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Research Article

Uncovering Fraudulent Financial Reporting: Fraud Hexagon and the Moderating Role of Information Technology Adoption

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Abstract: This research aims to examine the effect of the Fraud Hexagon dimensions on fraudulent financial reporting (FFR) in the banking sector in Indonesia, as well as analyze the moderating role of information technology (IT) adoption. Using a quantitative approach, this research using secondary data with purposive sampling technique to select 43 banks listed on the Indonesia Stock Exchange during the period 2020 to 2023. Financial reporting fraud is measured using the F-Score model, and the analysis technique used is PLS-SEM with WarpPLS 7.0 tools. The results showed that the opportunity (Ineffective Monitoring), and capability (CEO Change) had a positive effect in increasing the possibility of fraudulent financial reporting. Furthermore, IT adoption does not moderate the relationship between any of the Fraud Hexagon elements and FFR. These findings make an important contribution to the development of understanding of fraudulent financial reporting through fraud hexagon framework and technological approaches. The results of this research provide insights for banking regulators, auditors, and corporate policy makers in designing more effective fraud detection and prevention strategies.

Keywords: Banking Sector; Fraud Detection; Fraud Hexagon; Fraudulent Financial Reporting; Information Technology Adoption.

1. Introduction

Fraud is a systemic problem that not only undermines the integrity of government, but also destroys the foundation of the national economy. In a global context, Indonesia is a country with a high prevalence of fraud, especially in the Asia-Pacific region. Based on the Report to the Nations (RTTN) report by (ACFE, 2024), there were 25 cases of financial reporting fraud and Indonesia ranked 6th in Asia Pacific, causing an average loss due to financial reporting fraud of US$ 954,000. Although the frequency of these cases is relatively low, the impact of the losses incurred is very significant (ACFE, 2024)

In Indonesia, the Bank Bukopin case represents example of FFR. In 2018, the bank was involved in a credit card manipulation scheme carried out by internal personnel. The deliberate alteration of the reporting system caused the financial statements to misrepresent the bank's actual condition, undermining investor confidence and necessitating a rights issue to restore its capital structure(CNBC Indonesia, 2018). This incident underscores weaknesses in internal controls and suboptimal governance practices, which created an environment conducive to fraud.

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At the global level, the First NBC Bank case in the United States illustrates a more severe manifestation of similar misconduct. Ashton Ryan Jr., the bank's former president, was found guilty of concealing deteriorating credit conditions and falsifying financial records over several years. These fraudulent practices ultimately resulted in the collapse of First NBC Bank, causing substantial losses to investors and the government. In 2023, Ryan was sentenced to 14 years in federal prison for his actions (U.S Departement of Justice, 2023)

In 2019, the SCORE model was further developed into the SCCORE or Fraud Hexagon Model by (Vousinas, 2019). The Fraud Hexagon Theory explains six factors that contribute to financial statement fraud, namely pressure, capability, collusion, opportunity, rationalization, and ego. Several studies on FFR have shown inconsistent results regarding the variables that can minimize FFR. For instance, the findings of studies conducted by Alfarago & Mabrur, (2022), Indrijawati et al. (2025), Junus et al. (2025), and Sari et al. (2022) indicate that pressure, opportunity, rationalization, capability, and arrogance have a positive influence on the occurrence of FFR. However, studies by Lastanti et al. (2022), and Oktaviany & Reskino, (2023) present contradictory results, suggesting that these variables actually have a negative effect FFR, thereby reflecting an inconsistency with previous findings. Furthermore, collusion, as a newly introduced variable in the fraud hexagon theory, also shows mixed findings. Some researchers argued that collusion positively contributes to FFR (Alfarago & Mabrur, 2022; Handoko & Salim, 2022; Indrijawati et al., 2025), while others found that collusion had a negative effect on FFR (Achmad et al., 2022; M. P. Sari et al., 2024; N. Setiawan & Soewarno, 2025).

Along with technological advancements, many companies have begun adopting more sophisticated systems to detect and prevent fraud. For instance, the implementation of machine learning and data analytics has been proven effective in identifying suspicious patterns in financial reports(Mohammad et al., 2024; Othman, 2021). These methods function by building predictive models based on historical data, enabling early detection of suspicious behavior (Guo et al., 2019). With this more advanced approach, decision-making related to auditing and financial reporting is expected to become more timely and data-driven, thereby reducing the likelihood of fraud.

With the appropriate adoption of technology, banks can minimize opportunities for fraud and enhance the reliability of financial statements. It is crucial for the banking sector to integrate technology into their fraud monitoring and detection strategies. The use of advanced analytical methods enables auditors and financial managers to detect fraud earlier and more accurately, providing better information for decision-making. Research indicates that technology-based systems can reduce risks associated with financial fraud (Othman, 2021) Recent reports show that companies that successfully adopt such technologies experience significant reductions in fraud incidents, positively impacting their reputation and sustainability (Othman, 2021; Wang, 2024) In the digital era, it is essential for companies not only to follow technological trends but also to strategically integrate them into their internal control frameworks to safeguard assets and the integrity of their financial. Analytics-based approaches leveraging information technology can enhance fraud detection effectiveness by identifying unusual patterns in financial statements (Wang, 2024). These technologies not only improve accuracy but also allow for handling large volumes of data, which remains a major challenge in manual auditing (Wang, 2024).

2. Literature Review

Fraudulent Financial Report

Fraud is defined as the abuse of position carried out to obtain personal gain through the misuse of the organization's assets or resources (ACFE, 2019). According to the Statement on Auditing Standards (SAS) No. 99 (AICPA, 2002) and the Auditing Standards (SA), there are two types of material misstatements that may arise as a result of fraud: (1) fraudulent financial reporting and (2) asset misappropriation. Both are forms of fraud that significantly affect the reliability and fairness of financial statement presentation in accordance with Generally Accepted Accounting Principles (GAAP).

Fraudulent Financial Reporting (FFR) refers to purposeful financial statement falsification or omission of numbers or disclosures in order to mislead users of the financial statements. Manipulated information presented in financial reports creates a misleading impression of the organization's condition. On the other hand, asset misappropriation is when assets of a business are stolen or misused, leading to financial statements that are not presented properly and materially. Asset misappropriation may occur in various ways, such as embezzlement of funds, theft of assets, or charging expenses for goods or services that were never received by the entity.

IT Adoption

The adoption of information technology (IT) in the business context has experienced significant growth over the past decade, particularly in the digital era marked by Industry 4.0. Adoption of new technologies is influenced not only by their apparent benefits but also by various challenges faced by companies during implementation, such as limited resources, unexpected costs, and a lack of internal technological expertise Therefore, understanding the factors that influence IT adoption is essential to determine how companies can maximize the potential of IT to enhance productivity and operational efficiency.

The implementation of technologies such as cloud-based systems and data analytics software has become increasingly relevant in detecting and preventing fraud (Mohammad et al., 2024). The involvement of IT in audit processes and financial reporting has been proven to improve the reliability and effectiveness of internal controls, which can help mitigate the risk of financial statement fraud (Pratiwi et al., 2022).

In this context, government support and technology-friendly policies are also crucial in enhancing IT adoption among companies (Li, 2025) The implementation of policies that promote innovation and facilitate access to technology can drive economic growth and job creation (Li, 2025). All these factors must be considered to ensure that IT adoption is effective and contributes optimally to company performance. Given how quickly technologies are developing, such as artificial intelligence (AI) and machine learning, the utilization of these tools can significantly improve fraud detection and prevention within organizations. The advancement of these technologies offers innovative solutions to existing challenges in financial reporting systems, strengthens controls, and enhances the reliability of reports.

Hexagon Theory

Fraud theory has undergone significant evolution since its early development, beginning with the fundamental concept known as the Fraud Triangle. This theory originated from Cressey's (1953) Fraud Triangle, which comprises three components.: pressure, opportunity, and rationalization. The theory was later expanded into the Fraud Diamond by Wolfe & Hermanson (2004) with the addition of the capability element and was further refined into the Fraud Pentagon by Crowe (2011) through the inclusion of competence and arrogance. The theory was subsequently enhanced by Vousinas (2019) with the Fraud Hexagon Theory, which identifies six factors contributing to FFR : stimulus/pressure, capability, collusion, opportunity, rationalization, and ego. This development highlights that fraud is not merely the result of the interaction of three basic factors but can also be influenced by additional elements that reflect the dynamics within an organization.

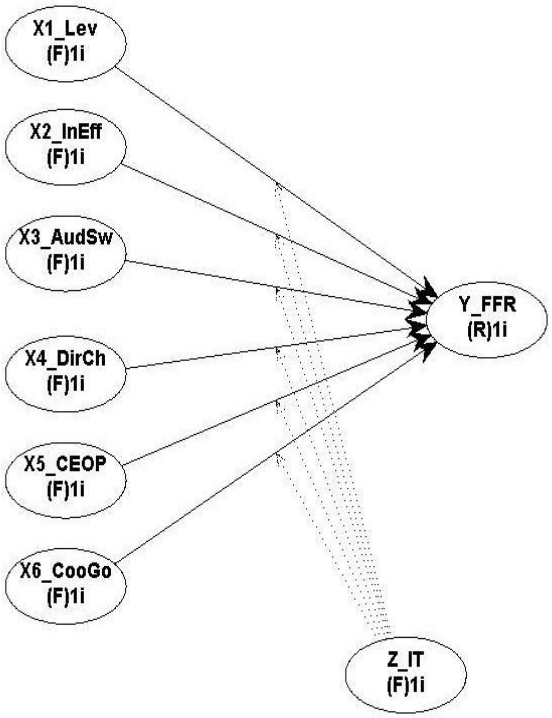

Figure 1. Research Framework.
Source: Warp PLS 8.0 output processed

Determinan Fraud Hexagon Terhadap Fraudulent Financial Reporting

External pressure can arise when a company requires additional debt or funding from outside parties to remain competitive. Consequently, principals exert pressure on agents to fulfill the requirements of outside parties regarding corporate performance. This environment may drive agents to engage in various actions, including manipulating financial statements to present favorable results that satisfy these external expectations. External pressure can be proxied through leverage ratios, measured as total debt to total assets. High leverage indicates substantial debt, which increases the risk of default and raises concerns among creditors or investors about providing further financing (Wicaksono & Suryandari, 2021). Organizations obtain capital both from shareholders and lenders to support operational activities, and an increase in debt within the capital structure is associated with higher credit risk (Achmad et al., 2022). Therefore, higher financial leverage is suspected to increase pressure on management to engage in fraudulent financial reporting.

The opportunity aspect in the Fraud Hexagon Theory reflects situations where weak supervisory systems create gaps for internal management to manipulate financial report companies. Ineffective monitoring refers to the inability of internal supervision tools, like the board of commissioners, audit committees, or internal control systems, to successfully identify and stop fraudulent activity. Research by Riduan & Arif (2024) indicates that when corporate monitoring systems are suboptimal, management has greater opportunities to manipulate financial reports with a lower risk of detection. This is supported by Rostami & Rezaei (2022), who note that weak oversight by boards reduces accountability in reporting. Ineffective monitoring reflects low accountability and transparency, which ultimately creates opportunities for fraud and increases incentives to manipulate financial statements to achieve targets.

According to the Fraud Hexagon Theory (Vousinas, 2019), auditor switching relates to rationalization, where management justifies manipulative actions by choosing more lenient or cooperative auditors. (Achmad et al., 2022) argue that auditor switching remains a potential enabler of fraud if not accompanied by stringent oversight. Auditor switching can act as a rationalization strategy to conceal fraudulent activities, as a new auditor may lack sufficient understanding of the company's history, enabling management to cover up prior irregularities

A new CEO has the authority to redesign corporate strategies and accounting policies. During this transition, weak monitoring can be exploited to manipulate reporting note that ambitious new CEOs may rationalize fraudulent actions as part of restructuring processes. A lack of initial control is a key trigger for fraud. Leadership transitions must be closely monitored by the board and nomination committees to prevent dominance by new management. while (Wang et al., 2023) state that forced CEO changes reflect board oversight failures, damaging director reputation and reducing shareholder confidence through increased voting pressures.

Arrogance in the Fraud Hexagon describes excessive confidence among fraud perpetrators that their actions will go undetected. In this context, CEO pictures symbolize a strong drive to maintain personal image through media exposure, symbolic recognition, and public visibility. The desire to maintain image can serve as a rationalization for fraudulent acts, especially under high-performance pressure. Effective corporate governance must limit executive power through strict oversight by the board and audit committees.

(Sari et al., 2024) indicate that companies with political connections are more likely to present financial information that does not reflect actual conditions as a form of political protection. This is reinforced by findings showing that relationships with government officials are often used as a shield to avoid rigorous audits and legal sanctions.

H1: Leverage has a positive effect on fraudulent financial report.
H2: Ineffective monitoring has a positive effect fraudulent financial report.
H3: Auditor switching has a positive effect on fraudulent financial report.
H4: CEO change has a positive effect on fraudulent financial report.
H5: Arrogance has a positive effect on fraudulent financial report.
H6: Corporate with Government has an effect on fraudulent financial report.

IT As Moderation of FFR

The development of information technology (IT) has brought significant transformation to many aspects of business operations, including financial control and reporting. In this context, IT functions as a strategic tool that can enhance the effectiveness of audit processes and minimize the likelihood of financial statement fraud. The application of IT in auditing provides opportunities for deeper data analysis, anomaly detection, and strengthening of internal controls (Novita & Anissa, 2022)

One of the reasons IT can serve as a strong moderating variable is its analytical capability to detect suspicious patterns in financial data. For example, the use of data analysis techniques and software tools such as data mining and artificial intelligence (AI) enables auditors to identify fraud indicators that may not be detected through traditional audit methods. With IT, auditors can conduct more sophisticated risk-based analyses to identify areas with a high potential for fraud. In their research, Novita & Anissa (2022) highlight that data analytics tools have assisted auditors in preserving financial reports' quality by enhancing anti-fraud controls, thereby improving the reliability and accuracy of the reports produced (Novita & Anissa, 2022).

H7: Information technology weaken the Positive Influence of Leverage on fraudulent financial report.
H8: Information technology Weaken the Positive Influence of Ineffective Monitoring fraudulent financial report.
H9: Information technology Weaken the Positive Influence of Auditor Switching on fraudulent financial report.
H10: Information technology Weaken the Positive Influence of CEO Change on fraudulent financial report,
H11: Information technology Weaken the Positive Influence of Arrogance on fraudulent financial report.
H12: Information technology Weaken the Positive Influence of Corporate with Government on fraudulent financial report.

3. Research Method

This study examines banking companies from 2020 to 2023, as published on the IDX website. The sample was selected using purposive sampling. Out of 43 listed companies, only 37 were included in the study due to specific criteria. The researcher obtained data from secondary sources available on the official IDX website. Data analysis was conducted using WarpPLS 7.0 with the SEM-PLS analysis method. The sample criteria used in this study are presented in Table 1. This research applies the following analytical model:

FFR = a + β1Lev + β2BDOUT + β3AChange + β4DChange + β5CEOPic + β6PolCon + β6Lev*IT + β7BDOUT*IT + β8AChange*IT + β9DChange*IT + β10CEOPic*IT + β6PolCon*IT + e

Table 1. Cricket Sampling Using Purposive Sampling.

No	Description	Quantity
1	Banking sector companies listed on the Indonesia Stock Exchange (BEI) throughout the 2020-2023 period.	43
2	Banking companies that failed to publish its annual and financial reports consistently throughout the 2020-2024 period.	0
3	Banking companies that fail to disclose the necessary data	(6)
	Total Sample (37x 4 years)	148

Source: Data processing, 2025

Table 2. Cricket Sampling Using Purposive Sampling.

Variable	Proxies	Measurement	Source
Pressure	Leverage (Lev)	Total Debt / Total Asset	(Achmad et al., 2022) (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)
Rationalization	Auditor Switching (AudSwi)	Coded 1 if there is some change of company's auditor, 0 otherwise	(M. P. Sari et al., 2024) (Handoko & Salim, 2022)
Capablity	Director Change (DirCha)	Coded 1 if there is some change of company's auditor, 0 otherwise	(Handoko & Salim, 2022) (Alfarago & Mabrur, 2022) (M. P. Sari et al., 2024)
Arrogance	CEO Picture (CEOPic)	Number of CEO picture attached to the annual financial report	(Handoko & Salim, 2022)

Collusion	Cooperation With Governance (CorGov)	Total number of concurrently serving members of the Board of Independent Commissioners	(Handoko & Salim, 2022)
Information Technology	IT	Using IT adoption as a dummy, if the bank is above (below) the median of the tech ratio, the value is 1 (0). And communication expenses to total operating expenses	(Dadoukis et al., 2021) (Lin & Qamruzzaman, 2023)
Fraudulent Financial Reporting	F-Score	F-Score = Accrual Quality + Financial Performance 1 = f score > 1 0 = f score < 1	(Novarina & Triyanto, 2022)

Source: Data processing, 2025

4. Results and Discussion

Table 3. Descriptive Result of Statistics.

Variables n=140	Descriptive Statistic			
	Minimum	Maximum	Mean	Std. Deviation
X1_Lev	0.050	0.919	0.752	0.174
X2_InEff	0.333	1	0.578	0.095
X3_AudSw	0	1	0.405	0.493
X4_DirCh	0	1	0.243	0.430
X5_CEOP	0	26	7.270	4.704
X6_CooGo	0	1	0.345	0.477
Z_IT	0	1	0.486	0.502
Y_FFR	0	1	0.412	0.494

Source: Data processing, 2025

Table 4. Model Fit Test Result.

Model fit and Quality Indices	Fit Criteria	Analysis Results	Decision
Average Path Coefficient (A.P.C.)	P < 0,05	P=0,054	Almost Meet the Criteria
Average R-Squared (A.R.S.)	P < 0,05	P < 0,001	Meet the Criteria
Average Adjusted R-Squared (A.A.R.S.)	P < 0,05	P < 0,001	Meet the Criteria
Average block V.I.F. (A.V.I.F.)	If ≤ 5, accepted; ideally, ≤3,3.	1,104	Ideal
Average full collinearity V.I.F. (A.F.V.I.F.)	If ≤ 5, accepted; ideally, ≤3,3	1,140	Ideal
Tenenhaus GoF (GoF)	Small ≥ 0,1, medium ≥ 0,25, large ≥ 0,36	0,491	Large
Simpson's paradox ratio (S.P.R.)	If ≥ 0,7, and ideally =1, accepted.	0,833	Meet the Criteria
R-squared contribution ratio (R.S.C.R.)	If ≥ 0,9, and ideally =1, accepted.	0,997	Meet the Criteria
Statistical suppression ratio (S.S.R.)	Acceptable if ≥ 0,7	0,750	Meet the Criteria
Nonlinear bivariate causality direction ratio (N.L.B.C.D.R.)	Acceptable if ≥ 0,7	1	Meet the Criteria

Source: Data processing, 2025

Table 5. Hypothesis Test Result.

Hypothesis	Direction (Path)	P-value (α=5%)	Path Coefficient	Decision
H_1=Lev-->FFR	-	<0.001	-0.366	Rejected
H_2=InMon-->FFR	+	0.046	0.136	Accepted
H_33=AudSw-->FFR	+	0.208	0.066	Rejected
H_4=CeoCha-->FFR	+	0.014	0.176	Accepted
H_5=CeoPic-->FFR	-	0.261	-0.052	Rejected
H_6=CoWiGov-->FFR	-	0.026	-0.155	Rejected
H_7=Lev*IT-->FFR	-	0.403	-0.020	Rejected
H_8=InMon*IT-->FFR	+	0.252	-0.054	Rejected
H_9=AudSw*IT-->FFR	+	0.474	0.005	Rejected
H_10=CeoCha*IT-->FFR	-	0.095	-0.106	Rejected
H_11=CeoPic*IT-->FFR	-	0.266	-0.051	Rejected
H_12=CoWiGov*IT-->FFR	+	0.445	0.011	Rejected

Source: Data processing, 2025

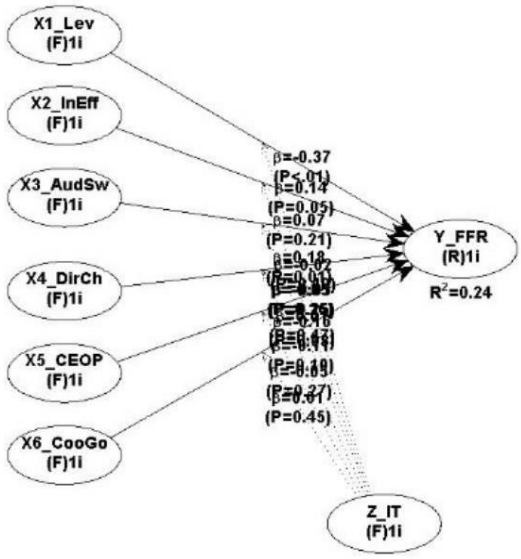

Figure 2. Research Model.

Source: Warp PLS 8.0 output processed

The relationship between leverage and ineffective monitoring in relation to FFR has been extensively discussed in the research literature. Hypothesis 1 posits that leverage has a negative effect on fraudulent financial reporting. This finding contradicts the initial hypothesis, which expected leverage is increasing the pressure on internal management to manipulate financial statements. Companies that emphasize ethics and stakeholder engagement tend to exhibit lower levels of fraudulent financial reporting, even under conditions of high leverage (Anisykurlillah et al., 2023). This finding is also consistent with Lastanti et al. (2022) and Oktaviany & Reskino, (2023) , who documented that leverage does not always increase fraudulent tendencies; instead, it can discipline management through external pressure and regulatory oversight. In this context, leverage acts not as a stimulus for fraudulent behavior, but as a disciplining mechanism that promotes more conservative reporting.

Regarding Hypothesis 2, ineffective monitoring is widely recognized as a significant factor contributing to fraudulent financial reporting. Insufficient independent oversight, particularly through weak board composition, creates opportunities for internal management to manipulate financial statements (Alfarago & Mabrur, 2022). Firms with lax governance structures or a lack of independent directors tend to show higher levels of financial misrepresentation, as weak supervisory mechanisms fail to restrain opportunistic behavior (Suryaningsih & Simon, 2019). Robust audit committees or external audits can act as critical safeguards, but when these are absent, the likelihood of fraud escalates (W. M. Sari et al., 2021). Ineffective monitoring arises when companies lack internal units or independent commissioners capable of performing effective oversight, thereby giving management more freedom to adjust financial reports to their advantage. Empirical findings confirm that ineffective monitoring has a positive and significant effect on fraudulent financial reporting, consistent with prior studies (Alfarago & Mabrur, 2022). This view is reinforced by Owusu et al. (2022) who emphasize that weak monitoring mechanisms heighten fraud risks in enterprises, and by Rashid et al. (2023) who underline the role of fragile internal controls in increasing the likelihood of misreporting. Thus, the effectiveness of independent commissioners is essential, as their failure due to limited expertise, authority, or independence weakens their role as a control mechanism and increases the potential for fraudulent financial reporting (Alfarago & Mabrur, 2022).

The role of auditor switching in the context of fraudulent financial reporting has garnered attention, yet evidence points to its weak influence. Changes in auditors often lead to enhanced scrutiny and improved financial reporting quality rather than escalating fraudulent activities. Akhidime emphasizes that poor governance and weak internal controls are more indicative of audit failures than the act of switching auditors itself, indicating that auditor changes can serve as corrective measures. The assertion that auditor changes create conducive environments for fraud lacks empirical support. Studies indicate that effective monitoring mechanisms and strong audit practices are critical for ensuring the integrity of financial statements. Moreover, evidence by Cahyani et al. suggests that auditor turnover does not significantly affect fraudulent behaviors, while findings from Andriani et al. indicate minimal influence of auditor changes on fraudulent financial reporting under specific contextual frameworks (Andriani et al., 2022). These findings collectively suggest that financial reporting integrity is primarily driven by the strength of internal controls and ethical governance structures rather than by the frequency of auditor changes, leading to the rejection of hypothesis H3.

Regarding Hypothesis 4, the results indicate that CEO change has a positive effect on fraudulent financial reporting. Leadership transitions often create a period of weakened oversight, providing greater discretion for internal management to manipulate financial statements (Wang et al., 2023). Research by Rachmawati and Raharja (2024) indicates that changes in the board of directors, including the CEO, can elevate the risks of financial statement fraud due to the potential for instability and a lack of consistent vision during transitions (Rachmawati & Raharja, 2024). This finding suggests that new leadership may prioritize short-term gains to impress stakeholders, potentially at the expense of ethical reporting practices.

Achmad et al. support this notion by highlighting that the capability of newly appointed

directors can foster an atmosphere that encourages false reporting., particularly when these leaders face high performance expectations (Achmad et al., 2022) Their study illustrates how the dynamic introduced by a new CEO can disrupt existing controls and oversight, thereby increasing opportunities for malfeasance in financial reporting. The fraud hexagon framework emphasizes that the psychological and social pressures linked to new leadership can lead CEOs to rationalize unethical financial reporting practices as necessary for organizational survival (Achmad et al., 2022)

In summary, the change in CEO frequently correlates with increased pressure and potential lapses in governance, which can facilitate conditions conducive to fraudulent financial reporting. This relationship underscores the need for vigilant oversight during transitions in executive leadership to mitigate the risk of fraud.

Hypothesis 5, arrogance have no significant effect on fraudulent financial reporting. Although certain studies argue that traits such as arrogance may influence reckless managerial decisions, evidence suggests that fraudulent practices are more strongly shaped by governance systems and external pressures (Yadiati et al., 2023). Strong internal controls and corporate governance mechanisms can limit the impact of such personal traits, preventing them from translating into fraudulent (Setiawan & Trisnawati, 2022) Empirical test results confirm that CEO pictures, often used as a proxy for arrogance, do not significantly affect fraudulent financial reporting, as their presence is generally intended to communicate professionalism and strengthen corporate reputation rather than signal managerial hubris (Handoko & Salim, 2022. Similarly, research on CEO narcissism shows that the inclusion of executive images does not necessarily indicate an intent to manipulate reports, as narcissistic leaders may seek visibility and recognition regardless of reporting practices (Ham et al., 2018). These findings are consistent with prior research that highlights CEO pictures have no significant relationship with fraudulent financial reporting (Alfarago & Mabrur, 2022; Handoko & Salim, 2022).

Hypothesis 6 states that corporate relations with government have no significant effect on fraudulent financial reporting. While such relationships may raise concerns about potential collusion, research indicates they can also introduce protective mechanisms through stronger regulatory oversight. For example, effective corporate governance practices supported by governmental supervision can mitigate fraudulent practices in publicly held firms. Similarly, Dewi & Anisykurlillah (2021) highlight that regulatory frameworks and collaboration with government institutions can deter fraudulent behaviors and strengthen integrity in financial reporting. These findings suggest that corporate-government ties are more likely to stabilize than to destabilize corporate practices, contradicting the initial assumption of H6. Therefore, the hypothesis that government cooperation significantly affects fraudulent financial reporting is rejected, as evidence shows such cooperation does not directly reduce fraudulent activities within organizations.

The moderating role of information technology (IT) in fraudulent financial reporting (FFR) was tested through hypotheses H7–H12; however, all were ultimately rejected. Beginning with H7, IT was expected to weaken the positive effect of leverage on FFR. Yet, high leverage continues to exert financial pressure that encourages manipulation, regardless of technological sophistication. Studies confirm that while IT may enhance efficiency, it does not alleviate the fundamental risks inherent in highly leveraged firms (Muslim, 2024)

Similarly, H8, which posited that IT reduces the effect of ineffective monitoring, was not supported. Research shows that transparency tools cannot substitute for strong governance and independent (Roszkowska, 2021) In the case of H9, the risks associated with auditor switching remain significant, as IT systems do not prevent firms from appointing more lenient auditors to avoid scrutiny (Maryani et al., 2023)

Regarding H10, CEO changes introduce shifts in strategy and reporting practices that persist even in the presence of advanced IT. Evidence highlights that leadership transitions inherently carry risks of financial misreporting that technology cannot offset (Tillu et al., 2023). H11, which proposed that IT mitigates the role of managerial arrogance, was also rejected, as behavioral traits such as arrogance or overconfidence cannot be controlled by technological tools (Tillu et al., 2023) Finally, H12 suggested that IT could weaken the influence of corporate-government ties on FFR. However, these relationships remain complex and are shaped more by regulatory and political dynamics than by digital systems (Olawale et al., 2024).

In summary, the rejection of H7–H12 emphasizes that while IT is essential for enhancing efficiency and transparency, it does not function as a moderating mechanism capable of weakening the drivers of fraudulent reporting. Instead, the integrity of financial reporting continues to depend primarily on strong governance structures, ethical leadership, and effective oversight.

5. Conclusion

This study examined the determinants of FFR using the Fraud Hexagon Theory and tested the moderating role of information technology (IT). Out of twelve proposed hypothesis, only two were supported: ineffective monitoring and CEO change were found to have a significant positive influence on FFR. These results highlight that weak governance structures provide greater opportunities for manipulation, while leadership transitions increase the risk of instability and opportunistic behavior in financial reporting.

In contrast, leverage, auditor switching, arrogance, and cooperation with government relations showed no significant impact on FFR, suggesting that external pressures and political ties are insufficient to drive fraudulent practices without weak oversight or leadership disruption. Moreover, the moderating role of IT was rejected across all models, indicating that technological adoption alone cannot replace the role of strong governance structures and ethical leadership in mitigating fraud.

The study faced challenges, particularly regarding data limitations, as the available data did not fully capture the scope and implementation of IT within the organizations studied. This may have affected the ability to detect its moderating effects comprehensively. For future research, it is recommended to use more detailed and complete data on IT adoption and integration. Researchers could also explore additional moderating or mediating factors, such as corporate culture, regulatory compliance, or board effectiveness, to provide a more nuanced understanding of the mechanisms that mitigate FFR.

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