

Detecting Potential Fraudulent Financial Reporting Through Hexagon Fraud in Indonesia Insurance Companies

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Abstract: This research aims to determine the influence of fraud hexagon elements on the detection of fraudulent financial reporting. The fraud hexagon is a model for detecting fraud in financial reporting proposed by Vousinas in 2019. The model comprises six elements: pressure, opportunity, rationalization, capability, arrogance, and collusion. These elements are measured using financial stability and external pressure (pressure), nature of the industry and ineffective monitoring (opportunity), change in auditor (rationalization), change of director (capability), frequent number of Chief Executive Officer (CEO) pictures (arrogance), and political connection (collusion). The study utilized a sample of 85 observations from 17 insurance companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023, and analyzed the data using ordinary least squares regression. The results show that all elements of the fraud hexagon significantly influence fraudulent financial reporting, with collusion appearing to be the most decisive influence. Therefore, it is recommended that the fraud hexagon elements be considered as fraud monitoring and prevention strategies.

Keywords: Fraud hexagon; fraudulent financial reporting; collusion

Abstrak: Penelitian ini bertujuan untuk mengetahui pengaruh elemen *fraud hexagon* terhadap deteksi kecurangan dalam pelaporan keuangan. *Fraud hexagon* merupakan model untuk mendeteksi kecurangan dalam pelaporan keuangan yang dikemukakan oleh Vousinas pada tahun 2019. Model ini terdiri dari enam elemen: tekanan (*pressure*), peluang (*opportunity*), rasionalisasi (*rationalization*), kapabilitas (*capability*), arogansi (*arrogance*), dan kolusi (*collusion*). Elemen-elemen tersebut diukur melalui stabilitas keuangan dan tekanan eksternal (tekanan), sifat industri dan pemantauan yang tidak efektif (peluang), pergantian auditor (rasionalisasi), pergantian direktur (kapabilitas), frekuensi kemunculan foto CEO (arogansi), dan koneksi politik (kolusi). Penelitian ini menggunakan sampel sebanyak 85 observasi dari 17 perusahaan asuransi yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2019 hingga 2023, dan menganalisis data menggunakan regresi *ordinary least squares*. Hasil penelitian menunjukkan bahwa seluruh elemen *fraud hexagon* berpengaruh signifikan terhadap kecurangan dalam pelaporan keuangan, dan kolusi menjadi elemen yang paling memengaruhi terjadinya kecurangan. Oleh karena itu, disarankan agar elemen *fraud hexagon* dipertimbangkan sebagai dasar strategi pemantauan dan pencegahan kecurangan.

Kata Kunci: *Fraud hexagon*, kecurangan pelaporan keuangan, kolusi

INTRODUCTION

Financial information is prepared to fulfil the stakeholders' interest in the company's performance. The information is essential for decision-making; hence, it is necessary to present it accurately (Azizah, 2024). However, due to opportunistic managers, most financial information is manipulated to increase profit. This act of manipulating financial information is fraud. According to the Association of Certified Fraud Examiners (ACFE), fraud is an unlawful act with an element of intentionality, such as manipulating and presenting false financial statements to other parties for personal or group gain. Further, there are three types of fraud: asset misappropriation, corruption, and financial statement fraud.

A survey conducted by ACFE also shows that asset misappropriation (i.e., when an employee steals or misuses organizational resources) is the most common type of fraud, accounting for 89%, and corruption cases accounted for 48%. Meanwhile, financial statement fraud, a type of fraud in which someone intentionally makes a material misstatement of a company's financial statements, accounted for 5% of all surveys (ACFE, 2024). However, although this fraud is the least common category at only 5%, it causes the highest median loss. Furthermore, the survey also indicates that, according to respondents in Indonesia, the most common form of fraud is corruption, at 64.4%, followed by misappropriation of assets and financial statement fraud, at 28.9% and 6.7%, respectively.

Recently, there has been a significant increase in issues related to insurance companies in many countries, particularly after the COVID-19 pandemic, including Indonesia. Insurance companies in Indonesia often face issues with claim failures and poor performance. The community of insurance writers in Indonesia (KUPASI) stated that the poor performance of insurance companies is caused by issues related to claim failures, disputes, unclear consumer protection, and slow customer service (Pratama, 2023). Additionally, a scandal by an insurance company also affects the community's perspective on other insurance companies (Nurcahyani, 2024). One of the scandals was found at PT Adisarana Wanaartha Life Insurance (PT WAL). The Financial Services Authority (OJK) announced that PT WAL's business license was revoked in 2022 because it failed to meet the solvency ratio or capital-based risk requirements set by OJK, in accordance with applicable regulations (Purwanti T, 2022). Another issue occurred at PT Prudential Life Assurance (Prudential Indonesia), which is facing accusations of failing to pay customer claims of up to 20 billion as of October 2024 (Zahira, 2024).

The study by Agustin et al. (2022) stated that the fraud hexagon theory could detect fraudulent financial reporting in insurance companies. The study shows that fraud in insurance companies from 2017 to 2022 is influenced by the pressure of financial targets and the rationalization of the accrual ratio. On the other hand, a study by Nasution et al. (2024) claimed that ineffective monitoring positively influenced fraudulent financial reporting, while external pressure and related party transactions are negatively influenced. Furthermore, the study revealed that other proxies, such as financial targets, industry nature, and asset growth, do not appear to have a relationship with the issues in financial reporting. Therefore, research on the role of the fraud hexagon theory remains inconclusive in explaining the factors that affect fraudulent financial reporting in insurance companies. Hence, based on the issues addressed above and the mixed evidence from previous literature, this research aims to detect fraudulent financial reporting in insurance companies in a recent context. This research aims to provide empirical evidence on the role of the fraud hexagon theory in explaining the factors that influence financial fraud in Indonesian insurance companies.

LITERATURE REVIEW

Fraudulent Financial Reporting

Fraud is an unethical and unlawful act committed by a person or organization to gain personal benefit at the expense of others. The Indonesian Institute of Public Accountants (IAPI) explains fraud as an intentional act committed by one or more people in management, those responsible for governance, employees, or third parties that involve the use of deception to gain unfair or unlawful gain (Puspita, 2023). Fraud causes financial and non-financial losses. There are three classifications of fraud according to ACFE (2024): asset misappropriation, corruption, and financial statement fraud.

1 Asset Misappropriation

Asset Misappropriation involves the misuse or theft of assets or property belonging to a company or another party. This is the easiest type of fraud to detect because the assets are tangible and can be measured or calculated.

2 Corruption

This type of fraud is the most difficult to detect because it involves cooperation with other parties, such as bribery and corruption. This type of fraud includes abuse of authority/conflict of interest, bribery, illegal gratuities, and economic extortion.

3 Financial Statement Fraud

Financial Statement Fraud occurs when company or government agency officials and executives use financial engineering in presenting their financial statements to gain profits, which can be likened to the term 'window dressing'.

Fraudulent financial reporting is a violation committed by management that can harm investors and creditors by submitting materially misstated financial statements (ACFE, 2024). Financial reports containing fraud can damage the reliability of financial information and cause investors to make the wrong decisions (Nasution et al., 2024). One way to measure or assess the presence or absence of fraudulent financial reporting is to use the fraud score (F-Score) model from Dechow, by adding accrual quality and financial performance (Septiani, 2023). The formula of F-Score is:

$$F - Score = Accrual\ Quality + Financial\ Performance$$

Fraud Hexagon

Several theories can be employed to explain the motivation or drive behind fraud perpetrators' actions. The fraud triangle theory, developed by Donald R. Cressey (1953), answers the question of why people commit fraud and why the fraud occurs. According to Cressey, the basis of individuals or groups committing fraud is pressure, opportunity, and rationalization. The theory was then developed by Wolfe & Hermanson in 2004 by adding the capability/competence element, namely ability, and referred to as the "fraud diamond theory". Meanwhile, Crowe Horwath (2012) developed the "fraud pentagon theory" by considering arrogance or arrogance/egoism. Recently, a more complete picture of factors that determined the fraud was initiated by Vousinas in 2019 by involving collusion in the "fraud hexagon theory". The fraud hexagon theory has six elements, namely pressure, opportunity, rationalization, capability, arrogance, and collusion (Qalbi, 2022). Therefore, this research implements the fraud hexagon theory in detecting fraudulent financial reporting in insurance companies.

Pressure

Pressure (stimulus), is the pressure to commit fraud, both financial and non-financial. Stimulus can come from high financial needs, professional aspirations, targets that must be achieved, and the desire to reach them quickly. This research investigates pressure with the proxies of financial stability and external pressure.

Financial stability refers to a company's total assets, which indicate how well the company can deliver favorable results for its investors. The decrease in asset performance could reduce the interest of investors, creditors, and decision-makers as they will consider this as financially unstable and unprofitable (Septiani, 2023). Thus, the higher this ratio, the more assets are performed within the company. The formula for measuring this proxy is a change in total assets (ACHANGE) (Rukmana & Nababan, 2024):

$$Change\ in\ Total\ Assets = \frac{Total\ Asset_t - Total\ Asset_{(t-1)}}{Total\ Asset_{(t-1)}}$$

Therefore, to investigate the relationship between financial stability and fraudulent financial reporting (Fouziah et al., 2022; Lionardi & Suhartono, 2022; Malau & Aryati, 2023; Maulina & Meini, 2023; Setyono et al., 2023; Tasya Kamila & Aina Zahra Parinduri, 2023) this research develops a hypothesis as follows:

H₁: Financial stability affects fraudulent financial reporting

Meanwhile, external pressure is measured using the leverage ratio, which is calculated by dividing total debt by total assets. A higher leverage ratio indicates that the company has greater debt. As the company has a large debt, there is a possibility of default, hence management is under pressure (Qalbi, 2022). Moreover, fraudulent financial reporting is more likely to occur if there is an external influence that is proxied by the leverage ratio or debt-to-asset ratio (DAR). The DAR formula is as follows (Rukmana & Nababan, 2024):

$$DAR = \frac{\text{Total Debt}}{\text{Total Assets}}$$

This study investigates the relationship between external pressure and fraudulent financial reporting (Asih, 2024; Brianta Ginting, 2023; Malau & Aryati, 2023; Maulina & Meini, 2023; Qalbi, 2022; Setyono et al., 2023) by formulating the hypothesis:

H₂: External pressure affects fraudulent financial reporting**Opportunity**

Opportunity refers to financial statement fraud that may occur in companies with weak internal controls or vulnerable accounting systems. The proxies of opportunity in this study are using the nature of the industry and ineffective monitoring.

The nature of the industry is a way to assess a company's accounts receivable. Because the nature of the industry is the nature of the industry, which is intended to achieve ideal industry conditions, and uncollectible accounts receivable can be a gap for fraudsters (Al-Rizky et al., 2024). The formula for accounts receivable (RECEIVABLE) is (Oktaviani, 2023):

$$\text{Accounts Receivable} = \frac{\text{Receivables}_t}{\text{Sales}_t} - \frac{\text{Receivables}_{(t-1)}}{\text{Sales}_{(t-1)}}$$

This study investigates the relationship between the nature of industry and fraudulent financial reporting (Al-Rizky et al., 2024; Setyono et al., 2023; Syurmita et al., 2024; Ulhaq & Trisnawati, 2023) by developing the hypothesis below:

H₃: The nature of the industry affects fraudulent financial reporting

Additionally, ineffective monitoring or ineffective supervision refers to the ratio between the independent board of commissioners and the total board of commissioners (BDOUT). The study utilized the formula proposed by (Rukmana & Nababan, 2024):

$$\text{Independent Board of Commissioners} = \frac{\text{Total Independent Board of Commissioners}}{\text{Total Board of Commissioners}}$$

To investigate the relationship between ineffective monitoring and fraudulent financial reporting this study makes the following hypothesis (Qalbi, 2022; Tasya Kamila & Aina Zahra Parinduri, 2023):

H₄: Ineffective monitoring affects fraudulent financial reporting

Rationalization

Rationalization is used to justify fraud. People who commit fraud may feel entitled to their actions, such as taking money and paying it later without anyone noticing. Additionally, they believe they are entitled to the money because they have been with the company for many years. Rationalization in this study is proxied by using auditor changes.

Change in Auditor, also known as auditor change (AUDCHANGE), is measured using a dummy variable size to determine whether there is a change in the public accounting firm in the company. A value of 1 indicates a change, while a value of 0 indicates otherwise (Rukmana & Nababan, 2024). This study investigates the relationship between changes in auditor and fraudulent financial reporting as used in Brianta Ginting (2023), Lionardi & Suhartono (2022), Malau & Aryati (2023), Setyono et al. (2023), and Tasya Kamila & Aina Zahra Parinduri (2023). Thus, this study formulates the following hypothesis:

H₅: Change in auditor affects fraudulent financial reporting

Capability

Capability refers to the quality and ability of a person that is crucial in determining whether a fraudulent act occurs due to pressure, opportunity, or rationalization. Capability proxied by a change of director. A change of directors (DCHANGE) in this study is measured using a dummy variable to determine whether there is a change in the company's directors. A value of 1 indicates a change, while a value of 0 indicates otherwise (Qalbi, 2022; Rukmana & Nababan, 2024). To examine the relationship between the change of directors and fraudulent financial reporting, this study refers to studies by (Asih, 2024; Lionardi & Suhartono, 2022; Malau & Aryati, 2023). Therefore, this study formulates the following hypothesis:

H₆: Change of director affects fraudulent financial reporting

Arrogance

Arrogance, defined as arrogance or egoism, suggests that it reveals mental processes that contribute to fraudulent behavior. This study proxied arrogance by referring to the frequent number of CEO's pictures (FNCP). Many CEOs do not want to lose their position or status within the company. Thus, they prefer to show their position and status to everyone. As a result, the number of CEO pictures in a company's annual report reflects the CEO's level of arrogance. Therefore, this study investigates the relationship between the number of CEO photos in the company's annual report and the frequency of CEO pictures and fraudulent financial reporting. In line with the research by Lionardi & Suhartono (2022) and Maulina & Meini (2023), this study builds the following hypothesis:

H₇: The frequent number of CEO's pictures affects fraudulent financial reporting

Collusion

Collusion and fraud are challenging to prevent when they occur between employees or external parties, particularly when they happen repeatedly. Collusion in this study proxied by looking at the political connection (PC) of the commissioners and the president of the board of directors (Qalbi, 2022). PC determines whether the president commissioner, the board of commissioners, and the president director have political connections or relationships with the government or political groups in their concurrent positions. In the conditions where the board of directors and commissioners have political connections and serve in the ranks of government, the possibility of their committing fraud by utilizing their positions would increase (Daresta & Suryani, 2022). Therefore, this study develops the hypothesis (Al-Rizky et al., 2024; Hartanto, 2023; Syurmita et al., 2024) as follows.

H₈: Political connection affects fraudulent financial reporting

RESEARCH METHODOLOGY

This research employed a verification study with explanatory survey methods and quantitative statistical techniques. The study utilized secondary data retrieved through intermediary media, such as the internet or online media. The unit of analysis is an organization where a data source is analyzed based on information from divisions of organizations or companies in specific sectors (financial data from companies used as the basis for this research analysis). Furthermore, this research focuses on insurance companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. A sample is selected by using a non-probability sampling method with a purposive sampling technique. While the criteria for sample selection are: insurance companies listed on the IDX from 2019 to 2023, companies that are not delisted, companies' financial reports are published on both the IDX and the company's official website, companies have complete data, and their financial reports have been audited during the observation period. Therefore, the detail of the sample structure is depicted below:

Table 1 Sample Structure

No	Criteria	Amount
1	Insurance companies listed on the IDX in 2021-2023 did not experience delisting during the observation period.	18
2	Insurance companies listed on the IDX whose financial reports are available on the IDX and the company's official website.	18
3	Insurance companies listed on the IDX have complete data related to the variables used in this study.	18
4	Insurance companies listed on the IDX did not have audited financial reports for the period 2021-2023.	(1)
Total Sample		17
Research Period (Year)		5
Number of Observations (Total Sample * Research Period)		85

Source: Processed data, 2025.

RESULTS AND DISCUSSION

RESULTS

Descriptive Statistics

The average value (mean), standard deviation, maximum value, and minimum value can be calculated using descriptive statistical analysis. Descriptive analysis aims to provide an overview of the descriptive data of the dependent and independent variables. Details of descriptive statistical tests from 85 observations are illustrated below:

Table 2 Descriptive Statistics

Variables	N	Min	Max	Mean	Std. Deviation
ACHANGE	85	-0.257	0.85	0.08082	0.175502
DAR	85	0.002	1.757	0.10502	0.193066
RECEIVABLE	85	-2.318	2.644	0.02013	0.64542
BDOUT	85	0.25	0.75	0.54356	0.139932
AUDCHANGE	85	0	1	0.11	0.31
DCHANGE	85	0	1	0.51	0.503
FNCP	85	0	9	2.96	2.124
PC	85	0	1	0.07	0.258
F-SCORE	85	-2.343	6.722	0.27335	1.223.884

Source: Data processed, 2025

Table 2 shows that the highest value of financial stability is 0.850, or 85%, while the lowest value of financial stability is -0.257, or -25.7%. An increase in total assets increases the likelihood of fraudulent financial statements, as management may be compelled to commit fraud if there is a threat to the company's financial stability. Meanwhile, the maximum value of external pressure is 1.757 or 175.7%, while the lowest is 0.002 or 0.2%. The variable indicates that a significant amount of debt would lead the company to a high credit risk. Thus, management would find ways to reduce the debt ratio, one of which is by committing fraud on its financial statements.

On the other hand, Table 2 also illustrates that the highest nature of industry is 2.644 and the lowest is -2.318. The figures also show that ineffective monitoring has the highest value of 75% and the lowest poor supervision value of 25%. Poor supervision indicates fraud. Furthermore, among the 17 companies observed, many companies rotate their directors, and some even change directors every year. Frequent changes in directors could indicate the company is not performing well and might be a sign of fraud.

Referring to the annual reports in this study, the maximum CEO photos published is 9, and the least amount is 0. Companies that include many photos of the CEO in the annual report, may indicate fraudulent financial statements. Moreover, the observation results that the average company has a relation with politics or government is 0.07. The last figure shows that F-Score has a maximum value of 6.722 and a minimum value of -2.343.

Multiple Linear Regression Analysis

The research utilized Ordinary Least Squares (OLS) to examine the relationship between elements of fraud hexagons and fraudulent financial reporting. Thus, before conducting multiple regression analysis and hypothesis testing, several classical assumption tests are carried out to ensure that the regression equation used is appropriate and valid (Sholihah et al., 2023).

Data Normality Test

The results of data processing using the one-sample Kolmogorov-Smirnov test show that the Kolmogorov-Smirnov value is 0.200 and the Asymptotic. Sig. (2-tailed) is 0.200 after data transformation, which is intended to fulfill the test requirements. With the provisions of the Asymp. Sig. (2-tailed) > 0.05 , then the residual data are typically distributed and fulfill the assumption that the data are suitable for use.

Data Multicollinearity Test

Data processing shows that there is no multicollinearity in all variables, because the tolerance value of each variable is ≥ 0.10 and the VIF value is ≤ 10 .

Table 3 Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
ACHANGE	0.110	9.059
DAR	0.113	8.846
RECEIVABLE	0.613	1.631
BDOUT	0.119	8.387
AUDCHANGE	0.312	3.207
DCHANGE	0.548	1.826
FNCP	0.877	1.140
PC	0.263	3.806

Source: Data processed, 2025

Heteroscedasticity Test Data

This test examines heteroscedasticity problems in the correlation between each independent variable and dependent variable through the Spearman Rank method. The results show that there is a correlation

between each regressor and fraudulent financial reporting with a significant value of $0.000 < 0.05$ (2-tailed).

Data Autocorrelation Test

This process used the Durbin-Watson test, but the results did not meet the conditions of the autocorrelation test. As a result, the Cochrane-Orcutt test was also used. The results show a DW value of 1.871, which already meets the condition $U < DW < 4 - dU$.

To test the hypothesis the research modified the multiple regression model as follows:

$$FFR_{i,t} = \alpha + \beta_1 ACHANGE_{i,t} + \beta_2 DAR_{i,t} + \beta_3 RECEIVABLE_{i,t} + \beta_4 BDOUT_{i,t} + \beta_5 AUDCHANGE_{i,t} + \beta_6 DCHANGE_{i,t} + \beta_7 FNCP_{i,t} + \beta_8 PC_{i,t} + e_{i,t}$$

The results show that factors such as financial stability, external pressure, nature of the industry, ineffective monitoring, change in auditor, change of director, frequent number of CEO's pictures, and political connection have a significant influence on fraudulent financial reporting in the insurance company listed on the IDX from 2019-2023.

Table 4 Regression Results

Model	Coefficient ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.195	0.015		12.951	0.000
ACHANGE	-1.605	0.045	-0.621	-36.008	0.000
DAR	-0.805	0.04	-0.303	-19.969	0.000
RECEIVABLE	-0.715	0.009	-0.499	-82.663	0.000
BDOUT	0.471	0.047	0.176	10.063	0.000
AUDCHANGE	0.11	0.02	0.048	5.525	0.000
DCHANGE	-0.393	0.013	-0.207	-29.830	0.000
FNCP	0.019	0.003	0.027	5.406	0.000
PC	0.72	0.031	0.287	22.946	0.000

Source: Data Processed, 2025

Table 4 above illustrates regression results of the relationship between elements of fraud hexagons and fraudulent financial reporting. Pressure proxied by financial stability (ACHANGE) and external pressure (DAR) showed a negative relationship with a significant value of 0.000. This means that the higher the change in total assets, the more the external variable can detect the effort to reduce fraud in financial reporting. This is also in line with the nature of the industry, which is proxied by the companies' receivables, which show a negative relationship at -0.499 with a significant value of 0.000. The higher the receivables, the lower the likelihood of companies engaging in fraudulent financial reporting. Meanwhile, when monitoring is ineffective, the possibility of fraud happening is higher. However, the regression results show that the ratio of the independent board of commissioners to the total board of commissioners is positively related to fraudulent financial reporting, with a significant value of 0.000.

Furthermore, the changes in auditor, arrogance level, and political connections have a positive influence on fraudulent financial reporting, with a significant value of 0.000. This means that these factors could be utilized to detect fraudulent financial reporting in monetary companies. On the contrary, director change is negatively related to fraud at a significant level. Therefore, the regression model supports H_1 to H_8 . Details of the hypothesis analysis can be found in Table 5 below:

Table 5 Hypotheses Results

Code	Hypothesis	Results
H ₁	Financial stability affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₂	External pressure affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₃	The nature of the industry affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₄	Ineffective monitoring affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₅	Change in auditor affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₆	Change of director affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₇	A frequent number of CEO pictures affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted
H ₈	Political connection affects fraudulent financial reporting in the insurance company listed on the IDX in 2019-2023.	Accepted

Source: Processed Data, 2025.

DISCUSSION

Financial Stability and Fraudulent Financial Reporting

Regression results show that financial stability has a significantly adverse effect on fraudulent financial reporting. This means that regression results support H₁. The result is in line with the findings of previous research conducted by Al-Rizky et al. (2024), Fouziah et al. (2022), Lionardi & Suhartono (2022), Malau & Aryati (2023) Setyono et al. (2023), and Tasya Kamila & Aina Zahra Parinduri (2023). In other words, insurance companies use the ratio of changes in total assets (ACHANGE) to assess the financial stability of a company. The results of the analysis suggest that the likelihood of fraud in financial statements can be reduced by enhancing financial stability. When a company's stability is good, it can manage its assets effectively. Therefore, it is understandable that this variable could utilized to detect fraudulent financial reporting.

External Pressure and Fraudulent Financial Reporting

Table 4 also shows that external pressure has a significant effect on fraudulent financial reporting. The results show a negative coefficient of -19.969 with a significance level of 0.000 (smaller than 0.05). Therefore, the regression results support H₂. The findings are in line with the findings of previous research conducted by Asih (2024), Brianta Ginting (2023), Malau & Aryati (2023), Maulina & Meini (2023), Qalbi (2022), Setyono et al. (2023), and Syurmita et al. (2024). To measure external pressure, the debt-to-asset ratio (DAR) is used, which means that debt will finance most of the company's assets if the ratio exceeds 50%. This is natural for insurance companies, as most of their funding comes from third parties who are collected and managed to generate profits.

Nature of Industry and Fraudulent Financial Reporting

The results depict that the nature of the industry has a significant influence on fraudulent financial reporting, with a coefficient of -82.663 and a significance level of 0.000. It is concluded that the nature of the industry affects the level of fraudulent financial reporting, which supports the acceptance of H₃.

These findings also support previous research (Al-Rizky et al., 2024; Lionardi & Suhartono, 2022; Setyono et al., 2023; Syurmita et al., 2024; Ulhaq & Trisnawati, 2023).

Accounts receivable (RECEIVABLE) is used to assess the nature of the industry. To achieve ideal conditions, companies must have similar characteristics, thereby creating more stable business conditions, which would indicate good management.

Ineffective Monitoring and Fraudulent Financial Reporting

The results of individual testing illustrate that ineffective monitoring has a significant effect on fraudulent financial reporting. This means that ineffective monitoring has a substantial impact on fraudulent financial reporting. The results support H₄ and align with the study by Qalbi (2023) and Kamila & Parinduri (2023).

Referring to the proxy, the ratio of the number of independent commissioners to the number of commissioners (BDOOUT) is utilized to evaluate ineffective monitoring. The failure of corporate supervision is believed to create fraud. Therefore, a good supervisory mechanism would reduce fraud. However, this study found that the number of independent commissioners does not indicate reasonable internal control.

Change in Auditor and Fraudulent Financial Reporting

The change in auditor has a significant effect on fraudulent financial reporting, with a positive coefficient of 5.525. It explains that the change in auditor affects the level of fraudulent financial reporting. These results support H₅ and in parallel with the findings of previous research conducted by Loen (2023), Lionardi & Suhartono (2022), Brianta Ginting (2023), Kamila & Parinduri (2023)), and Malau & Aryati (2023). Companies can utilize the auditor change mechanism to minimize the risk of fraud in their financial statements.

Change of Director and Fraudulent Financial Reporting

The change of director is proven to have a significant effect on fraudulent financial reporting. The results support the H₆ and other studies by Asih (2024), Brianta Ginting (2023), Lionardi & Suhartono (2022), Malau & Aryati (2023) and Tasya Kamila & Aina Zahra Parinduri (2023). Too frequent changes in directors can lead to fraud and reduce performance because it takes longer to adjust to the new directors (Loen, 2023).

Frequent Number of CEO's Pictures and Fraudulent Financial Reporting

Furthermore, the level of arrogance, as proxied by the frequency of CEO pictures (FNCP), also has a significant impact on fraudulent financial reporting. The results give evidence to support the H₇, and this is in line with the claim of previous studies (Lionardi & Suhartono, 2022; Malau & Aryati, 2023). The more pictures of the CEO are displayed in the company's annual report, the more likely the company is to commit financial misconduct.

Political Connection and Fraudulent Financial Reporting

The latest results indicate that a political connection has a significant impact on fraud in financial reporting. The results could explain the H₈, which is also supported by studies from (Al-Rizky et al., 2024; Hartanto, 2023; Syurmita et al., 2024). Political relationship determines whether the company is connected to the government or political groups (PC) during the observation period. It is also interesting that among all coefficients, the political connection has the highest coefficient among all regressors. This suggests that insurance companies with special political ties may find it easier to secure business or project licensing. However, certain political relationships might lead to dishonest financial statements as the company would provide additional funds to government officials in support of their projects.

CONCLUSIONS

The purpose of this study is to detect fraudulent financial statements with the hexagon fraud detection model. The empirical results indicate that financial stability, external pressure, the nature of

the industry, and director changes have a negative influence on fraudulent financial reporting. On the other hand, ineffectively monitoring, the change in auditor, and the frequent number of CEO pictures that show arrogance and political connections positively influence the fraud in financial reporting. Furthermore, the political connection has the highest coefficient among all regressors, indicating the most significant influence. This depicts that elements of fraud hexagons could be beneficial in detecting the misuse of financial reporting. Therefore, it is recommended that the fraud hexagon elements be considered as fraud monitoring and prevention strategies.

Meanwhile, this research has limitations on the scope addressed in the fraudulent issues. Future research is expected to explore additional variables that may influence financial statement fraud. Additionally, all variables in this study are factors that influence financial statement fraud. Therefore, people involved in preparing financial statements should pay better attention to assessing these factors.

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