

Fraud Hexagon Analysis in Detecting Financial Statement Fraud with Corporate Governance as a Moderating Variable

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ABSTRACT

The purpose of this research is to study the influence of the fraud hexagon on financial report fraud in insurance companies listed on the Indonesia Stock Exchange from 2018 to 2022, incorporating corporate governance as a moderating factor. In this study, the fraud hexagon serves as the independent variable, while financial report fraud is the dependent variable. The data analysis method used is multiple regression. The research findings indicate that the variables of external pressure and ineffective monitoring have a positive influence on financial report fraud. Conversely, the variables of total accruals, CEO education, CEO duality, and political connections show a negative influence on financial report fraud. Corporate governance, as a moderating variable, is found to moderate only the relationship between external pressure and CEO duality on financial report fraud.

INTRODUCTION

Fraud is an issue that continues to occur to this day. Fraud is an illegal act aimed at manipulating and presenting false reports or other actions carried out by individuals within or outside the organization for their personal or group interests, done intentionally and ultimately causing harm to a company or other institution (Lastanti et al., 2022; Riyanti, 2021; Sari et al., 2022). Fraud is an issue that cannot be completely eradicated but can be minimized through efforts to prevent the misuse of resource components that have significant potential for exploitation. No organization or company is entirely safe from fraud. Conflicts of interest, bribery, illegal purchases, and extortion are some ways in which corruption can manifest. Asset misappropriation means the theft of money and other assets. Financial report fraud, on the other hand, involves errors in the amounts or disclosures written in financial statements.

ACFE, the world's largest anti-fraud organization, conducted a survey on fraud cases worldwide in 2018 and found 220 fraud cases in the Asia-Pacific region with a median loss of 236,000 USD. Fraud schemes involved non-cash, expense reimbursement, and billing. Corruption is the most common fraud scheme (Achmad et al., 2023; Widiastika & Junaidi, 2021). However, this scheme is highly detrimental as it results in losses amounting to 700,000 USD. According to ACFE's research, asset misappropriation remains frequent, but the largest losses are associated with the misuse of company assets.

Financial report fraud involves intentional errors meant to manipulate and deceive users of financial reports through the presentation of false data or other types of negligence (Apriliana & Agustina, 2017; Oktaviany & Reskino, 2023). Insurance companies are an example of financial report fraud in Indonesia. This can certainly harm the business, especially if the company has poor internal controls. Insurance companies are highly averse to losses to maintain public trust. Therefore, it is crucial to research the potential causes of financial report fraud. One case of insurance fraud is PT. Asuransi Jiwasraya, the first insurance company in Indonesia, which defaulted on payments amounting to 802 billion IDR in October 2018. This case was later investigated by the Supreme Audit Agency, which found potential state losses of 16.8 trillion IDR from the case (Haryanti, 2023). One of the causes of financial report fraud in insurance companies is poor internal control governance by the company, resulting in a negative spread that causes liquidity pressure on the company.

Fraud theory is useful for detecting financial report fraud. For this purpose, various types of fraud theories, each with evolving elements, can be utilized. The fraud triangle theory was created by Cressey in 1993, consisting of pressure, opportunity, and rationalization. Subsequently, the collusion theory added a fourth element, opportunity, proposed by Wolfe and Hermansyah in 2004. The fraud pentagon theory, proposed by Crowe Horwath in 2011, added the element of arrogance. Finally, the fraud hexagon theory, proposed by Vousinas in 2019, combines six main elements of collusion: pressure/stimulus, opportunity, arrogance, and rationalization.

To detect financial report fraud, several previous researchers have examined the fraud hexagon using different proxies for each of its components.

One such study was conducted by Rizkiawan (2021), which used proxies such as stimulus (financial stability), capability (absence of director turnover), collusion (related-party sales transactions), opportunity (effective supervision), rationalization (auditor turnover), and ego (political connections).

The fraud hexagon theory is relatively new, so there are only a few studies investigating the hexagon phenomenon in detecting financial report fraud. Additionally, previous research results are still inconsistent. The results may be inconsistent because the companies used are not the same for each component of the fraud hexagon or because the companies used are not the same for each study. Therefore, this research will attempt to replicate the fraud hexagon analysis using various proxies and also add moderation to determine whether these inconsistent components will become stronger or weaker with the presence of a moderating variable. In this study, we will analyze several proxies for each component whose results were inconsistent in previous research.

The purpose of this research is to determine how each part of the fraud hexagon impacts financial report fraud, and how the moderating variable affects each part of the fraud hexagon. The independent variable used is the fraud hexagon, which consists of components: pressure, measured by external pressure; opportunity, proxied by effective supervision; rationalization, proxied by total accruals; capability, proxied by CEO education; ego, proxied by CEO duality; and collusion, proxied by political connections. The dependent variable is measured using profit, and the moderating variable is proxied by the presence of independent commissioners in the company..

THEORETICAL REVIEW

Agency Theory

Jensen and Meckling (1976) were the first to explore Agency Theory. According to this theory, company managers are referred to as "agents" and shareholders as "principals." This difference in viewpoints leads to agency conflicts because capital providers and company managers do not have the same information. Therefore, to reduce the differences in company interests, a monitoring system needs to be established to help all parties achieve alignment of interests (Butar Butar, 2020).

Financial Report Fraud

Financial report fraud refers to the deliberate act of presenting a company's financial reports in a way that either omits or manipulates information to deceive those who review the reports. This act is illegal as it aims to mislead and deceive parties relying on the company's financial reports to make decisions, with the fraudster benefiting from the deception. Financial report fraud is considered either a criminal or civil fraud by authorities due to the differences between these types of fraud (Adhikara, 2020; Suryakusuma & Stephanus, 2023).

Fraud Hexagon Theory

The Fraud Hexagon Theory was developed by Vousinas (2019) to complement previous fraud theories by adding a new component: collusion. The Fraud Hexagon Theory includes 6 components, which are improvements upon earlier fraud theories.

Pressure

Pressure is a condition in which an individual feels the need to commit fraud (Riyanti, 2021). Pressure can be financial or non-financial, and in this context, it can be represented as financial pressure. External pressure is used to represent pressure in this study. Studies by Achmad et al. (2023), Narew et al. (2021), and Nilzam (2020) show that pressure from external sources can increase financial report fraud. Based on these findings, the hypothesis H1 is: external pressure has a positive impact on financial statement fraud.

Opportunity

The presence of an opportunity to alter financial reports is known as opportunity. According to SAS No. 99, when the board of commissioners, board of directors, and audit committee do not properly execute the financial reporting process, and when individuals or small groups dominate management without adequate oversight, fraud can occur within the company. In this study, the opportunity element will be measured using effective supervision, proxied by the number of audit committees within the company. Research by Gando Suri (2023) indicates that effective supervision can reduce financial report fraud. Based on these findings, the following hypothesis can be drawn:

H2: Financial statement fraud is influenced by ineffective monitoring.

Rationalization

Rationalization refers to the effort to justify fraudulent actions that have been committed (Imtikhani & Sukirman, 2021). In this study, the rationalization variable is the total accrual ratio in the financial reports. Relationships with auditors and the total accrual ratio are among the conditions that can lead management to commit fraud. Studies (Arulampalam Kunaraj, P. Chelvanathan, Ahmad AA Bakar, 2023; Octaviana, 2022) show that total accruals increase financial report fraud. Thus, the following hypothesis can be drawn:

H3: Total accruals increase financial statement fraud.

Capability

Capability is the ability of an individual to perform various tasks at work, especially in developing business, and the ability to control social conditions that can be advantageous (Miftahul Jannah et al., 2021; Syahrul Mustofa, 2020). In this study, capability is measured using CEO education as a proxy. This is also related to research by Octaviana (2022), which found that CEO education reduces financial report fraud. Thus, the following hypothesis can be drawn:

H4: CEO education reduces financial statement fraud.

Arrogance

arrogance refers to an individual's ability to exhibit a sense of superiority (Kusumosari & Solikhah, 2021). CEO duality is an indicator used to measure ego. This can lead to the dominance of power, which triggers egoistic traits, potentially causing the CEO to commit fraud. A study (Mardeliani et al., 2022) found that position duality facilitates financial report fraud. Thus, the following hypothesis can be drawn:

H5: CEO duality increases financial statement fraud.

Collusion

Collusion can occur among employees, between groups of individuals in different companies, or between companies simultaneously. Dishonest attitudes and behaviors between two or more people are defined as collusion (Nadziliyah & Primasari, 2022). This study describes collusion through CEO political connections. Research (Kusumosari & Solikhah, 2021; Nadziliyah & Primasari, 2022) found that political connections increase financial report fraud. Thus, the following hypothesis can be drawn:

H6: Political connections increase financial statement fraud.

Corporate Governance

To foster and maintain investor trust, one of the main business areas is corporate governance. To ensure that the company is managed very well to achieve the goals set from the beginning, governance combines processes, practices, and procedures (Triyuwono et al., 2020; Ullah et al., 2017). In this study, corporate governance is proxied by independent commissioners. Thus, the following hypotheses can be drawn:

H7: Independent commissioners enhance the impact of external pressure on financial statement fraud.

H8 : Independent commissioners enhance the effectiveness of supervision on financial statement fraud.

H9: Independent commissioners enhance the impact of auditor turnover on financial statement fraud.

H10: Independent commissioners enhance the effect of CEO education on financial statement fraud.

H11: Independent commissioners enhance the impact of CEO duality on financial statement fraud.

H12: Independent commissioners enhance the effect of political connections on financial statement fraud.

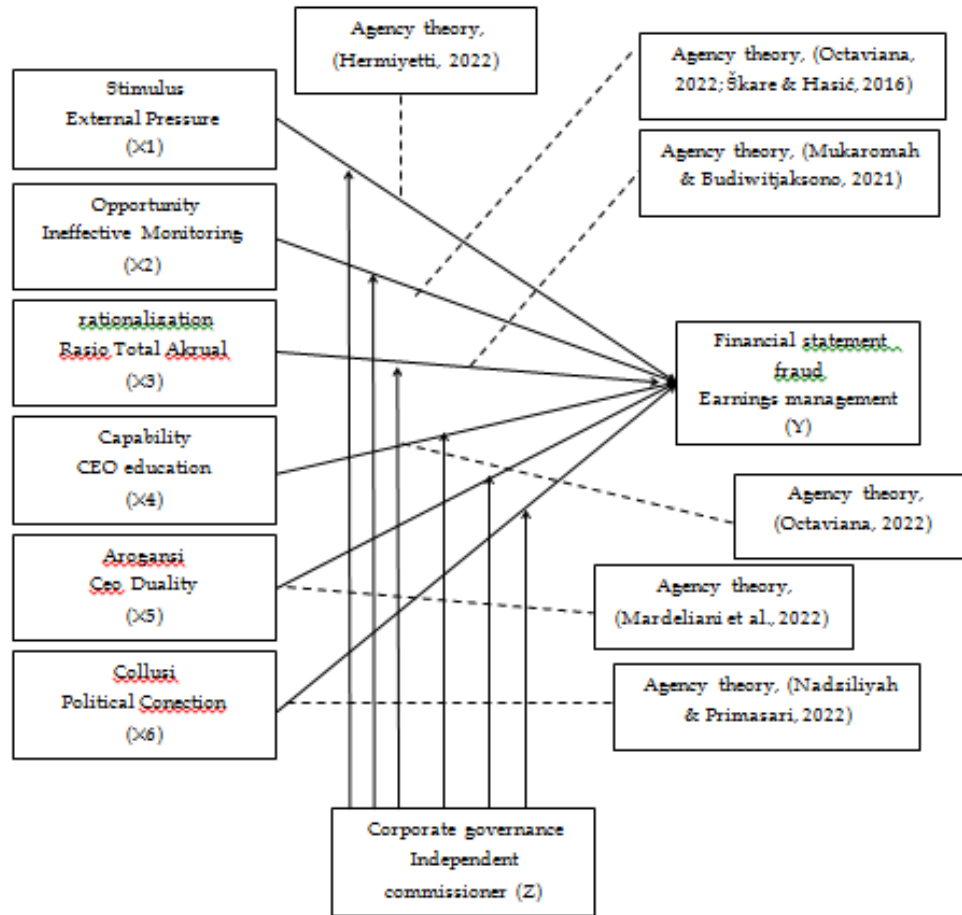


Figure 1. Conceptual framework

METHODOLOGY

In this study, a quantitative approach was used, and an associative research type was employed. The secondary data used comes from the annual reports of insurance companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. This research aims to produce relevant and accurate results for insurance companies in Indonesia over a five-year period. E-Views 13 software was used for data analysis. The population of this study consists of insurance companies in Indonesia that are actively serving the public, including reinsurance companies, general insurance (property and casualty insurance), and life insurance companies, which have complete financial statements each year. The study population includes 18 insurance companies, with 11 companies selected as the sample.

Table 1. Research and measurement variables

Fraud hexagon	Variable	Measurement
Stimulus	External pressure (X1)	$\text{laverage} = \frac{\text{total liability}}{\text{total assets}}$
Opportunity	Ineffective monitoring	Number of audit committees

	(X2)	
Rationalization	Total accrual ratio (X3)	$TATA = \frac{total\ accruals}{total\ assets}$
Capability	CEO Education (X4)	CEOs with a master's background or higher are assigned a value of 1 in the dummy variable, while CEOs with no background are assigned a value of 0.
Arogansi	CEO's duality (X5)	Dummy variable, value 1 if the company has a CEO who has 2 professional responsibilities and value 0 if the company does not have a CEO who holds 2 responsibilities in a company.
Collusi	Political connections (X6)	Companies with CEOs who have political connections are given a value of 1 by the dummy variable, while companies with CEOs who do not have political connections are given a value of 0.
	Financial statement fraud (Y)	Profit management
	Corporate governance (z)	Proportion of independent commissioners

RESULTS

Multicollinearity test

Table 2. Multicollinearity test results

	X1	X2	X3	X4	X5	X6	Z
X1	1.000000	0.288384	-0.357212	0.065306	0.142614	0.103358	0.213361
X2	0.288384	1.000000	-0.286401	-0.028391	0.012257	-0.262698	-0.167993
X3	-0.357212	-0.286401	1.000000	-0.003167	0.057600	0.056600	0.059016
X4	0.065306	-0.028391	-0.003167	1.000000	0.133631	0.108075	-0.078633
X5	0.142614	0.012257	0.057600	0.133631	1.000000	-0.046659	0.147108
X6	0.103358	-0.262698	0.056600	0.108075	-0.046659	1.000000	0.096667
Z	0.213361	-0.167993	0.059016	-0.078633	0.147108	0.096667	1.000000

All independent variables in the study have a tolerance value of less than 0.85 (<0.85), indicating that there is no multicollinearity problem, as each independent variable can be explained by the other independent variables, as shown in Table 2 of the multicollinearity test.

Heteroscedasticity Test

Table 3. Heteroscedasticity test results

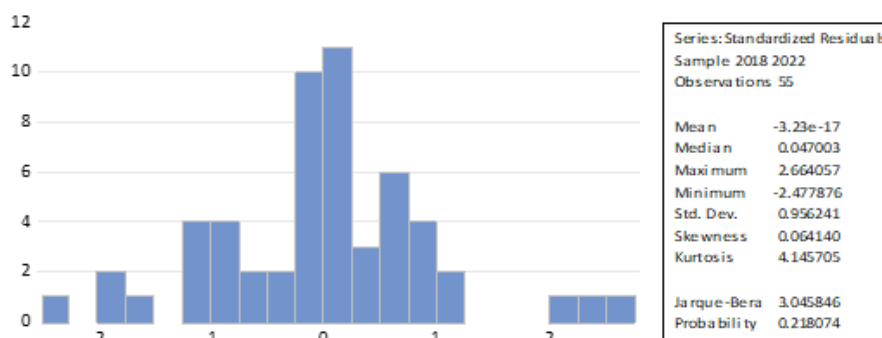
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	511383.9	4.15E+08	0.001232	0.9990
X1	4.66E+08	5.28E+08	0.882773	0.3831
X2	29152287	74782036	0.389830	0.6989
X3	-5.57E+08	5.61E+08	-0.991965	0.3277
X4	-92906309	69432423	-1.338082	0.1890
X5	34339402	1.03E+08	0.334959	0.7395
X6	88744774	1.38E+08	0.642910	0.5242
Z	10195144	3.05E+08	0.033413	0.9735

As shown in Table 3, the results of the heteroscedasticity test indicate that all variables have significance values greater than 0.05 (>0.05). Therefore, it can be concluded that this study does not experience heteroscedasticity issues.

Normality test

It can be concluded that this study meets the normality assumption, as shown by Graph 2, where the probability value of the normality test for this study is 0.218074, indicating that this value is greater than 0.05 (>0.05).

Figure 2. normality tes results



Coefficient of determination test

Table 5. Coefficient of determination test results

R-squared	0.802464	Mean dependent var	2.41E+08
Adjusted R-squared	0.711705	S.D. dependent var	3.85E+08

Table 5 shows that the independent variables—financial stability, director turnover, government ownership, industry characteristics, auditor changes, and the number of CEO photos in the company's annual report—account for 71.7% of the likelihood of financial report fraud. Other variables not discussed in this study account for the remaining 28.3% of the likelihood.

Simultaneous significance test (f statistical test)

Table 6. f statistical test results

F-statistic	8.841649	Durbin-Watson stat	1.284544
Prob(F-statistic)	0.000000		

Table 6 shows an F-statistic probability value of 0.000000 (<0.05) and a total F-statistic value of 8.841649. Therefore, it can be concluded that the significance of the dependent variable is jointly influenced by the independent variables.

Model Feasibility Test (t Statistical Test)

Table 7. t statistical test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.86E-13	1.18E-13	2.423622	0.0205
X1	1.000000	6.03E-14	1.66E+13	0.0000
X2	-1.17E-13	2.19E-14	-5.350639	0.0000
X3	-1.04E-13	1.59E-13	-0.656453	0.5157
X4	-1.73E-14	1.94E-14	-0.891654	0.3785
X5	-2.35E-15	6.00E-14	-0.039198	0.9689
X6	-3.44E-14	3.89E-14	-0.885817	0.3816
Z	-2.26E-13	8.65E-14	-2.607871	0.0132

According to the statistical test results shown in Table 7, variables X1 and X2 have significance values of 0, which is less than 0.05 (<0.05), indicating that variables X1 and X2 have a significant impact on variable Y. In contrast, the significance values for variable X3 are 0.5157, for variable X4 are 0.3785, and for variable X5 are 0.9689, indicating that these three variables do not have a significant impact on variable Y.

Test moderation

Table 8. Results of stimulus variable moderation tests

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-22.06930	16.51427	-1.336377	0.1888
X1	23.07431	8.773796	2.629912	0.0120
Z	22.79901	10.13199	2.250200	0.0299
X1Z	-10.20973	5.004489	-2.040115	0.0478

As shown in Table 8, the probability value for the interaction variable between X1 and Z is 0.0478, which is less than 0.05 (less than 0.05). Therefore, it can be concluded that variable Z can assist or moderate variable Y.

Table 9. Results of the variable opportunity moderation test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19.09581	6.898379	2.768159	0.0084
X2	-1.492674	2.307145	-0.646979	0.5213
Z	-9.612861	12.03273	-0.798893	0.4290
X2Z	4.464438	4.042318	1.104425	0.2758

As shown in Table 9, variable Z cannot moderate variable Y because the probability value for the interaction variable is 0.2758, which is greater than 0.05 (>0.05).

Table 10. Results of the rationalization variable moderation test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.43437	1.537540	10.03835	0.0000
X3	-19.73629	20.56423	-0.959739	0.3428
Z	2.228774	2.687272	0.829382	0.4117
X3Z	34.22722	33.58588	1.019096	0.3141

As shown in Table 10, variable Z cannot moderate variable Y because the probability value for the interaction variable is 0.3141, which is greater than 0.05 (>0.05).

Table 11. Results of the capability variable moderation test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.94305	3.477116	3.147163	0.0031
X4	4.204795	3.590860	1.170971	0.2484
Z	10.77989	5.883982	1.832074	0.0742
X4Z	-8.290402	6.032873	-1.374205	0.1768

As shown in Table 11, variable Z cannot moderate variable Y because the probability value for the interaction variable is 0.1768, which is greater than 0.05 (>0.05).

Table 12. Results of the ego variable moderation test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.88419	1.222434	12.17586	0.0000
X5	-8.910638	4.640305	-1.920270	0.0618
Z	3.079064	2.168476	1.419921	0.1632
X5Z	16.01869	7.158264	2.237790	0.0307

As shown in Table 12, the probability value for the interaction variable between X1 and Z is 0.0307, which is less than 0.05 (<0.05). Therefore, it can be concluded that variable Z can assist or moderate variable Y.

Table 13. results of the collusive variable moderation test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.66343	1.371880	10.68857	0.0000
X6	0.820686	5.148533	0.159402	0.8741
Z	3.612240	2.441400	1.479577	0.1466
X6Z	-1.518200	8.125279	-0.186849	0.8527

As shown in Table 13, variable Z cannot moderate variable Y because the probability value for the interaction variable is 0.8527, which is greater than 0.05 (greater than 0.05).

DISCUSSION

The influence of external pressure on financial statement fraud

The results of the hypothesis testing conducted in this study indicate that the first hypothesis is accepted. This shows that external pressure, measured by the average ratio, has a positive impact on financial report fraud. The t-statistic value is 1.6600 with a significance value of 0, which is less than $\alpha = 0.05$. Management must meet the demands of third parties or external pressures (Nilzam, 2020; Octaviana, 2022). Companies with significant debt may experience default, meaning creditors will pressure them to settle all their debts. In agency theory, there is a conflict of interest between the controlling parties and the agents. Management might commit fraud in financial reports due to the tendency to show high total assets. Therefore, the results of this study address agency theory regarding the impact of financial stability on financial fraud.

External pressure has a positive impact on financial report fraud, according to previous studies (Achmad et al., 2023; Narew et al., 2021; Nilzam, 2020). However, other studies (Cipta & Nurbaiti, 2022; Lastanti et al., 2022) have found a negative impact.

The effect of effective supervision on financial statement fraud

This indicates that having many audit committees is very cautious in avoiding financial report fraud. The t-statistic value is -5.350 with a significance value of 0, which is less than $\alpha = 0.05$. The inability to prevent and detect fraud can increase the likelihood of its occurrence. An effective monitoring system is required to prevent financial report fraud. If there is a conflict of interest between agents and directors, it can lead to issues for the agency and necessitate oversight from the agents. This may also be due to well-functioning audit committees, which ensure the company has a good monitoring system and reduces the likelihood of financial report fraud.

The effect of total accruals on financial statement fraud

The hypothesis testing results of this study show that the third hypothesis does not hold. This indicates that total accruals have a negative impact on financial report fraud. The t-statistic value is -0.6564 with a significance value of 0.5157, which is greater than $\alpha = 0.05$. This suggests that

the likelihood of financial report fraud is lower if the company has more accruals. With this accrual method, management can act and think logically about the results of the financial report, especially regarding revenue, allowing them to exploit the situation to commit fraud in the company's financial reports.

Previous studies (Lastanti et al., 2022) found that total accruals affect financial report fraud. However, other studies (Arulampalam Kunaraj, P. Chelvanathan, Ahmad AA Bakar, 2023; Octaviana, 2022) found that total accruals influence financial report fraud.

The effect of CEO's education on financial statement fraud

The hypothesis testing results of this study show that the fourth hypothesis cannot be accepted. This indicates that CEO education leads to higher financial report fraud. The t-statistic value is -0.8916, and the significance value is greater than $\alpha = 0.05$. People with higher education are usually considered to have exceptional and beneficial skills, knowledge, and experience for business. This is because higher education teaches ethics, open-mindedness, and a positive attitude, which reduces the likelihood of financial report fraud.

Previous research (Octaviana, 2022) found that CEO education increases financial report fraud, while another study (Ying and Mei, 2014) found that CEO education decreases financial report fraud.

The effect of CEO duality on financial statement fraud

The hypothesis testing results of this study show a rejection of the fifth hypothesis. This indicates that CEO duality has a negative impact on financial report fraud. With a significance value of 0.9689, which is greater than $\alpha = 0.05$, the t-statistic value is -0.0391. This study suggests that CEOs with dual positions are more likely to exploit their positions to enhance company performance and maintain their own performance to ensure the company's survival. Conversely, CEOs who do not hold dual positions, either within or outside their companies, are more focused on their roles to improve company performance and maintain a positive image with investors.

These findings contradict previous research (Mardeliani et al., 2022), which found that CEO duality has a positive effect on financial report fraud, but align with previous research (Miftahul Jannah et al., 2021).

The influence of political connections on financial statement fraud

The sixth hypothesis is not supported. This indicates that political connections worsen financial report fraud. The t-statistic value is -0.8858, and the significance value of 0.3816 is greater than $\alpha = 0.05$. Because management with political connections does not always use their positions for personal or group gain, this study suggests that collusion, proxied by political connections, does not affect financial report fraud.

These findings align with previous research (Muhthadin & Amin, 2023; Nurbaiti & Arthami, 2023), which found that political connections have a negative impact on financial report fraud. In contrast, earlier studies (Kusumosari & Solikhah, 2021; Nadziliyah & Primasari, 2022) found that political connections have a positive impact on financial report fraud.

The influence of independent commissioners moderates the fraud hexagon on financial statement fraud

The results of hypothesis testing show that the seventh hypothesis is accepted. This indicates that independent commissioners can moderate the positive impact of external pressure on financial report fraud, with a t-statistic value of -2.0401 and a significance value of 0.0478, which is less than $\alpha = 0.05$. This suggests that independent commissioners can moderate the positive effect of external pressure on financial report fraud. If independent commissioners perform their duties well, such as supervising various parties, especially management, external pressure will decrease. Other studies (Riyanti, 2021) also suggest that external pressure can reduce financial report fraud.

However, hypothesis testing for the eighth hypothesis shows that independent commissioners cannot moderate the relationship between effective supervision and financial report fraud. The significance value is 0.2758 and the t-statistic is 1.1044, which is greater than $\alpha = 0.05$. Therefore, this finding indicates that independent commissioners fail to control the relationship between effective supervision and financial report fraud, and hypothesis H8 is rejected.

The ninth hypothesis testing results show that independent commissioners cannot moderate the positive effect of accruals on financial report fraud, with a t-statistic of 1.0190 and a significance value of 0.3141, which is greater than $\alpha = 0.05$. Thus, hypothesis H9 is rejected.

The tenth hypothesis testing shows that independent commissioners cannot moderate the positive impact of CEO education on financial report fraud, with a t-statistic of -1.3742 and a significance value of 0.1768, which is greater than $\alpha = 0.05$. Therefore, hypothesis H10 is rejected.

The eleventh hypothesis testing shows that independent commissioners have a positive effect on the relationship between CEO duality and financial report fraud. The t-statistic is 2.2377 and the significance value is 0.0307, which is less than $\alpha = 0.05$. This indicates that independent commissioners are effective in moderating the effect of CEO duality on financial report fraud, so hypothesis H11 is accepted.

Conversely, the twelfth hypothesis testing results do not support the hypothesis, thus hypothesis H12 is rejected.

The results for H8, H9, H10, and H12 indicate that the hypotheses are rejected, meaning that independent commissioners cannot moderate the variables of effective supervision, accruals, CEO education, and political connections. Compliance with the corporate governance recommendations provided by the OJK as guidelines and explanations is one reason why the implementation of independent commissioners results in some organizations not following these directions simultaneously (Rizkiawan, 2021). If the recommendations are not fully suitable for the entity's circumstances or needs, the entity is expected to explain why the recommendations were not applied. This is regulated in the governance guidelines. Research by Arulampalam Kunaraj, P. Chelvanathan, and Ahmad AA Bakar (2023) found that factors such

as opportunity, rationalization, capability, and collusion cannot prevent financial report fraud.

CONCLUSION

The purpose of this study is to examine how each element of the Fraud Hexagon model—external pressure, opportunity (ineffective monitoring), rationalization (total accruals), capability (CEO education), ego (CEO duality), and collusion (political connections)—affects financial statement fraud. This study also investigates moderating variables. It focuses on insurance companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022.

Based on the results discussed in the previous chapter, it can be concluded that external pressure and effective supervision reduce financial statement fraud. Additionally, a company will have a high value in the eyes of investors if its condition is stable and sound. As a result, management may be pressured to continually demonstrate the company's performance and stability to prevent investors from reducing their future investments. Conversely, although independent commissioners can control external pressure and CEO duality, they cannot control the effects of supervision, accruals, CEO education, and political connections on financial statement fraud in this study. Overall, financial statement fraud is influenced by the components of the Fraud Hexagon theory.

FUTURE STUDY

Researchers are encouraged to address several limitations of this study in future research. The number of variables used to evaluate their impact on financial statement fraud is relatively small. Additionally, this study uses a limited sample consisting of eleven insurance companies listed on the Indonesia Stock Exchange (IDX) that meet certain criteria. Therefore, this sample does not encompass all insurance companies in Indonesia.

The scope of future research is expected to be expanded to include not only insurance companies but also private companies, manufacturing industries, and banks. Furthermore, future studies could employ various measurement proxies and increase the number of proxies used for each variable to capture phenomena from different perspectives. Additionally, future research should consider using good corporate governance variables as moderating variables in the direct relationship between the elements of the Fraud Hexagon theory and financial statement fraud.

REFRENSI

- Achmad, T., Ghozali, I., Helmina, M. R. A., Hapsari, D. I., & Pamungkas, I. D. (2023). Detecting Fraudulent Financial Reporting Using the Fraud Hexagon Model: Evidence from the Banking Sector in Indonesia. *Economies*, 11(1). <https://doi.org/10.3390/economies11010005>
- Adhikara, M. A. (2020). Motivasi Bonus Plan Dalam Fraudulent Financial Statement. *Jurnal Ekonomi: Journal of Economic*, 11(1). <https://doi.org/10.47007/jeko.v11i1.3011>
- Apriliana, S., & Agustina, L. (2017). The Analysis of Fraudulent Financial Reporting Determinant through Fraud Pentagon Approach. *Jurnal Dinamika Akuntansi*, 9(2), 154–165. <https://doi.org/10.15294/jda.v7i1.4036>
- Arulampalam Kunaraj, P.Chelvanathan, Ahmad AA Bakar, I. Y. (2023). No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析Title. *Journal of Engineering Research*, 10(2), 732–757.
- Butar Butar, S. (2020). Karakteristik Dewan Komisaris Dan Idiosyncratic Volatility. *Media Riset Akuntansi, Auditing & Informasi*, 20(1), 61–82. <https://doi.org/10.25105/mraai.v20i1.6282>
- Cipta, A. T., & Nurbaiti, A. (2022). Fraud Hexagon untuk Mendeteksi Indikasi Financial Statement Fraud. *E-Jurnal Akuntansi*, 32(10), 2977. <https://doi.org/10.24843/eja.2022.v32.i10.p06>
- Gando Suri, A. (2023). Analisis Fraud Hexagon Dalam Mendeteksi Potensi Kecurangan Laporan Keuangan Pada Perusahaan Badan Usaha Milik Negara (BUMN). *Syntax Literate; Jurnal Ilmiah Indonesia*, 8(5), 3495–3515. <https://doi.org/10.36418/syntax-literate.v8i5.11885>
- Haryanti, R. (2023). Analisis Kecurangan Laporan Keuangan PT Asuransi Jiwasraya dengan Analisis Fraud Pentagon. *Sanskara Akuntansi Dan Keuangan*, 1(02), 92–99. <https://doi.org/10.58812/sak.v1i02.70>
- Hermiyetti. (2022). SCORRE approach as an instrument for detecting fraudulent financial reporting. *International Journal of Business Ecosystem & Strategy* (2687-2293), 4(4), 118–131. <https://doi.org/10.36096/ijbes.v4i4.353>
- Imtikhani, L., & Sukirman, S. (2021). Determinan Fraudulent Financial Statement Melalui Perspektif Fraud Hexagon Theory Pada Perusahaan Pertambangan. *Jurnal Akuntansi Bisnis*, 19(1), 96. <https://doi.org/10.24167/jab.v19i1.3654>
- Kusumosari, L., & Solikhah, B. (2021). Analisis Kecurangan Laporan Keuangan Melalui Fraud Hexagon Theory. *Fair Value: Jurnal Ilmiah Akuntansi Dan*

- Keuangan*, 4(3), 753–767. <https://doi.org/10.32670/fairvalue.v4i3.735>
- Lastanti, H. S., Murwaningsari, E., & Umar, H. (2022). the Effect of Hexagon Fraud on Fraud Financial Statements With Governance and Culture As Moderating Variables. *Media Riset Akuntansi, Auditing & Informasi*, 22(1), 143–156. <https://doi.org/10.25105/mraai.v22i1.13533>
- Mardeliani, S., Sudrajat, & Alvia, L. (2022). Analisis Kecurangan Laporan Keuangan Menurut Hexagon Fraud Model Pada Perusahaan Bumh Tahun 2016-2020. *Jurnal Syntax Admiration*, 3(7), 842–857. <https://doi.org/10.46799/jsa.v3i7.458>
- Miftahul Jannah, V., Andreas, A., & Rasuli, M. (2021). Pendekatan Vousinas Fraud Hexagon Model dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Studi Akuntansi Dan Keuangan Indonesia*, 4(1), 1–16. <https://doi.org/10.21632/saki.4.1.1-16>
- Muhthadin, M. Al, & Amin, M. N. (2023). Hexagon Fraud in Fraudulent Financial Statement: Perusahaan Sektor Keuangan Yang Terdaftar Di Bei Periode 2018-2021. *Jurnal Aplikasi Akuntansi*, 8(1), 157–172. <https://doi.org/10.29303/jaa.v8i1.292>
- Mukaromah, I., & Budiwitjaksono, G. S. (2021). Fraud Hexagon Theory dalam Mendeteksi Kecurangan Laporan Keuangan pada Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019. *Jurnal Ilmiah Komputerisasi Akuntansi*, 14(1), 61–72. <http://journal.stekom.ac.id/index.php/kompak> page61
- Nadziliyah, H., & Primasari, N. S. (2022). Analisis Fraud Hexagon Terhadap Financial Statement Fraud Pada Perusahaan Sektor Infrastruktur, Utilitas Dan Transportasi. *Accounting and Finance Studies*, 2(1), 21–39. <https://doi.org/10.47153/afs21.2702022>
- Narew, I., Zuhroh, D., & Harmono. (2021). Analisis Diamond Fraud Theory Dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal I Akuntansi Trisakti*, 8(September), 317–342.
- Nilzam, S. P. (2020). Analisis Pendeteksian Kecurangan Laporan Keuangan Menggunakan Teori Fraud Pentagon Dengan Ukuran Perusahaan Sebagai Variabel Moderasi. *Prosiding Seminar Nasional Pakar*, 1–6. <https://doi.org/10.25105/pakar.v0i0.6908>
- Nurbaiti, A., & Arthami, A. (2023). Mendeteksi Kecurangan Laporan Keuangan Menggunakan Teori Fraud Hexagon. *Akurasi : Jurnal Studi Akuntansi Dan Keuangan*, 6(1), 215–228. <https://doi.org/10.29303/akurasi.v6i1.359>

- Octaviana, N. (2022). Analisis Elemen-Elemen Fraud Hexagon Theory Sebagai Determinan Fraudulent Financial Reporting. *Jurnal Akuntansi*, 11(2), 106–121. <https://doi.org/10.46806/ja.v11i2.895>
- Oktaviyani, F., & Reskino. (2023). Financial Statement Fraud: Pengujian Fraud Hexagon Dengan Moderasi Audit Committee. *Jurnal Bisnis Dan Akuntansi*, 25(1), 91–118. <https://doi.org/10.34208/jba.v25i1.1799>
- Riyanti, A. (2021). The Effect of Hexagon Fraud on the Potential Fraud Financial Statements with the Audit Committee as a Moderating Variable. *International Journal of Social Science and Human Research*, 04(10), 2924–2933. <https://doi.org/10.47191/ijsshr/v4-i10-36>
- Rizkiawan, M. (2021). Analisis Fraud Hexagon dan Tata Kelola Perusahaan Atas Adanya Kecurangan dalam Laporan Keuangan. *Integritas: Jurnal Antikorupsi*, 8(2), 269–282.
- Sari, M. P., Mahardika, E., Suryandari, D., & Raharja, S. (2022). The audit committee as moderating the effect of hexagon's fraud on fraudulent financial statements in mining companies listed on the Indonesia stock exchange. *Cogent Business and Management*, 9(1), 1–24. <https://doi.org/10.1080/23311975.2022.2150118>
- Škare, M., & Hasić, T. (2016). Corporate governance, firm performance, and economic growth – theoretical analysis. *Journal of Business Economics and Management*, 17(1), 35–51. <https://doi.org/10.3846/16111699.2015.1071278>
- Suryakusuma, A., & Stephanus, D. S. (2023). Pengaruh Fraud Hexagon Terhadap Kecurangan Laporan Keuangan Pada Bumn Go Public Indonesia. *Parsimonia - Jurnal Ekonomi Dan Bisnis*, 10(2), 125–139. <https://doi.org/10.33479/parsimonia.v10i2.785>
- Syahrul Mustofa. (2020). Kebijakan Dana Desa & Korupsi Dana Desa Dari Sabang Sampai Merauke. *Guepedia*, 3(1), 50–73.
- Triyuwono, E., Ng, S., & Daromes, F. E. (2020). Tata Kelola Perusahaan Sebagai Mekanisme Pengelolaan Risiko Untuk Meningkatkan Nilai Perusahaan. *Media Riset Akuntansi, Auditing & Informasi*, 20(2), 205–220. <https://doi.org/10.25105/mraai.v20i2.5597>
- Ullah et al, M. (2017). The Impact Of Corporate Governance On Financial Performance Of Pakistan's Cement Manufacturing Firms. *City University Research Journal*, 14–20

- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372–381. <https://doi.org/10.1108/JFC-12-2017-0128>
- Widiastika, A., & Junaidi, J. (2021). Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal Akuntansi, Keuangan, Dan Manajemen*, 3(1), 83–98. <https://doi.org/10.35912/jakman.v3i1.747>