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Article

Can Corporate Governance Structures Reduce Fraudulent Financial Reporting in the Banking Sector? Insights from the Fraud Hexagon Framework

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Abstract

This study investigates the determinants of Fraudulent Financial Reporting (FFR) in the banking sector from 2020 to 2024 by integrating the Fraud Hexagon framework within a risk and financial management perspective. The research employs a robust empirical analysis using financial and governance data to examine six key elements—pressure, opportunity, rationalization, capability, arrogance, and collusion—that shape fraud risk behavior in financial institutions. The findings reveal that internal risk pressures, such as high leverage and performance demands, significantly influence fraud incentives, whereas ineffective monitoring mechanisms, auditor switching, chairperson changes, and CEO visibility show limited effects on FFR. Moreover, cooperation with government entities does not automatically reduce fraud risk unless supported by strong and independent risk governance structures. The study highlights the crucial role of corporate governance mechanisms, including audit committees, institutional ownership, and internal control systems, in mitigating fraud risk and enhancing financial reporting integrity. From a policy perspective, the research provides strategic insights for regulators and supervisory bodies—such as the Financial Services Authority (OJK)—to strengthen governance frameworks, enforce stricter disclosure requirements, and integrate fraud risk management practices into corporate oversight. Overall, the study contributes to the literature on financial governance by demonstrating how effective risk management and governance alignment can reduce fraudulent reporting and improve the sustainability of the banking sector.

Keywords: fraudulent financial reporting; corporate governance; fraud hexagon framework; audit committee; institutional ownership

1. Introduction

Fraudulent Financial Reporting (FFR) has become a controversial topic around the world due to the huge losses suffered by companies after crimes are uncovered (Zin et al., 2020). The occurrence of FFR is driven by a company's obligation to publish financial statements at each reporting period. This obligation then leads to fraudulent activities within a company that seeks to present its financial statements in a favorable light to its users, resulting in the statements not accurately reflecting the actual financial condition (Achmad, Ghozali, Rahardian, et al., 2022a; Biduri & Tjahjadi, 2024a). The Wirecard case reflects the largest fraud in German history. The case then became a very important urgency because the reporting of € 1.9 billion in cash never existed in the financial statements, the audit company (EY) in charge of the Wirecard company also failed to find signs of fraud risk, which ultimately caused losses to many parties (bbc.com, 2022). Another case often occurs at Silicon Vally

Bank (SVB), a bank from the United States with fraudulent fraud characterized by the concealment of material information that should be disclosed such as a decrease in the market value of the bank's bond portfolio, so that investors do not know that the actual value of bank assets has decreased. The events that befell Wirecard and SVB then put pressure on financial authorities not to underestimate medium and non-systematic banks, given the urgency of the importance of auditor supervision in overcoming corporate problems that could stabilize the global economic system.

The background to this research is the increasing number of fraudulent financial report cases in the banking industry, which has raised concerns about the reliability of financial information and the financial system's integrity. Fraud is a serious phenomenon that not only impacts companies but also has a widespread impact, damaging government institutions and undermining the pillars of the national economy. Cases of fraud in financial reporting are still rampant around the world, especially in Indonesia. Data reported by the Report to the Nations (RTTN) by ACFE shows that in 2020, the average loss due to false financial reporting was US\$ 954,000. Although the frequency of such cases is relatively low, the impact of the losses incurred is significant (ACFE, 2020). In Indonesia, fraud cases often occur, specifically at Maybank in 2020. This case occurred at the Cipulir branch, causing losses of up to Rp 22.8 billion (Voi.id, 2020). Customer funds that should have been managed professionally were misused for personal gain, causing significant losses and tarnishing public trust in banking institutions (Achmad, Ghozali, Rahardian, et al., 2022a). The potential for FFR at Regional Development Banks (BPD) reflects weak governance and oversight, with the KPK finding Rp1.26 trillion in irregularities due to practices such as document manipulation and fictitious loans (Bloomberg Technoz, 2025). In response to these issues, strengthening the integrity of financial reporting through robust governance mechanisms particularly the moderating role of audit committees and institutional ownership can mitigate financial statement fraud and enhance the credibility of financial information.

The fraud hexagon theory describes six factors that contribute to FFR, which can include six main elements, namely pressure, capability, collusion, opportunity, rationalization, and arrogance. Several studies related to fraud show inconsistent results regarding variables that can minimize FFR actions. As with the results of research conducted by (Alfargo & Mabur, 2022a; Indrijawati et al., 2025a; Junus et al., 2025; Naldo & Widuri, 2023; Sari et al., 2022; Setiawan & Soewarno, 2025a, 2025c; Sudrajat et al., 2023a; Taqi & Ageng, 2024; Thaufur, 2025a) pressure, opportunity, rationalization, capability, and arrogance positively influence the occurrence of fraud. However, studies by (Achmad et al., 2024; Bader et al., 2024a; Lastanti et al., 2022; Oktaviany & Reskino, 2023a; Sari et al., 2024a; Sudrajat et al., 2023a) found contradictory results, where these variables negatively influenced fraudulent practices, reflecting inconsistency with previous findings. Additionally, collusion as a new variable in the fraud hexagon theory also shows varying findings. Some researchers suggest that collusion has a positive contribution in influencing fraudulent behavior (Alfargo & Mabur, 2022b; Bader et al., 2024b; Handoko & Salim, 2022; Indrijawati et al., 2025b; Oktaviany & Reskino, 2023b), while others find that collusion has a negative influence on fraudulent behavior (Achmad, Ghozali, Rahardian, et al., 2022b; Sari et al., 2024b; Setiawan & Soewarno, 2025b; Sudrajat et al., 2023b).

Imbalances in the implementation of corporate governance caused by information asymmetry can contribute to financial fraud (Li, 2025). Corporate governance is essential in preventing FFR, especially in the banking sector, vulnerable to financial statement manipulation. Some companies use corporate governance mechanisms to strengthen their image and credibility after discovering fraud (Kassem, 2022). The existence of corporate governance, such as audit committees and institutional ownership, is another critical factor in minimizing such fraud. Based on research (Sari et al., 2022, 2024a) Shows that the results of the audit committee as a moderating variable are capable to influence several aspects of the fraud hexagon, such as the nature of the industry, change of directors, financial stability, and political connections, which can be interpreted to mean that the audit committee is not merely a symbol and governance practice, but can also be used as a tool to minimize financial reporting fraud other contexts, institutional ownership plays a second important role in reducing fraud. As consistent with the findings (Kassem, 2022), Institutional ownership negatively

impacts fraud. This may indicate that institutional ownership also plays an active role in weakening fraud, which ultimately pressures management to act more transparently and responsibly in fulfilling their obligations.

The main difference underlying this study lies in the use of moderating variables. This study combines audit committees with institutional ownership as moderating variables in analyzing the relationship between the fraud hexagon theory and FFR. Khamainy et al., (2022) only conducted research using components of the fraud diamond theory to prove the components that trigger Fraud. On the other hand, research (Achmad, Ghozali, & Pamungkas, 2022; Alfarago & Maburur, 2022a; Bader et al., 2024a; Indrijawati et al., 2025a; Junus et al., 2025; Naldo & Widuri, 2023; Sahla & Ardianto, 2023; Setiawan & Soewarno, 2025a, 2025c; Sudrajat et al., 2023a) only uses fraud theory as the basis for its research and does not include corporate governance variables in his research. Meanwhile (Achmad et al., 2024; Oktaviany & Reskino, 2023a; Sari et al., 2022, 2024a) Only using the audit committee as a variable moderator of the FFR. In other contexts Taqi & Ageng (2024) there has been a novelty in his research by using institutional ownership as a moderating variable, but the research is still limited to the scope of triangle theory. The imbalance of results from previous studies and the urgency of the increasingly prevalent FFR have prompted researchers to conduct further research to analyze the factors that can influence this phenomenon.

This study contributes to the fraud literature by extending the application of the Fraud Hexagon Theory to the Indonesian banking sector, a context where fraudulent financial reporting (FFR) can have significant systemic implications. While the Fraud Triangle and Fraud Diamond models have been extensively utilized in prior research, they overlook critical dimensions such as ability, arrogance, and external pressure. These factors are especially relevant in the banking industry, where managers possess sophisticated technical expertise, demonstrate high confidence in complex financial decision-making, and face substantial regulatory and market pressures. Incorporating these dimensions, the Fraud Hexagon framework offers a more holistic understanding of the multifaceted nature of fraud risk in emerging market financial institutions.

Existing studies on FFR have predominantly concentrated on internal managerial and financial determinants, often neglecting the psychological, structural, and institutional dimensions that drive fraudulent behavior. Traditional theoretical approaches, including the Fraud Triangle and Fraud Pentagon, have not adequately captured the interplay between cognitive biases, organizational culture, and governance mechanisms that foster fraud within the banking context. Notable global cases such as Wirecard, Wells Fargo, and the 2008 financial crisis illustrate how fraudulent conduct in financial institutions can destabilize both domestic and international financial systems.

This study represents one of the few empirical investigations that evaluate the relevance and explanatory power of the Fraud Hexagon theory in explaining FFR within the banking industry. Furthermore, it emphasizes the critical moderating role of corporate governance mechanisms—specifically, audit committees and institutional ownership—in mitigating fraudulent reporting practices. These governance structures enhance oversight, strengthen ethical accountability, and reduce opportunities for financial misrepresentation.

By integrating behavioral, organizational, and governance perspectives, this research aims to provide a comprehensive model for detecting and preventing FFR in emerging market banks. The findings are expected to offer strategic insights for regulators and policymakers, particularly in designing preventive governance frameworks that enhance transparency and financial integrity across the global banking system.

2. Materials and Methods

The Fraud Hexagon Theory is an evolution of previous theories related to the causes of fraud. It begins with the Fraud Triangle by Cressey (1953), which includes pressure, opportunity, and rationalization. This was later expanded into the Fraud Diamond by Wolfe & Hermanson (2004) with the addition of capability, and further refined into the Fraud Pentagon by Crowe (2011), which added competence and arrogance. The theory was perfected by Vousinas (2019) through the Fraud Hexagon

Theory, which introduced collusion as the sixth factor, making the model more comprehensive in explaining the causes of FFR (Desviana et al., 2020; Vousinas, 2019). The theory explains that fraudulent actions are driven not only by pressure and opportunity but also by the perpetrator's ability, self-justification, overconfidence, and collaboration with other parties. If all these factors align, the potential for fraud within an organization, particularly in financial reporting, increases significantly (Sudrajat et al., 2023c; Thaifur, 2025b).

2.1. Determinant Fraud Hexagon on FFR

External pressure on companies, known as external pressure (Achmad et al., 2023), can stem from various sources, such as shareholder demands, debt obligations, market expectations, and macroeconomic conditions. A common indicator used to measure external pressure is leverage, which is the proportion of total debt to total assets. External pressure arises when a business struggles to repay high-risk debt. The higher the credit risk, the more hesitant lenders are to extend credit (Achmad et al., 2023). Higher leverage ratios increase financial pressure on companies to meet debt obligations (Lin., 2023), which can ultimately drive management to commit financial statement fraud—such as recognizing revenue prematurely or concealing expenses—to create a healthy financial image and avoid reputational damage or creditor sanctions (Viana et al., 2022; Sari et al., 2022). However, in the context of strong corporate governance, companies with robust oversight structures, such as active audit committees and transparent debt policies, can mitigate this pressure and restrain management's tendency to commit fraud. Research by Gill et al. (2011) also shows that good governance can reduce the risk of unhealthy debt practices.

The opportunity aspect in the Fraud Hexagon reflects conditions where weak oversight systems create gaps for management to manipulate financial statements. Ineffective monitoring refers to the inability of internal oversight mechanisms, such as the board of commissioners, audit committees, or internal control systems, to adequately detect and prevent fraudulent actions. Research by Riduan and Arif (2024) states that when a company's oversight system is not functioning optimally, management has greater opportunities to manipulate financial statements with a low risk of detection. This is reinforced by the findings of Rostami and Rezai (2022), who note that weak oversight by supervisory boards leads to low reporting accountability. In the context of corporate governance, ineffective monitoring indicates weak accountability and transparency, creating opportunities for fraud (Saputra & Sari, 2023).

Based on the Fraud Hexagon Theory (Vousinas, 2019), auditor switching is linked to the rationalization aspect, where management justifies manipulative actions by selecting more permissive or cooperative auditors for deviant reporting. Research by Achmad et al. (2023) shows that auditor switching remains a factor enabling fraud if not accompanied by strict oversight. As revealed by Ghaisani & Supatmi (2023), "auditor switching can act as a rationalization strategy for concealing fraudulent activities, where new auditors may lack sufficient understanding of the company's history, making it easier for management to mask prior irregularities." Companies may exploit this situation to obscure fraud known by the previous auditor, thus diminishing the effectiveness of financial oversight.

Sari et al (2022) and Naldo & Widuri (2023) emphasize that auditor changes increase fraud risk, particularly when governance does not actively involve the audit committee in the auditor evaluation process. Research by Rizkiawan & Nugroho (2022) shows that auditor transitions often create oversight gaps. Under good corporate governance, the audit committee plays a critical role in overseeing auditor switching to prevent management from using it as a justification.

A new CEO has the authority to redesign company strategies and accounting policies. During this transition, lax oversight can be exploited for reporting manipulation (Dewi & Siregar, 2023). Wulandari & Khafid (2022) state that ambitious new CEOs can rationalize fraud as part of restructuring. Masrurroh et al. (2022) also highlight the lack of initial controls as a trigger for fraud.

From a corporate governance perspective, leadership transitions should be closely monitored by the board and nomination committees to avoid dominance by new management. Studies by Lee and

Bose (2025) show that formal and transparent CEO succession planning can reduce negative market reactions to leadership change announcements. Additionally, global research by Finance Research Letters (2024) finds that increased CEO turnover frequency only positively impacts short-term performance unless supported by strong corporate governance structures. Furthermore, Wang et al., (2023) state that forced CEO turnover reflects board oversight failures—proven to damage director reputations and reduce shareholder trust through increased voting pressure.

The arrogance aspect in the Fraud Hexagon describes the excessive confidence of fraud perpetrators that their actions will not be detected. In this context, CEO Picture reflects a strong drive to maintain personal image through media exposure, symbolic awards, and public visibility (Capalbo et al., 2018). Rijssenbilt et al. (2013) and Devi et al. (2021) show that image-oriented CEOs tend to conceal actual financial conditions to preserve external reputation. This drive to maintain image can rationalize fraud, especially under high performance pressure.

To prevent personal dominance in decision-making, effective corporate governance must emphasize limiting executive power through strict oversight by the board of directors and audit committees. Biduri (2023) study confirms that CEO arrogance is a major determinant of fraud, even in ethics-driven industries. CEOs with high symbolic or social status may exploit their positions to manipulate financial reporting, especially under weak or permissive governance systems. This underscores the need for institutional controls on image-driven practices to ensure reporting integrity and corporate accountability.

Studies by Salehi et al. (2023) state that politically connected companies are more likely to present financial information that does not reflect actual conditions as a form of political protection. This is reinforced by Ahmad et al (2022), who find that connections with government officials are often used as shields to avoid strict audits and legal sanctions. Meanwhile, Struckel et al. (2022) note that companies partnering with state institutions in strategic projects face short-term performance pressures that encourage manipulative behavior.

In healthy corporate governance practices, government involvement must be approached cautiously, as it can create conflicts of interest and reduce managerial independence. Biduri (2023) finds that political affiliations are a major determinant of increased fraud risk, especially when internal controls and audit functions are systematically weakened. Similarly, Ariningrum & Diyanty (2017) explain that political connections often diminish the effectiveness of boards of commissioners as loyalty shifts from professionalism to external interests. Therefore, strong corporate governance is key to limiting the excesses of corporate-government power relations by enhancing transparency, audit committee roles, and independent external oversight.

H1: Leverage has a positive effect on financial statement fraud.

H2: Ineffective monitoring has a positive effect on financial statement fraud

H3: Auditor switching has a positive effect on financial statement fraud.

H4: CEO change has a positive effect on financial statement fraud.

H5: CEO Picture has a positive effect on financial statement fraud.

H6: Corporate with Government has an effect on financial statement fraud.

The Moderating Role of Audit Committee on FFR

In the governance context, the Audit Committee plays a strategic role in preventing fraud by overseeing financial reporting processes, ensuring auditor independence, and evaluating management accounting policies. An effective audit committee improves audit quality (Hassan et al., 2025), enhances reporting transparency (Babalola et al., 2025), and suppresses earnings manipulation (Badolato et al., 2014). Below are hypotheses based on the six aspects of the Fraud Hexagon and the moderating role of the Audit Committee:

High leverage increases financial pressure on companies and may drive management to commit fraud to maintain financial image (Achmad et al., 2023; Lid ., 2023; Viana et al., 2022). However, an active audit committee can mitigate the impact of leverage on fraud by strengthening financial oversight (Badolato et al., 2023). A competent and independent audit committee can objectively

evaluate financing structures and debt risks while pressuring management to remain transparent in reporting.

Hassan et al. (2025) emphasize that the financial expertise of audit committee members is critical in detecting fraud symptoms arising from leverage pressure. With strong governance and coordination with external auditors, the audit committee ensures financing strategies do not become loopholes for manipulative actions (Wulandari & Maulana, 202; Yaumil & Thaifur, 2025).

Ineffective monitoring is a key dimension in the Fraud Hexagon, reflecting weak oversight of managerial activities, which creates opportunities for fraud. When internal oversight mechanisms, such as the board of commissioners or internal control systems, are suboptimal, management has greater leeway to manipulate financial statements (Biduri, 2023). In such conditions, an effective audit committee is essential to close these oversight gaps.

The Audit Committee serves as a secondary control mechanism that compensates for weak internal controls by conducting in-depth evaluations of financial statements, external audits, and compliance with accounting principles. Hassan et al. (2025) show that audit committees with high competence and independence can mitigate the effects of weak internal monitoring. Additionally, Babalola et al. (2025) find that the intensity and quality of audit committee meetings correlate positively with their ability to detect early fraud indicators. Thus, an active and integrity-driven Audit Committee can moderate the influence of ineffective monitoring on financial statement fraud.

Auditor switching can be exploited by management to rationalize manipulation, especially when new auditors are unfamiliar with the company's risk profile (Achmad et al., 2023; Naldo & Widuri, 2023). A strong audit committee can oversee the switching process to prevent it from being used to conceal potential fraud (Quick et al., 2024). The audit committee can also evaluate the independence and track record of new auditors as part of good governance. Research by Sari et al. (2022), Utami & Rahmawati (2024), and Yousewi et al. (2022) shows that auditor transitions without audit committee involvement increase fraud risk. With audit committee involvement, switching becomes more transparent and less prone to manipulation (Nasir & Hashim, 2021; Badolato et al., 2014).

A new CEO brings changes to accounting strategies and policies that can be exploited for fraud, especially during poorly monitored transitions (Biduri & Tjahjadi, 2024; Masruroh et al., 2022). An active audit committee can assess the risks of management changes and evaluate the consistency of financial reporting during transitions (Felix et al., 2024). Wahyuningtyas & Aisyaturrahmi (2022) highlight the importance of the audit committee as a strategic overseer in leadership transitions. The audit committee can assist the board of commissioners in verifying new CEO policies and limiting excessive personal dominance (Yaumil & Thaifur, 2025; Hassan et al., 2025; Gorshunov et al., 2021).

CEOs focused on personal image (CEO Picture) tend to maintain external reputations through various means, including financial statement manipulation. In the Fraud Hexagon, this reflects the arrogance aspect—overconfidence that fraud will go undetected (Capalbo et al., 2018; Rijsenbilt et al., 2013). CEOs with high media exposure often feel immune to oversight, especially under weak control systems. An effective Audit Committee can counterbalance CEO dominance by objectively assessing reporting and company strategies. Hassan et al. (2025) and Badolato et al. (2014) show that audit committees with financial expertise and high independence are better at identifying image-driven manipulative behavior. The audit committee's presence is crucial in preventing reputation-motivated fraud.

In some cases, weak governance enables collusion between management, internal auditors, and boards. A high-quality audit committee—with quad-qualified members (independence, director experience, financial expertise, and share ownership)—has been proven to reduce corruption and financial manipulation (Gorshunov et al., 2021). In weak institutional environments, the audit committee can still protect external interests (Ashiru et al., 2024). The audit committee catalyzes healthy corporate governance. Research by Safitri & Sari (2022), Yaumil & Thaifur (2025), and Mutmainah & Mahmudah., (2025) emphasizes the importance of an active audit committee in

strengthening governance and preventing executive dominance over oversight. The audit committee is a key safeguard for transparency and accountability in organizations.

H7: The Audit Committee moderates the influence of leverage on financial statement fraud.

H8: The Audit Committee moderates the influence of institutional monitoring on financial statement fraud.

H9: The Audit Committee moderates the influence of auditor switching on financial statement fraud.

H10: The Audit Committee moderates the influence of CEO change on financial statement fraud.

H11: The Audit Committee moderates the influence of CEO Picture on financial statement fraud.

H12: The Audit Committee moderates the influence of corporate governance on financial statement fraud.

2.2. *The Moderating Role of Institutional Ownership on FFR*

The role of institutional ownership (IO) is critical. IO can function as an independent, rational external overseer with incentives to promote transparency and financial reporting integrity. Institutional shareholders—such as pension funds, insurance companies, and mutual funds—have collective power to pressure companies against irregularities (Wulandiri & Maulana, 2022). Additionally, institutional ownership actively enhances governance effectiveness, improves disclosure quality, and limits high-risk decision-making (Burns et al., 2010; Bose et al., 2024). Based on the Fraud Hexagon framework and the positive role of institutional ownership, the following hypotheses are formulated:

High leverage creates financial pressure that may drive management to manipulate financial statements (Achmad et al., 2023; Lin, 2023). However, significant institutional ownership (IO) can curb fraud tendencies by demanding financing efficiency and debt management accountability (Wang et al., 2023). IO typically consists of professional investors like pension funds and mutual funds, which have long-term interests in reporting integrity (Bose et al., 2024). Research by Wulandari & Maulana (2025), Burns et al. (2010), and Yaumil & Thaifur (2025) shows that IO plays an effective oversight role in corporate governance. With high IO involvement, companies tend to be more transparent in debt policies and cautious about high-leverage risks that could trigger fraud.

Ineffective monitoring creates fraud opportunities, especially when internal oversight mechanisms like boards of commissioners and audit committees underperform (Riduan & Arif, 2024; Gotelaere & Paoli, 2025). IO can strengthen oversight structures by pressuring companies to ensure control systems work effectively (Yang et al., 2017; Sun., 2024). In corporate governance, IO acts not as passive investors but as strategic oversight agents. Studies by Ramalingegowda et al. (2023), Wulandari & Maulana (2022), Rostami & Rezai (2022) state that IO involvement encourages companies to build accountable and independent internal oversight structures, reducing fraud risks from weak monitoring.

Auditor switching can rationalize fraud, where management replaces auditors to avoid negative audit findings (Achmad et al., 2023; Naldo & Widuri, 2023). IO has a strong interest in audit quality and pressures management not to misuse auditor switching (Ramalinge et al., 2021; Burns et al., 2010). Wahyuningtyas & Aisyaturrahmi (2022), and Wang et al., (2015) state that IO often encourages companies to retain independent, high-quality auditors. With IO oversight, switching becomes more transparent and objective, reducing fraud potential during auditor transitions.

CEO change provides new opportunities for individuals to implement strategies or policies that could be exploited for fraud (Biduri & Tjahjadi., 2024; Prasetyo et al., 2021). IO can limit new CEO authority misuse by pressuring for oversight of leadership transitions through performance evaluations and disclosures (Nie et al., 2024). Research by Wahyuningtyas & Aisyaturrahmi (2022), Wulandari & Maulana (2022), and Yaumil & Thaifur (2025) states that IO actively prevents new CEOs from making extreme decisions that could harm reporting integrity. With institutional investor pressure, new management will be more cautious in restructuring financial statements.

CEOs aggressively promoting their image tend to exhibit manipulative behavior to protect reputations, reflecting arrogance in the Fraud Hexagon (Capalbo et al., 2018; Rijsenbilt et al., 2013). However, institutional investors can counter this tendency by focusing on transparency and long-term results (Ramalingegowda et al., 2021; Nie et al., 2024). Devi et al (2023), Wulandari & Maulana (2022), and Yaumil & Thaifur (2025) reveal that governance pressure from IO effectively curbs CEOs' manipulative tendencies for image purposes. IO helps create an oversight culture that prevents individual dominance in financial reporting decisions.

Unmonitored corporate-government relationships can enable collusion, especially in sensitive projects or contracts (Rostami & Rezael, 2023; Mutmainah & Mahmudah., 2023). IO can balance such external influences by emphasizing transparent processes and reporting (Ramalingegowda et al., 2021; Wulandari & Maulana., 2022). Burns et al. (2010), Yaumil & Thaifur (2025), and Bose et al. (2024) state that active IO in governance prevents the misuse of external authority relationships for personal gain. With IO oversight, corporate-government relations remain ethical and accountable.

H13: Institutional Ownership moderates the influence of leverage on financial statement fraud.

H14: Institutional Ownership moderates the influence of ineffective monitoring on financial statement fraud

H15: Institutional Ownership moderates the influence of auditor switching on financial statement fraud.

H16: Institutional Ownership moderates the influence of CEO change on financial statement fraud.

H17: Institutional Ownership moderates the influence of CEO Picture on financial statement fraud.

H18: Institutional Ownership moderates the influence of Corporate with Government on financial statement fraud

3. Results

This section may be divided by subheadings. This study investigates banking companies in Indonesia from 2020 to 2024 as published on the IDX website. The sample was selected using a purposive sampling method. Out of xx listed companies, only xx samples were used in the study due to several criteria. The data were obtained from secondary data sourced from the official IDX website. The researcher used WarpPLS 7.0 with the SEM-PLS analysis method. Corporate governance is implemented through various structural indicators that reflect the quality of oversight. Specifically, we measure board size, the proportion of independent commissioners, the effectiveness of the audit committee, the existence of a risk committee, and the quality of the external auditor (e.g., association with the Big Four). This governance structure serves as a variable that can strengthen or weaken the relationship between fraud risk factors and financial statement manipulation. For example, an independent and active audit committee can reduce opportunity-driven fraud, while strong external audit quality can limit ability-driven fraud. The sample criteria used in this study are presented in Table 1. This study applies an analysis using the following model:

$$FFR = a + \beta_1 Lev + \beta_2 BDOUT + \beta_3 AChange + \beta_4 DChange + \beta_5 CEOPic + \beta_6 CoWiGov + \beta_7 Lev * AC + \beta_8 BDOUT * AC + \beta_9 AChange * AC + \beta_{10} DChange * AC + \beta_{11} CEOPic * AC + e$$

Table 1. Sample Creteria.

No	Criteria	Total Data
1	Bank intitution that maintained its listing on the Indonesia Stock Exchange throughout the 2020-2024 period.	49
2	Banking instituion that failed to publish its annual and financial reports consistently throughout the 2020-2024 period.	(6)
3	Banking institutions that fail to disclose the necessary data	0

4	Total observation data	35
	Total observation data sample (35 x 4 years)	140

Source: Secondary Data, processed (2025).

Table 2 presents the descriptive statistics of all variables used in the study with a total of 140 observations. The results show variations across variables, indicating differences in leverage, internal inefficiency, and governance characteristics among firms. These variations provide a strong basis for further regression analysis on financial fraud risk (FFR). Table 3 demonstrates that all model fit indices meet the recommended statistical thresholds, confirming the robustness and validity of the structural model. The Average Path Coefficient (APC), R-squared measures, and collinearity diagnostics indicate that the model is free from multicollinearity and exhibits strong explanatory power.

Table 2. Descriptive Result of Statistics.

Variables n=140	Descriptive Statistic			
	Minimum	Maximum	Minimum	Std. Deviation
X1_Lev	0.321	X1_Lev	0.321	X1_Lev
X2_InEfff	0.333	X2_InEfff	0.333	X2_InEfff
X3_AudSw	0	X3_AudSw	0	X3_AudSw
X4_DirCh	0	X4_DirCh	0	X4_DirCh
X5_CEOPic	1	X5_CEOPic	1	X5_CEOPic
X6_CooGov	0	X6_CooGov	0	X6_CooGov
Z1_AudCom	0	Z1_AudCom	0	Z1_AudCom
Z2_InsOwn	0.015	Z2_InsOwn	0.015	Z2_InsOwn
Y_FFR	1	Y_FFR	1	Y_FFR

Source: Secondary Data, processed (2025).

Table 3. Model Fit Test Result.

Model fit and Quality Indices	Fit Criteria	Analysis Results	Decision
Average Path Coefficient (A.P.C.)	$P < 0,1$	$P=0,039$	Accepted
Average R-Squared (A.R.S.)	$P < 0,1$	$P < 0,001$	Accepted
Average Adjusted R-Squared (A.A.R.S.)	$P < 0,1$	$P < 0,001$	Meet the Creteria
Average block V.I.F. (A.V.I.F.)	Acceptable if ≤ 5 , ideally $\leq 3,3$	1,294	Ideal
Average full collinearity V.I.F. (A.F.V.I.F.)	Acceptable if ≤ 5 , ideally $\leq 3,3$	1,397	Ideal
Tenenhaus GoF (GoF)	Small $\geq 0,1$, medium $\geq 0,25$,	0,524	Large
Simpson's paradox ratio (S.P.R.)	Acceptable if $\geq 0,7$, ideally =1	0,889	Accepted
R-squared contribution ratio (R.S.C.R.)	Acceptable if $\geq 0,9$, ideally =1	0,992	Accepted
Statistical suppression ratio (S.S.R.)	Acceptable if $\geq 0,7$	0,667	Meet the Creteria

Nonlinear bivariate causality
direction ratio (N.L.B.C.D.R.) Acceptable if $\geq 0,7$ 1 Accepted

Source: Secondary Data, processed (2025).

Table 4 defines the operationalization and measurement of variables representing fraud antecedents within the Fraud Hexagon framework, encompassing pressure, opportunity, rationalization, capability, arrogance, and collusion, along with audit committee competence and institutional ownership as moderating factors. These constructs were measured using validated financial and governance proxies adapted from prior empirical studies, ensuring theoretical rigor and methodological consistency.

Table 4. Operational Definition and Measurement of Variables.

Variable	Proxies	Measurement	Source
Pressure	Leverage (Lev)	Total Debt / Total Asset	(Achmad et al.2022) (Naldo et al.2023) (Bader et al 2024)
Oppurtunity	Ineffective Monitoring (InEff)	Total Independent Board of Comissioners / Total board of Comissioners	(Arum et al. 2024) (Achmad et al 2024) (Sari et al. 2024)
Rationalization	Auditor Switching (AudSwi)	Coded 1 if there is a change of company's auditor, 0 otherwise	(Achmad et al 2023) (Handoko Et al 2022) (Handoko Et al 2022)
Capablity	Director Change (DirCha)	Coded 1 if there is a change of company's auditor, 0 otherwise	(Alfarago et al, 2022) (Sari et al. 2024) (Biduri et al. 2024)
Arrogance	CEO Picture (CEOPic)	Number of CEO picture attached to the annual financial report	(Handoko et al, 2022)
Collusion	Cooperation With Governance (CorGov)	Total Board of Independent Commissioners who have concurrent positions	(Biduri et al. 2024) (Handoko et al, 2022)
Audit Comitte	Audit Comitte (AauCom)	Number of the audit committee with financial and accounting skills / total of the audit committee	(Handoko Et al 2022) (Alfarago et al, 2022)
Institutional Ownership	Institutional Ownership (InOwn)	Total shares owned by institusion / Total shares outstanding	Achmad (2022)

Source: Secondary Data, processed (2025).

4. Discussion

This study adopts the Fraud Hexagon framework by Vousinas (2019) to analyze the relationship between pressure, opportunity, rationalization, capability, arrogance, and collusion in influencing FFR. Understanding these interconnected elements helps organizations enhance corporate governance and reduce fraud risks through accountability and transparency. The hypothesis tests (H1, H7, H13) revealed that leverage does not significantly affect FFR, and both the audit committee

and institutional ownership failed to moderate this relationship. This suggests that external pressure from creditors due to high leverage does not necessarily lead to fraud, possibly due to stronger internal controls and governance (Guo et al., 2019). This aligns with Fitriana et al. (2024), who argue that ethical decision-making in response to pressure is shaped by market and governance dynamics. Similarly, Anisyukurlillah et al. (2023) found that companies emphasizing ethics and stakeholder engagement tend to have lower FFR levels, even under high leverage.

Moreover, Yang et al. (2017) highlight that external pressures, such as regulatory demands and societal expectations, also influence FFR, particularly in newly listed firms. Companies pressured to meet short-term targets may engage in manipulative practices, reinforcing that leverage alone does not cause fraud; rather, it depends on how governance structures respond to such pressure.

Ineffective monitoring is a situation where the company does not have an internal unit that effectively monitors its performance (Biduri & Tjahjadi, 2024a). The test results for hypothesis 2 (H2) indicate ineffective monitoring has a positive and significant effect on FFR. This research suggests that when independent commissioners fail to carry out their oversight tasks effectively, it creates an environment where management has greater latitude to modify financial reports for their benefit. The lack of objective supervision increases the potential for dishonest actions, since management has fewer constraints in negotiating misleading deals. Owusu et al. (2022) assert that a lack of effective monitoring mechanisms significantly increases the risk of fraud within governmental enterprises, signaling the importance of robust internal control systems in curbing fraudulent behaviors (Owusu et al., 2022). This assertion aligns with insights from Rashid et al. (2023) who emphasize that weak internal controls are a crucial factor enhancing the likelihood of FFR (Rashid et al., 2023). This result is consistent with prior research (Alfarago & Maburur, 2022; Biduri & Tjahjadi, 2024c). That highlights the critical role of independent commissioners in preventing fraud and ensuring the integrity of financial reporting, where failure to do so may lead to FFR. This reinforces the idea that companies must not only appoint independent commissioners but also ensure that they have the capacity and willingness to perform their duties effectively. The existence of independent commissioners is believed to provide more objective oversight in a company, thus making it difficult for management to negotiate deceitful deals (Alfarago & Maburur, 2022b). However, if these commissioners are ineffective whether owing to lack of expertise, authority, or independence that their effectiveness as a control mechanism weakens.

In exploring the context of hypotheses 8 (H8) and hypotheses 14 (H14) regarding the role of audit committees and institutional ownership as moderators of the relationship between ineffective monitoring and FFR. Both hypotheses have been rejected, indicating a lack of support for the moderating effects suggested by the relationships. Yang et al. (2017a) findings that the characteristics of audit committees and supervisory boards do not play a role in the control of financial fraud in China (Yang et al., 2017a). For the role of Institutional Ownership in controlling the adverse effects of ineffective monitoring, the evidence was similarly not supportive. Collectively, these findings underscore that neither Audit Committee presence nor Institutional Ownership guarantees the mitigation of FFR occurrence associated with ineffective monitoring within the Fraud Hexagon framework.

The test results for hypothesis 3 (H3) indicate that auditor switching has a positive and significant effect on FFR. This finding suggests that frequent changes in external auditors provide management with greater opportunities to conceal fraudulent activities in FFR. When companies switch auditors, especially when done repeatedly within a short period, it may disrupt the continuity and depth of the audit process. This condition allows management to exploit gaps during the transition, increasing the risk of fraudulent practices. The probability of auditor switching, especially toward non-Big 4 auditors, increases more for fraud firms than for control firms after the revelation of fraud (Lee & Ha, 2021); (Erena et al., 2021) (Erena et al., 2022). This result is consistent with prior research (Sari et al, 2024 ; Alfarago et al, 2022) (Alfarago & Maburur, 2022a; Sari et al., 2024a) that that found a positive effect between Auditor Switching and FFR.

Further scrutiny of additional hypotheses provides insight into the ineffective moderating roles of both audit committees and institutional ownership. Hypothesis 9 (H9) proposed that the audit committee moderates the influence of auditor switching on financial statement fraud, while hypothesis 15 (H15) suggested that institutional ownership moderates the same relationship. However, both hypotheses were rejected, indicating a lack of support for these moderating effects in this context. Previous studies indicate that audit committees, despite their pivotal role in governance, may struggle to effectively mitigate risks associated with auditor switching, especially in companies marked by higher incidences of FFR (Erena et al., 2021; Wehrhahn & Velte, 2024).

The test results for hypothesis 4 (H4) indicate that CEO change did not have significant effect on FFR. Since CEO is the face of company, a more credible CEO will enhance the company's image in the perception of stakeholders. The replacement of directors aims to appoint individuals with greater competence and prudence, thereby enhancing company performance, attracting investors, and reducing opportunities for FFR (Sari et al, 2024). This result is consistent with prior research (Sari et al, 2024; Achmad et al, 2022; Biduri) that Auditor Switching did not have significant effect on FFR.

Hypothesis 10 (H10) suggested that the audit committee moderates the effect of CEO changes on financial statement fraud, while hypothesis 16 (H16) posited that institutional ownership plays a similar role. Unfortunately, both hypotheses were rejected, indicating a lack of evidence supporting these moderating effects in this context. Research shows that while audit committees are designed to enhance governance and oversight efficiency, their effectiveness can be limited. For instance, the study by Rohmatin et al., 2021 indicates that audit committees may lack the necessary engagement and authority to effectively moderate the impact of managerial changes on fraud (Rohmatin et al., 2021). Likewise, the role of institutional ownership as a moderating factor appears to be limited. While institutional investors are often presumed to bolster corporate governance frameworks, their passive nature and fragmented ownership structures can undermine their ability to influence management decisions meaningfully.

The test results for hypothesis 5 (H5) indicate that CEO picture did not have significant effect on FFR. The company shows pictures of its top management to the public and stakeholders. The number of pictures presented is not intended to symbolize the arrogance of management but rather reflect company's commitment and professionalism (Handoko et al, 2022). The shows pictures of the company's CEO can act as a non-verbal communication tool to enhance the company's positive reputation. Another study on CEO narcissism found that the number of CEO photos in the annual report does not always aim to manipulate financial report because narcissistic CEO can receive higher compensation than less narcissistic CEO even if the company performs worse (Ham et al., 2018). This result is consistent with prior research (Handoko et al, 2022; Lastanti; Alfarago) that CEO picture did not have significant effect on FFR.

Furthermore, the examination extends to hypotheses 10 (H10) and 16 (H16). Hypothesis 10 posited that the audit committee moderates the effect of CEO pictures on financial statement fraud, which received significant support. This implies that audit committees, through their monitoring capabilities and strategic oversight, can help mitigate potential manipulations stemming from how a CEO's image is utilized to shape public perception and potentially mask underlying financial issues.

In contrast, hypothesis 16, which proposed that institutional ownership moderates the impact of CEO images on financial statement fraud, was rejected. This suggests that despite the presence of institutional investors, their influence does not extend to moderating the effect of a CEO's image on FFR. Prior findings indicate that institutional investors may not consistently exert the active governance necessary to mitigate fraud risks, given their potentially passive investment strategies and fragmented ownership structures.

The findings of this study reveal that Hypothesis 6 (H6), which posited that cooperation with the government significantly affects FFR is rejected. This indicates that cooperation with government bodies does not necessarily reduce fraudulent reporting practices within organizations. Furthermore, Hypothesis 10 (H10), which tested the moderating effect of the audit committee on the relationship between cooperation with government and FFR, was accepted. This result highlights the crucial role

played by audit committees in strengthening governance mechanisms. When an active and competent audit committee exists, cooperation with governmental institutions has a tangible influence in curbing fraudulent reporting. Conversely, Hypothesis 16 (H16), which examined whether institutional ownership moderates the relationship between cooperation with the government and FFR, was rejected. The rejection of H16 suggests that institutional ownership, despite its potential governance strength, does not significantly enhance the impact of government cooperation on mitigating fraud. This could be due to conflicting objectives or passive roles played by institutional investors in certain jurisdictions, as supported by Mousavi et al. (2022), who argue that institutional ownership often focuses more on financial performance rather than operational integrity (Mousavi et al., 2022). Table 5 summarizes the hypothesis testing results, indicating that while several direct relationships, such as ineffective monitoring, auditor switching, and director change, significantly influence financial fraud risk, most moderating effects of the audit committee and institutional ownership are statistically insignificant, thereby suggesting that governance mechanisms only partially mitigate fraudulent financial reporting within the Fraud Hexagon framework.

Table 5. Summary of Result.

Hypothesis	Direction (Path)	P – value ($\alpha=5\%$)	Path Coefficient	Decision
H1=Lev-->FFR	-	0.001	-0.250	Rejected
H2=InMon-->FFR	+	0.003	0.225	Accepted
H3=AudSw-->FFR	+	0.041	0.144	Accepted
H4=CeoCha-->FFR	+	0.018	0.173	Accepted
H5=CeoPic-->FFR	-	0.033	-0.151	Rejected
H6=CoWiGov-->FFR	-	0.180	-0.076	Rejected
H7=Lev*AudCom-->FFR	-	0.143	-0.089	Rejected
H8=InMon*AudCom-->FFR	+	0.205	0.069	Rejected
H9=AudSw*AudCom-->FFR	-	0.281	-0.049	Rejected
H10=CeoCha*AudCom-->FFR	-	0.311	-0.041	Rejected
H11=CeoPic*AudCom-->FFR	+	<0.001	0.281	Accepted
H12=CoWiGov*AudCom-->FFR	-	0.016	-0.176	Rejected
H13=Lev*InOwn-->FFR	-	0.369	-0.028	Rejected
H14=InMon*InOwn-->FFR	+	0.385	0.025	Rejected
H15=AudSw*InOwn-->FFR	+	0.110	0.102	Rejected
H16=CeoCha*InOwn-->FFR	-	0.011	-0.187	Rejected
H17=CeoPic*InOwn-->FFR	+	0.373	0.027	Rejected
H18=CeoPic*InOwn-->FFR	-	0.377	-0.026	Rejected

Source: Secondary Data, processed (2025).

5. Conclusions

This study provides empirical evidence on how corporate governance mechanisms and fraud risk management practices influence the occurrence of Fraudulent Financial Reporting (FFR) within the Indonesian banking sector from 2020 to 2024. Drawing on the Fraud Hexagon framework, which incorporates six elements—pressure, opportunity, rationalization, capability, arrogance, and collusion—the research aims to identify how governance and risk structures mitigate financial misreporting risks in a highly regulated industry.

The findings reveal that although banks with high leverage levels face stronger external pressures from creditors and investors, such financial stress does not necessarily result in fraudulent reporting. This is attributed to the implementation of robust internal control systems, governance oversight, and compliance mechanisms, which serve as integral components of a bank's fraud risk management system. Institutions that prioritize ethical leadership, transparency, and stakeholder accountability tend to exhibit lower fraud risk exposure, even under high leverage conditions.

However, the results indicate that ineffective monitoring—characterized by weak internal audit functions and passive board supervision—significantly increases the likelihood of FFR. This emphasizes the critical role of independent commissioners and board-level risk oversight in maintaining the integrity of financial reporting. The analysis of audit committees and institutional ownership as moderating variables shows that while theoretically positioned to strengthen accountability, their influence on reducing FFR is statistically insignificant. This suggests that governance effectiveness depends not merely on structural presence but also on the independence, competence, and proactivity of oversight bodies.

The study also finds that auditor switching positively affects FFR, implying that frequent changes in external auditors weaken continuity and audit quality, increasing fraud risk. Conversely, CEO changes and symbolic indicators of managerial arrogance, such as CEO picture disclosure, do not have significant direct effects on FFR. These results suggest that in the banking context, reputational signaling does not necessarily reflect arrogance or increased fraud propensity. Nonetheless, active audit committees can mitigate potential manipulation by enforcing risk-based audit practices and ethical standards.

From a risk management perspective, the study highlights that corporate governance mechanisms—including board independence, audit committee effectiveness, and risk committee authority—function as the first line of defense against financial reporting fraud. Strengthening risk governance structures not only minimizes internal control failures but also enhances the resilience of banks against operational and reputational risks. Regulatory agencies such as Indonesia's Financial Services Authority (OJK) and the Ministry of State-Owned Enterprises (BUMN) are advised to reinforce governance disclosure requirements, enforce auditor rotation policies, and restrict CEO duality to enhance transparency and accountability across the sector.

Overall, this research contributes to the growing body of literature on governance-based fraud risk management by providing empirical evidence from a developing financial system. By linking the Fraud Hexagon model with corporate governance mechanisms and financial data from the banking sector, the study demonstrates how effective governance frameworks operate as a form of strategic risk control, reducing the likelihood of fraudulent reporting and strengthening financial stability. The findings underscore that governance is not merely a compliance tool but a core component of enterprise risk management in safeguarding the integrity of financial systems.

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