

Assessing the Risk of Fraudulent Financial Reporting in Indonesian Banking Companies Through the Lens of Hexagon Fraud Analysis

Mathildis Tellyani Segi Sare¹ and Anggreni Dian Kurniawati^{2*}

^{1,2}Universitas Atma Jaya Yogyakarta, Indonesia

anggrenidiankurniawati@uajy.ac.id

Abstract

The study aims to determine the impact of hexagon fraud on the detection of potential fraudulent financial statements. The study identified several factors that may have contributed to the emergence of potentially fraudulent financial reporting. These factors included the financial stability of the pressure element, the ineffective monitoring of the opportunity element, the change of auditor of the rationalization element, changes in the director of the capability element, the CEO duality of the ego element, and the political connection of the collusion element. The Eckel Index projects the possibility of fraudulent financial statements. The sample in this study is a banking company listed on the Indonesian Stock Exchange in the period 2018 to 2022. Sample obtained by purposive sampling. This study will highlight the possibility of fraudulent financial reporting, particularly regarding income smoothing practices used by Indonesian banks. The insights obtained from the hexagon fraud analysis can be leveraged by a banking institution to enhance its sustainable management procedures in the future.

Keywords: banking, eckel index, fraud hexagon, fraudulent financial reporting, income smoothing.

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1. INTRODUCTION

Financial statements are useful as one of the tools to communicate financial information and company activities to stakeholders in decision-making. As part of transparency and accountability to financial statement users, management has a significant responsibility to present financial statements with a high level of credibility. In the process, management often commits fraudulent financial reporting instead of reporting the company's financial performance. Fraudulent financial reporting is an intentional act of deviation from the company's financial condition by misrepresenting or omitting amounts and disclosures in the financial statements with the aim of

deceiving report users (ACFE, 2022). Based on data obtained from the Report to the Nations 2022 (ACFE, 2022), the percentage of fraudulent financial reporting cases occurring globally is 8%. This percentage is indeed the smallest among the cases, but according to the ACFE Chapter Indonesia Survey (ACFE Indonesia, 2019), the percentage of financial statement fraud cases occurring in Indonesia is 9.2%, with 22 cases reported, resulting in significant losses.

Several cases of financial statement fraud that are prevalent in Indonesia originate from the banking sector. The practice of financial statement fraud by banking companies that caused significant losses to the country is the case of PT Bank Century. In 2008, PT Bank Century could not pay the funds requested by customers, resulting in a bank run or, in other words, a clearing failure. Starting from that incident, many irregularities began to emerge, one of which was the financial report of PT Bank Century, which was considered misleading due to the discovery of numerous material errors in its presentation. Another case of financial statement fraud in the banking sector also occurred at PT Bank Bukopin Tbk. In 2018, PT Bank Bukopin modified its financial statements, specifically the credit card data that had been recorded over several years. This modification caused Bukopin's credit position and commission-based income to increase to an unreasonable level. The modification incident went undetected through various oversight and audit processes for more than 5 years. In addition to PT Bank Century and PT Bank Bukopin, cases of financial statement fraud also occurred at PT Bank Tabungan Negara in 2020. PT Bank Tabungan Negara engaged in the buying and selling of non-performing loans from PT Batam Island Marina (BIM) from Bank BTN to PT Pusat Pengelola Aset (Persero), with the purchase funds originating from loans provided by Bank BTN to PT Pusat Pengelola Aset (PPA).

Several fraud scandals in the banking sector raise significant questions about the management of public funds. The banking sector is a highly regulated sector and a business that heavily relies on public trust. The financial statement fraud that occurs will reduce public trust. Many factors can trigger the potential for financial statement fraud in companies, including banking companies. The company must be vigilant of the parties involved in the preparation of financial statements so that fraud can be detected as quickly as possible, thereby preventing losses for the company. Thus, there is a practical need in the banking sector for early fraud detection, and the theoretical approach of the fraud hexagon can be used to bridge this issue.

The detection of potential financial statement fraud begins with the identification of fraud indicators (red flags) and factors that can encourage or trigger financial statement fraud actions. The latest theory regarding factors influencing fraud is the fraud hexagon (Vousinas, 2019). The fraud hexagon theory provides information on factors that impact the decisions of individuals and groups to commit fraud. These factors fall into six elements that can trigger fraud in financial statements, namely: pressure, opportunity, rationalization, capability, arrogance, and collusion. Few studies have particularly used the fraud hexagon approach to uncover red flags of financial statement fraud in the banking sector, which has unique characteristics. Therefore, this research will use the fraud hexagon theory to analyze the factors that can trigger financial statement fraud committed by banking companies. This study will enrich the literature on early detection of fraud based on theory. Practically, the results of this research can be used as a guide for auditors and regulators in identifying and anticipating potential fraud more effectively. This study can also

provide empirical input for regulators to increase transparency and accountability in the policies and governance in the banking sector.

2. LITERATURE REVIEW

2.1. Agency Theory

A previous study done by Jensen and Meckling (1976) described the agency relationship as a contract in which one or more principals (owners) engage another person or agent (manager) to carry out the operational activities of the company. In agency theory, the principal refers to the investor or shareholder, while the agent refers to the management or company that performs the work of managing the assets of the shareholders or investors. The relationship that develops between management and investors is a representation of the relationship between agent and principal. The principal or investor, as the provider of funds and facilities for the continuity of the company's operations, also has access to the company's internal data presented in the form of financial reports. The agent or management who oversees the company's activities and has access to information regarding the overall operations and performance within the company. The agent, as the manager of the company's operations, has an obligation to manage the company as entrusted by the principal to enhance the principal's prosperity through the increase in the company's value. However, in reality, the relationship between the agent and the principal is not always good. This is caused by the occurrence of a conflict of interest where the agent tends to seek personal gain without considering the interests of the principal, whereas the main goal of the company is to maximize the welfare of the capital owners. The conflict of interest arising from this agency relationship is triggered by the presence of asymmetric information. Asymmetric information is defined as the imbalance between parties who have the ability to obtain and utilize information for their own benefit and those who do not have the ability to obtain information in the same quantity (Scott, 2015). The separation between ownership and management functions is the cause of the emergence of asymmetric information. The agent, namely management, has the obligation to report the company's condition information accurately to the principal, namely the investor. Problems arise when the information about the company's condition conveyed does not match the actual situation. Management, as the party with more access to information compared to investors, will take advantage of the opportunities to commit fraudulent actions. In this case, management will always strive to undertake various actions to ensure that the overall performance of the company appears good to investors, with the aim of receiving rewards or compensation for the performance achieved. The actions taken by management are a form of moral hazard. Moral hazard can occur when management desires large compensation without considering the interests of investors (Masako and Stoughton, 1986). Moral hazards can occur due to selfish and self-serving behavior.

To maximize shareholder wealth, management is often faced with factors that lead to undesirable actions, such as committing fraud. These factors are divided into several components that can lead management to commit fraudulent acts, including pressure, opportunity, rationalization, ability, ego, and collusion. In relation to agency theory, investors (principals) will set high expectations that must be met by

management (agents) to fulfil their responsibilities as company managers. Such a situation will create pressure on management when executing it and result in management's motivation to avoid sanctions if the pressure is not met. Furthermore, the view that management and investors have differing interests or conflicts of interest. Management will always seek opportunities to obtain large bonuses or compensation in various ways when managing the company, while investors or shareholders desire transparency regarding the actual state of the company and request that management work to enhance the company's value in the long term. However, management will always take advantage of opportunities to commit violations, such as lax monitoring or supervision, which is one of the various opportunities that management can exploit to engage in fraudulent practices.

2.2. Fraud Hexagon Theory

Vousinas (2019) developed the fraud hexagon theory aimed at refining the previous fraud pentagon theory by adding a sixth element, which is collusion. Collusion is a condition that describes a deceptive agreement between two or more people with the aim of defrauding another party. The characteristics of collusion elements include support for company officials or employees in the form of payments if they can win tenders and purchase certain services or goods, and in the process of purchasing services or goods, there are intermediaries involved. Employees and external parties such as politicians or government officials are often involved in collusion (Achmad et al., 2022). Therefore, there are six elements that can indicate the potential causes of fraud in financial statements, namely pressure, opportunity, rationalization, capability, arrogance (ego), and collusion.

The first element of the fraud hexagon is pressure. Pressure will arise when a company experiences unstable financial conditions, prompting management to attempt to improve the company's prospects by manipulating financial statements (Skousen and Twedt, 2009). A person's personal desire that arises due to a desperate situation and the condition to commit a crime can also be referred to as pressure (Shelton, 2014). In the corporation, the pressure experienced is in the form of a desire to obtain additional sources of funds and financing in the form of debt to remain competitive in the eyes of other competitors (Sari et al., 2022). SAS No. 99 (AICPA, 2003) states that there are several situational and conditional factors that influence a person to commit fraud, namely personal financial need, financial instability, financial target, and external pressure. In this study, the pressure element will be proxied by financial instability. According to AICPA (2003), in committing financial statement fraud, there are indications within the pressure element commonly felt by management, namely when the company's financial situation is unstable and the profitability of the company's financial condition is threatened. The variable of financial instability will be measured by the ratio of total asset changes, as asset growth is one of the aspects often manipulated by management (Skousen and Twedt, 2009). Therefore, a larger ratio of total asset changes in a company may indicate a higher potential for fraudulent actions by management in the company.

Meanwhile, the second element is opportunity. Opportunity is the condition in which the perpetrator of fraud commits a crime by exploiting the situation and conditions, for example, when there is a weakness in internal controls that allows the perpetrator to commit fraud without detection (Dorminey et al., 2012). In this study, the element of opportunity will be proxied by ineffective monitoring, which refers to a

condition where the oversight function does not operate effectively within an organization due to the dominance of control and ineffective internal management. Without internal control, it will create opportunities for management or other parties to commit financial statement fraud. This variable will be measured using the ratio of the independent board of commissioners.

The third element is rationalization, which is an attempt at self-justification for deviant acts committed because it can encourage fraudulent financial reporting, as the deceivers believe that their actions are fair and reasonable (Achmad et al., 2022). Top management has convinced itself that fraudulent actions are a justifiable risk. Those involved in deviant actions tend to justify their actions consistently (Tugas, 2012). In this study, the element of rationalization will be proxied by the change in auditor. Change in auditors is one of the ways companies reduce the potential detection of financial statement fraud by auditors (Lou and Wang, 2009). The change of auditors carried out by the company can lead to various perceptions; in this case, rationalization may involve management justifying the change of auditors with various legitimate reasons, such as cost or auditor specialization. This is because the company is perceived to be changing its auditor to hide fraud that was discovered by the previous auditor.

The fourth element is capability, which involves the traits and abilities necessary to successfully commit (Wolfe and Hermanson, 2004). Individuals who possess the capability will feel that their skills will reduce the effort required to act dishonestly and the likelihood of being caught, so individuals who believe they have the ability to successfully commit fraud tend to rationalize their actions more because of a more optimistic assessment of the consequences. In this study, the element of capability will be proxied by the change in director. Change in director is the transfer of duties, positions, functions, and roles from the previous board of directors to the new board of directors (Pamungkas and Utomo, 2018). The change in the board of directors is essentially only beneficial for the company, specifically in improving the performance of the previous board of directors. Typically, the company strives to change the composition of the board or transfer authority to the newly selected directors who are deemed more competent. On the other hand, the change in the board of directors can be seen as an opportunity or a loophole to eliminate directors suspected of being aware of fraudulent actions within the management. The change from the old board of directors to the new one requires a considerable amount of time to adapt or adjust to the new company culture, which certainly limits performance effectiveness and increases the likelihood of fraud within the company.

The fifth element is arrogance (ego). The high level of arrogance and the sense of superiority possessed by a CEO. Arrogance is an attitude of exaggeration or greed that comes from a person who believes that internal controls do not apply to themselves (Horwarth, 2012). Based on that argument, arrogance is identified as having the power of ego, self-esteem, and authority in individuals, which leads to detection (Sarikhani and Ebrahimi, 2022). A leader tends to want to showcase their position or title within a company for the sake of being recognized by many people and does not want to lose that status, position, or title. In this study, the element of arrogance (ego) will be proxied by CEO duality. CEO duality is an important indicator factor in the governance of an organization and serves as a reflection of the CEO's strength in contributing to the company's performance (Dalton et al., 1999). CEO duality, which refers to a single individual serving as both CEO and chairman of the

board, has significant negative impacts, such as reduced corporate control and the emergence of conflicts of interest. In this case, Indonesia has implemented a two-tier system according to the Republic of Indonesia Law Number 40 of 2007 concerning Limited Liability Companies. In the two-tier system, management authority and supervisory authority are separated and held by different individuals. The regulations in Indonesia lead to CEO duality, which is not directly present in the board of commissioners, who also serve as the board of directors, but can be seen from the familial relationships in the positions of the board of directors and the board of commissioners (Putri and Deviesa, 2017). The familial relationship between the board of directors and the board of commissioners will affect the decline in oversight functions within the company and have a negative impact on the company's progress.

The sixth element is collusion. Collusion is a deceptive agreement between two or more people for one party to act on behalf of another with a negative intent, such as deceiving a third party for personal gain (Vousinas, 2019). With the existence of collusion, companies usually gain unique privileges to enhance their performance and value and exploit the ease and advantages of the company in committing financial reporting fraud through manipulation. This action certainly violates the law because it sacrifices everything to benefit certain parties, which harms the surrounding people. In this study, the element of collusion will be proxied by political connection. Political connections can be found in organizations or companies where the directors hold positions as political officials, former government officials, or former military officials (Osazuwa, 2016). In a company that has political connections, personal gains will be prioritized by seizing opportunities without considering the long-term performance benefits of the company. The presence of political connections in a director will allow the company to gain more special benefits, such as borrowing funds from third parties and signing contracts with the government, which can lead to fraud and manipulation in the financial statements prepared. To continue building good relationships and maintaining the company's reputation, the company's management has the potential to engage in fraudulent practices in the preparation of financial statements so that the financial condition appears good over time.

2.3. Hypothesis Development

Various pressures within the company can lead management to engage in fraudulent practices in the financial statements. The condition of instability in financial performance can lead management to commit fraudulent actions due to the pressure of not meeting the desires of investors or shareholders to maintain the company's performance. Financial instability is a condition where the fluctuations in a company's finances occur due to disruptions in the company's main activities and trigger a financial crisis (Raz et al., 2013). When a company is in a state of financial instability, it will affect the trust of financial statement users. According to AICPA (2003), financial stability is a condition in which the company is compelled to portray that its financial condition is stable. Managers are under pressure to commit financial statement fraud when economic, industry, or operational entity conditions threaten financial stability. Previous research (Utami and Pusparini, 2019; Kurniawati, 2021a; Octani et al., 2022; Jannah and Praptoyo, 2023) states that financial stability has a positive effect on fraudulent financial reporting. Therefore, in measuring the variable of financial instability, the ratio of total asset changes is used, where the asset

account is an important aspect of the company that has the potential to reflect its financial instability. The larger the ratio of total asset changes, the higher the potential for fraud. Based on this, the hypothesis can be formulated as follows:

H1: Financial instability is positively associated with the potential fraudulent financial reporting.

Fraudulent practices occurring within a company can be caused by the existence of an opportunity. Management is the party that knows the most information about the company, and this can create an opportunity to carry out fraudulent practices. Fraud perpetrators need to know in detail the right place and time to exploit weaknesses in the company's control and supervision, so that fraudulent actions can ultimately be concealed. That is why companies need to have good oversight to avoid fraudulent practices. However, in reality, fraudulent practices are one of the consequences of ineffective supervision within the company, which provides opportunities for managers to commit fraudulent actions (Khoir and Kusumawati, 2020). According to AICPA (2003), ineffective monitoring is a condition where the oversight function does not operate effectively within an organization due to the dominance of control and ineffective internal management. Previous research (Octani et al., 2022; Jannah and Praptoyo, 2023) states that ineffective monitoring has a positive effect on financial statement fraud. Ineffective monitoring will encourage managers to commit fraudulent actions against the reports. Therefore, the measurement of ineffective monitoring will be conducted using the ratio of independent commissioners. A very small number of independent commissioners or even their absence will increase the likelihood of conflicts of interest or an imbalanced influence on the company's decision-making. Based on this, the hypothesis can be formulated as follows:

H2: Ineffective monitoring is positively associated with the potential fraudulent financial reporting.

Rationalization is an element that impressively justifies fraudulent actions and considers fraud as something that can be justified and is acceptable when committed. The condition of justifying an action can become problematic when done continuously, and its impact on the company is the concealment of violations by management. This situation leads to the rotation of public accounting firms in a company over time. A change in auditors is one of the ways companies reduce the potential detection of financial statement fraud by auditors (Lou and Wang, 2009). Public accounting firms, as offices that provide external auditor services in examining a company's financial statements, are required to have a high level of independence in order to reveal when fraudulent practices by the company occur. The replacement of auditors is prone to occur in a company to cover up potential fraudulent practices. The company believes that changing auditors can erase the evidence of findings made by the previous auditor. Previous research (Utami and Pusparini, 2019; Hidayah and Devi Saptarini, 2020; Octani et al., 2022; Jannah and Praptoyo, 2023) states that a change in the auditor affects fraudulent financial reporting. The more frequently a company changes auditors, the higher the likelihood that the company is erasing traces of fraud previously found by the former auditor. Based on this, the following hypothesis can be formulated:

H3: Change in auditor associated with the potential fraudulent financial reporting.

Fraud will not be committed if the perpetrator cannot commit fraud. In carrying out fraudulent practices, ability is an important factor that has a significant influence on the occurrence of such actions. The main factor that the general public looks at to assess whether someone has sufficient capability is positioning (Hidayah and Devi Saptarini, 2020). Positioning is the position and function that a person holds within a company, which creates an opportunity to commit fraud. Therefore, top management positions are considered the most reliable way to either prevent or even carry out fraudulent practices. When a company has a director or leader whose tenure is only brief, it can be suspected that the company is trying to replace a director who is aware of fraud in the management. A change in director is the transfer of duties, positions, functions, and roles from the previous director to the new director (Pamungkas and Utomo, 2018). Previous research (Utami and Pusparini, 2019; Hidayah and Devi Saptarini, 2020; Widyatama and Setiawati, 2021; Octani et al., 2022; Jannah and Praptoyo, 2023) states that a change in director affects financial statement fraud. Frequent changes in the board of directors can be an effort to minimize the likelihood of the old directors understanding the fraud being carried out by the company, so continuous changes in the board of directors can indicate an increasing potential for fraud being committed. Based on this, the following hypothesis can be formulated:

H4: Change in director associated with the potential fraudulent financial reporting.

A high ego possessed by someone indicates that they have a superior attitude or a proud nature, believing that internal controls within the company cannot be applied to them. When someone with a high ego is assigned to be a leader in the company, it will cause chaos in the company's oversight and leadership structure. This is because a leader with a very strong position or rank will have full power and oversight over the company and will disregard ethical principles to achieve their personal goals. There is one type of personality among fraudsters, namely the egotistical, someone who is supported to succeed by various means, confident, and narcissistic (Vousinas, 2019). The ego of a leader can be seen through CEO duality. CEO duality is one of the important indicators in the governance of an organization and serves as a reflection of the CEO's strength in contributing to the company's performance (Dalton *et al.*, 1999). CEO duality describes a situation where a CEO also holds another position within the company, and it indicates the dominance of power held by that CEO. In Indonesia, the corporate governance system adopted is the two-tier board system, which prevents an individual from holding two positions simultaneously, such as being a member of both the board of commissioners and the board of directors. Therefore, CEO duality in Indonesia is characterized by familial relationships between the board of commissioners and the board of directors (Widyatama and Setiawati, 2021). CEO duality affects financial statement fraud. CEO duality can lead to poor governance within a company because the CEO is unable to perform oversight functions separately or independently. Based on this, the following hypothesis can be formulated:

H5: CEO duality is associated with the potential fraudulent financial reporting.

Collusion significantly contributes to financial statement fraud. As collusion within a company intensifies, the likelihood of fraudulent behavior also increases

(Jannah et al., 2021). This refers to the collaboration between companies and the government, which often results in mutually advantageous arrangements. Such relationships, however, can be detrimental to other parties and may lead to fraudulent activities within the organization. When a company maintains ties with government entities or political figures, this is known as a political connection. Political connections can be found in organizations or companies whose directors hold positions as political officials or former government officials, as well as former military officials (Osazuwa, 2016). The advantage of having political connections can provide special benefits to management, which ultimately leads to matters that will harm the users of financial statements. Companies with political connections prefer leniency in government regulations and receive protection from their political partners (Correia, 2014). Supported by previous research (Jannah and Praptoyo, 2023), which concluded that political connections affect financial statement fraud. When the company realizes that the political connection can be exploited, it will use that situation to gain easier access to certain resources. This situation will increase the risk of manipulation in the presentation of financial statements. Of course, this becomes a very dangerous factor in the company's development process, as elements leading to financial statement fraud will emerge with such connections. Based on this, the following hypothesis can be formulated:

H6: Political connection associated with the potential fraudulent financial reporting.

3. METHODOLOGY

This research is a quantitative study. In this study, the identified population consists of financial statements and annual reports of the banking sector listed on the Indonesia Stock Exchange (IDX) for the years 2018-2022. The sample in this study was taken using purposive sampling techniques based on specific criteria. The sample criteria are the banking sector listed on the Indonesia Stock Exchange during the years 2018-2022, which issue and publish annual financial statements and annual reports, and provide relevant data related to the research variables comprehensively. Table 1 below explains the operationalization of variables in this study.

Table 1. Operationalization of Variables

| Variables | Definition | Elements | Scale |
|--|---|--|---------|
| Fraudulent financial reporting (ECKEL) | The potential for financial statement fraud is an intentional act of misrepresentation of a company's financial condition by misstating or omitting amounts or disclosures in the financial statements with the aim of deceiving the users of the reports (ACFE, 2022). | Eckel Index = $\frac{CV\Delta I}{CV\Delta S}$ Code 1, if $CV\Delta I < CV\Delta S$, then the company can be classified as a company that engages in earnings management, and code 0, if $CV\Delta I > CV\Delta S$, cannot be classified as a company that engages in earnings management. | Nominal |

| Variables | Definition | Elements | Scale |
|---------------------------------|---|--|---------|
| Financial Instability (ACHANGE) | Financial instability is a condition where the fluctuations in a company's finances occur due to disruptions in the company's main activities, triggering a financial crisis (Raz et al., 2012). | $ACHANGE = \frac{Asset\ Total_t - Asset\ Total_{t-1}}{Asset\ Total_{t-1}}$ <p>The value of ACHANGE is absolute.</p> | Ratio |
| Ineffective Monitoring (BDOUT) | Ineffective monitoring is a condition where the oversight function does not operate effectively within an organization due to the dominance of control and ineffective internal management (AICPA, 2003). | $BDOUT = \frac{Number\ of\ independent\ commissioners}{Total\ of\ board\ of\ commissioners}$ | Ratio |
| Change in Auditor (AUDCHANGE) | Change in auditors is one of the ways companies reduce the potential detection of financial statement fraud (Lou and Wang, 2009). | Dummy variable, Code 1, if there is a change in the public accounting firm. Code 0, if there is no change in the public accounting firm. The period used is t-1. The decision to change the auditor is determined by the General Meeting of Shareholders. | Nominal |
| Change in Director (DCHANGE) | Change in director is the transfer of duties, positions, functions, and roles from the previous board of directors to the new board of directors (Pamungkas and Utomo, 2018). | Dummy variable, Code 1, if there is a change in the board of directors, and Code 0, if there is no change in the board of directors. The period used is t-1. The decision on the change in director is determined by the General Meeting of Shareholders. | Nominal |
| CEO duality (CEODUAL) | CEO duality is an important indicator in the governance of an organization and reflects the CEO's strength in contributing to the company's performance (Dalton et al., 1999) | Dummy variable, Code 1, if there is a family relationship between the board of directors and the board of commissioners during 2018-2022. Code 0, if there is no family relationship between the board of directors and the board of commissioners during 2018-2022. | Nominal |
| Political Connection (POLCON) | Political connections can be found in organizations or companies whose directors hold positions as political officials, former government officials, or military officials (Osazuwa, 2016) | Dummy variable, Code 1, if the CEO, board of directors, and/or board of commissioners have political connections (involvement with political parties, government officials, military officials, former government officials, or former military officials) during 2018-2022. Code 0, if the CEO, board of directors, and/or board of | Nominal |

| Variables | Definition | Elements | Scale |
|-----------|------------|---|-------|
| | | commissioners do not have political connections (involvement with political parties, government officials, military officials, former government officials, or former military officials) during 2018-2022. | |

Source: Literature review from previous research (2024).

The dependent variable of this study is the potential for financial statement fraud, proxied by the Eckel index. The Eckel index is calculated by dividing the coefficient of variation of profit changes by the coefficient of variation of revenue changes. This index is used to determine whether a company belongs to the group that engages in earnings management or not. A dummy variable is used to determine if a company engages in earnings management. If the value of $CV\Delta I < CV\Delta S$, then the company can be classified as a company that practices earnings smoothing and will be assigned code 1. If the value of $CV\Delta I > CV\Delta S$, then the company does not practice earnings smoothing and will be assigned code 0.

The independent variable of this study is financial stability, which is measured by the total asset turnover ratio. The total asset turnover ratio is a ratio used to measure the extent to which a company utilizes its assets to depict its financial stability. The second independent variable used in this study is ineffective monitoring, which employs the ratio of the independent board of commissioners. The ratio of the independent board of commissioners is a ratio used to measure the proportion of the board of commissioners' members who are considered independent from management and majority shareholders. The third independent variable in this study is the change in auditor, measured using a dummy variable. The fourth independent variable in this study is the change in director, also measured using a dummy variable. Next, the fifth independent variable in this study is CEO duality, measured using a dummy variable. The last independent variable in this study is political connection.

This study will use descriptive statistical analysis to calculate the minimum value, maximum value, mean, and standard deviation. After that, hypothesis testing will be conducted using logistic regression. The research model is as follows:

$$ECKEL = \alpha + \beta_1 ACHANGE + \beta_2 BDOUT + \beta_3 AUDCHANGE + \beta_4 DCHANGE + \beta_5 CEODUAL + \beta_6 POLCON + \varepsilon$$

ECKEL is the potential for fraudulent financial reporting, measured using the Eckel Index, α is a constant in the regression model, and $\beta_1 - \beta_6$ are regression coefficients that indicate the influence of each independent variable on ECKEL. ACHANGE is the financial instability of the company, which reflects the company's ability to maintain a healthy financial condition. BDOUT is the effectiveness of oversight, measured by the presence of an independent board of commissioners or an active audit committee. AUDCHANGE is the change of external auditors, which may indicate management's efforts to seek more permissive auditors. DCHANGE is a change of directors, which can be an indicator of a change in strategy or potential manipulation of financial statements. CEODUAL is CEO duality. It is the condition where the CEO also serves as the chairman of the board of directors, potentially

reducing the effectiveness of oversight. POLCON is a political connection, which refers to the company's ties with parties that have political influence, which can affect transparency and accountability. ε is the error term, which reflects other variables not included in the model but can affect ECKEL.

The goodness of fit test for the regression model in this study uses Hosmer and Lemeshow's Goodness of Fit Test. Next, the Nagelkerke R Square coefficient determination test is conducted to estimate the extent to which the regression model can predict the varying dependent variable. The fraud hexagon analysis used as an approach in this research can reveal the factors influencing banking companies to commit fraudulent financial reporting. The results of this analysis can ultimately be used as information for banking companies to make improvements and mitigate risks in corporate governance sustainably in the future, thereby increasing stakeholder trust and enhancing the reputation of banking companies.

4. RESULTS AND DISCUSSION

The sample in this study uses the purposive sampling method with certain criteria for its determination. Based on the predetermined criteria, the sample for this study is as follows:

Table 2. Sample Selection

| No. | Criteria | Total |
|-------------------------------------|---|------------|
| 1. | Banking companies listed on the Indonesian Stock Exchange from 2018 to 2022 | 47 |
| 2. | Outlier | (7) |
| Total | | 40 |
| Sample year-firm (2018-2022) | | 200 |

Source: Indonesian Stock Exchange (2024).

The sampling in this study uses a purposive sampling method with specific criteria for its determination. Based on the established criteria, the sample for this study is as follows:

Table 3. Descriptive Statistics

| Variable | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------|-----|---------|---------|--------|----------------|
| ACHANGE | 200 | 0.0017 | 2.0124 | 0.1566 | 0.2255 |
| BDOUT | 200 | 0.3333 | 0.7500 | 0.5675 | 0.0826 |
| AUDCHANGE | 200 | 0 | 1 | 0.19 | 0.397 |
| DCHANGE | 200 | 0 | 1 | 0.56 | 0.497 |
| CEODUAL | 200 | 0 | 1 | 0.14 | 0.348 |
| POLCON | 200 | 0 | 1 | 0.39 | 0.490 |
| ECKEL | 200 | 0 | 1 | 0.53 | 0.500 |

Source: Data Processed by the Researcher (2024).

The results of the descriptive statistical test conducted show that the number of data in this study (n) is 200. This study also uses the feasibility test of the logistic regression model using the Hosmer and Lemeshow Test and the Overall Regression Model Goodness of Fit Test Results. Table 4 presents the results of the test.

Table 4. Hosmer and Lemeshow's Test

| <i>Hosmer and Lemeshow's Test</i> | | | |
|-----------------------------------|------------|----|-------|
| Step | Chi-Square | df | Sig. |
| 1 | 6.036 | 8 | 0.643 |

Source: Data Processed by the Researcher (2024).

Table 5. Overall Regression Model Goodness of Fit Test Results

| Block Number = 0 | Block Number = 1 |
|--------------------------|--------------------------|
| <i>-2 Log Likelihood</i> | <i>-2 Log Likelihood</i> |
| 276.278 | 265.933 |

Source: Data Processed by the Researcher (2024).

The results of Hosmer and Lemeshow's Test indicate that the Sig. Value of 0.284 > 0.05, which means that the regression model is deemed suitable for use in research related to the potential occurrence of financial statement fraud in banking sector companies. Next, the goodness-of-fit test of the regression model was conducted to determine whether the independent variables in the model can significantly improve the model's fit. From the overall regression model goodness of fit test results presented, the -2 log likelihood value before the independent variables were included (Block Number = 0) was 276.278, and the -2 log likelihood value after the independent variables were included (Block Number = 1) was 266.195. It can be concluded that the -2 log likelihood value decreased by 10.083 after the independent variables were included in the model. This decrease occurred due to the addition of independent variables such as financial stability, ineffective monitoring, change in auditor, change in director, CEO duality, and political connection into the regression model, thereby indicating a better regression model.

Table 6. Coefficient of Determination Test

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|------|----------------------|----------------------|---------------------|
| 1 | 265.933 ^a | 0.050 | 0.067 |

Source: Data Processed by the Researcher (2024).

The result of the coefficient of determination test yielded a Nagelkerke R Square value of 0.066 or 6%. This amount indicates that the independent variables in this study can explain the dependent variable by 6%. Thus, 94% of other independent variables can explain the dependent variable outside of this research model. Table 2 below presents the results of the hypothesis testing of this study using logistic regression analysis:

Table 7. Hypothesis Results

| Variable | B | S.E. | Wald | df | Sig. | Results |
|-----------|--------|-------|-------|----|-------|---------------|
| ACHANGE | 2.217 | 1.018 | 4.742 | 1 | 0.029 | Supported |
| BDOUT | 1.324 | 1.796 | 0.543 | 1 | 0.461 | Not supported |
| AUDCHANGE | -0.366 | 0.372 | 0.966 | 1 | 0.326 | Not supported |
| DCHANGE | 0.349 | 0.303 | 1.332 | 1 | 0.248 | Not supported |
| CEODUAL | -0.169 | 0.430 | 0.154 | 1 | 0.695 | Not supported |
| POLCON | 0.369 | 0.300 | 1.509 | 1 | 0.219 | Not supported |

Source: Data Processed by the Researcher (2024).

From the results of the hypothesis testing above, H1 is supported, which states that financial instability has a positive effect on the potential for financial statement fraud. The results of this test are also consistent with previous research (Octani et al., 2022; Thamlim and Reskino, 2023). These results indicate that financial instability within the company can lead to potential financial statement fraud. The unstable condition of the company's assets can result in total asset changes that are either too high or too low over a certain period. This can certainly exacerbate the agency problem between management and investors, as it may put pressure on management to commit fraud in financial statements due to their inability to meet the expectations desired by investors. If the company's total assets decline, management is considered incapable of managing the company's assets, which will certainly affect the company's cash flow and investments. An unstable condition of the company's assets can result in changes in total assets that are either too high or too low over a certain period. This can certainly exacerbate the agency problem between management and investors, as it can put pressure on management to commit fraud in the financial statements due to their inability to meet the expectations of investors. Therefore, pressure from investors to achieve high financial targets in conditions of unstable assets can drive management to commit fraud. From the explanation, it can be concluded that financial instability has a positive effect on the potential for financial statement fraud.

The results of testing H2 show that the hypothesis is not supported, which means ineffective monitoring does not affect the potential for financial statement fraud. This shows that the most important aspect of monitoring a company is not the number of independent commissioners but rather the performance provided by the independent commissioners. Independent commissioners are tasked with implementing good corporate governance principles with the hope of minimizing the occurrence of financial statement fraud. The small number of independent commissioners in a company can indicate ineffective oversight, which may potentially lead to fraudulent practices. This happens because the presence of independent commissioners can support both financial and non-financial monitoring of the company conducted by management. Whether the number of independent commissioners is large or small, the oversight steps are still carried out objectively and are not influenced by any parties, thus not posing a potential for financial statement fraud practices. This is because the company has already proportioned the number of independent commissioners in each field necessary for overseeing the

company. This also affects the availability of company resources to provide training costs and salaries for independent commissioners. The independent board of commissioners with good expertise and capabilities will have a positive impact on performance in carrying out their duties and responsibilities. The company has essentially calculated the ideal number of independent commissioners by considering the oversight needs within the company, thereby reducing the potential for financial statement fraud. The most important thing for overseeing a company is not based on the number of independent commissioners but on how the company prepares the board of commissioners with a focus on good performance, so that oversight can continue effectively within the company. The results of this test are also consistent with previous research (Handoko and Tendean, 2021; Octani et al., 2022).

Meanwhile, the results of testing H3 indicate that the hypothesis is not supported, which means that a change in auditor does not affect the potential for financial statement fraud. This indicates that the change of auditors in a company is not due to an intention to conceal fraudulent practices, but rather because the company aims to comply with the Minister of Finance Regulation No. 17/PMK.01/2008 and is dissatisfied with the previous auditor's performance, leading to the decision to replace the auditor. Many factors can influence a company to change its auditor, and they are not solely related to fraud findings. Compliance with regulations and dissatisfaction with auditor services can be factors that explain why a company changes auditors rather than indicating that the company is covering up fraudulent practices. The results of this test are also consistent with previous research (Hidayah and Devi Saptarini, 2020; Kurniawati, 2021a, 2021b; Widyatama and Setiawati, 2021; Jannah and Praptoyo, 2023; Juniarty and Kurniawati, 2025).

The results of test H4 indicate that the hypothesis is not supported, meaning that a change in director does not affect the potential for financial statement fraud. This indicates that changes in the board of directors can occur because the company wants to replace the directors with more competent performance, and several other factors, such as personal resignations, the end of their term, and honorable dismissals. Some of these factors can trigger a change in the board of directors to prevent a vacancy in the board's functions within a company, so this cannot be indicated as an attempt to conceal fraud.

Wolfe and Hermanson (2004) state that a person's position or role within an organization can provide the ability to take advantage of opportunities to commit fraud in financial statements. The board of directors, as the leadership, bears a heavy burden on the company and has the opportunity to know all detailed information about the company. This can certainly be a factor that has the potential to lead to financial statement fraud practices. The increasingly frequent changes in the board of directors may indicate that the company is dismissing directors who are aware of the fraudulent practices being carried out. However, many companies change their directors not to cover up fraudulent practices but due to various factors that have been carefully considered.

Throughout the years 2018-2022, changes in the board of directors occurred in the company largely due to resignations with respect, followed by personal resignations, and finally the expiration of the board of directors' term. These factors can trigger changes in the board of directors to prevent a vacancy in the board's functions within a company, so this cannot be indicated as an attempt to conceal

fraud. The results of this test are also consistent with previous research (Handoko and Tendean, 2021; Kurniawati, 2021a, 2021b; Octani et al., 2022; Jannah and Praptoyo, 2023).

The results of test H5 indicate that the hypothesis is not supported, which means that CEO duality does not affect the potential for financial statement fraud. This shows that family relationships do not influence work, as the board of directors and the board of commissioners will continue to work professionally to achieve the company's goals. The family relationships that exist between the board of directors and the board of commissioners do not affect the emergence of potential fraud within the company. The board of directors continues to carry out its duties and responsibilities without the influence of those around them, so the potential for financial statement fraud will not arise in the company. The results of this test are also consistent with previous research (Fadhilah *et al.*, 2021). The high ego possessed by a leader will lead to arbitrary actions that they can take. Ego can be seen through CEO duality, which provides an indication of the CEO's dominance and superiority within the company. According to Widyatama and Setiawati (2020), the depiction of dominance and superiority will lead to an arrogant or haughty attitude toward the rights held by a CEO. In this study, CEO duality is illustrated by the existence of family relationships between the board of commissioners and the board of directors. Family relationships can impact company performance because they influence agency problems that may lead to conflicts of interest. This occurs because the board of directors, which has significant control over the overall activities of the company, feels free from oversight and does not need to adhere to rules and policies due to its familial ties with the board of commissioners. However, looking at the results of the hypothesis testing in this study, the familial relationship between the board of directors and the board of commissioners does not always indicate the potential for fraud. This is not in line with the previous research (Widyatama and Setiawati, 2021), which states that CEO duality is associated with the practice of fraud.

The board of directors, as leaders responsible for organizing all company activities, must certainly uphold a high level of independence and professionalism. Independence and professionalism are the two main pillars that the board of directors must possess in order to carry out their duties effectively and responsibly. The familial relationship between the board of directors and the board of commissioners does not influence the emergence of potential fraud within the company. The board of directors continues to perform its duties and responsibilities without influence from those around them, so the potential for financial statement fraud will not arise in the company. The results of this test are also consistent with previous research conducted by Fadhilah et al. (2023). From this explanation, it can be concluded that CEO duality does not affect the potential for financial statement fraud.

Finally, the results of the H6 test were not supported, which means that political connection does not influence the potential for financial statement fraud. This indicates that the political connections established between companies and the government will encourage companies to gain support in achieving sustainable growth. The advantage certainly has a positive impact on the company, as it facilitates management collaboration with other parties. When the company realizes that political connections can be exploited, this situation will increase the potential for fraudulent practices. However, the political connections established between the

company and the government do not always indicate that the company is trying to exploit them to commit fraud. The existence of political connections actually has a positive impact on the company because it opens opportunities for achieving sustainable growth. Companies with good political connections can obtain important and up-to-date information about policies and regulations that impact their business. This allows the company to adapt to changes more quickly and take strategic steps to maximize long-term profits. Political connections are considered a way for companies to gain additional support and grow over time.

The existence of a relationship between the government and companies results in a low value of financial statement fraud (Ufiana and Triyanto, 2022). This is because companies feel monitored and have good regulations, so they must be proactive in complying with government rules and policies. Companies with strong political connections have the responsibility to actively implement good governance mechanisms. The application of good governance can provide many benefits, including maintaining positive relationships with the government, building investor trust, and reducing the potential for financial statement fraud within the company. Companies with political connections will be more cautious in committing fraud due to the fear of greater legal and reputational consequences. Thus, companies with well-established political connections have the potential to gain support in achieving sustainable growth. The results of this test are also consistent with previous research (Ufiana and Triyanto, 2022; Al-Rizky, Indrijawati and Juwita Purisamy, 2024). From the explanation, it can be concluded that political connection does not affect the potential for financial statement fraud.

5. CONCLUSION

Based on the discussion above, it can be concluded that financial stability has a positive effect on the potential for financial statement fraud, while ineffective monitoring, change in auditor, change in director, CEO duality, and political connection do not affect the potential for financial statement fraud. This indicates that the ratio of total asset changes can be used as a means to detect the potential for financial statement fraud in banking companies, particularly in this study. Therefore, every party that requires financial statements to make or take decisions needs to analyze in detail and be vigilant about the company's financial stability over time. This needs to be done so that users of financial statements do not make incorrect long-term decisions for the company. In addition to in-depth analysis, the audit stage must also be conducted on the financial statements to detect early signs that could potentially lead to financial statement fraud. Ultimately, the information presented in the financial statements is a fair representation of the accurate and expected financial situation and does not mislead the users of the financial statements.

The results of this study indicate that financial instability has a positive effect on the potential for financial statement fraud. Financial instability becomes one of the factors that illustrate the pressure of committing fraud. The pressure that arises will influence management to make various efforts so that the company's finances appear stable over time and can meet the desires of investors. A high rate of change in total asset ratios does not rule out the possibility that management is attempting to manipulate the preparation of financial statements. Therefore, users of financial

statements need to conduct in-depth analysis before making decisions, and financial statement audits must also be carried out to detect early signs that could potentially lead to financial statement fraud.

This study has several limitations. The proxy used to measure ego, namely CEO duality, is difficult to verify its accuracy. The tasks and responsibilities borne by the board of directors and commissioners are certainly very complex, so the performance carried out by the directors cannot be directly observed. When a director works in their daily routine at the company, the situation cannot depict whether the director is actually behaving as if they are showing arrogance or not. Additionally, CEO duality is only seen from the existence of family relationships between the board of commissioners and the board of directors, so there is still a possibility that the company is family-owned, but the child does not want to continue, thus opening their own company under the parent company. Furthermore, the board of directors who actually have family relationships with the board of commissioners in the same company may not necessarily want to disclose this in the annual report because they feel that it is a privacy issue that could distract from their performance.

Suggestions for future research include using other independent variables that can serve as alternative proxies for the fraud hexagon elements. The rationalization element can be used in CAR because this ratio is a measure of bank health that can be rationalized in certain situations. For the capability element, considering CEO Expertise as a proxy can be beneficial because the CEO's expertise can better reflect capability. As for the Ego element, content analysis of the annual report can be used to better illustrate management behavior. The collusion element can use cooperation with the government to further explore the essence of actual cooperation with the government that may trigger the possibility of collusion.

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