not necessarily reduce fraud. Female and male CEOs exhibit very similar cheating behavior. Luo et al. (2020); Maulidi et al. (2022); Wang et al. (2022) found that women are more risk-averse and committed to ethical practices than men in leadership positions in companies and female CFOs tend not to engage in risky and unethical financial reporting fraud compared to male CFOs. Conversely, Deruvensi & Kristianti (2022) prove that female CFOs do not affect reducing accounting fraud. Ahmadi et al. (2018); and Brahma et al. (2021) state that the role of women as commissioners on boards of companies is very important. Women are also seen as the human capital of the company and have the opportunity to participate in the company on an equal footing with men. Companies with female commissioners are expected to improve company performance, because women bring creativity, innovation, and new knowledge to the boardroom, thus becoming a competitive advantage for the company. Meanwhile, Fitroni & and Feliana (2022); and Razak & Helmy (2020) prove that female and male commissioners have the same opportunity to commit fraud. Companies that have female commissioners cannot reduce fraudulent practices. Alkebsee et al. (2021; Miglani & Ahmed (2019); and Udin et al. (2021) found that women on audit committees will emphasize higher audit quality and more assurance from external auditors when companies are more complex and riskier. The presence of women on audit committees can make internal control processes better and high-quality financial reports so that companies can use the results of these financial reports to improve company performance. The audit committee is very important in helping companies ensure transparency and reliability of reports to internal and external parties. In addition, the presence of women on the audit committee will bring benefits because women are considered to be more detailed, careful, risk-averse, and considered more integrity so they can present better activities and outputs. Conversely, Fitroni & Feliana (2022) found that gender on the audit committee has no significant effect on fraudulent practices. This result can occur because the characteristics of the audit committee task that can detect fraudulent practices have no relationship with gender diversity among its members. These earlier studies, however,
fail to consider the relationship between gender roles and financial reporting fraud. Therefore, this study can help explain why previous research has reported conflicting results.

This research refers to Maulidi et al. (2022) finding that the higher the proportion of female CFOs, the lower the likelihood of companies being involved in financial reporting fraud. This study also found that female CFOs are less likely to tolerate any opportunistic practices, which raises the possibility of corporate fraud. The next reference study by Wang et al. (2022) confirms that women avoid risks and are more committed to ethical practices than men in leadership positions in companies. The difference between this study from the previous ones is first, the addition of CEO or (in Indonesia terms it is called President Director) characteristic. Female CEOs can communicate well with female CFOs, who are the most important executive management of the company besides the board of directors and audit committee (Schopohl et al., 2021). Therefore, female CEOs can influence female CFOs to make less risky decisions, which can minimize the occurrence of financial statement fraud. Next, the addition of a board of commissioners and audit committee. The presence of women in the membership of the board of commissioners and audit committee can influence the policies that will be set because women tend to analyze problems first and then process them (Felinda et al., 2019).

This research contributes to the accounting literature in several ways. First, for the company, the results of this study are expected to provide consideration and contribution to the company as an evaluation considering the importance of promoting gender diversity as a corporate governance mechanism by providing new evidence in Indonesia. Second, for regulators, the results of this study are expected to provide consideration or input in making policies related to the importance of diverse genders to reduce financial reporting fraud. Considering that in Indonesia there have been regulations regarding gender equality in various fields (politics, economy, socio-culture, defense security) namely Presidential Instruction No. 9 of 2000 on Gender in National Development of the Republic of Indonesia and Regulation of the Minister of State for Women’s Empowerment and Child Protection of the Republic of Indonesia No. 25 of 2010 shows that Indonesia is committed to gender equality. Therefore, it is hoped that gender diversity in the company can create gender equality and reduce financial reporting fraud.

2. LITERATURE REVIEW AND HYPOTHESES FORMULATION

Gender Socialization Theory

Gender socialization theory explains how people act in a social environment that depends on gender (Mason & Mudrack, 1996). Men and women have different perspectives on moral and ethical values that can be seen from the socialization process (Dawson, 1992). The first socialization process of a person is their parents (Bernard, 1982). The influence of parental upbringing on children from birth will shape the differences in character and ethical behavior between men and women (Dawson, 1992).

Parents have different upbringings in treating boys and girls (Bernard, 1982). Different educational backgrounds between men and women, starting from every baby's birth, have become a habit in society. The question that arises is "Is the baby male or female?". This question is important because the answer involves more than just knowing the sex, but brings
all the big things that are significantly related throughout the child's life (Darvina & Sulistyowati, 2010).

Bernard (1982) argued that men and women enter different worlds in a single community, namely the pink world for girls and the blue world for boys. According to him, women are born into the "pink world" called pink because pink is a traditional feminine color, while men are born into the "blue world" called blue because blue is a traditional masculine color. Bernard (1982) explained that this "world" differentiation will have an impact on parents in caring for and educating children based on gender. Boys tend to be educated to be brave which will affect their behavior in decision-making and rationality that is more courageous. Meanwhile, women are educated for the cultivation of moral values on affection, and gentleness so that they become more empathetic, and obedient to orders or responsibilities and tend to avoid risks so that they are more ethical than men (Dawson, 1992).

Gender socialization theory in this study can explain that the socialization process influenced by the parental upbringing of children from birth will shape different characters between men and women. Women are educated on the cultivation of moral values and gentleness (Dawson, 1992) so that they become more ethical and empathetic (Ho et al., 2015). Therefore, women pay more attention to social issues and support greater social responsibility (Al-Shaer & Zaman, 2016) which can create higher-quality financial reporting (Liu, 2018; Wahid, 2019).

Furthermore, women are educated to obey orders or responsibilities and tend to avoid risks (Dawson, 1992) so that women are more compliant with existing ethical standards and tend to make decisions that are not highly risky for the company (Bosquet et al., 2014) but ethically strong in decision making (Betz et al., 1989). Therefore, it is predicted to be able to reduce financial reporting fraud through its role as a decision-maker to implement the right strategy.

Corporate Governance System in Indonesia

Unlike most Southeast Asian (ASEAN) member countries (e.g., Malaysia, Thailand, Singapore, Myanmar, Brunei, Laos, and Cambodia) that follow English law or common law, corporate law in Indonesia adopts French law or civil law (Khan et al., 2020). Therefore, Indonesia adopts a two-tier board structure, which is also applied in countries such as Germany, the Netherlands, and Japan (Darmadi, 2011). The two-tier board system divides the corporate governance structure (i.e., the board) into two groups. The first group is called the Supervisory Board, also known as the Board of Commissioners. The supervisory board consists of independent and non-independent non-executive directors (NEDs) (Tricker, 2015). The second group is the management board. The management board consists of the President Director and Directors. The management board is responsible for running the daily operational management routine, while the main task of the supervisory board is to appoint and dismiss members of the management board, as well as monitor their performance (Jungmann, 2006).

In the corporate governance system in Indonesia, overlapping membership in the supervisory board and management board is not allowed. Therefore, there is no concern about CEO duality in the two-tier board structure. Therefore, the term executive line in this study refers to members of the management board namely the CEO and CFO, and members of the supervisory board namely the board of commissioners and audit committee.
Female CEO and Financial Reporting Fraud

The Chief Executive Officer (CEO) holds the top position in a company. According to Indonesia Law Number 40/2007, the CEO has the task and responsibility of setting and overseeing employee work and leading the company in formulating company policies. Leadership style, communication skills, and decision-making can be determined by gender (Betz et al., 1989; Roxas & Stoneback, 2004).

Gender socialization theory explains that men and women have different values, ethical views, and attitudes in the workplace due to upbringing during childhood and reinforced over time through social norms (Dawson, 1992). The ability to react between men and women when experiencing the same problem can be assumed due to gender differences. (Na & Hong, 2017) assert that gender differences can create different leadership styles and affect behavior when making decisions.

Women's executives can be said to be more effective and efficient in making very complex decisions with more mature considerations. Women contribute different perspectives and offer solutions in companies that can improve the quality of decision-making processes (Suherman et al., 2021). Feminine leadership styles are more emotional, cooperative, more intuitive in solving problems, and more empathetic (Loden, 1985). Women CEOs with feminine leadership styles can minimize violations of financial reporting rules (Maula & Rakhman, 2018). Hoang et al. (2019) confirms that female CEOs have lower risk scores than male CEOs. Setyaningrum et al. (2019) that female CEOs have a negative and significant effect on earnings management. Our first hypothesis is as follows:

H1: Firms with female CEOs are less likely to engage in financial reporting fraud.

Female CFO and Financial Reporting Fraud

Indonesia Law Number 40/2007 about limited liability companies does not recognize the term CFO, but in practice, the CFO position is often used to refer to the finance director. The CFO is responsible for overseeing the application of accounting standards, preparing financial statements, and making accounting decisions (X. Liu et al., 2022). The CFO's duties generally oversee all of the company's financial functions and usually oversee the company's financial reporting process, thus having the greatest direct effect on accounting decisions in the company (Wang & Fung, 2022).

The CFO is directly involved in the financial reporting process, and CFO characteristics are known to affect financial reporting outcomes (Habib & Hossain, 2013). Regarding characteristics, companies with more gender-diverse CFOs are found to have better financial reporting quality (Abbott et al., 2012; Lai et al., 2017; Wahid, 2019). Gender socialization theory explains that the socialization process influenced by a parental upbringing of children from birth will shape different characters between men and women (Dawson, 1992). Gender diversity leads to unique human characters in executives because it conveys different things in executives (Bzeouich et al., 2019).

Women in executive positions can offer different perspectives and expand the available information set (Farag & Mallin, 2017). Women's representation at the top executive level (CFO and CEO) is increasingly seen as a significant determinant in financial decision-making monitored by the board of commissioners (Baker et al., 2019; Jalan et al., 2020. CFO women show greater diligence and independence than men in various decision-making contexts (Li et
al., 2022) and show less overconfidence, thus promoting stricter ethical standards that can help manage ethical issues appropriately (Huang & Liu, 2022). Therefore, the presence of women in CFO positions can enhance the overall supervision of a company's financial information (Boachie & Mensah, 2022; Davis & Garcia-Cestona, 2021) so that female CFOs are less likely to encourage financial reporting fraud.

Liao et al. (2019) found that female CFOs have a negative effect on financial reporting fraud in companies. Gupta et al. (2020) show that female CFOs have a low likelihood of financial deviation. Wang et al. (2022) state that women avoid risks and are more committed to ethical practices than men in leadership positions in companies. In addition, more women representatives in top leadership roles can reduce fraud or effectively detect fraud. Maulidi et al. (2022) confirm that there is a negative and significant relationship between female CFOs and the occurrence of financial reporting fraud. Our second hypothesis is:

**H2: Firms with female CFOs are less likely to engage in financial reporting fraud.**

**Female Board of Commissioners and Financial Reporting Fraud**

The National Governance Policy Committee explains that the board of commissioners is an executive member of the company who has the task and responsibility of overseeing and advising the company's board of directors, as well as ensuring that the company implements corporate governance. The Board of Commissioners functions as a supervisor and controller of the board of directors' performance in carrying out its role as the driving force of the company. Indirectly, the supervisory role performed by the board of commissioners will affect the quality of financial reporting.

The supervision carried out by the board of commissioners can also be influenced by the diversity of gender, as it can complement the shortcomings of each member, whether male or female. Gender socialization theory states that men and women have different perspectives on moral and ethical values, which can be seen through the socialization process (Dawson, 1992). The socialization process in the workplace will shape the differences in character and behavior between men and women (Dawson, 1992).

Women tend to adhere more to existing ethical standards for business decisions due to their risk-averse nature compared to men, who tend to be involved in more risky business decisions (Harris et al., 2019). Therefore, the ethical nature of women is expected to effectively oversee the company's operations, especially in monitoring how the board of directors carries out its duties. This is an important component that can help improve the company's financial performance (Thomaszen & Hidayat, 2020), resulting in higher-quality financial reporting and a reduction in fraudulent practices within the company. The presence of women on the board of commissioners in the supervision process of the board of directors is more effective compared to the absence of women altogether (Wiley & Monllor-Tormos, 2018).

Companies with female boards of commissioners are expected to improve company performance because women bring creativity, innovation, and new knowledge to the boardroom, thereby providing a competitive advantage for the company (Ahmadi et al., 2018). Therefore, a diverse group of board of commissioners can create a conducive corporate environment for the establishment of more cohesive communication from various perspectives to be considered in decision-making.
Brahma et al. (2021) assert that the role of women on the board of commissioners is crucial in a company because women are also considered as human capital for the company and have the right to contribute to the company on an equal footing with men. Maula & Rakhman (2018) found that the proportion of female board of commissioners has a significant negative effect on the level of financial reporting violations committed by the company. The third hypothesis can be stated as follows:

**H3: Gender diversity of the Board of Commissioners is negatively associated with the likelihood of financial reporting fraud.**

**Female Audit Committee and Financial Reporting Fraud**

The audit committee is a professionally and independently working committee established by the board of commissioners. The audit committee's task is to provide independent and professional opinions to the board of commissioners in reviewing financial information and enhancing the credibility of financial reports (Raihan & Herawaty, 2019). Characteristics such as financial expertise and independence are crucial for the effectiveness of the audit committee (Klein, 2002; Krishnan, 2005).

Gender diversity in the audit committee has recently been considered as one of the factors that can enhance its effectiveness (Aldamen et al., 2018b; Lai et al., 2017). Gender socialization theory explains that the socialization process can shape gender-based differences in behavior and character (Dawson, 1992). Adams & Funk (2012) assert that women are more likely to be independent thinkers than men, thereby enhancing effectiveness through their presence on the committee (Abbott et al., 2012; Encarnación Lucas-Pérez et al., 2015).

The increased effectiveness resulting from the presence of women on the committee can improve financial information (Geiger & O’connell, 1998), strengthen internal control systems (Chen et al., 2018), and lead to a reduction in corporate fraud (Capezio & Mavisakalyan, 2016; Wahid, 2019). This is because women are considered to possess unique and different abilities from men. Apart from their abilities, women are also seen to have different perspectives, enabling them to perform auditing functions more carefully and diligently. It is this greater attention to detail and diligence that drives the role of women in the audit committee to fulfill their function of reviewing financial information and providing independent opinions (Abbott et al., 2012; Adams & Ferreira, 2009).

Alkebsee et al. (2021) confirm that the presence of women on the audit committee enhances internal monitoring and communication, thereby reducing the perception of audit risk and the need for external auditor assurance. The findings also indicate that women demand high-quality audits and further assurance from external auditors when companies are more complex and riskier. Oradi & Izadi (2020) found that the presence of at least one woman on the audit committee reduces the likelihood of financial reporting fraud. The fourth hypothesis can be formulated as follows:

**H4: Gender diversity of audit committees is negatively associated with the likelihood of financial reporting fraud.**
3. RESEARCH METHODS

Sample
This research focuses on manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2013 to 2022, which is accessed directly from annual reports and financial statements available on both the Indonesia Stock Exchange website www.idx.co.id and on each company's website. The research sample is companies that report financial statements and annual reports consecutively during the period 2013 to 2022, use the Rupiah denomination, and present data related to research variables. Therefore, companies with incomplete financial data will be excluded from the sample. After imposing the sample criteria, the final sample remains 710 firm-year observations.

Research Model
Panel data is a combination of cross-sectional and time series data. Gujarati & Porter (2009) state that panel data regression is a technique to combine cross-sectional and time series data. The equation of the model used in this study is as follows:
\[
\text{Fraud}_{it} = \alpha + \beta_0 \text{CEO}_{it} + \beta_1 \text{CFO}_{it} + \beta_2 \text{BOC}_\text{Div}_{it} + \beta_3 \text{AC}_\text{Div}_{it} + \beta_4 \text{Size}_{it} + \\
\beta_5 \text{Lev}_{it} + \beta_6 \text{ROA}_{it} + \beta_7 \text{AGE}_{it} + \beta_8 \text{BIG4}_{it} + \varepsilon_{it}
\]
Where, Fraud is the likelihood of financial reporting fraud, \( \beta_0 \) is constant, \( \beta_1, \beta_2, \beta_3, \beta_4 \) is regression coefficient, CEO\(_{it}\) is the gender of CEO, CFO\(_{it}\) is the gender of CFO, BOC\(_{it}\) is the diversity of the Board of Commissioners, AC\(_{it}\) is the diversity of Audit Committee, Size\(_{it}\) is Ln firm size, Ln Lev\(_{it}\) is leverage, ROA\(_{it}\) is Ln Return on Assets, AGE\(_{it}\) is Ln firm age, BIG4\(_{it}\) is audit quality and \( \varepsilon_{it} \) is an error.

Variable Measurement
The dependent variable of our study is the likelihood of financial reporting fraud. This research uses the F-Score model to infer the likelihood of financial reporting fraud. Table 1 presents the measure of variables and the source of references for the measures. In the Indonesian context, the terms CEO and CFO refer to the President Director, and Finance Director.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraud</td>
<td>F-Score= Accrual Quality + Financial Performance</td>
<td>Dechow et al. (2011)</td>
</tr>
<tr>
<td></td>
<td>F-score &gt;1 indicates the likelihood of committing financial reporting fraud</td>
<td></td>
</tr>
<tr>
<td>CEO</td>
<td>A dummy variable that takes 1 if the CEO of the firm is female and 0 otherwise</td>
<td>Gupta et al. (2020)</td>
</tr>
<tr>
<td>CFO</td>
<td>A dummy variable that takes 1 if the CFO of the firm is female and 0 otherwise</td>
<td>Gupta et al. (2020)</td>
</tr>
<tr>
<td>BOC_Div</td>
<td>= ( \frac{\text{The number of female commissioners}}{\text{Total number of company commissioners}} )</td>
<td>Brahma et al. (2021)</td>
</tr>
<tr>
<td>AC_Div</td>
<td>= ( \frac{\text{The number of female audit committee}}{\text{Total number of company audit committee}} )</td>
<td>Miglani &amp; Ahmed (2019)</td>
</tr>
</tbody>
</table>
4. RESULTS AND DISCUSSION

Descriptive Statistics

Table 2 presents the descriptive statistics of each variable used in this study. The CEO shows an average value of 0.02, which means that female CEOs in the companies are 2%, this reflects that 98% are male CEOs. The minimum value of the CEO variable is 0.00 while the maximum value is 1.00. The CFO variable shows an average value of 0.25. This shows that the CFO position in the firm-samples is 25% filled by women and the remaining 75% filled by men. The minimum value of CFO is 0.00 while the maximum value is 1.00. The BOC_Div shows an average value of 0.09, which means that the average ratio between the number of female board of commissioners to the total board of commissioners of the company is 9%. The minimum value of BOC_Div is 0.00 while the maximum value is 0.75. The AC_Div shows an average value of 0.23, which means that the average ratio between the number of female audit committee members to the total audit committee members of the company is 23%. The minimum value of the AC_Div is 0.00 while the maximum value is 1.00.

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>710</td>
<td>0.00</td>
<td>1.00</td>
<td>0.02</td>
<td>0.16</td>
</tr>
<tr>
<td>CFO</td>
<td>710</td>
<td>0.00</td>
<td>1.00</td>
<td>0.25</td>
<td>0.43</td>
</tr>
<tr>
<td>BOC_Div</td>
<td>710</td>
<td>0.00</td>
<td>0.75</td>
<td>0.09</td>
<td>0.16</td>
</tr>
<tr>
<td>AC_Div</td>
<td>710</td>
<td>0.00</td>
<td>1.00</td>
<td>0.23</td>
<td>0.27</td>
</tr>
<tr>
<td>Size</td>
<td>710</td>
<td>24.4</td>
<td>33.6</td>
<td>28.7</td>
<td>1.72</td>
</tr>
<tr>
<td>Lev</td>
<td>710</td>
<td>0.04</td>
<td>1.92</td>
<td>0.46</td>
<td>0.23</td>
</tr>
<tr>
<td>ROA</td>
<td>710</td>
<td>0.00</td>
<td>1.07</td>
<td>0.08</td>
<td>0.09</td>
</tr>
<tr>
<td>Age</td>
<td>710</td>
<td>5.00</td>
<td>101</td>
<td>36.3</td>
<td>16.0</td>
</tr>
<tr>
<td>BIG4</td>
<td>710</td>
<td>0.00</td>
<td>1.00</td>
<td>0.37</td>
<td>0.48</td>
</tr>
</tbody>
</table>

The average value of the size variable is 28.7, which means that the average total assets of the companies used as samples are quite large, as stipulated in the Decision of the Board of Directors of the Indonesia Stock Exchange Number Kep-00001/BEI/01-2014 which categorizes companies as large if they have net total assets of at least Rp100,000,000,000.

The minimum value of the size variable is 24.4, while the maximum value of the size variable is 33.6. The average value of the leverage is 0.46, which means that the average sample company has a total debt of 46% of the total assets owned by the company. The minimum value of the leverage variable is 0.04, while the maximum value of the leverage variable is 1.92. The average value of the ROA variable is 0.08, which means that the average company used as a
sample has a net profit of 8% of the total assets of the company. The minimum value of the ROA variable is 0.00, while the maximum value of the ROA variable is 1.07. The average value of the firm age variable is 36.3, which means that the average sample company has been established for 36.3 years. The minimum value of the firm age variable is 5.00, meaning that the youngest company is 5 years old, while the maximum value of the firm age variable is 101, which means that the oldest company was established for 101 years. The average value of the audit quality variable is 0.37, which means that 37% of the sample companies were audited by BIG4 KAPs while the remaining 63% of sample companies were audited by non-BIG4 KAPs. Therefore, it can be concluded that most sample companies were audited by non-BIG4 KAPs.

Table 3 Frequency of the Likelihood of Reporting Fraud

<table>
<thead>
<tr>
<th>Classification</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms that are more likely to commit financial reporting fraud</td>
<td>614</td>
<td>86.4</td>
</tr>
<tr>
<td>Firms that are less likely to commit financial reporting fraud</td>
<td>96</td>
<td>13.6</td>
</tr>
<tr>
<td>Total</td>
<td>710</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3 presents the frequency of the likelihood of financial reporting fraud. The financial statement fraud variable shows 86.4% or 614 observations are more likely to commit financial reporting fraud, and 13.6% or 96 observations are less likely to commit financial reporting fraud.

Table 4 shows that the Prob. Cross-Section Chi-Square for the panel data regression model of financial report fraud (fraud) is smaller than the significance level of 5% ($\alpha = 0.05$). Therefore, the best model for the panel data regression model is the fixed effect model, because the Chow test result above rejects the null hypothesis. It can be seen from Table 4 that the Prob. Cross-Section Random for the panel data regression model of financial report fraud is smaller than the significance level of 5% ($\alpha = 0.05$). It is concluded that the best model for the panel data regression model is the fixed effect model because the Hausman test result above rejects the null hypothesis. The testing is not continued to the Lagrange multiplier test, because both Chow and Hausman tests choose the fixed effect model.

Table 4. Estimation of Panel Data Regression Model

<table>
<thead>
<tr>
<th>Model</th>
<th>N</th>
<th>Chow Test</th>
<th>Hausman Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Prob. Cross-Section Chi-Square</td>
<td>Best Model</td>
</tr>
<tr>
<td>Fraud</td>
<td>710</td>
<td>0.0095</td>
<td>Fixed Effect Model</td>
</tr>
</tbody>
</table>

It can be concluded that based on the test results of the panel data regression model estimation from Table 4, the best model for each model is selected. The best model for panel data regression of financial report fraud in this study is the fixed effect model.

**Discussion**

**Female Chief Executive Officer and Financial Reporting Fraud**

The results of the first hypothesis test show that CEO gender has a negative and insignificant effect on financial report fraud, which means that the first hypothesis is rejected as shown in Table 5. This is caused by the fact that most companies in Indonesia, especially those listed on the Indonesia Stock Exchange (ISE), are led by men. The Indonesia Business
Coalition for Women Empowerment (IBCWE) 2021 survey provides evidence that only 4% of women are leaders in companies that are included in the Indonesia Stock Exchange (ISE).

Based on the descriptive statistics in Table 3 in this study, it shows that women in the sample companies are 2%. When there are more men than women, it means that there is still a gender gap in the CEO position in the sample companies. Referring to the World Economic Forum index in the Global Gender Gap Report (2022), Indonesia ranks 92 out of 146 countries in terms of gender equality. With this condition, various challenges are faced by women when they hold leadership positions. First, the challenge of facing gender stereotypes or gender bias. Gender stereotypes view that women have feminine behaviors (such as emotional, cooperative, and social), while men are seen as agents (such as ruling, instructing, and directing) so they are considered less valuable for corporate-level decisions (Weck et al., 2022) when women are considered not to have the same capacity as men when they are in leadership positions because social stereotypes between women and men in companies tend to favor men (Gammie et al., 2007). In addition, (Weck et al., 2022) argue that women are less focused on tasks and achievement-oriented so they are less assertive, independent, aggressive, and decisive than men. As a result, men are considered more suitable for leadership positions. Therefore, gender inequality makes it difficult for women to obtain top positions in companies (Withisuphakorn & Jiraporn, 2017) because women have to meet higher effectiveness standards to achieve and maintain top executive positions (Eagly & Johannesen-Schmidt, 2001).

In addition, the sample companies are manufacturing companies, which are still the main drivers of the economy in Indonesia, so they have a fairly high-risk index. Female CEOs are more likely to operate in less risky companies than companies with male CEOs. The average risk index of female CEO companies is lower than that of companies with male CEOs (Hoang et al., 2019). Therefore, the percentage of companies in industries with high-risk indexes have a large gender gap in the CEO position. The results of this test are contrary to Setyaningrum et al. (2019) who found that female CEOs have a negative and significant effect on fraud in the form of earnings management. However, the results of testing the first hypothesis are in line with Deruvensi & Kristianti (2022) who proved that female CEOs do not affect accounting fraud. Harris et al. (2019) assert that female CEOs do not necessarily reduce fraud, because female and male CEOs show very similar cheating behavior.

**Female Chief Financial Officer and Financial Reporting Fraud**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Fraud</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Coeff.</td>
<td>Std. Error</td>
</tr>
<tr>
<td>CEO</td>
<td>-</td>
<td>-0.009194</td>
<td>0.114669</td>
</tr>
<tr>
<td>CFO</td>
<td>-</td>
<td>-0.106348</td>
<td>0.050690</td>
</tr>
<tr>
<td>BOC_Div</td>
<td>-</td>
<td>-0.199968</td>
<td>0.130637</td>
</tr>
<tr>
<td>AC_Div</td>
<td>-</td>
<td>-0.189592</td>
<td>0.078541</td>
</tr>
<tr>
<td>Size</td>
<td>+</td>
<td>0.661444</td>
<td>1.416607</td>
</tr>
<tr>
<td>Lev</td>
<td>+</td>
<td>-0.051231</td>
<td>0.047706</td>
</tr>
<tr>
<td>ROA</td>
<td>+</td>
<td>-0.028102</td>
<td>0.014734</td>
</tr>
<tr>
<td>Age</td>
<td>-</td>
<td>0.245714</td>
<td>0.132653</td>
</tr>
<tr>
<td>BIG4</td>
<td>-</td>
<td>0.060555</td>
<td>0.070780</td>
</tr>
</tbody>
</table>
The result of the second hypothesis test shows that the CFO has a negative and significant effect on financial statement fraud, which means that the second hypothesis is accepted, as shown in Table 5. The survey by Thornton International Ltd (2020) states that the position of CFO in Indonesian companies, especially those listed on the Indonesia Stock Exchange (IDX), is the position with the most women at 48%. This is also evidenced by Table 3, which shows that the CFO position in the sample companies is filled by women at 25%, but the sample in this study is only in the manufacturing industry, not all companies listed on the Indonesia Stock Exchange. This means that women in CFO positions in sample companies prove that women can reduce the likelihood of these companies being involved in financial statement fraud. This is because female CFOs have a more conservative character in financial reporting than males (Francis et al., 2015; Li et al., 2022; Schopohl et al., 2021).

The difference in character between men and women can be caused by a socialization process influenced by the parental upbringing of children from birth (Dawson, 1992). Consistent with gender socialization theory, gender differences lead to unique human characteristics in executives because they convey different things in executives (Bzeouich et al., 2019). The representation of women in top executives (CFO and CEO) is increasingly seen as a significant determinant in financial decision-making (Baker et al., 2019; Jalan et al., 2020). The presence of women in CFO positions can increase overall supervision of company financial information (Boachie & Mensah, 2022; Davis & Garcia-Cestona, 2021) because female characters are more conservative in financial reporting which can be associated with fewer deviations from financial statements (Gupta et al., 2020). The results of testing the hypothesis of this study are consistent with Liao et al. (2019) who found that female CFOs have a negative effect on financial reporting fraud in companies. Gupta et al. (2020) showed that female CFOs have a low likelihood of financial deviation. Wang et al. (2022) stated that women avoid risk and are more committed to ethical practices than men in corporate leadership positions. Maulidi et al. (2022) confirmed that there is a negative and significant relationship between female CFOs and the occurrence of financial reporting fraud.

**Female Board of Commissioners and Financial Reporting Fraud**

The testing results of the third hypothesis prove that the board of commissioners has a negative and insignificant effect on financial reporting fraud, which means that the third hypothesis is rejected as can be seen in Table 5. The absence of gender diversity influences the Board of Commissioners members on financial reporting fraud may be caused by the number of Board of Commissioners with female gender only amounting to 9% of the total Board of Commissioners members of the company. Therefore, the small percentage of women on the board of commissioners in the sample company causes no influence on fraud in the company. The results may occur because both male and female genders on the board of commissioners have the same core tasks and gender selection or social role selection of men and women are only the results of social and cultural construction through habituation, socialization, culture, and cultural inheritance since children are born into the world influenced by time and place.

Some researchers argue that corporate actions will not be influenced by gender diversity on the board because there is no cognitive difference between men and women (Khan & Vieito, 2013; Triana et al., 2014). Men and women only differ in how they express their feelings, not how they handle certain problems (Báez et al., 2018). Women tend to adhere more to existing
ethical standards for business decisions because of their risk-averse nature compared to men who tend to engage in more risky business decisions Harris et al. (2019) thus causing women to be more passive in decision-making. The testing results of this hypothesis are not consistent with (Brahma et al., 2021) stating that the role of women on the board of commissioners in companies is very important, which is expected to improve company performance, because women bring creativity, innovation, and new knowledge in the boardroom, thus becoming a competitive advantage for the company (Ahmadi et al., 2018). However, the testing results of this hypothesis are consistent with (Fitroni & Feliana, 2022) proving that the board of commissioners has no effect on accounting fraud, meaning that both women and men have the same opportunity to commit fraud. (Razak & Helmy, 2020) found that companies that have female Board of Commissioners members cannot reduce the occurrence of cheating practices.

**Female of Audit Committee and Financial Reporting Fraud**

The testing results of the fourth hypothesis prove that the audit committee has a negative and significant effect on financial reporting fraud, which means that the fourth hypothesis is accepted as can be seen in Table 5. The composition of the committee is one of the most important corporate governance mechanisms. Because most decisions are made at the committee level, it is very appropriate and valuable to focus on the composition of committees such as the audit committee. Most studies on accounting and finance subjects focus on the composition of the audit committee because of its central role in internal corporate governance and its relevance to financial reporting and corporate audit (Rani, 2018; Velte, 2023; Weickgenannt et al., 2021). The audit committee is responsible for overseeing the financial reporting process and recruiting and providing compensation to external auditors (Rani, 2018). To ensure the efficiency of the audit committee, it must have certain characteristics (Thiruvadi, 2012) such as independence, diligence, financial expertise, and experience.

Based on descriptive statistical data in Table 3 this study shows the number of female audit committee members to the total audit committee members of the company by 23%, meaning that it provides evidence that the audit committee in the company that is sampled is diverse. Diversity in the company's audit committee is positively related to financial performance (Sarhan et al., 2019; Yarram & Adapa, 2021). Because of the unique information possessed by diverse audit committees, diversity can increase the information offered to management. Of course, gender differences can produce a unique set of information that can be used by management to make better decisions (Sharma, 2004). This finding supports the gender socialization theory because gender diversity is a factor of success for a company and information enhancement (Carter et al., 2007). The reason for this implication is that female audit committees are more risk-averse (Francis et al., 2015), do not tolerate opportunistic behavior (Krishnan & Parsons, 2008), and tend to report high-quality financial statements (Thiruvadi & Huang, 2011). Therefore, by considering the personality of women, a higher proportion of women in the company's committees can perform superior monitoring and encourage management to pursue value and performance enhancement strategies, which are in the best interests of shareholders (Alkebsee et al., 2021). Because women on the audit committee can enhance the supervisory role of the committee in financial reporting (Alkebsee et al., 2021). As a result, it can strengthen the internal control system (J. Chen et al., 2018) improve audit quality (Aldamen et al., 2018a; Lai et al., 2017) and reduce fraud in the company.
The testing results of this hypothesis are consistent with (Alkebsee et al., 2021) who assert that the presence of women on the audit committee enhances internal monitoring and communication. In addition, women demand high-quality audits and further assurance from external auditors when the company is complex and risky. Oradi & Izadi (2020) found that the presence of at least one woman on the audit committee can reduce the likelihood of fraud against financial statements.

**Control Variables and Financial Reporting Fraud**

The first control variable proves that the size of the company (size) has a positive and insignificant effect on financial statement fraud, the first control variable is rejected. The findings of this study prove that the financial statement fraud committed by management does not look at the size of the company. There is no guarantee that the larger the company's assets, the more vulnerable it is to commit financial statement fraud. Companies with small assets also have the same opportunity to commit financial statement fraud.

The second control variable proves that leverage has no positive and insignificant effect on financial statement fraud, the second control variable is rejected. The findings of this study show that although the average manufacturing company has a high level of debt, which is 46% of the total assets of the company, it is not able to put pressure on management to commit financial statement fraud. This is because manufacturing companies are large companies, Indonesian information portals state that the manufacturing industry sector remains the main contributor to supporting economic growth in Indonesia, of course, it is considered capable of paying off its debts by looking for other sources of funding.

The third control variable proves that ROA has no positive and insignificant effect on financial statement fraud, the third control variable is rejected. Table 1 shows that the average company used as a sample has a net profit of 8% of the total assets of the company. When the profit generated from the average sample company is low enough, it indicates that the company's growth is slow and the company's performance is low, so it does not encourage management to commit fraud to achieve profitability and income (Beasley, 1996).

The fourth control variable is the age of the company which shows that the age of the company has no negative and insignificant effect on financial statement fraud, the fourth control variable is rejected. This shows that how long the sample company has been established cannot prove that financial statement fraud did not occur. The fifth control variable is BIG4 which shows that BIG4 has no negative and insignificant effect on financial statement fraud, the fifth control variable is rejected. This is because the role and quality of audit by both BIG4 and non-BIG4 KAPs are observed in the sample companies. In addition, Table 1 shows that the selection of audit services by the sample companies using BIG4 KAPs is very small, only 37%, even companies that use BIG4 KAPs services are still indicated to commit financial statement fraud and non-BIG4s are 63%, meaning that the majority of sample companies use non-BIG4 KAP services.

5. **CONCLUSIONS AND SUGGESTIONS**

This study aims to obtain empirical evidence regarding the influence of chief executive officer, chief financial officer, board of commissioners, and audit committee women on
financial statement fraud. This study uses a sample of manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2013 to 2022.

Based on the results of the study, we obtained the following conclusions. First, female chief executive officers have a negative and insignificant effect on financial reporting fraud, which means the first hypothesis is rejected. This is because companies in Indonesia, especially companies listed on the Indonesia Stock Exchange (IDX), are mostly led by men. Second, female chief financial officers have a negative and significant effect on financial reporting fraud, which means the first hypothesis is accepted. A survey by Thornton International Ltd (2020) mentioned that the CFO position in Indonesian companies, especially companies listed on the Indonesia Stock Exchange (IDX), is the position with the most women, which is 48%. Third, the female board of commissioners has a negative and insignificant effect on financial statement fraud, which means the first hypothesis is rejected. Some researchers argue that company actions will not be influenced by gender diversity on the board because there is no cognitive difference between men and women (Khan & Vicito, 2013; Triana et al., 2014). Men and women only differ in how they express their feelings, not how they handle certain problems (Báez et al., 2018). Fourth, the female audit committee has a negative and significant effect on financial statement fraud, which means the first hypothesis is accepted. The reason for this implication is that female audit committee members are more risk-averse (Francis et al., 2015) and do not tolerate opportunistic behavior (Krishnan & Parsons, 2008), and tend to report high-quality financial statements (Thiruvadi & Huang, 2011). Company size (size) has a positive and insignificant effect on financial statement fraud, the first control variable is rejected. This finding proves that the financial statement fraud committed by management does not regard the size of the company. Leverage has a positive and insignificant effect on financial statement fraud, the second control variable is rejected. This finding shows that although the average manufacturing company has a high level of debt, which is 46% of the total assets of the company, it is not able to put pressure on management to take fraudulent actions on financial statements. ROA has a positive and insignificant effect on financial statement fraud, the third control variable is rejected. The age of the company has a negative and insignificant effect on financial statement fraud, the fourth control variable is rejected. BIG4 has a negative and insignificant effect on financial statement fraud, the fifth control variable is rejected. This is because most of the sample companies use non-BIG 4 audit firms.

The limitation of this study is that this study only uses data from manufacturing companies. Manufacturing companies have not been able to explain comprehensively the data of companies in Indonesia regarding gender diversity in company executives in reducing financial statement fraud. Therefore, future research should use all companies listed on the Indonesia Stock Exchange (IDX) to explain gender diversity in company executives in reducing financial statement fraud.

REFERENCES


Loden, M. (1985). Feminine leadership, or, How to succeed in business without being one of the boys. Times Books.


