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The Influence of Fraud Hexagon on Financial Statement Fraud



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KEYWORDS	ABSTRACT
<p>Keywords:</p> <p>Fraud hexagon; financial statement fraud; f-score.</p> <p>Conflict of Interest Statement:</p> <p>The author(s) declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.</p> <p>Copyright © 2024 AMAR. All rights reserved.</p>	<p>Purpose: This study examines the influence of the fraud hexagon elements—pressure, opportunity, rationalization, capability, ego, and collusion—on detecting fraudulent financial statements in manufacturing companies listed on the Indonesia Stock Exchange (IDX).</p> <p>Research Design and Methodology: The research, meticulously designed, focuses on a sample of 52 manufacturing companies listed on the IDX from 2019 to 2021, selected using purposive sampling based on specific criteria. The fraud hexagon elements are measured through variables such as financial targets, changes in directors, political connections, the nature of the industry, auditor changes, and multiple CEO positions. The data analysis is conducted using multiple linear regression to assess the impact of these variables on financial statement fraud.</p> <p>Findings and Discussion: The findings, of significant importance, indicate that financial targets, changes in directors, and CEO duality have a positive and significant effect on fraudulent financial statements, suggesting that these factors increase the likelihood of fraud. The nature of the industry exhibits a negative and significant effect, implying that certain industry characteristics may reduce fraud risk. In contrast, political connections and auditor changes show a negative and insignificant effect, indicating no substantial impact on fraud detection.</p> <p>Implications: The study highlights the importance of considering multiple governance and operational factors when assessing fraud risk. It suggests that firms and regulators should enhance oversight mechanisms, particularly in areas where fraud risk is heightened due to management dynamics or financial pressures.</p>

Introduction

Financial statement fraud continues to pose a significant challenge for stakeholders, undermining the reliability of financial reports crucial for economic decision-making. According to the Indonesian Financial Accounting Standards (PSAK) No. 1, the primary objective of financial statements is to provide information regarding an entity's financial position, performance, and changes in financial position, which is valuable for a wide range of users (Budyanto & Puspawati, 2022). However, companies often manipulate these statements to present a more favorable image, driven by the desire to achieve high profits and maintain market competitiveness (Chen et al., 2021). This manipulation can take various forms, including earnings management, misrepresentation of financial data, and fraudulent financial reporting, exacerbated by weak internal controls and ineffective oversight

mechanisms (Donelson et al., 2017). Agency theory offers a lens through which to understand the motivations behind financial statement fraud. Jensen & Meckling (1976) argue that conflicts of interest between principals (owners) and agents (managers) can lead to decision-making that prioritizes the agents' benefits over those of the principals. In the Indonesian context, the prevalence of financial statement fraud has been highlighted by numerous studies, including those by Widoatmodjo (2022), which indicate that such fraudulent activities are often driven by the need to meet or exceed market expectations. Bader et al. (2024) noted that the evolving fraud landscape necessitates a more comprehensive model, such as the fraud hexagon, to understand better and mitigate the factors contributing to financial statement fraud.

Recent studies have explored the mechanisms and motivations behind financial statement fraud, highlighting the complexities of understanding and mitigating fraudulent behavior in corporate environments. Rasheed et al. (2023) introduced the fraud hexagon model, which expands upon the traditional fraud triangle by adding three new dimensions: stimulus, capability, and collusion. This model provides a more nuanced approach to identifying the factors contributing to financial statement fraud, especially in environments where collusion and managerial capability play significant roles. Studies by Chen et al. (2021) have further elaborated on how the interplay of these factors can lead to financial manipulation, underscoring the need for robust internal controls and corporate governance structures. In the Indonesian context, research by Van Driel (2018) has provided empirical evidence of the prevalence and characteristics of financial statement fraud in publicly listed companies, emphasizing the role of regulatory environments and economic pressures in shaping fraudulent activities. Despite these advancements, recent studies also have notable limitations. Most research has focused on Western contexts, leaving a gap in understanding how different cultural, regulatory, and economic environments may influence fraud dynamics (Schuchter & Levi, 2016). While the fraud hexagon model offers a comprehensive framework, empirical validation across diverse sectors and non-Western contexts remains limited. Additionally, existing research tends to emphasize post-fraud detection rather than preventive measures that address the root causes of fraud, such as managerial incentives and collusion (Almalki, 2022). This gap highlights the need for more targeted studies integrating theoretical models with practical applications in fraud prevention and detection.

While recent studies have made significant strides in expanding the understanding of financial statement fraud, a critical gap remains between theoretical frameworks and their empirical application in diverse contexts. The fraud hexagon model, proposed by (Rendon & Rendon, 2022) incorporates additional factors like stimulus, capability, and collusion, offering a more comprehensive lens through which to view fraudulent activities. However, existing research, such as those by Chen et al. (2021), primarily focuses on validating these theoretical models within Western contexts or specific sectors, neglecting the unique dynamics in non-Western and emerging markets. This presents a gap in understanding how these additional elements interact in different cultural and regulatory environments, particularly within the Indonesian manufacturing sector, which operates under distinct economic pressures and governance challenges. While studies have identified the relevance of individual fraud factors, the interaction between these elements remains underexplored. Most research, including Yulianti et al. (2024), has focused on post-fraud detection and case analysis, which provides limited insight into preventive strategies or the proactive application of the fraud hexagon model. This narrow focus restricts the development of comprehensive fraud prevention frameworks that consider the multidimensional nature of fraud risk in real time. To bridge this gap, more empirical research is needed to explore how companies can integrate the fraud hexagon model into their governance structures, ensuring robust fraud detection and prevention mechanisms that address the complexities of modern corporate fraud.

The novelty of this research lies in its detailed empirical investigation of the fraud hexagon model within the unique context of Indonesian manufacturing companies listed on the Indonesia Stock Exchange (BEI). Previous research has looked chiefly at fraud's six parts—stimulus, capability, collusion, opportunity, rationalization, and ego—alone or in Western contexts. On the other hand, this study wants to examine how all six of these parts interact and affect financial statement fraud in a non-Western setting. This research seeks to fill the identified gaps by integrating these elements into a single, cohesive model that can be practically applied to enhance fraud detection and prevention

strategies in real-time corporate governance settings. The primary research question guiding this study is: "How do the elements of the fraud hexagon model influence financial statement fraud in Indonesian manufacturing companies listed on the BEI?" The objective is to provide actionable insights into fraud risk's multidimensional nature and propose robust framework companies can utilize to identify and mitigate potential fraud risks before they manifest. This study's focus on a sector that is economically significant and particularly vulnerable to fraud due to its complex operational dynamics contributes to the broader literature on corporate governance and fraud prevention, offering valuable policy and strategic recommendations for stakeholders.

Literature Review

Evolution of Fraud Theories and the Emergence of the Fraud Hexagon

Over the years, the understanding of fraud in corporate environments has significantly evolved, driven by the increasing complexity of fraudulent activities. This evolution has led to the need for more comprehensive models, such as the fraud hexagon, to understand and prevent fraud. Traditionally, the 'fraud triangle,' which encompasses three primary factors—pressure, opportunity, and rationalization—has been the dominant model used to understand and prevent fraud (Cressey, 1953). This model suggests that individuals commit fraud when they experience financial or personal pressures, perceive an opportunity to act without detection, and can rationalize their dishonest actions. While the fraud triangle has been widely adopted, its limitations in capturing the multifaceted nature of contemporary fraud have become apparent, particularly in complex organizational settings like manufacturing firms. Recent advancements in fraud theory have sought to extend the traditional fraud triangle to address the intricacies of modern fraud schemes better. Bancin & Baihaqi (2023) introduced the 'fraud hexagon,' an expanded model that adds three new elements: stimulus, capability, and collusion. This model offers a more comprehensive understanding of fraud by recognizing additional factors contributing to fraudulent behavior, especially in complex organizational environments. The manufacturing sector, characterized by its intricate financial operations and multiple layers of decision-making, presents a particularly relevant context for applying the fraud hexagon model.

The fraud hexagon model expands on the traditional fraud triangle by introducing three additional elements: stimulus, capability, and collusion, providing a more comprehensive understanding of factors contributing to fraudulent behavior. 'Stimulus' refers to external pressures, such as economic downturns, competitive pressures, or regulatory changes, that may push a company to manipulate its financial statements to appear more favorable (Chen et al., 2021). These external forces can create an environment conducive to fraud, particularly when the company's survival is perceived to be at risk. 'Capability' involves the skills, knowledge, and authority required to execute fraud without detection. This recognizes that not all employees can manipulate financial records; typically, individuals in senior management or those with specialized knowledge are more capable of committing undetected fraud (Comer, 2017). However, the most significant departure from the fraud triangle is the inclusion of 'Collusion,' which captures the collaborative nature of some fraudulent schemes. Unlike the fraud triangle, which views fraud as an individual act, the fraud hexagon acknowledges that fraud often involves several parties conspiring together (Achmad et al., 2022). In manufacturing companies, opportunities for collusion are higher due to complex operations spanning multiple departments. The fraud hexagon model is particularly relevant for analyzing financial statement fraud in manufacturing companies listed on the Indonesia Stock Exchange (BEI), where these elements—stimulus, capability, and collusion—interact in complex ways, complicating fraud detection and prevention efforts (Zahara & Ratnawati, 2024).

Recent studies have supported the application of the fraud hexagon model in understanding financial statement fraud. Rasheed et al. (2023) demonstrated that including stimulus, capability, and collusion improves the model's predictive power, particularly in environments where the traditional fraud triangle falls short. Research by Bayagub et al. (2019) on Indonesian manufacturing firms further underscores the importance of these additional elements in understanding fraud risks in emerging markets. Additionally, Chen et al. (2021) highlighted the role of external pressures and managerial expertise in fostering fraudulent financial reporting in volatile economic conditions. While

the fraud hexagon offers a more comprehensive framework, practical challenges remain in its application. Identifying and measuring factors like stimulus or capability requires sophisticated tools and methodologies. Furthermore, collusion complicates detection efforts by breaking the trust between co-conspirators and collecting definitive evidence of fraud (Rahman & Jie, 2024). Despite these challenges, the fraud hexagon provides valuable insights into the multifaceted nature of fraud, emphasizing the need for integrated fraud detection and prevention strategies that account for the dynamic interactions of various fraud risk factors.

Empirical Evidence and Application of the Fraud Hexagon in Manufacturing Firms

Empirical research on the fraud hexagon model across various industries, primarily manufacturing, underscores its remarkable effectiveness in predicting and preventing financial statement fraud. The fraud hexagon, a robust extension of the traditional fraud triangle, incorporates elements like capability and collusion, thereby enhancing the model's capacity to evaluate fraud risk in complex operational environments. In the manufacturing sector, with its intricate financial transactions, multiple management layers, and substantial inventory data, the fraud hexagon provides a more comprehensive framework for understanding fraud dynamics (Achyani, 2023). Manufacturing companies, with their complex supply chains and high operational risks, are particularly vulnerable to fraud. The inclusion of capability and collusion in fraud risk models significantly enhances their predictive power, especially in manufacturing settings where financial and operational data are closely intertwined, creating numerous opportunities for fraudulent activities.

Studies explicitly targeting the manufacturing sector have demonstrated that financial statement fraud frequently involves collusion among various parties, including managers and external auditors. Feinberg & Larson (2024) notes that the high degree of managerial autonomy and decentralized decision-making typical of manufacturing firms often facilitates collusion. This aligns with the fraud hexagon's focus on capability and collusion as critical factors in fraudulent behavior. Understanding how these elements interact within a company's operational framework can help identify high-risk areas and develop targeted fraud mitigation strategies (Sihombing & Rahardjo, 2014). Research also indicates that manufacturing firms' structural and operational characteristics, such as decentralized operations and fragmented oversight, inherently support fraud conditions. This decentralization grants significant control to local managers over financial reporting and inventory management, which can be exploited to manipulate financial outcomes (Chen et al., 2021). Incorporating elements like capability and collusion, the fraud hexagon model provides a valuable tool for assessing these risks and strengthening internal controls. Empirical studies further suggest that targeted strategies focused on these elements effectively reduce fraud risks. Enhancing transparency, improving communication across departments, and investing in ethical training are critical steps to mitigate collusion and reduce fraud capabilities (Peltier-Rivest, 2018). Additionally, manufacturing firms' real-time monitoring and data analytics can provide early warnings of potential fraud, thereby strengthening fraud detection and prevention measures. The fraud hexagon model is precious in manufacturing firms due to its ability to address the complexities of operational and financial interdependencies. By expanding traditional fraud models to include capability and collusion, the fraud hexagon provides a more nuanced understanding of fraud risks, helping organizations develop more effective prevention strategies (Iweriebor, 2023). This makes it an essential tool for companies and regulators, providing a sense of security in safeguarding financial integrity in high-risk sectors.

Theoretical and Practical Implications for Fraud Prevention and Detection

Integrating the fraud hexagon model into corporate governance and risk management practices offers significant theoretical and practical benefits for enhancing fraud prevention and detection. Theoretically, the fraud hexagon model extends the traditional understanding of fraud by incorporating additional dimensions often overlooked by conventional models. While the traditional fraud triangle includes pressure, opportunity, and rationalization, the fraud hexagon adds stimulus, capability, and collusion. This expanded framework provides a more comprehensive view of the fraud landscape, particularly in complex manufacturing sectors where financial statement fraud risks are

influenced by internal and external pressures (da Costa, 2017). Theoretically, the fraud hexagon model enhances our understanding of how multiple factors interact to create a fraud-prone environment. By acknowledging external pressures (stimulus), individual capabilities (capability), and the collaborative nature of fraud (collusion), this model offers a more nuanced approach to analyzing fraud risks. This holistic perspective is precious in manufacturing sectors, where operational complexities and significant financial transactions heighten the risk of fraudulent activities (van Driel, 2019). The fraud hexagon model provides a sense of security, knowing that all potential fraud factors are being considered and addressed.

The fraud hexagon model suggests several improvements to traditional fraud prevention strategies. Companies should move beyond basic internal controls and auditing practices to implement more comprehensive fraud prevention measures. For example, increasing transparency and communication across all organizational levels can help address collusion risks. Effective communication channels can discourage secretive behavior and foster a culture of openness, making it harder for collusive fraud schemes to take root (Hussain, 2014). Investing in employee training and ethical leadership development can significantly reduce factors related to capability and rationalization. Training programs should emphasize ethical behavior and provide employees with the tools to recognize and report suspicious activities. Ethical leadership also plays a crucial role in setting the tone at the top and modeling acceptable behavior (Chen et al., 2021). Continuous monitoring and data analytics are essential to an effective fraud prevention strategy. Implementing real-time monitoring systems can provide early warnings of potential fraud indicators and enable prompt responses to emerging threats. By leveraging advanced data analytics, companies can detect unusual patterns and anomalies in financial transactions that may signal fraudulent activities.

Research Design and Methodology

This study employs a quantitative approach using secondary data. The population comprises 232 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period from 2019 to 2021. Data collection is conducted through documentation, utilizing annual reports from the specified observation period. These reports are accessed from the IDX website (www.idx.co.id). The sample is determined through purposive sampling, a strategy that selects samples based on specific criteria related to the data sources required for the study. The data analysis techniques include descriptive statistical analysis, classical assumption testing, and multiple regression analysis, performed using SPSS version 25.

Dependent Variable Measurement

F-Score = *Accrual Quality + Financial Performance*

$$RSST\ accrual = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{Average\ Total\ Asset}$$

Description:

WC = *Current Assets - Current Liability*

NCO = *(Total Assets - Current Assets - Investment and Advances) (Total Liabilities- Current Liabilities - Long Term Debt)*

FIN = *Total Investment - Total Liabilities*

$$ATS = \frac{(Beginning\ Total\ Assets + End\ Total\ Assets)}{2}$$

Financial performance = *change in receivable + change in inventories + change in cash sales + change in earnings*

Description:

$$Change\ in\ receivables = \frac{\Delta\ Receivables}{Average\ Total\ Assets}$$

$$Change\ in\ inventories = \frac{\Delta\ Inventories}{Average\ Total\ Assets}$$

$$Change\ in\ cash\ sales = \frac{\Delta Sales}{Sales\ (t)} - \frac{\Delta Receivables}{Receivables\ (t)}$$

$$Change\ in\ earning = \frac{Earnings\ (t)}{Average\ Total\ Assets\ (t)} - \frac{Earnings\ (t-1)}{Average\ Total\ Assets\ (t-1)}$$

Table 1. Measurement of Independent Variables

Variable	Indicator
Financial Target	$ROA = \frac{Net\ Profit}{Total\ Assets}$
Director Change	Code 1 if there is a change in directors; Code 0 if there is no change in directors
Political Connection	Code 1 if directors or commissioners have political connections; Code 0 otherwise
Industry Nature	$RECEIVABLE = (Receivables / Sales) - (Receivables(t-1) / Sales(t-1))$
Auditor Change	Code 1 if there is a change in auditors; Code 0 if there is no change in auditors
CEO Duality	Code 1 if there is duality of the CEO position; Code 0 if there is no CEO duality

Findings and Discussion

Findings

Table 2. Kolmogorov-Smirnov Test (One-Sample Kolmogorov-Smirnov Test)

		Unstandardized Residual
N		156
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.17387513
Most Extreme Differences	Absolute	.062
	Positive	.062
	Negative	-.042
Test Statistic		.062
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Table 2 shows a significance level of 0.200, which is above 0.05. Therefore, the residuals are normally distributed, and the research model meets the normality assumption.

The heteroscedasticity test in this study was conducted using the Glesjer Test. If the significance values of the independent variables are greater than 0.05, it indicates that heteroscedasticity is not present. The results of the Glesjer Test are presented below:

Table 3. Glesjer Test (Coefficients^a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.136	.021		6.583	.000
Financial Target	.064	.112	.048	.573	.568
Director Change	.015	.018	.067	.807	.421
Political Connection	-.025	.019	-.110	-1.310	.192
Industry Nature	.202	.165	.100	1.221	.224
Auditor Change	-.008	.018	-.037	-.457	.649
CEO Duality	.003	.018	.011	.139	.890

a. Dependent Variable: ABS_RES

The Glesjer test results indicate that the significance values for all variables are greater than 0.05. This suggests that there is no evidence of heteroscedasticity in the regression model, making it suitable for predicting financial statement fraud using the variables of financial target, director change, political connection, industry nature, auditor change, and CEO duality.

Multicollinearity was tested by examining whether the tolerance value is greater than 0.10 and the Variance Inflation Factor (VIF) is less than 10. If the tolerance value is less than 0.10 and the VIF is greater than 10, it indicates high multicollinearity. The results of the multicollinearity test are presented in the following table:

Table 4. Multicollinearity Test Results (Coefficients^a)

Model		Collinearity Statistics	
		Tolerance	VIF
1	Financial Target	.938	1.066
	Director Change	.961	1.040
	Political Connection	.934	1.070
	Industry Nature	.969	1.032
	Auditor Change	.975	1.026
	CEO Duality	.984	1.016

a. Dependent Variable: Financial Statement Fraud

Table 5. Runs Test

	Unstandardized Residual
Test Value ^a	.01033
Cases < Test Value	78
Cases >= Test Value	78
Total Cases	156
Number of Runs	90
Z	1.767
Asymp. Sig. (2-tailed)	.077

a. Median

The Asymptotic Significance (2-tailed) value is 0.077, which is greater than the 0.05 threshold. This indicates that there is no evidence of autocorrelation in the regression model. Consequently, the linear regression analysis can proceed without concerns about autocorrelation affecting the results.

Table 6. T-Test (Coefficients^a)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.039	.033		1.196	.233
Financial Target	1.045	.180	.333	5.803	.000
Director Change	.068	.029	.131	2.308	.022
Political Connection	-.027	.031	-.050	-.878	.382
Industry Nature	-2.821	.265	-.602	-10.663	.000
Auditor Change	-.024	.029	-.046	-.824	.411
CEO Duality	.063	.029	.121	2.162	.032

a. Dependent Variable: Financial Statement Fraud

Based on the Table 6, the regression equation formed in this regression test is:

$$Y = 0.039 + 1.045X_1 + 0.068X_2 - 0.027X_3 - 2.821X_4 - 0.024X_5 + 0.063X_6$$

Discussion

The effect of financial target variables on financial statement fraud.

The impact of financial targets on financial statement fraud reveals a significant positive correlation, indicating that higher financial targets can indeed increase the likelihood of fraudulent activities in financial reporting. This finding supports H1, positing that financial targets positively and significantly affect financial statement fraud. Specifically, as financial targets become more stringent, the pressure on management to meet these targets intensifies. This pressure can lead to manipulative behaviors aimed at achieving the desired financial outcomes, especially when the return on assets (ROA) is high but challenging. This result aligns with the theoretical framework of the fraud triangle, where pressure or incentive is one of the core elements driving fraudulent behavior. The high financial targets create a significant incentive for management to engage in fraudulent reporting if they cannot meet their performance goals through legitimate means. This finding is consistent with prior research that identifies financial targets as a critical factor in the likelihood of financial statement fraud. For example, Setiawati & Baningrum (2018) and Septriani & Handayani (2018) found that financial targets exert substantial pressure on management, leading to increased fraud risk.

Similarly, Sagala & Siagian (2021) observed that firms with aggressive financial targets are more prone to financial manipulation. This supports the notion that achieving high ROA can drive fraudulent activities when targets are unmet.

The results from this study reinforce the existing literature by demonstrating that the pressure of meeting ambitious financial targets is a significant predictor of financial statement fraud. This is in line with the findings of previous studies, which established a direct link between financial performance targets and fraudulent behavior (Septriani & Handayani, 2018; Setiawati & Baningrum, 2018). The consistency between this study's findings and earlier research underscores the robustness of the relationship between financial targets and fraud. From a practical perspective, these findings underscore the importance of organizations setting realistic and achievable financial targets to mitigate the risk of fraud. Companies should be cautious when establishing performance goals, ensuring that targets are challenging and attainable without resorting to unethical practices. Additionally, firms should implement robust internal controls and regularly review performance targets to prevent undue pressure that could lead to financial manipulation. These proactive measures are essential in managing the risk of fraud effectively.

The effect of change of directors on financial statement fraud

The findings of this study indicate a positive and significant relationship between director changes and financial statement fraud. This suggests that H2 is accepted, affirming that changes in company directors substantially impact the likelihood of fraudulent financial reporting. The data imply that whether the frequency of director changes is high or low, it correlates with an increase or decrease in financial statement fraud. This relationship highlights the potential risks of organizational leadership transitions, where new directors may engage in or uncover fraudulent activities. The results align with the concept that director changes can create an environment of uncertainty and instability within an organization, which may increase the risk of fraudulent behavior. New directors may feel pressured to quickly demonstrate performance improvements, which can lead to unethical decisions and manipulations of financial statements. This understanding should make us all more cautious and aware of the potential risks associated with leadership changes.

Conversely, frequent changes can disrupt established internal controls, allowing fraudulent activities to go unnoticed. This understanding is consistent with the broader corporate governance theory, which emphasizes stability and continuity in leadership as essential factors in maintaining strong oversight and accountability within organizations. These findings support H2, which posited that director changes would positively influence the incidence of financial statement fraud. The acceptance of this hypothesis suggests that the dynamics introduced by new leadership—whether through changes in strategic direction, operational priorities, or internal controls—can significantly impact the occurrence of fraud. The study's results align with this hypothesis, demonstrating that organizations undergoing frequent leadership changes are more vulnerable to fraudulent reporting practices.

The study's outcomes are consistent with previous research highlighting the relationship between leadership changes and financial misconduct. Prior studies, such as those by Setiawati & Baningrum (2018) and Sagala & Siagian (2021), have also found that leadership transitions can disrupt organizational stability and increase the likelihood of financial statement fraud. These studies suggest that new directors engage in or tolerate aggressive financial practices to make immediate impacts or align the company with new strategic goals. Similarly, the research by Septriani & Handayani (2018) supports that frequent director changes can weaken internal controls and oversight, thereby facilitating fraudulent behavior. The current study's findings align with these perspectives, further validating the connection between director turnover and increased fraud risk. From a practical perspective, the findings suggest that companies should be proactive and prepared for the potential risks associated with frequent leadership changes. Robust onboarding processes for new directors, emphasizing the importance of ethical leadership and compliance with internal controls, could significantly mitigate these risks.

The effect of political connection variables on financial statement fraud

The findings of this study, which unexpectedly reveal that political connections have a negative and insignificant effect on financial statement fraud, are sure to pique your interest. This outcome, which challenges the commonly held belief that political ties lead to financial misconduct, suggests that H3, which proposed that political connections positively influence financial statement fraud, is rejected. The data indicate that regardless of the extent of political connections, there is no significant impact on the increase or decrease in financial statement fraud. This finding challenges the assumption that political ties inherently increase the likelihood of financial misconduct within firms. From a conceptual standpoint, the result suggests that political connections do not necessarily provide the shield or leverage required to facilitate fraudulent activities in financial reporting. Political connections offer certain benefits, such as more accessible access to resources or regulatory leniency; however, these connections do not directly translate to a higher propensity for fraudulent financial practices. Instead, political connections might be associated with enhanced scrutiny from regulators and the public, discouraging fraudulent behavior. This finding aligns with corporate governance theories emphasizing transparency and accountability, suggesting that political ties might only sometimes equate to a lack of oversight or ethical lapses.

The rejection of H3 indicates that political connections do not significantly influence financial statement fraud. The hypothesis assumed that firms with strong political ties would have more opportunities or motivation to manipulate financial statements due to perceived protections or favorable treatment. However, the study's results do not support this assumption, as the statistical analysis shows no significant correlation between political connections and the likelihood of financial statement fraud. This finding suggests that other factors may be more critical in influencing fraudulent behavior, such as internal controls, corporate culture, or the personal ethics of management. This study's results are consistent with previous research by Ibrahim et al. (2022) which found that political connections did not significantly affect financial statement fraud. Similarly, (Habib et al., 2018) reported a negative coefficient for political connections (PCON), indicating no significant impact on financial misconduct. These studies collectively suggest that political connections do not inherently increase fraud risk, which aligns with the current study's findings. The consistency across these studies provides a more substantial basis for understanding the role of political connections in corporate governance, mainly regarding financial reporting practices. From a practical perspective, the findings imply that policymakers and regulators should not necessarily view political connections as a primary indicator of fraud risk within companies. Instead, attention should be focused on strengthening internal controls and promoting a culture of ethical behavior, which are more direct factors influencing the likelihood of fraud. This insight will keep you, as policymakers and regulators, well-informed and equipped to make decisions that prioritize transparency and accountability.

The effect of the nature of the industry on fraudulent financial statements

The findings of this study indicate that the nature of the industry has a negative and significant effect on financial statement fraud. This result means that H4, which proposed that industry nature would not significantly influence financial statement fraud, is rejected. The data suggest that as the nature of the industry becomes more complex or decreases instability, the likelihood of financial statement fraud increases. This relationship highlights the potential risks associated with industries characterized by decentralized operations, diverse inventory locations, and varying levels of regulatory scrutiny. The results suggest that the nature of the industry directly impacts the risk of financial misstatements. Industries with widely dispersed inventory, complex supply chains, and significant variability in asset valuation are more prone to misstatements in financial reporting. The increased complexity associated with managing inventory and other assets across multiple locations can lead to higher errors or intentional misreporting risks. This finding aligns with the broader financial reporting theory, which emphasizes that industry characteristics significantly influence the accuracy and reliability of financial statements. In industries where inventory is dispersed across many locations, the risk of inventory misstatement is heightened, particularly if the inventory becomes damaged or needs to be adequately accounted for (Faradiza, 2019).

The rejection of H4, which assumed that industry characteristics would not significantly affect fraud risks, is a key finding of our study. The results show a contrary trend, indicating that the nature of the industry is indeed a significant factor in influencing financial statement fraud. The statistical analysis indicates a significant negative impact, meaning that as the complexity of the industry increases or as industry characteristics become more challenging to manage, the risk of fraudulent financial reporting also rises. This suggests that companies in more complex industries must adopt robust internal controls and financial oversight practices to mitigate fraud risk. The study's findings, which align with previous research by Faradiza (2019), underscore the practical implications for fraud risk management. Faradiza's study, like ours, found that the nature of the industry significantly affects the likelihood of financial statement fraud. Specifically, companies with inventory spread across multiple locations face a greater risk of misstatement. This risk is due to the potential for inventory to become damaged or inaccurately recorded, leading to higher chances of fraud. These results support the assertion that industry nature is a critical factor in fraud risk management. From a practical standpoint, the findings suggest that companies in industries with high complexity or significant variability should implement stringent internal controls and monitoring systems. Firms should pay particular attention to inventory management practices, ensuring accurate and timely reporting of inventory levels across all locations. Regular audits and reviews of inventory and other high-risk areas can help identify and mitigate potential fraud risks. Organizations should also consider adopting advanced technologies like data analytics and real-time monitoring systems to enhance fraud detection and prevention capabilities.

The effect of Auditor Change on financial statement fraud

The comprehensive findings of this study, conducted with meticulous attention to detail, indicate that auditor changes have a negative and insignificant effect on financial statement fraud. This outcome suggests that H5, which proposed that auditor changes would significantly influence financial statement fraud, is rejected. The data show that regardless of the frequency of auditor changes, there is no significant impact on the increase or decrease of financial statement fraud. This finding challenges the assumption that changes in auditors inherently increase or decrease the likelihood of financial misconduct within firms. These results can be interpreted to suggest that changing auditors does not inherently alter the risk profile related to financial statement fraud. The assumption behind H5 was that changing auditors might allow companies to manipulate their financial statements, either by selecting a more compliant auditor or taking advantage of the transition period. However, the study's findings indicate that auditor changes do not directly impact fraudulent activities. This could be due to several factors, including rigorous audit standards, regulatory oversight, and the professionalism of the auditing firms, which mitigate the potential for fraud despite changes in auditors.

The rejection of H5 implies that auditor changes are not a significant factor in influencing financial statement fraud. The hypothesis assumed that auditor turnover would either increase the opportunities for fraudulent reporting due to reduced audit quality or decrease fraud risk by bringing a fresh perspective to the audit process. However, the findings do not support this assumption, as statistical analysis shows no significant correlation between auditor changes and the likelihood of financial statement fraud. This suggests that other variables, such as corporate governance practices, internal controls, or the ethical standards of management, play a more crucial role in determining fraud risk than merely changing auditors. The study's results are consistent with previous research by Dasman & Nida (2022), which also found that changes in auditors do not significantly affect financial statement fraud. Similarly, Damayani et al. (2017) reported that the rationalization variable, proxied by auditor changes, did not significantly affect financial misconduct in financial reporting. These studies align with the current research findings, further suggesting that the impact of auditor changes on fraud risk may be overstated or misinterpreted. The consistency of these findings across multiple studies strengthens the argument that auditor changes alone do not provide a sufficient basis for assessing fraud risk. From a practical standpoint, the findings suggest that companies and regulators should not view auditor changes as a primary indicator of fraud risk. Instead, efforts should be focused on ensuring that all auditing processes, regardless of who conducts them, adhere to high standards

of rigor and integrity. This emphasis on high standards of rigor and integrity in auditing processes is crucial for maintaining the reliability and accuracy of financial reporting, thereby enhancing the overall integrity of the financial system.

The effect of CEO concurrent position variable on financial statement fraud

The findings of this study indicate that CEO duality has a positive and significant effect on financial statement fraud. This outcome supports H6, which posited that CEO duality would increase the likelihood of financial statement fraud. The data demonstrate that when the CEO also holds the position of the board chair, the risk of fraudulent financial reporting rises. This finding suggests that the concentration of power in a single individual creates an environment where independent oversight is compromised, thereby facilitating financial misreporting. The result aligns with the notion that CEO duality undermines the effectiveness of corporate governance. When a CEO also serves as the board chair, the separation of powers between management and oversight becomes blurred. This dual role can lead to conflicts of interest, where the CEO might prioritize personal or managerial interests over those of shareholders or other stakeholders. The lack of independent oversight can result in less stringent monitoring of managerial actions, increasing fraudulent activity opportunities. This understanding is consistent with agency theory, which argues that when the interests of managers are not aligned with those of shareholders, there is a higher risk of opportunistic behavior, such as financial fraud.

The acceptance of H6 is significant as it underscores the role of CEO duality in increasing the likelihood of financial statement fraud. The hypothesis assumed that dual roles would lead to a concentration of power and reduce the board's ability to exercise effective oversight, thereby increasing fraud risk. The study's results support this assumption, indicating that companies where the CEO also serves as the board chair are more vulnerable to financial misreporting. This finding aligns with the core tenets of agency theory, highlighting the potential for conflicts of interest when the roles of CEO and board chair are not separated. The study's findings are consistent with prior research by Yang et al. (2017), who found that CEO duality positively affects financial statement fraud due to the lack of independent oversight. Yang et al. argue that a CEO in dual roles cannot provide objective supervision separate from their interests, leading to increased fraud risk. Similarly, Kusumosari & Solikhah (2021) concluded that CEO duality leads to disproportionate power within the organization, further increasing the likelihood of fraudulent financial reporting. Both studies support the notion that the concentration of decision-making power in a single individual creates a governance weakness, enabling unethical behavior and reducing the effectiveness of internal controls. The current study's findings align with these perspectives, reinforcing the link between CEO duality and fraud risk. From a practical standpoint, these findings imply that organizations should carefully consider the potential risks associated with CEO duality. To mitigate the risk of financial statement fraud, companies might benefit from separating the roles of CEO and board chair to ensure a more robust governance structure and enhance the board's ability to oversee management independently. Strengthening the independence and diversity of the board can also help mitigate the risks associated with CEO duality by providing more effective checks and balances. Additionally, firms should implement comprehensive internal controls and auditing procedures to detect and prevent fraud, particularly in high concentrations of power.

Conclusion

This study aimed to examine the impact of various factors on financial statement fraud among companies. The findings revealed that financial targets and changes in directors positively and significantly influence financial statement fraud, suggesting that higher financial targets and frequent leadership changes increase the risk of fraudulent reporting. Political connections, however, were found to have no significant effect on financial statement fraud, indicating that such ties do not directly influence fraud risk. Conversely, the nature of the industry was shown to have a negative and significant impact on financial statement fraud, highlighting that more complex industry characteristics could reduce fraud occurrences. Auditor changes did not significantly affect fraud, suggesting that altering auditors does not directly correlate with fraud risk. Lastly, CEO duality had

a positive and significant effect on financial statement fraud, suggesting that when a CEO also serves as board chair, the risk of fraud increases due to the concentration of power.

The value of this study lies in its significant contribution to academic knowledge and practical applications. The research provides original insights into how various factors, including financial targets, leadership dynamics, and governance structures, impact the likelihood of financial statement fraud. These findings, which have been rigorously researched and tested, can help inform policy development and corporate governance practices by highlighting the importance of balancing performance pressures with robust oversight mechanisms. The study suggests that companies should consider separating the roles of CEO and board chair to mitigate fraud risk, implement more rigorous internal controls, and maintain high levels of transparency to safeguard against potential fraud. Additionally, investors can use these findings to assess the risk profiles of companies they are considering investing in, especially by examining corporate governance practices and financial target settings.

However, this study has certain limitations that should be acknowledged. The research relied on specific financial indicators and variables that may not capture all aspects of financial statement fraud, and the generalizability of the findings may be limited to the context studied. This opens up exciting opportunities for future research to consider using alternative models for measuring financial statement fraud, such as the Beneish Model, which incorporates factors like total accruals, gross margin index, asset quality index, and sales growth index. Additionally, incorporating moderating variables such as Corporate Social Responsibility (CSR) could provide a more nuanced understanding of the factors influencing fraud. Researchers are encouraged to explore these avenues in future studies to build on the findings of this research and contribute to a more comprehensive understanding of financial statement fraud dynamics.

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