JOURNAL OF APPLIED MANAGERIAL ACCOUNTING
Vol. {9}, No. {2}, {2025}, {132-142}
ISSN: {2548-9917} (online version)

Article History
Received {September, 2025}
Accepted {October, 2025}

ANALYSIS OF FINANCIAL STATEMENT FRAUD USING THE FRAUD HEXAGON APPROACH IN STATE OWNED ENTERPRISES LISTED ON THE INDONESIA STOCK EXCHANGE

Danar Irianto[1)*], Ridho Tanso Rikalmi[2)], Desrahayu Vinarsinta Uli Munthe [3)]
[1]Business Management, Politeknik Negeri Batam, Batam, Indonesia
email: danar@polibatam.ac.id
[2]Business Management, Politeknik Negeri Batam, Batam, Indonesia
email: ridho@polibatam.ac.id
[3]Business Management, Politeknik Negeri Batam, Batam, Indonesia
email: desrahayumunthe@gmail.com

ABSTRACT

This study aims to analyze various factors from the fraud hexagon in relation to detecting financial statement fraud in State Owned Enterprises listed on the Indonesia Stock Exchange (IDX) during the 2019–2021 period. The study population consists of 24 State Owned Enterprises listed on the IDX. A purposive sampling method was used to select the sample, resulting in 13 State Owned Enterprises that met the research criteria, with a total of 39 observations. The novelty of this research lies in the addition of a new variable financial stability as an indicator to measure stimulus or pressure. The data were processed using logistic regression analysis with IBM SPSS version 27. The findings indicate that Rationalization, proxied by Total Accruals, has a significant positive effect on detecting financial statement fraud. In contrast, financial stability, external pressure, financial targets, opportunity, capability, arrogance, and collusion do not show significant effects on the detection of financial statement fraud.

Keywords: *Fraud Hexagon, Financial Statement Fraud.*

ABSTRAK

Penelitian ini bertujuan untuk mengkaji pengaruh faktor-faktor dalam teori fraud hexagon terhadap pendeteksian kecurangan laporan keuangan pada Badan Usaha Milik Negara (BUMN) yang terdaftar di Bursa Efek Indonesia (BEI) selama periode 2019–2021. Populasi penelitian mencakup 24 BUMN yang terdaftar di BEI, dengan penentuan sampel menggunakan metode purposive sampling, sehingga diperoleh 13 BUMN yang memenuhi kriteria penelitian dengan total 39 data observasi. Ciri kebaruan dari penelitian ini terletak pada penambahan variabel stabilitas keuangan sebagai indikator baru untuk mengukur aspek tekanan (stimulus/pressure) dalam kerangka fraud hexagon. Analisis data dilakukan dengan menggunakan regresi logistik melalui perangkat lunak IBM SPSS versi 27. Hasil penelitian menunjukkan bahwa variabel rasionalisasi yang diproksikan melalui Total Accruals memiliki pengaruh positif dan signifikan terhadap kemungkinan terjadinya kecurangan laporan keuangan. Sementara itu, variabel stabilitas keuangan, tekanan eksternal, target keuangan, kesempatan, kapabilitas, arogansi, serta kolusi tidak menunjukkan pengaruh yang signifikan terhadap pendeteksian kecurangan laporan keuangan pada BUMN yang menjadi objek penelitian.

Kata Kunci: Fraud hexagon, Kecurangan laporan keuangan.

*Corresponding author. E-mail: danar@polibatam.ac.id

1. INTRODUCTION

The high level of pressure and risk in the financial sector makes it particularly vulnerable to various forms of fraud, including fraudulent practices in the preparation of financial statements. According to Imtikhani & Sukirman (2021) financial statement fraud is committed deliberately for various reasons, such as personal gain, enhancing the company's reputation, attracting investors, and so on. According to the Report to the Nations 2020 published by the ACFE, fraud is generally classified into three main categories: asset misappropriation, financial statement fraud, and corruption. Although financial statement fraud occurs less frequently than the other two types of fraud, it results in the highest financial losses (ACFE Global, 2020)

One of the major fraud cases that drew significant public attention in Indonesia in early 2019 was the controversy surrounding PT Garuda Indonesia Tbk. The company was suspected of manipulating its 2018 financial statements by recognizing revenue prematurely, despite actually recording losses during the same period. Another case involves PT Asuransi Jiwasraya, which committed fraud by misusing customer funds for highrisk investments and manipulating financial statements, ultimately leading to

default and state losses amounting to trillions of rupiah (Handoko, 2021). Ideally, financial statements serve as a crucial basis for stakeholders to make informed decisions. However, in reality, many companies are tempted to present appealing financial reports by manipulating certain components that do not accurately reflect their actual financial condition. Such actions can harm users of financial statements and have negative impacts on the company, both financially and reputationally.

The manipulation of financial reports may also erode public trust, hinder the company’s ability to maintain business sustainability, and, in more severe cases, lead to bankruptcy. The factors that drive individuals to engage in fraudulent behavior are explained by Vousinas (2019) through the Fraud Hexagon Theory, which consists of six components: pressure, opportunity, rationalization, capability, arrogance, and collusion. A previous study by Handoko (2021) found that collusionone of the elements of the fraud hexagonhas a positive and significant effect on financial statement fraud. However, other variables such as financial targets, external pressure, weak monitoring, auditor turnover, director turnover, and the frequency of CEO photo appearances did not show significant influence. Similarly, research by Siregar & Murwaningsari (2022) showed that collusion, along with stimulus and capability, significantly influences financial statement fraud, while opportunity, rationalization, and ego factors did not have a significant effect. In contrast, the study by Sholikatun & Makaryanawati (2023) found that collusion, external pressure, financial targets, capability, and rationalization were not significant, while opportunity had a negative effect on financial statement fraud. These differing results from previous studies indicate inconsistencies in the factors that cause financial statement fraud.

This motivates the present study to re-examine the influence of the fraud hexagon, particularly in State Owned Enterprises (SOEs) listed on the Indonesia Stock Exchange. The selection of the SOE sector is based on a 2019 survey by ACFE Indonesia, which revealed that SOEs accounted for the second highest fraud losses in Indonesia, reaching 8.1% (Association of Certified Fraud Examiners Indonesia, 2019). What distinguishes this study from previous ones is the addition of a new variable financial stability as an indicator to measure stimulus or pressure. In light of past fraud cases and the driving factors behind them, particularly in financial reporting, the detection of fraud has become increasingly important. This study is expected to make a meaningful contribution to financial auditors in carrying out their duties to examine SOE financial statements. Specifically, it aims to provide insight and guidance regarding early warning signs or indicators that may suggest the occurrence of financial statement fraud, enabling auditors to prioritize these areas in their audit processes.

2. LITERATUR REVIEW

2.1 Agency Theory

K Agency Theory, developed by Jensen & Meckling (1976), addresses the relationship between the principal (the party granting authority, such as the owner) and the agent (the party receiving authority, such as the manager). The principal delegates decision making authority to the agent for their benefit. However, differences in interests and information asymmetry can lead to conflicts and agency costs. Financial statement fraud may occur when agents exploit this asymmetry. Management, having more knowledge of the company's internal conditions, typically possesses more comprehensive information than shareholders. This imbalance creates opportunities for manipulation to serve the agent's own interests.

2.2 Fraud Hexagon Theory

Figure 1 Fraud Hexagon

As the latest evolution of previous fraud theories, the Fraud Hexagon Theory has a long historical development. It began with the Fraud Triangle, introduced by Cressey in 1953, which consisted of pressure, opportunity, and rationalization. Wolfe and Hermanson later expanded this model in 2004 into the Fraud Diamond by adding the element of capability. In 2011, Crowe further developed it into the Fraud Pentagon by incorporating ego. Finally (Vousinas, 2019) refined the model into the Fraud Hexagon by including the element of collusion. Thus, the theory now comprises six elements: pressure, capability, collusion, opportunity, rationalization, and ego. This theory offers a more comprehensive framework for detecting and preventing fraud in financial reporting. By understanding these six elements, both auditors and management can enhance the effectiveness of internal controls and identify potential fraud at an earlier stage.

2.3 Hypothesis Development

Financial stability and financial statement fraud

Financial stability is positioned as a proxy for the stimulus element that drives the occurrence of fraud. According to Agency Theory, management will make var ious efforts to present the entity's financial condition as stable, while simultaneously pursuing their own interests to maximize personal welfare (Siregar & Murwaningsari, 2022). In times of stable or improving financial conditions, management tends to receive higher compensation. However, when a company faces financial difficulties, management may be tempted to manipulate financial statements to maintain a positive image and secure personal benefits. This is supported by the findings of Siregar & Murwaningsari (2022) and Tarjo, Anggono, & Sakti (2021) which indicate that financial stability, measured by ACHANGE, has a positive influence on the potential for financial statement fraud. Based on this indication, the following hypothesis is proposed:

H1: Financial stability has a significant positive effect on financial statement fraud.

External pressure and financial statement fraud

as proxy for the stimulus element, external pressure arises when management faces demand to secure funding or loans in order to maintain business continuity. As agents in Agency Theory, management is responsible for maximizing profits and driving company growth. However, funding constraints often push management to engage in fraudulent behavior to meet these expectations. Empirical findings by Maulina & Meini (2023), Imtikhani & Sukirman (2021), and Tarjo et al., (2021) also support this view. Their studies show that external pressure, measured using

leverage, has a positive influence on the likelihood of financial statement fraud. Based on these indications, the following hypothesis is proposed:

H2: External pressure has a significant positive effect on financial statement fraud.

Financial target and financial statement fraud.

Financial targets serve as a proxy for the stimulus element in driving financial statement fraud. Companies often set financial goals, such as profit and sales tar gets, which may create pressure on management to achieve them. According to Agency Theory, such pressure can encourage management to adopt various strategies to meet targets and present financial statements that appear favorable. This is supported by the findings of Sudrajat et al., (2023) and Tarjo et al.,(2021) which show that financial targets, measured using Return on Assets (ROA), have a positive effect on the likelihood of financial statement fraud. Based on this indication, the following hypothesis is proposed:

H3: Financial targets have a significant positive effect on financial statement fraud.

Opportunity and financial statement fraud

Financial statement fraud often involves more than just management and can even include cross functional collaboration within the organization. Employees with authority over accounting decisions may exploit situations to commit fraudulent practices without the knowledge of or detection by management (Siregar & Murwaningsari, 2022). This is in line with the Fraud Hexagon theory, which high lights opportunity as a triggering factor for fraud, particularly when a company's internal controls are inadequate. Weak supervision and control create opportunities for individuals or groups to commit fraud without fear of being exposed. This is consistent with the findings of Tarjo et al., (2021) and Khamainy et al., (2022), who suggest a positive correlation between the Nature of Industry (NIND) and the likelihood of financial statement fraud. Based on this evidence, the proposed hypothesis is as follows:

H4: Opportunity has a positive effect on financial statement fraud.

Rationalization and Financial Statement Fraud

Rationalization is the process of creating justifications or excuses for engaging in fraudulent behavior (Sari & Rofi, 2020). Through the accrual concept, rationalization allows management to recognize revenue without actual cash receipts, which can be manipulated for personal gain. This aligns with the rationalization element in the Fraud Hexagon theory, where perpetrators perceive their actions as acceptable or normal business practices. This is consistent with the findings of Octaviana (2022) who states that rationalization measured using the Total Accrual to Total Assets (TATA) ratio has a positive influence on the likelihood of financial statement fraud. Based on this indication, the proposed hypothesis is as follows:

H5: Rationalization has a positive effect on financial statement fraud.

Capability and Financial Statement Fraud

Director turnover is generally intended to improve board performance by introducing more competent leadership. However, it may also reflect personal interests that are misaligned with those of the principals, potentially leading to agency conflicts and financial statement fraud. In the context of agency theory, director turnover can serve as an indicator of fraud, as it reflects a strategic attempt by the company to address conflicts of interest. This supports the findings of Miftahul Jannah et al. (2021), which state that capability measured by changes in board members have an influence on the practice of financial statement fraud. Based on this indication, the proposed hypothesis is as follows:

H6: Capability has a positive effect on financial statement fraud.

Arrogance and Financial Statement Fraud

Arrogance or ego drives individuals to pursue success by prioritizing personal interests, exhibiting high self-confidence, and displaying narcissistic tendencies. This ego can serve as motivation for fraudulent behavior, as individuals seek to preserve their image or influence in the eyes of others (Vousinas, 2019). In the Fraud Hexagon theory, arrogance is often reflected through dualism in positions of authority, which may lead to the misuse of executive power (Tarjo et al., 2021). This is consistent with the findings of Sudrajat et al., (2023), Tarjo et al. (2021) and Khamainy et al., (2022) who suggest that arrogance, as proxied by dualism of position or CEO duality, influences the occurrence of financial statement fraud. Based on this indication, the proposed hypothesis is as follows:

H7: Arrogance has a positive effect on financial statement fraud.

Collusion and Financial Statement Fraud

According to agency theory, conflicts of interest between principals and agents arise from goal divergence and information asymmetry. Management, having greater access to information, may exploit its position for personal gain, potentially leading to collusion. One example of such conflict is related party transactions (RPT), where management engages in transactions with affiliated parties to divert company resources to those with special relationships, often at the expense of the company (Rizkiawan & Subagio, 2023). This aligns with the findings of Rizkiawan & Subagio (2023) and Daresta & Suryani (2022) who state that collusion, as proxied by related party transactions, influences financial statement fraud. Based on this indication, the proposed hypothesis is as follows:

H8: Collusion has a positive effect on financial statement fraud.

Based on the hypotheses proposed, the conceptual framework of this study is presented in the figure below.

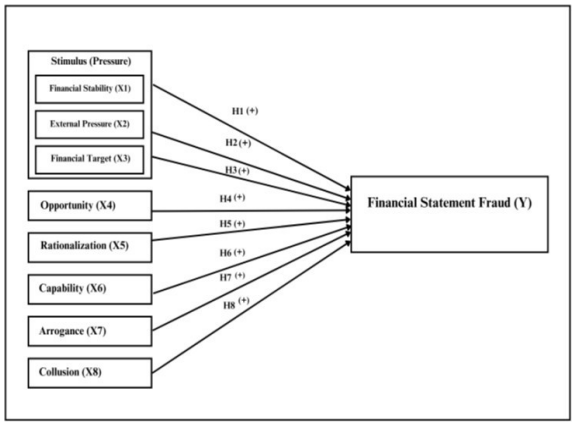

Figure 2 Theoretical Framework
Source : Processed by the author (2025)

3. RESEARCH METHODE

This study adopts a quantitative research approach using secondary data derived from the annual financial statements of state-owned enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) during the 2019–2021 period. The quantitative approach is selected to examine the relationship between independent variables and the likelihood of financial statement fraud in an objective and measurable manner. The population of this study consists of all SOEs listed on the IDX during the observation period. The research sample was selected using a purposive sampling technique to ensure data suitability and completeness. The sampling criteria include: (1) SOEs that were consistently listed on the IDX from 2019 to 2021, (2) companies that published complete annual financial statements during the observation period, and (3) companies with all required data related to the research variables. The data used in this study were collected from the official IDX website and relevant company reports. Logistic regression analysis was employed to test the research hypotheses, as the dependent variable—financial statement fraud—is measured as a dichotomous variable. The statistical analysis was conducted using SPSS version 27.

4. RESULT & DISCUSSION

Descriptive Statistics

Descriptive statistical analysis indicates that Financial Statement Fraud, as measured by the F-Score, has a mean value of 0.28, suggesting that 28% of companies are potentially involved in fraudulent activities. The financial stability variable has a mean of 0.059, indicating relatively stable asset growth. External pressure has a mean of 0.592, meaning that, on average, company debt accounts for 59.2% of total assets. The financial target (ROA) shows a mean of 0.037, suggesting a relatively low rate of return on investment. Opportunity has an average of 0.030, reflecting a low level of manipulation potential within the industry. Rationalization, with a mean of -0.022, also indicates a low level of accrual-based manipulation. Capability, represented by director turnover, occurred in 21% of companies. Arrogance, measured through dual positions, is relatively high, with a mean of 0.74. Meanwhile, collusion through related party transactions occurred in 27.9% of companies, indicating potential collusion in financial reporting.

Tabel 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FS	39	0,99894918	0,61997793	0,0596082204	0,23622603958
EP	39	0,29409191	0,85820403	0,5923915944	0,17522230841
FT	39	0,00062222	0,22248240	0,0366617199	0,04991634373
OPT	39	1,55138203	1,79442982	0,0301293857	0,41235946308
RTZ	39	0,14478645	0,10187640	0,0221219556	0,05780223393
CPT	39	0	1	0,38	0,493
ARG	39	0	1	0,74	0,442
COLL	39	0,00439196	0,90411224	0,2789580111	0,26201840331
FFS	39	0	1	0,28	0,456
Valid N (listwise)	39				

Source: Output from SPSS Version 27, 2025

Tabel 2. Overall Model Fit Test

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	46,432	-0,872
	2	46,401	-0,933
	3	46,401	-0,934
Step 1	1	31,840	-1,152
	2	29,169	-1,410
	3	28,662	-1,427
	4	28,630	-1,406
	5	28,630	-1,404
	6	28,630	-1,404

Source: Output from SPSS Version 27, 2025

The overall model test table shows a comparison of the -2 Log Likelihood values between the initial step (Step 0) and the final step (Step 1). The -2 Log Likelihood value in the initial block is recorded at 46.401, while in the final block it decreases to 28.630. This reduction of 17.771 indicates that the applied logistic regression model is significantly better than the initial model, which did not include any

independent variables. Therefore, the proposed model is considered to fit the data well and is suitable for further analysis.

Table 3. Coefficient of Determination Test

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	28.630[a]	0,366	0,526

Source: Output from SPSS Version 27, 2025

As shown in the table above, 52.6% of the variation in financial statement fraud (the dependent variable) can be explained by the set of independent variables examined in this study, including financial stability, external pressure, financial targets, opportunity, rationalization, capability, arrogance, and collusion, as indicated by the Nagelkerke R Square value. The remaining 47.4% is likely influenced by factors outside the scope of this research model.

Table 4. Logistic Regression Model Fit Test

Step	Chi-square	Df	Sig.
1	12,063	8	0,148

Source: Output from SPSS Version 27, 2025

The Hosmer and Lemeshow test results show a Chi-square value of 12.063 with a significance level (p-value) of 0.148, which exceeds the threshold of 0.05. This indicates that the logistic regression model has a good fit with the observed data. In this test, the null hypothesis (H_0) states that there is no significant difference between the predicted values and the observed values. Since the p-value of 0.148 is greater than 0.05, the null hypothesis is accepted. Therefore, the logistic regression model is considered appropriate and reliable for analyzing the relationship between the independent and dependent variables.

Wald Test

As shown in the table, the Wald test evaluates eight independent variables that are hypothesized to influence financial statement fraud. The analysis reveals that only Rationalization shows a statistically significant relationship with financial statement fraud (p-value = 0.019 < 0.050). The other variables financial stability, external pressure, financial targets, opportunity, capability, arrogance, and collusion do not exhibit a significant individual effect (p-value > 0.050) on financial statement fraud.

Logistic Regression Model.

The logistic regression method is applied in this study to test the proposed hypotheses, with data processing conducted using SPSS version 27. The detailed results of the analysis are presented in the table. Based on the data analysis, the resulting logistic regression equation is as follows:

Financial Statement Fraud = –1.404 + 0.020 × Financial Stability + 0.533 × External Pressure – 7.120 × Financial Target – 2.991 × Opportunity + 30.968 × Rationalization1.321 × Capability + 0.516 × Arrogance – 0.808 × Collusion + ε

Table 5. Logistic Regression Test Results

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	FS	0,02	2,573	0	1	0,994	1,021
	EP	0,533	3,404	0,024	1	0,876	1,703
	FT	-7,12	15,335	0,216	1	0,642	0,001
	OPT	-2,991	2,622	1,301	1	0,254	0,05
	RTZ	30,968	13,201	5,503	1	0,019	2,81E+16
	CPT	1,321	1,187	1,239	1	0,266	3,748
	ARG	0,516	1,354	0,145	1	0,703	1,675
	COLL	-0,808	2,275	0,126	1	0,722	0,446
	Constant	-1,404	2,468	0,324	1	0,569	0,246

Source: Output from SPSS Version 27, 2025

Discussion

The Effect of Financial Stability on Financial Statement Fraud.

The test of the first hypothesis regarding the relationship between financial stability and financial statement fraud reveals a positive regression coefficient of 0.020 with a significance value of 0.994 (above the 5% threshold). Therefore, the alternative hypothesis (H1) is rejected. This result confirms that

financial stability measured through asset growth (ACHANGE)does not have a significant impact on financial statement fraud. In other words, variations in total annual assets cannot be used as a justification for the presence of fraud in financial reporting. This is because changes in assets often reflect strategic management decisions in managing the company's asset portfolio and are a reflection of the company's broader business strategies. Management inherently aims to maximize the value of assets, and any increase or decrease in assets is generally made based on proportional considerations to achieve corporate goals.

This finding is consistent with the studies of Tarjo et al (2021) and Khamainy et al., (2022), which concluded that pressure represented by financial stability has no significant effect on financial statement fraud. However, these results contrast with those of Siregar & Murwaningsari (2022) and Imtikhani & Sukirman (2021) who found that financial stability does have a significant influence on financial statement fraud.

The Effect of External Pressure on Financial Statement Fraud.

The results of the second hypothesis test show a regression coefficient of 0.553 and a significance value of 0.876 (greater than 5%), leading to the rejection of H2. This indicates that external pressure, as measured by leverage, does not influence the likelihood of financial statement fraud. Therefore, the size of a company's liabilities relative to its total assets cannot be used as an indicator of fraudulent financial reporting. This finding suggests that even though state owned enterprises (SOEs) tend to have relatively high leverage, they are still capable of fulfilling their obligations in a stable and well-planned manner. This capability is supported by strict government regulations and oversight over SOEs, as well as strong external trust (from creditors and investors) in the continuity of SOEs' operations. The results are consistent with the findings of Handoko (2021) and Sholikatun & Makaryanawati (2023), who also found that leverage, as a proxy for external pressure, does not significantly affect financial statement fraud. However, this finding contrasts with the studies of Maulina & Meini (2023), Tarjo et al (2021), and Khamainy et al (2022). which suggest that external pressure measured by leverage does have an effect on the occurrence of financial statement fraud.

The Effect of Financial Targets on Financial Statement Fraud.

The third hypothesis test shows a regression coefficient of –7.120 with a significance value of 0.642 (greater than 5%). Therefore, H3 is rejected. This indicates that financial targets, as measured by Return on Assets (ROA), have no significant impact on financial statement fraud. In other words, the level of financial targets whether high or low does not appear to trigger fraudulent financial reporting practices. This may be attributed to the fact that the companies sampled in this study have enhanced their operations through the adoption of modern technology, advanced information systems, the recruitment of high-quality human resources, and the implementation of effective board policies. These companies recognize that even if financial targets are difficult to achieve, committing fraud could pose long term risks such as reputational damage, legal consequences, and a loss of public trust. This finding aligns with the studies of Sholikatun & Makaryanawati (2023), Tarjo et al (2021)), and (Khamainy et al., 2022). who concluded that financial targets measured by ROA do not influence fraudulent behavior in financial reporting. Conversely, the result contradicts the findings of Sudrajat et al (2023) and Octaviana (2022), who found that financial targets, as reflected in ROA, do affect financial statement fraud.

The Effect of Opportunity on Financial Statement Fraud.

The fourth hypothesis test yields a regression coefficient of –2.991 and a significance level of 0.254 (above 5%), leading to the rejection of H4. This finding indicates that opportunity, proxied by the nature of industry, does not have a significant effect on financial statement fraud. In short, industry characteristics are not a primary trigger of fraudulent behavior. This implies that although certain industries may provide more flexibility in revenue recognition

or expense reporting, management does not necessarily exploit these opportunities for fraudulent purposes. The intrinsic opportunity within an industry's nature does not automatically lead to illegal actions, particularly when the company is equipped with strong internal control systems and rigorous financial reporting oversight mechanisms. These findings are consistent with the results of Sholikatun & Makaryanawati (2023) who concluded that the nature of industry does not significantly influence financial statement fraud. However, this result contrasts with the research of Khamainy et al., (2022) and Octaviana (2022), who found that opportunity, as reflected in the nature of industry, does have an impact on financial statement fraud.

The Effect of Rationalization on Financial Statement Fraud.

The results of the fifth hypothesis test show a regression coefficient of 30.968 with a significance value of 0.019 (below 5%), thus H5 is accepted. This indicates that rationalization, measured by the total accrual to total assets ratio, has a significant positive effect on financial statement fraud. In other words, the higher the accruals recorded by a company, the greater the likelihood of fraud in financial reporting since accruals can be exploited to manipulate financial data. This finding is consistent with the results of Octaviana (2022), who found that rationalization, measured by the ratio of total accruals to total assets, significantly influences financial statement fraud.

The Effect of Capability on Financial Statement Fraud.

The sixth hypothesis test produces a regression coefficient of 1.321 with a significance value of 0.266 (exceeding 5%), resulting in the rejection of H6. This means that capability, measured using a dummy variable for director turnover, does not show a significant effect on financial statement fraud. Thus, the replacement of a company's director cannot be considered an indicator of fraud. Such changes generally occur not because of fraudulent indications, but due to term limits, retirement, or internal policies. In fact, such appointments are often aimed at improving leadership quality by recruiting experienced and competent directors committed to maintaining corporate integrity. This finding is in line with the studies by Handoko (2021), Sholikatun & Makaryanawati, (2023), and Sudrajat et al (2023), which concluded that director turnover does not influence financial statement fraud. However, this result does not support the findings of Miftahul Jannah et al (2021) and Rizkiawan & Subagio (2023), who found that managerial capability particularly through changes in leadership has an effect on fraudulent actions.

The Effect of Arrogance on Financial Statement Fraud.

The seventh hypothesis test reveals a regression coefficient of 0.516 with a significance value of 0.703 (above the 5% threshold), resulting in the rejection of H7. This indicates that arrogance, proxied by dualism of position, does not have a significant effect on financial statement fraud. Holding multiple positions is not strong enough to trigger manipulation in financial reporting. One possible explanation is that CEOs with dual roles tend to use their authority to improve company performance and protect their personal reputation in order to retain their positions. Moreover, effective oversight by the Board of Commissioners plays a critical role in balancing the CEO's power, thereby minimizing the potential for abuse of authority that could lead to fraud.

This finding is consistent with the studies of Tarjo et al. (2021) and Imtikhani & Sukirman (2021), This finding indicates that duality of position does not significantly trigger fraudulent financial reporting. However, this result contradicts the study by Sudrajat et al. (2023), which found that arrogance—reflected through position duality—has a significant influence on financial statement fraud.

The Effect of Collusion on Financial Statement Fraud.

For the eighth hypothesis, the regression coefficient is –0.818 with a significance value of 0.722 (above 5%), thus H8 is rejected. This finding indicates that collusion, measured using related party transactions (RPT), does not significantly influence financial statement

fraud. This may be due to the fact that RPTs conducted by State Owned Enterprises (SOEs) in Indonesia are generally carried out in accordance with prevailing business practices and legal provisions, such as PMK No. 7/PMK.03/2015. These transactions are executed based on business needs and are disclosed in accordance with PSAK No. 7 and Bapepam LK Regulation No. KEP-347/BL/2012, ensuring that they are free from conflicts of interest. The study finds that all SOEs engage in RPTs, but due to strict supervision and regulation, the potential for collusion and fraudulent financial reporting is minimal. This result is consistent with the findings of Sudrajat et al. (2023) and Alfarago et al. (2023), who also found that collusion, as measured by RPT, does not have a significant effect on financial statement fraud.

5. CONCLUSIONS AND DISCUSSION

Based on the findings of this study, it can be concluded that out of the eight variables tested, only one variable rationalization was found to have a significant positive effect on financial statement fraud. This finding indicates that the higher the ratio of total accruals to total assets, the greater the likelihood that a company will engage in fraudulent financial reporting practices. In contrast, the remaining seven variables financial stability, external pressure, financial targets, opportunity, capability, arrogance, and collusion did not show any significant effect on financial statement fraud. This study has several limitations. The sample is restricted to Indonesian state-owned enterprises (SOEs), and the observation period covers only three years (2019–2021). Consequently, the findings may not fully represent the overall condition of SOEs in Indonesia. Furthermore, the coefficient of determination test shows a value of 52.6%, indicating that the independent variables in this study explain only 52.6% of the variation in the dependent variable. This relatively low value is due to the limited number of independent variables with significant influence, as only rationalization an extension beyond the traditional fraud hexagon model was found to have a meaningful impact. Therefore, many other variables outside this research model may better explain the occurrence of financial statement fraud. Future studies are encouraged to incorporate additional variables to enhance the model's explanatory power. These may include Personal Financial Need to represent the stimulus element, Ineffective Monitoring to measure opportunity, and Competence, which could be proxied by education level and work experience, to assess managerial capability. Additionally, the Beneish M-Score may be considered as an alternative method for measuring the dependent This study has several limitations, particularly with respect to the measurement of the fraud variable. Future research is therefore encouraged to broaden the sample by including companies from various industry sectors and to extend the observation period. Such improvements may enhance the representativeness of the findings and strengthen their external validity. In addition, future studies may consider employing alternative proxies or indicators for the independent variables that are more closely aligned with specific industry characteristics. Expanding the number of independent variables is also recommended to allow for a more comprehensive examination of the determinants of financial statement fraud.

6. REFERENCES

ACFE Global. (2020). Report to the nations on occupational fraud and abuse: 2020 global fraud study. Association of Certified Fraud Examiners, Inc., 1–88. https://acfepublic.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf

Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon fraud: Detection of fraudulent financial reporting in state-owned enterprises Indonesia. Economies, 10(1), 1–16. https://doi.org/10.3390/economies100100

Alfarago, D., Syukur, M., & Mabrur, A. (2023). The likelihood of fraud from the fraud hexagon perspective: Evidence from Indonesia. ABAC Journal, 43(1), 34–51.

Association of Certified Fraud Examiners Indonesia. (2019). Survei fraud Indonesia 2019. Indonesia Chapter #111, 53(9), 1–76. https://acfe-indonesia.or.id/survei-fraud-indonesia/

Daresta, T., & Suryani, E. (2022). Pengaruh faktor-faktor kolusi terhadap kecurangan laporan keuangan. SEIKO: Journal of Management & Business, 5(2), 342–351. https://doi.org/10.37531/sejaman.v5i2.2893

Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting material accounting misstatements. Contemporary Accounting Research, 28(1), 17–82. https://doi.org/10.1111/j.1911-3846.2010.01041.x

Handoko, B. L. (2021). Fraud hexagon dalam mendeteksi financial statement fraud perusahaan perbankan di Indonesia. Jurnal Kajian Akuntansi, 5(2), 176. https://doi.org/10.33603/jka.v5i2.5101

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

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. In The economic nature of the firm: A reader (3rd ed., pp. 283–303).

https://doi.org/10.1017/CBO9780511817410.023

Khamainy, A. H., Amalia, M. M., Cakranegara, P. A., & Indrawati, A. (2022). Financial statement fraud: The predictive relevance of fraud hexagon theory. Journal of Accounting and Strategic Finance, 5(1), 110–133. https://doi.org/10.33005/jasf.v5i1.249

Maulina, N. S., & Meini, Z. (2023). Pengaruh fraud hexagon terhadap fraudulent financial statement. Jurnal Akuntansi Universitas Jember, 21(2), 97. https://doi.org/10.19184/jauj.v21i2.38169

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.4.1.116

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

Rianggi, F., & Novita, N. (2023). Fraud hexagon dan fraudulent financial statement dengan pendekatan Beneish M-Score model. Jurnal Akuntansi Universitas Jember, 21(2), 69. https://doi.org/10.19184/jauj.v21i2.38089

Richardson, S. A., Sloan, R. G., Soliman, M. T., Tuna, I., Barth, M., Beaver, B., Dechow, P., Healy, P., Kahn, R., Kothari, S. P., Schipper, K., Taylor, S., & Watts, R. (2005). Accrual reliability, earnings persistence and stock prices. Journal of Accounting and Economics, 39(3), 437–485.

Rizkiawan, M., & Subagio, S. (2023). Analisis fraud hexagon dan tata kelola perusahaan atas adanya kecurangan dalam laporan keuangan. Integritas: Jurnal Antikorupsi, 8(2), 269–282.
https://doi.org/10.32697/integritas.v8i2.909

Sari, M. R., & Rofi, M. A. (2020). Faktor-faktor yang memotivasi kecurangan laporan keuangan. Journal of Management and Business Review, 17(1), 79–107. https://doi.org/10.34149/jmbr.v17i1.202

Sholikatun, R., & Makaryanawati, M. (2023). Determinan kecurangan laporan keuangan

(perspektif fraud hexagon theory). Ekuitas (Jurnal Ekonomi dan Keuangan), 7(3), 328–350. https://doi.org/10.24034/j25485024.y2023.v7.i3.5484

Siregar, A., & Murwaningsari, E. (2022). Pengaruh dimensi fraud hexagon terhadap financial statement fraud. Jurnal Kajian Akuntansi, 6(2), 211. https://doi.org/10.33603/jka.v6i2.6799

Sudrajat, S., Suryadnyana, N. A., & Supriadi, T. (2023). Fraud hexagon: Detection of fraud of financial report in state-owned enterprises in Indonesia. Jurnal Tata Kelola dan Akuntabilitas Keuangan Negara, 9(1), 87–102. https://doi.org/10.28986/jtaken.v9i1.1358

Tarjo, T., Anggono, A., & Sakti, E. (2021). Detecting indications of financial statement fraud: A hexagon fraud theory approach. Akrual: Jurnal Akuntansi, 13(1), 119–131. https://doi.org/10.26740/jaj.v13n1.p119-131

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