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Detecting of Fraudelent Financial Report: Perspective F Score Modeling

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ABSTRACT
This study aims to detect fraud in financial statements using the F Score model and hexagon fraud determinants. These six proxies are used in the research model to analyse and detect possible fraudulent financial reporting in companies based on financial stability; capability, which is formed by changes in the board of directors; collusion, which is formed by the company's involvement in government projects; opportunity, which is formed by the nature of the industry; rationalisation, which is formed by changes in auditors; and ego, which is formed by the frequent appearance of the CEO's photo. The study approach is descriptive quantitative. The sampling technique is non-probability sampling using the purposive sampling method. This study involved a sample size of 30 companies, which collectively provided 150 annual reports. The data analysis method used is panel data regression analysis using Eviews software version 13. The results show that four of the six hexagonal fraud components significantly influence the potential for misleading financial reporting. Meanwhile, collusion, proxied by company involvement in government projects, and opportunity, proxied by industry nature, do not influence the likelihood of misleading financial reporting.

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INTRODUCTION

The foundational in understanding financial statement fraud and other types of occupational fraud as classified by the ACFE (Dorris, 2022). The ACFE states that there are three main types of fraud committed by management: asset misappropriation, corruption, and financial statement fraud. The following are the results of a observed conducted among ACFE members who are certified CFE professionals worldwide.

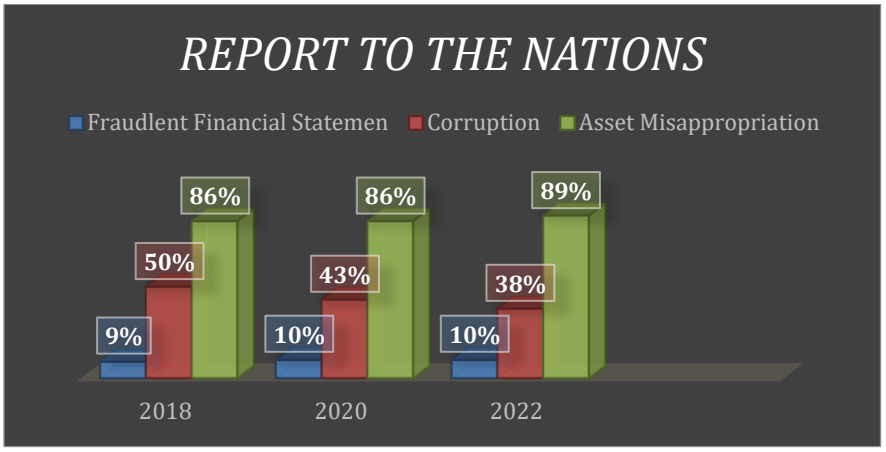


Figure 1. Report to The Nations

Source: report to the Nation ACFE (2018, 2020, 2022)

The least common of the kind of fraud is fraudulent financial statements, with an average percentage of 9.6%. However, fraudulent financial statements always incur the highest average losses among the three types of fraud. This is evidenced by the ACFE's survey on median losses in the following graph.

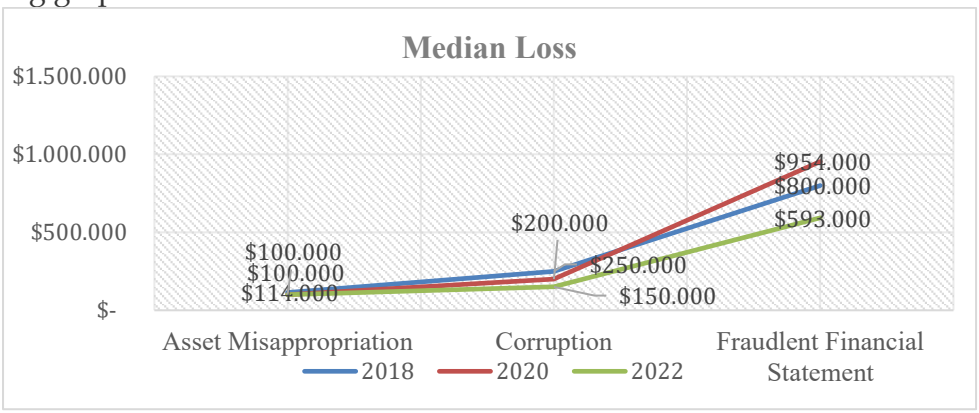


Figure 2. Report to The Nations

Source: report to the nations ACFE (2018, 2020, 2022)

The median loss graph above shows that fraudulent financial statements caused the largest average loss over three years, amounting to USD 782,00 (Dorris, 2022). Based on the ACFE's "Report to the Nations" for 2018, 2020, and 2022, the financial services sector (including banking, financial institutions, and insurance) consistently ranks among the sectors with the highest incidence of occupational fraud, including financial statement misrepresentation.

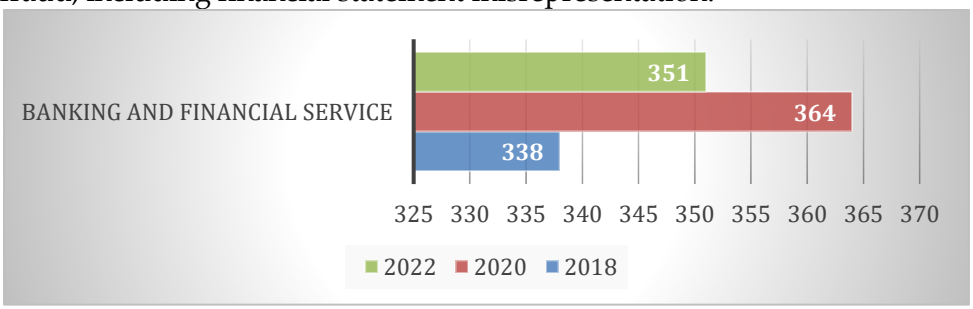


Figure 3. Report to The Nations ACFE about Banking & Financial Service

Source: report to the nations ACFE (2018, 2020, 2022)

The ACFE survey results indicate that organizations 2018, 2020, and 2022 Reports to the Nations, the sector with the highest incidence of fraud or financial statement misrepresentation is the financial sector. Cases of fraud in the financial sector are not limited to the global arena. According to the ACFE in the 2024 Asia Pacific Fraud Survey (SFI), the financial industry suffers the highest losses compared to other industries (ACFE, 2024).

The fraud score model, commonly referred to as the F Score, was developed by Patricia Dechow and her colleagues in 2011 as a tool to assess the likelihood of financial statement fraud. This model is based on various financial metrics and ratios that can indicate potential fraudulent behavior (Ozcelik, 2020). The F Score model indeed utilizes two primary components to assess the likelihood of financial statement fraud: accrual quality and financial performance (Wolfe & Hermanson, 2004). Then, for influencing factors as detection of financial statement fraud, six components are used, referred to as the hexagon fraud theory. The six elements referred to as stimulus formulated by financial stability, capability formulated by change of directory, collusion formulated by corporate involvement in government projects, opportunity formulated by nature of industry, rationalization formulated by change in auditor, and ego formulated by frequent number of CEO's pictures.

Based on previous research on factors influencing financial statement fraud, the results are still inconsistent, indicating a research gap and numerous cases of financial statement fraud. Therefore, this research is interesting and still worth revisiting. This study applies the fraud hexagon as the basis for examining the influence on financial statement fraud because this theory is a development of the previous fraud theory (Jaya Zalukhu & Reskino, 2024; Lu & Zhao, 2020; P. B. S. Sihombing & Murwaningsari, 2022; Wei et al., 2017). With the addition of a new component, namely collusion, it is hoped that financial statement fraud can be detected more deeply. Fraud components cannot be studied directly, therefore proxies are needed to measure these components (Skousen; et al., 2009). The proxies used to measure each component of the fraud hexagon in this study include stimulus, which is proxied by financial stability; capability, which is proxied by change of director; collusion, which is proxied by corporate involvement in government projects; opportunity, which is proxied by the nature of the industry; rationalization, which is proxied by change in auditor; and ego, which is proxied by the frequent number of CEO's pictures (Brief et al., 1996; Lu & Zhao, 2020; Narsa et al., 2023; T. Sihombing & Eirene Panggulu, 2022). These proxies were used because there were still inconsistent results in previous studies.

LITERATURE REVIEW

The agency theory in this study is used to see whether all forms of accountability carried out by management to the principal are actually implemented properly. The existence of personal interests and information about the internal conditions of the company that is only possessed by management can be an opportunity for management to engage in fraudulent financial reporting or financial statement fraud by not providing accurate information in the financial statements (Bahr et al., 2010).

The presence of these internal and external factors indicates a high level of information asymmetry, so that the higher the asymmetry between the managers and the users of financial statements, the greater the tendency for fraud to occur (Sales et al., 2021). This study will analyze how the relationship between the fraud hexagon theory and the components of stimulus, capability, opportunity, rationalization, ego, and collusion affects fraudulent financial reporting using the F Score Model in financial sector companies listed on the Indonesia Stock Exchange for the period 2018-2022.

The Effect of Financial Stability on The Likelihood of Misleading Financial Reporting

Kirkos et al. (2013), when a company's financial stability is jeopardized by adverse economic or industry conditions, managers may experience significant pressure to manipulate financial reports. This pressure often stems from the need to meet financial targets, maintain investor confidence, or secure funding, leading to an increased risk of fraudulent reporting. A company's instability can create an environment where managers feel compelled to engage in fraudulent financial reporting to mask poor performance or meet financial expectations. This pressure can arise from the need to protect their jobs, maintain investor trust, or secure financing, ultimately increasing the likelihood of unethical practices (Jaya Zalukhu & Reskino, 2024; T. Sihombing & Eirene Panggulu, 2022).

The pressure in question stems from the need to achieve financial targets, maintain the trust of investors and stakeholders, secure funding and financing, and internal factors such as rewards for achieving financial report performance targets. In a competitive business environment, companies often set ambitious profit or growth targets. If economic conditions deteriorate (e.g., high inflation or declining market demand), managers may feel compelled to 'dress up' reports in order to meet targets. Kirkos et al., (2013) emphasise that this often occurs in industries that are sensitive to economic cycles, such as banking, where failure to meet targets can trigger a decline in share prices or job losses. Furthermore, investors, creditors, and market analysts expect transparency and stable performance. When companies face losses or instability, managers may manipulate reports to avoid negative reactions such as mass stock sales or credit withdrawals. T. Sihombing & Eirene Panggulu, (2022) add that in emerging markets such as Indonesia, where investor confidence is highly dependent on financial reports, this pressure is more intense due to the risk of social and legal stigma.

Another fundamental source of pressure is the industry's need for funding. Unstable companies may find it difficult to obtain loans or new investments. Manipulating reports can make a company appear healthier, thereby facilitating access to capital. Jaya Zalukhu & Reskino (2024) illustrate this with the case of a company facing a liquidity crisis, where managers feel 'forced' to hide debts in order to obtain financing from banks or capital markets. In addition, internal factors such as employee reward policies mean that managers often receive performance-based compensation (e.g., bonuses or stock options) that depends on positive financial reports. If a company is threatened with bankruptcy, they may manipulate data to protect their own positions. This pressure is exacerbated by a corporate culture that prioritises short-term results over long-term integrity. Kirkos et al. (2013) explain that in conditions of instability, managers may see manipulation as a temporary solution to avoid worse consequences, such as bankruptcy. T. Sihombing & Eirene Panggulu (2022) add that in the Indonesian context, cultural factors such as authority hierarchies and social pressure can reinforce this tendency, as managers may feel responsible for the welfare of employees and shareholders. Therefore, the first hypothesis is as comply with:

H1: Financial stability significantly affects the likelihood of misleading financial reporting.

The Effect of Change of Directory on the Likelihood of Misleading Financial Reporting

Boyle et al., (2015) explain that fraud can occur if it is committed by someone who has higher abilities and intellectual capacity than others. Therefore, the absence of board turnover for a long period of time can indicate fraud in financial statements. Boyle et al., (2015) emphasise that fraud is not an impulsive or simple act, but rather a scheme devised by highly intelligent individuals. This is based on the theory of 'superior intellect' or superior intellectual ability, whereby fraudsters (such as senior executives or financial managers) are capable of devising complex schemes, such as overstating income through premature revenue recognition, understating liabilities, or using complex financial derivatives, as well as the ability to anticipate detection, such as predicting the risk

of audits or supervision. The board of directors serves as a governance mechanism to prevent fraud by monitoring management performance and ensuring the integrity of financial reports. (Boyle et al., 2015) found that the absence of board member turnover over a long period (e.g., more than 5-10 years without rotation) can indicate a higher risk of fraud. This is due to a lack of independence and oversight.

Boards with no turnover often become a 'rubber stamp' for management decisions. This occurs because board members may have personal or financial relationships with executives (such as the CEO), making them reluctant to challenge or critically audit decisions. This study analysed data from the SEC (Securities and Exchange Commission) and found that companies with boards that had remained unchanged for years had fraud rates that were 20-30% higher. Therefore, the second hypothesis is as comply with:

H2: Change of directory affects the likelihood of misleading financial reporting.

The Effect of Corporate Cooperation with Government Projects on the Likelihood of Misleading Financial Reporting.

Collusion is a significant concern in the context of fraud, as it involves multiple parties working together to deceive others for mutual benefit (Vousinas, 2019). To further support the potential for fraud, Vousinas argues that one component of fraud detection is collusion. One form of potential collusion within a company is project collaboration with the government. The larger the scale of collaboration between a company and the government, the greater the income received by the company. This can prompt management to take advantage by manipulating the company's financial reports (Nugraha et al., 2024; Wijayani & Ratmono, 2020). Project collaborations between private companies and the government often involve infrastructure projects, procurement of goods/services, or high-value public investments. This creates a strong incentive for collusion, where by company management may work with government officials to manipulate financial reports by overstating revenue, understating expenses, and window dressing. Therefore, the third hypothesis is as comply with:

H3: Cooperation with government projects affects the Likelihood of Misleading Financial Reporting.

The Influence of the Nature of Industry on the Likelihood of Misleading Financial Reporting.

SAS No. 99, titled "Evaluation of Fraud Risks in Financial Statement Audits," emphasizes the importance of understanding the industry in which a company operates, as it can significantly influence the risk of fraudulent financial reporting. Here are some key points regarding how the nature of the industry can create opportunities for management to commit fraud, particularly through the use of estimates in financial statements, such as on uncollectible accounts and obsolete inventory accounts. Estimating the economic life of the company on uncollectible accounts and obsolete inventory accounts provides an opportunity for management to commit fraud, as the value of these account balances is assessed subjectively. The higher the accounts receivable in a company, the higher the indication of fraud in the company (Sawangarrerak, 2021).

Estimating the economic life of a company's uncollectible accounts and obsolete inventory accounts provides an opportunity for management to commit fraud, as the value of these account balances is assessed subjectively. The higher the accounts receivable in a company, the higher the indication of fraud in the company (Achmad et al., 2022, 2023). Research by (Sawangarreerak & Thanathamathee, 2021) shows that companies with high accounts receivable tend to have greater indications of fraud, as this could indicate manipulation to hide credit risk or improve liquidity. Therefore, the fourth hypothesis is as comply with:

H4: The nature of the industry affects the likelihood of misleading financial reporting

The Effect of Auditor Change on the Likelihood of Misleading Financial Reporting.

According Narsa et al., (2023), auditor replacement is the decision to terminate the relationship between the company and the auditor and appoint a new auditor. Auditors need to be replaced to maintain their independence. If an auditor has worked with a client for more than three years, the auditor's independence is questionable and the company's code of ethics is not being followed. Thus, the longer the rotation of auditors in a company, the higher the potential for fraud in financial statements (Violita, 2013).

This is in line with the professional code of ethics for accountants, as stipulated by the International Ethics Standards Board for Accountants (IESBA), which requires auditors to maintain mental and appearance independence. In Indonesia, OJK Regulation No. 13/POJK.03/2017 on the Use of Public Accountant Services in the Preparation of Financial Statements also regulates this. Narsa et al. (2023) confirm that this 3-year limit aims to ensure that the code of ethics is followed, although its implementation depends on company policy. At the global level, the Sarbanes-Oxley Act (SOX) in the US requires the rotation of lead auditors every 5 years, while in the European Union, there are similar rules. In Indonesia, although not mandatory, public companies often implement voluntary rotation to meet investor and regulator expectations. Violita, (2013) states that the longer the auditor rotation in a company, the higher the potential for fraud in financial reports. This is based on the logic that a long relationship between auditors and clients can reduce the effectiveness of audits, allowing for the manipulation of financial reports such as overstatement of income, understatement of debt, or concealment of losses. Therefore, the fifth hypothesis is as comply with:
H5: Auditor Change affects the likelihood of misleading financial reporting.

The Effect of CEO Photo Frequency on the Likelihood of misleading Financial Reporting Fraud

The frequent appearance of the CEO's picture is a proxy for the ego component, or what is known as arrogance in the fraud pentagon theory. According Sagala & Siagian, (2021), the exploitation of held authority due to arrogance can result in financial statement fraud. No internal control system can limit the actions and behavior of a CEO because of the power that is held.

In the context of CEOs, arrogance can arise from positions of high power, where they feel unrestrained by social norms or laws. This differs from other components such as pressure (e.g., financial pressure) or opportunity (opportunities arising from weak controls), because ego is intrinsic and psychological. According to this theory, arrogance allows CEOs to justify unethical actions, such as manipulating financial reports, because they are confident they can avoid the consequences.

The frequent appearance of CEO photos as a proxy for arrogance is based on the assumption that arrogant individuals tend to seek public attention and recognition. For example, if a CEO's photo appears repeatedly in annual reports, company websites, or social media, this may indicate a desire to build an image of themselves as a 'hero' or irreplaceable leader. Empirical studies, such as those cited in (Sagala & Siagian, 2021), show that the frequency of these photos correlates with the risk of fraud, as it reflects the exploitation of authority stemming from arrogance.Therefore, the sixth hypothesis is as comply with:
H6: Frequent number of CEO's picture affects the likelihood of misleading financial reporting

RESEARCH METHOD

Data Source & Sampling

Further research on fraud in financial statements was conducted by (Lin et al., 2015; Narsa et al., 2023). The study used several proxies, including financial stability, external pressure, changes in directors, changes in the board of commissioners, changes in KAP auditors, the number of CEO photos in financial statements, and cooperation with the government. The results of the study

showed that financial stability, external pressure, and the number of CEO photos had an impact on financial statement fraud, while the other proxies did not have an impact (Boyle et al., 2015). The population in this study consisted of 106 financial sector companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022, with 530 company annual reports. The research method uses a non-probability sampling technique with purposive sampling. After further investigation, there were 100 samples that could be processed to answer the established hypothesis.

Data Analysis

In this research, data processing was conducted using EViews 13, employing computer-assisted techniques. Data management using Eviews consisted of several stages, including descriptive statistics, estimation of the regression model based on panel data, hypothesis testing, partial significance testing, and simultaneous significance testing. Estimated panel data regression model can be formulated as follows:

$$Y = \alpha + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 + e$$

Y = *Fraudulent Financial Reporting*
α = *constant*
β = *regression coefficient for each variable* X1
= *Stimulus (Financial stability)*
X2 = *Capability (change of directory)*
X3 = *Collusion (corportate with government project)*
X4 = *Opportunity (nature of industry)*
X5 = *Ratonaliz (change in auditor)*
X6 = Ego *(frequent number of CEO's picture)*
e = *error or residual variable*

Measurement and Operational Variable Definition

This study uses independent variables as determining factors using the fraud hexagon theory, which is proxied using six proxies from the hexagon components, namely financial stability from the stimulus component, change of directory from the capability component, corporate with government project from the collusion component, nature of industry from the opportunity component, change in auditor from the rationalization component, and frequent number of CEO's pictures from the ego proxy.

Table 3.1 Formulated

No.	Variable	Formula
1.	**Dependent Variable: Fraudelent Financial Report**	
	F Score Model	*F Sccore=Accrual quality + Performance* *Resource:* (Dewi, 2022)
2.	**Independent Variable:** *Stimulus*	
	Financial stability	ACHANGE =Total aset(t) – Total aset (t-1)/Total aset (t-1) *Resource:* (Dewi, 2022)
3.	**Independent Variable:** *Capability*	
	Change of directory	Dummy variable, If there is a change in directors during the 2018-2022 period, it is coded as 1; otherwise, it is coded as 0 *Resource:* (Dewi, 2022)

No.	Variable	Formula
4.	**Independent Variable:** *Collusion*	
	Corportate with government project	The dummy variable will be coded as 1 if there was a joint project with the government during the 2018-2022 period, and 0 if there was no such project. Resource: (Sari & Nugroho, 2020)
5.	**Independent Variable:** *Opportunity*	
	Nature of industry	NOI= *Receivable/ sales – Receivable* (t-1)/*Sales*(t-1) Resource: (Sari & Nugroho, 2020)
6.	**Independent Variable** *: Rationaliz*	
	Change in auditor	The dummy variable will be coded as 1 if there was a change in KAP during the 2018-2021 period, and 0 if there was no change. Resource: (Sari & Nugroho, 2020)
7.	**Independent Variable:** Ego	
	Frequent number of CEO's picture	CEO PIC = ∑ photos of the CEO appearing in the annual financial report *Resource:* (Sari & Nugroho, 2020)

RESULT AND DISCUSSION

Table 4.1.
Descriptive Statistical Analysis

Items	N	Min	Max	Mean	Std. Deviation
Y	100	-70.65772	61.87570	1.31986	10.32259
STI	100	-37.85000	50.40000	1.02420	7.086131
CAP	100	0.000000	1.000000	0.11000	0.314466
COL	100	0.000000	1.000000	0.64000	0.482418
OPP	100	-97.90696	140.6000	5.96674	28.82919
RAZ	100	0.000000	1.000000	0.12000	0.326599
EGO	100	1.000000	17.00000	6.08000	3.174011

Source: Output from eviews 13, processed by the author in 2023

Based on the descriptive analysis table for the 2018-2022 period, it shows that there is a minimum value of Fraudulent Financial Reporting with a value of -70.65772, meaning that there are indications of fraudulent financial reporting practices. The average value of fraudulent financial reporting is 1.3, with 18% of the total sample detected engaging in fraudulent financial reporting practices. Furthermore, the Financial Stability variable shows that 63% exceed the average of 1.03, meaning that the samples used experienced a decrease in assets. Change of directory shows that the average value is 0.11 (11%), which means that almost all financial sector companies in the sample did not change their directors during the research period, indicating a high level of fraud in the companies in the research sample.

The Corporate Governance Project shows that the average value is 0.64 (64%), which means that many financial sector companies in the sample have projections with the government, indicating a high level of fraud in the companies in the research sample. The nature of the industry shows that the average is 39%, exceeding the average value of 5.9, which means it has the highest indication of fraud. The final point, Change in Auditor. Change in auditor, shows that 12% of the average value is 0.12, meaning that the sample companies indicate high fraudulent financial reporting practices. The final point, The frequent number of CEOs' pictures shows that 37% have a value above the average of 6.08, which means they have the highest indication of financial statement fraud.

Common Effect Model Approach

Table 4.2 Common Effect Model Approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.242983	1.043688	7.897935	0.0000
STI	-1.483155	0.025264	-58.70572	0.0000
CAP	-6.646512	1.097619	-6.055388	0.0000
COL	-1.746836	0.731432	-2.388240	0.0190
OPP	-0.012829	0.005896	-2.175780	0.0321
RAZ	-4.747397	1.050485	-4.519241	0.0000
EGO	0.403328	0.058303	6.917771	0.0000
R-squared	0.975408	Mean dependent var		1.319862
Adjusted R-squared	0.973822	S.D. dependent var		10.32259
S.E. of regression	1.670165	Akaike info criterion		3.931152
Sum squared resid	259.4191	Schwarz criterion		4.113514
Log likelihood	-189.5576	Hannan-Quinn criter		4.004957
F-statistic	614.7934	1.558187	Durbin-Watson stat	1.558187
Prob(F-statistic)	0.000000			

Source: Output from eviews 13, processed by the author in 2023

Fixed Effect Model Approach

Table 4.3 Fixed Effect Model Approach

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.605582	1.551361	2.968737	0.0040
STI	-1.497746	0.023654	-63.31775	0.0000
CAP	-6.817042	1.019703	-6.685320	0.0000
COL	1.625851	1.356935	1.198179	0.2347
OPP	-0.008880	0.005456	-1.627645	0.1079
RAZ	-3.474816	1.096923	-3.167785	0.0022
EGO	0.443654	0.148597	2.985624	0.0038
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.986292	Mean dependent var		1.319862
Adjusted R-squared	0.981661	S.D. dependent var		10.32259
S.E. of regression	1.397907	Akaike info criterion		3.726725
Sum squared resid	144.6067	Schwarz criterion		4.404069
Log likelihood	-160.3362	Hannan-Quinn criter.		4.000858
F-statistic	212.9716	Durbin-Watson stat		2.517626
P	0.000000			

Source: Output from eviews 13, processed by the author in 2023

Random Effect Model Approach

Table 4.4 **Random Effect Model Approach**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.104793	1.116857	6.361417	0.0000
STI	-1.490249	0.022631	-65.85032	0.0000
CAP	-6.679643	0.979078	-6.822378	0.0000
COL	-0.756151	0.905931	-0.834668	0.4060
OPP	-0.009923	0.005270	-1.882918	0.0628
RAZ	-4.111587	1.008274	-4.077845	0.0001
EGO	0.399724	0.076901	5.197883	0.0000
Effects Specification				
			S.D.	Rho
Cross-section random		0.929407		0.3065
Idiosyncratic random		1.397907		0.6935
	Weighted Statistics			
R-squared	0.979382	Mean dependent var		0.736656
Adjusted R-squared	0.978052	S.D. dependent var		9.590289
S.E. of regression	1.420799	Sum squared resid		187.7362
F-statistic	736.2650	Durbin-Watson stat		2.063462
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.974669	Mean dependent var		1.319862
Sum squared resid	267.2141	Durbin-Watson stat		1.449724

Source: Output from eviews 13, processed by the author in 2023

Regression Model Selection Test

Based on the table above, panel data models can be estimated using three main approaches: Common Effects Model (CEM), Fixed Effects Model (FEM), and Random Effects Model (REM). To determine the most appropriate model for the data, several statistical tests are required. The Chow test is used to compare CEM and FEM, with the aim of identifying whether FEM provides a significantly better fit than CEM by taking into account individual heterogeneity.

Table 4.5 Chow Test

Redundant Fixed Effects Tests			
Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.092275	(19,74)	0.0003
Cross-section Chi-square	58.442687	19	0.0000

Source: Output from eviews 13, processed by the author in 2023

The Chi-square cross-section probability shows a value of 0.0000, which is smaller than the predetermined significance level of α = 5%. This value indicates that H0 is rejected and H1 is accepted. Therefore, based on the Chow test, the most appropriate model between CEM and FEM is FEM.

Hausman Test Correlated Random Effects - Hausman Test Equation: Untitled
Test cross-section random effects

Table 4.6 Hausman Test

Test Summary	Chi-S1 Statistic	Chi-Sq. d.f. Prob	Prob
Cross-section random	9.070781	6	0.1696

Source: Output from eviews 13, processed by the author in 2023

Based on the results of the Hausman test above, the probability value is 0.1696, which is greater than α = 5%. This value indicates that H0 is accepted and H1 is rejected. The model selected for the panel data regression in this study is REM. Thus, the Random Effect Model is used as the basis for hypothesis testing in this study.

Table 4.7 Lagrange Multiplier Test

Lagrange Multiplier Tests for Random Effects Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one- sided (all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	9.895934	0.003096	9.899031
	(0.0017)	(0.9556)	(0.0017)

Source: Output from eviews 13, processed by the author in 2023

Based on the results of the Hausman test, the p-value is 0.0017, which is less than the significance level of a = 5%. This indicates that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. Therefore, the Fixed Effect Model (FEM) is more appropriate than the Random Effect Model (REM), and the FEM is selected as the basis for hypothesis testing in this study.

Panel Data Regression Analysis

Thus, the results of panel regression using REM are used as the basis for regression analysis in determining the influence of the test variables. Results of panel data regression utilizing the REM model were obtained using Eviews 13 software.

Table 4.8 Result Regresi Data Panel

Dependent Variable: Y
Method: Panel EGLS (Cross-section random effects) Date: 08/17/23 Time: 20:29
Sample: 2018 2022
Periods included: 5
Cross-sections included: 20
Total panel (balanced) observations: 100
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.104793	1.116857	6.361417	0.0000
STI	-1.490249	0.022631	-65.85032	0.0000
CAP	-6.679643	0.979078	-6.822378	0.0000
COL	-0.756151	0.905931	-0.834668	0.4060
OPP	-0.009923	0.005270	-1.882918	0.0628
RAZ	-4.111587	1.008274	-4.077845	0.0001
EGO	0.399724	0.076901	5.197883	0.0000
Weighted Statistics				
R-squared	0.979382	Mean dependent var		0.736656
Adjusted R-squared	0.978052	S.D. dependent var		9.590289
S.E. of regression	1.420799	Sum squared resid		187.7362
F-statistic	736.2650	Durbin-Watson stat		2.063462
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.974669	Mean dependent var		1.319862
Sum squared resid	267.2141	Durbin-Watson stat		1.449724

Source: Output from eviews 13, processed by the author in 2023

The results of the panel data regression test can be seen in the table below.

Partial Test Results (t-test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	7.104793	1.116857	6.361417	0.0000
STI	-1.490249	0.022631	-65.85032	0.0000
CAP	-6.679643	0.979078	-6.822378	0.0000
COL	-0.756151	0.905931	-0.834668	0.4060
OPP	-0.009923	0.005270	-1.882918	0.0628
RAZ	-4.111587	1.008274	-4.077845	0.0001
EGO	0.399724	0.076901	5.197883	0.0000

Source: Output from eviews 13, processed by the author in 2023

As indicated in the table 4.10, the probability or significance measure of the variable X1 is 0.0000, which is below 0.05. In addition, the comparison between the t-statistic and the t-table is also considered. The t-statistic measure in the t-test results for X1 is -65.85, which is greater than the t- table value. Therefore, it can be be inferred that the financial stability variable partially influences the likelihood of misleading financial reporting, or hypothesis X1 is recognized. The financial stability variable has a negative direction, which means that when a company has poor financial stability, it can be interpreted that the potential for fraud in financial statements will increase. These test results are in line with agency theory and attribution theory, whereby when a company is in an unstable condition, its value in the eyes of investors will decline. The results of this study are supported by and consistent with

research conducted by (Sagala & Siagian, 2021; Yadav et al., 2024; Zheng & Jin, 2023) stated that financial stability affects the potential for financial statement fraud.

Additionally, the t-statistic value in the t-test results for X2 is -6.822, which is greater than the t- table value. Therefore, it can be concluded that the change of directory variable partially influences the likelihood of misleading financial reporting, or hypothesis X2 is accepted. The variable change of directory has a negative direction, which means that the smaller the interval of company director changes during the research period, the higher the indication of fraud in the financial statements. These test results are in line with agency theory and attribution theory, whereby short intervals between changes in management create the potential for fraud. The results of this study are supported and in line with research conducted by , who studied the manufacturing sector during the period 2017-2019, and (Zhu et al., 2021), who stated that a change of directory affects the potential for financial statement fraud.

The t-statistic value in the t-test results for X3 is -0.834, which is smaller than the t-table value. Therefore, it can be concluded that the corporate with government project variable does not partially influence the likelihood of misleading financial reporting, or hypothesis X3 is rejected. This study is supported by and in line with research conducted by (Achmad et al., 2023; Setiawan & Soewarno, 2025), who studied the LQ 45 sector for the 2017-2019 period and stated that corporate involvement in government projects has no effect on the potential for financial statement fraud.

Furthermore, the t-statistic value in the t-test results for X4 is -1.882, which is smaller than the t- table value. Therefore, it can be concluded that the nature of industry variable does not partially affect the likelihood of misleading financial reporting, or hypothesis X4 is rejected. This means that the nature of the industry does not affect the likelihood of misleading financial reporting. The results of this study are supported by and consistent with research conducted by (Gray & Debreceny, 2014) who studied the financial sector during the period 2017 – 2020, and (Wei et al., 2017), who studied the LQ 45 sector during the 2016–2020 period, stating that the nature of the industry does not influence the potential for financial statement fraud.

In addition, the t-statistic value in the t-test results for X5 is -4.077, which is greater than the t-table value. Therefore, it can be concluded that the variable change in auditor partially affects the likelihood of misleading financial reporting, or hypothesis X5 is accepted. The t-statistic value in the t-test results for X5 is -5.197, which is greater than the t-table value. Therefore, it can be concluded that the variable "frequent number of CEO's pictures" partially influences the likelihood of misleading financial reporting, or hypothesis X6 is accepted. The variable "frequent number of CEO's pictures" has a positive direction, which means that the more photos of the CEO there are in a company's annual report, the higher the indication of fraud in the financial statements. The results of this study are supported by and consistent with research conducted by (Boyle et al., 2015), who studied the LQ 45 sector for the period 2016-2020, and who (Wei et al., 2017) stated that the frequent appearance of CEOs' photos has an effect on the potential for financial statement fraud.

The Influence of Financial Stability on the Potential for Fraudulent Financial Activities

These test results are in line with agency theory and attribution theory, whereby when a company is in an unstable condition, its value in the eyes of investors will decline. This relates to

the interests of agents and principals, whereby investors as principals want a high return on their investment. This creates pressure on management to always demonstrate stable company performance so that investors do not reduce their investment in the following year. When total assets decline, principals may consider the company to be unstable and unable to operate properly (Aviantara, 2021). The unstable condition of the company will stimulate company managers. The higher the stimulus received by company managers, the greater the potential for financial statement fraud. Thus, the findings in this study are able to answer this theory because the hypothesis test shows that the stimulus proxied by financial stability affects the potential for fraudulent financial reporting.

The results of this study are supported by and consistent with research conducted by (Lin et al., 2015), who studied the same sector as this study with a research period from 2017 - 2020, and (Soeprajitno, 2019), who researched the manufacturing sector with a research period of 2016 - 2020, stating that financial stability affects the potential for financial statement fraud. However, this study is not in line with the research conducted by (Janah et al., 2022), who studied the manufacturing sector with a period of 2017-2019, stating that financial stability does not affect the potential for financial statement fraud.

The Influence of Directory Changes on the Potential for Financial Fraud

These test results are in line with agency theory and attribution theory, whereby short intervals between changes in directorship create the potential for fraud. This is because directors who serve for long periods will understand and know a lot of information about the company, including its weaknesses, so that if this information should be conveyed to interested parties, directors in high positions can take advantage of it, thereby increasing the potential for fraud (Achmad et al., 2023).

According to (Boyle et al., 2015; Wolfe & Hermanson, 2004), fraud in companies occurs because directors have the capability to commit fraud by taking advantage of their position, potential, or situation in the company, which means that the longer the director's term of office or the absence of director turnover in the company, the higher the potential for fraud. The results of this study are supported and in line with research conducted by (Janah et al., 2022), who researched the manufacturing sector for the period 2017-2019, and Istiyanto & Yuyetta (2021), who researched the manufacturing sector for the period 2016-2028, stating that a change of directorship affects the potential for financial statement fraud. However, this study is not in line with the research conducted by Violita, (2013), which examined the LQ 45 sector for the period 2016-2020, stating that a change of directory.

The Influence of Corporate-Government Projects on the Potential for Fraudulent Financial Reporting

The greater the scale of cooperation between companies and the government, the greater the income received by companies. This can trigger management to take advantage by manipulating the company's financial statements. However, the results of testing in this study are not in line with agency theory or attribution theory because when there is more cooperation between companies and government projects, the potential for fraud in financial statements actually decreases. This means that cooperation with government projects does not necessarily cause fraudulent financial reporting. The results of this study are also supported by research conducted by (Shah et al., 2021), which states that not all cooperation with government projects results in companies attempting to participate in these projects. This is due to the possibility of differences in views on what is to be

achieved. Similar research was also conducted by (Ulfah et al., 2017; Wijayani & Ratmono, 2020), who stated that collusion is one way for companies to commit fraud through cooperation with the government that organises the cooperation, but in reality, if fraud occurs when collaborating with government projects, it will result in the company being blacklisted.

The results of this study are supported by and consistent with research conducted by (Cheng et al., 2021; Cook et al., 1988), who studied the financial sector during the period 2017 – 2020, and Nurardi & Wijayanti (2021), who researched the LQ 45 sector for the period 2017-2019, stating that corporate involvement in government projects does not affect the potential for financial statement fraud. However, the results of this study are not in line with the research conducted by Sari & Nugroho, (2020), who studied the manufacturing sector for the period 2016–2028, stating that corporate involvement in government projects affects the potential for financial statement fraud.

The Influence of the Nature of Industry on the Potential for Fraudulent Financial Reporting

This study found that an increase in the accounts receivable ratio during the observation period in the financial companies sampled actually reduced the likelihood of financial malpractice. Therefore, the results of this test are not in line with agency theory and attribution theory, and the hypothesis that the nature of the industry influences the potential for fraudulent financial reporting is rejected. According to research by (Narsa et al., 2023), it is stated that high accounts receivable values do not necessarily indicate that a company is committing fraud because an increase in accounts receivable from the previous year tends to be followed by the company implementing strict credit policies and internal controls over the amount of accounts receivable so that the company's accounts receivable are under control and cash receipts are smooth due to relatively smooth payments of accounts receivable from debtors, making the company appear to be in good condition.

The results of this study are supported by and consistent with research conducted by (Narsa et al., 2023; Umar et al., 2020), who studied the financial sector during the period 2017 – 2020, and (Novarina & Triyanto, 2022), who researched the LQ 45 sector for the period 2016-2020, stating that the nature of the industry does not affect the potential for financial statement fraud. However, the results of this study are not in line with the research conducted by (Dewinta Agustin et al., 2022), who studied insurance companies for the period 2017–2020, stating that the nature of the industry affects the potential for financial statement fraud.

The Influence of change in auditor on the potential for fraudulent financial reporting

The results of this study are supported by and consistent with research conducted by Agusputri et al., (2019), who studied the manufacturing sector for the period 2015-2017, and Ulfah et al., (2017), who studied the banking sector for the period 2011-2015, stating that a change in auditor affects the potential for financial statement fraud. However, this research is not in line with the research conducted by Janah et al., (2022), who studied the financial sector for the period 2016-2020, stating that a change in auditor does not affect the potential for financial statement fraud.

The Influence of Frequent Number of CEO's Picture on the Potential for Fraudulent Financial Reporting

The results of this study indicate that the more photos of the CEO appear in a company's

annual report, the higher the CEO's ego level within the company. A person with an egoistic attitude tends to have a superiority complex, which drives them to justify any means necessary to achieve their desires, thereby leading to fraud. With their selfish nature, no internal control system can limit the actions and behaviour of a CEO because of the power they wield (Anggriani & Dewi, 2022).

The results of this study are supported and in line with research conducted by (Novarina & Triyanto, 2022), who researched the LQ 45 sector for the period 2016-2020, and Dewi & Yuliati (2022), who researched the food and beverage sector for the period 2016-2020, stating that the frequent number of CEO's pictures influences the potential for financial statement fraud. However, this study is not in line with the research conducted by (Agusputri et al., 2019), which examined the manufacturing sector for the period 2015-2017, stating that the frequent number of CEO's pictures does not affect the potential for financial statement fraud.

The influence of financial stability, change of directory, corporate with government project, nature of industry, change in auditor and frequent number of CEO's picture on the potential for fraudulent financial reporting

The results of this simultaneous test are also supported by and consistent with agency theory and attribution theory, which state that when an individual has more opportunities and information and has the chance to commit fraud, the potential for fraud increases. Therefore, the results of this simultaneous test support the hexagon fraud theory as a reference for detecting potential fraud in company financial reports. Thus, the seventh hypothesis in this study is accepted.

CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

Conclusion

This study aims to determine the effect of the hexagon fraud theory with stimulus components proxied by financial stability, capability proxied by change of directory, collusion proxied by corporate with government projects, opportunity proxied by nature of industry, rationalization proxied by change in auditor, and ego proxied by frequent number of CEO's pictures in the financial sector listed on the Indonesia Stock Exchange for the period 2018-2022.

Financial stability affects the likelihood of misleading financial reporting in companies in the financial sector. Furthermore, change of directory affects the likelihood of misleading financial reporting in financial sector companies during the period. Corporate with government projects does not affect the likelihood of misleading financial reporting in financial sector companies during the period. Nature of industry does not affect the likelihood of misleading financial reporting in financial sector companies during the period. Change in auditor affects the likelihood of misleading financial reporting in financial sector companies during the period. Finally, the last variable, frequent number of CEO's pictures, affects the likelihood of misleading financial reporting during the period.

Implication and Limitation

Company management is advised to present financial statements in accordance with applicable codes of conduct. Financial statements used as a basis for decision-making by investors must accurately reflect the actual situation so as not to harm other parties. Company management should also work in accordance with existing policies and regulations to prevent misconduct related to financial statement fraud. Additional knowledge that can be used as a reference, particularly in the fields of auditing and forensic investigation or other areas of fraud

theory.

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