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Triangle Fraud: Motivation Engaging Financial Reporting Fraud

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ABSTRACT

This research aimed to provide empirical evidence regarding the influence of the fraud triangle—comprising pressure, opportunity, and rationalization—on corruption. Pressure was assessed through financial targets and external pressure, while opportunity was evaluated based on the ineffectiveness of monitoring systems. Rationalization was gauged by the rate of sales growth. Fraud was operationalized through discretionary accruals, which represent a form of financial statement manipulation. A sample of 66 companies was selected using a purposive sampling technique. The results of multiple regression analysis indicated that pressure significantly affects financial statement fraud. Specifically, pressure exerted by investors prompts management to engage in fraudulent activities by altering financial statements to align with the expectations of report users.

KEYWORDS: Discretionary Accrual, Opportunity, Pressure, Rationalization, Triangle Fraud.

1. INTRODUCTION

Fraud refers to actions undertaken by individuals with the intent of achieving personal benefit. As outlined by the Association of Certified Fraud Examiners (ACFE) in 2022, fraud encompasses three primary categories: corruption, asset misappropriation, and the preparation of fraudulent financial statements. The ACFE report (2022) indicates that within the Asia Pacific region, Indonesia ranks fourth, having recorded 23 instances of fraud. The countries with the highest number of reported cases are summarized in Table 1.

Table 1. 4 Country with High Fraud Cases

Country	Number of Cases
Australia	38
China	33
Malaysia	25
Indonesia	23

Sources: ACFE 2020

A significant prevalence of fraudulent activities in Indonesia is evidenced by various notable incidents. For instance, the PT Asabri case resulted in a staggering loss of IDR 22.78 trillion. Additionally, PT Kimia Farma Apotik, a subsidiary of PT Kimia Farma, was implicated in the manipulation of its financial statements for the years 2021-2022, leading to a loss of IDR 1.87 trillion for the parent company in 2023. Furthermore, the recent case involving E-Fishery revealed that the company falsely reported annual profits while, in reality, it was incurring substantial losses. These fraudulent activities are primarily motivated by personal gain and the acquisition of funds from investors. When such fraud is uncovered, investors bear the brunt of the losses. Financial statement fraud, in particular, has been identified as the most damaging, as highlighted in the ACFE report (2022), which indicates that losses attributed to financial statement fraud surpass those resulting from corruption or asset misappropriation on a global scale. Given the prevalence of these cases in Indonesia and the significant financial repercussions associated with financial statement fraud, this study will concentrate specifically on this type of fraud.

In theoretical discourse, various elements contribute to the manifestation of fraudulent activities. The fraud triangle theory, introduced by Donald R. Cressey in 1950, serves as the initial framework for understanding the factors that facilitate fraud. This foundational theory has paved the way for subsequent theoretical developments. According to this model, three primary factors motivate individuals to engage in fraudulent behavior: pressure, opportunity, and rationalization. Pressure may originate from both external and internal sources. External pressure often arises from superiors who may incentivize fraudulent actions to present a favorable financial outlook for the organization. Conversely, internal pressure can stem from the individual perpetrator and their familial obligations. A desire for a hedonistic lifestyle or the necessity to fulfill family needs can significantly propel an individual towards committing fraud. Fraud is significantly driven by the presence of opportunity. Individuals who engage in fraudulent activities often exploit deficiencies in oversight or inadequate internal controls. Such lapses in supervision create vulnerabilities that enable perpetrators to carry out their fraudulent schemes. Additionally, rationalization plays a crucial role, as it serves as a means for individuals to justify their dishonest actions. For instance, they may perceive the misappropriation of company funds for personal use, with the intention of reimbursing the amount upon receiving their salary, as acceptable behavior. Although this may appear harmless, it constitutes an act of fraud.

Research on fraud remains a pertinent topic for discussion, particularly given the significant number of cases reported both globally and within Indonesia. Furthermore, studies examining the components of the fraud triangle in relation to financial statement fraud have yielded inconsistent findings. For instance, (Bhaktiar & Setyorini, 2021) identifies opportunities and rationalizations as key motivators for individuals engaging in financial statement fraud, while (Sihombing & Nugroho, 2022) emphasizes the role of pressure as a contributing factor. Conversely, (Barus et al., 2021) research highlights rationalization as the sole influence on financial statement fraud. Consequently, this study aims to provide empirical evidence regarding the impact of the fraud triangle's elements on financial statement fraud. The research is situated in Indonesia, a country recognized as one of the top four nations with high incidences of fraud.

2. LITERATURE REVIEW

2.1. Agency Theory

Agency theory elucidates the dynamics of the agency relationship, characterized as a contractual arrangement wherein management (the agent) operates on behalf of one or more individuals (the principal) and is empowered by the principal to make optimal decisions for their benefit (Ghozali, 2021; 86). Within this framework, the key participants are the management, serving as agents, and the investors, functioning as principals. Both parties possess distinct interests that may not always align, leading to skepticism regarding the agent's commitment to prioritizing the principal's interests (Ghozali, 2021; 87). When the principal and agent pursue divergent objectives, it fosters an environment of mistrust concerning the agent's dedication to the principal's welfare. A central challenge posed by agency theory is to ensure that agents are motivated to enhance the principal's well-being. Agents entrusted with the responsibility of managing the organization typically possess more information than the principals. This disparity in information is referred to as asymmetric information. A significant degree of information asymmetry can empower the agent to prioritize personal interests, potentially to the detriment of the principal, who has a vested interest in the company's success (Utama et al., 2021).

2.2. Triangle Fraud

The notion of triangle fraud was first articulated by Cressey, who delineated three fundamental motivations that drive individuals to engage in fraudulent activities: pressure, opportunity, and rationalization. Pressure can stem from both internal and external influences (Mashitoh et al., 2023). Internal pressures typically manifest as financial difficulties, substantial debts, family responsibilities, or aspirations for a more indulgent lifestyle. In contrast, external pressures may arise within the workplace, where employees might feel coerced by their superiors to partake in fraudulent actions to maintain their positions. These elements collectively inform an individual's choice to commit fraud (Dwimawanti & Ramadani, 2023; Mashitoh et al., 2023).

The second component of triangle fraud is opportunity, which emerges from insufficient internal controls within an organization (Dwimawanti & Ramadani, 2023). Even in the presence of ostensibly robust internal controls, the potential for fraudulent behavior remains a critical factor contributing to fraud (Mashitoh et al., 2023). The third component is rationalization, which arises from a disconnect between management and their subordinates. Employees may resort to fraudulent actions as a means of justifying their behavior, often motivated by a desire to achieve benefits akin to those enjoyed by their superiors. This phenomenon is frequently described as justification (Mashitoh et al., 2023). A summary of these three factors is presented to enhance comprehension of the triangle fraud theory.

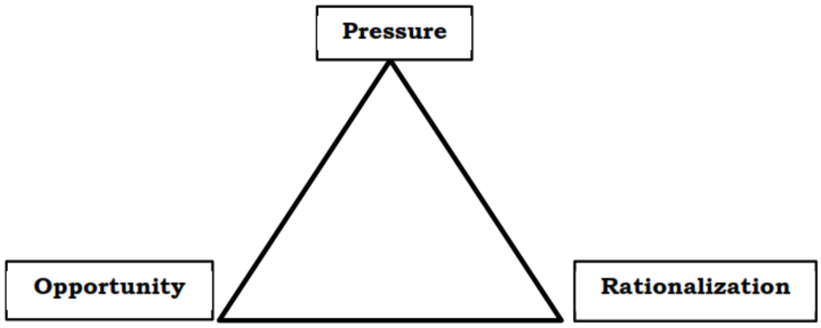

Figure 1. Triangle Fraud
Sources: (Wells, 2011) in (Kagias et al., 2022)

Lister (2007), referenced in (Kagias et al., 2022), offers a distinct viewpoint on the notion of triangle fraud. This type of fraud is compared to a fire that is sparked by three critical elements: heat (which signifies Pressure), fuel (representing Opportunity), and oxygen (indicating Rationalization). This metaphor implies that the likelihood of fraud intensifying increases when these three factors coexist. Lister's description of triangle fraud is expressed in the following manner:

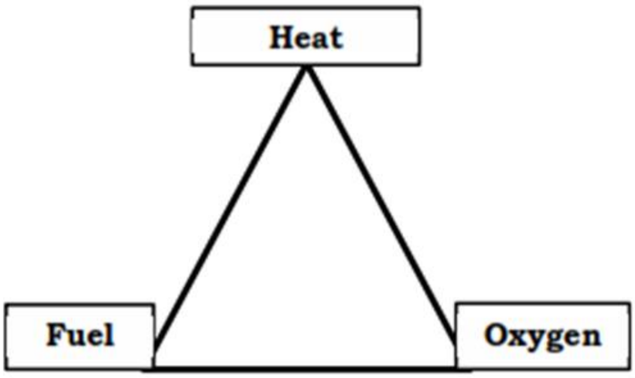

Figure 2. Triangle Fraud as Fire
Sources: (Lister , 2007) in (Kagias et al., 2022)

2.3. Financial Target and Financial Statement Fraud

Pressure can manifest as financial aspirations or targets set by investors. Investors seek favorable financial performance from companies to enhance their wealth. However, this aspiration becomes challenging to achieve when a company faces financial difficulties, which, if disclosed, can lead to negative sentiments among investors. Consequently, management may resort to manipulating financial statements to portray a more favorable financial position. Research conducted by (Julianto et al., 2022; Rachman et al., 2023) indicates that elevated financial targets correlate with an increased likelihood of fraudulent activities. As investor demands intensify, the propensity for fraud to occur in order to satisfy these demands also escalates. Conversely, findings by (Achmad et al., 2024; Isa et al., 2024; Sihombing & Nugroho, 2022) suggest that when financial targets are met or surpassed, the likelihood of fraud diminishes. According to agency theory, management's pursuit of personal gain may lead to fraudulent behavior aimed at meeting or exceeding investor expectations. In such scenarios, management stands to gain significant incentives. From this analysis, the following hypotheses can be formulated.

H1 Financial targets increase financial statement fraud

2.4. External Pressure and Financial Statement Fraud

External pressures can act as a crucial catalyst in financial environments, especially regarding the influence of creditors. These creditors may apply pressure that drives management to partake in deceptive practices concerning financial reporting. The expectation of timely loan repayments and the annual obligation to pay interest can create circumstances where management feels it necessary to alter financial information to portray a more favorable financial condition, thus reducing perceived credit risk. Research conducted by (Andriani et al., 2022; Julianto et al., 2022)demonstrates a correlation between external pressures and an increase in financial statement fraud. In contrast, findings from (Achmad et al., 2022, 2023; Adhania et al., 2024) indicate that such external pressures might actually result in a reduction of fraudulent reporting, as heightened security is likely to arise from the fear of default, which poses a significant threat to creditors. Within the framework of agency theory, the pressure exerted on management can contribute to an increase in financial statement fraud. This situation stems from the conflicting interests among various stakeholders, including creditors and management. When management prioritizes their own interests, they may resort to fraudulent practices, yielding short-term benefits for creditors, but ultimately leading to long-term negative consequences. Based on this examination and the established theoretical framework, the following hypothesis can be proposed.

H2 External pressure increase financial statement fraud.

2.5. Ineffective Monitoring and Financial Statement Fraud

The likelihood of financial statement fraud is greatly affected by the presence of weak internal controls within an organization. A lack of adequate management oversight can exacerbate the risk of generating misleading financial reports. While independent commissioners, who are responsible for overseeing the organization and chairing the audit committee, have the potential to reduce such fraudulent activities, their ineffective supervision has led to an uptick in fraudulent behavior (Adhania et al., 2024; Bader et al., 2024). In contrast, research by (Triana & Iskandar, 2023) suggests that an independent board of commissioners may actually be associated with increased levels of fraud. In Indonesia, it is particularly concerning that the average company often only fulfills the basic requirements regarding the number of independent commissioners, which complicates the oversight function. From the perspective of agency theory, the emergence of fraud can be linked to inadequate oversight and the existence of weaknesses that allow for unethical practices, ultimately serving the interests of management at the detriment of stakeholders. Based on this examination and the established theoretical framework, the following hypothesis can be proposed.

H3 Ineffective monitoring increase financial statement fraud.

2.6. Rationalization and Financial Statement Fraud

Rationalization serves as a means of justifying fraudulent activities. Individuals who engage in fraud often perceive their actions as acceptable and devoid of wrongdoing. One indicator of this rationalization can be observed in sales practices (Khamainy et al., 2022). Manipulative tactics, such as discounting and the implementation of policies aimed at boosting sales, are deemed justifiable, even when the actual revenue may not be realized. The fraudster prioritizes inflated sales figures, leading to the presentation of exaggerated profit reports. According to agency theory, management's desire to meet investor expectations for substantial profits can drive them to manipulate sales figures. Elevated sales figures are believed to enhance company profitability, a notion that management considers valid due to its expediency in generating profit. Consequently, the hypothesis formulated from this discussion is.

H4 Change in sales increase financial statement fraud.

3. METHODOLOGY

In the research period of 2020-2022, a total of 66 companies were chosen as research samples from the consumer cyclicals and consumer non-cyclicals sectors listed on the Indonesia Stock Exchange (BEI). The selection of the research sample was conducted through purposive sampling method. Table 1 shows the sample selection procedures.

Table 1. Sample Selection Procedure

No	Description	Total
1.	During the research period, companies in the consumer cyclicals and consumer non-cyclicals sectors that were listed on the Indonesia Stock Exchange were examined.	191
2.	Companies that do not present financial reports as of December 31	(16)
3.	Companies that not to employ the Rupiah currency	(13)
4.	Companies that experience losses	(96)
Total Company		**66**
Research Period		**3 Years**
Total Sample		**198**

Table 2. Definition Variable

Variable	Definition	Measurement
Financial Report Fraud (Fraud)	Earnings management refers to the actions taken by a manager to inflate or deflate profits in the financial statements of a company, ultimately serving the manager's own self-interests rather than accurately reflecting the company's financial performance to stakeholders.	$TACCit = NI_{it} - CFO_{it}$ $TACCit/A_{it-1} = \alpha_1 (1/A_{it-1}) + \alpha_2 (\Delta REV_{it}/A_{it-1}) + \alpha_3 (PPE_{it} - A_{it-1})$ $NDA_{it} = \alpha_1 (1/A_{it-1}) + \alpha_2 [(\Delta REV_{it} - \Delta REC_{it})/A_{it-1}) + \alpha_3 (PPE_{it} - A_{it-1})$ $DACCit = TACCit/A_{it-1} - NDA_{it}$
Financial Target (ROA)	Profitability refers to a company's ability to generate profits within a specific financial period.	$ROA = \frac{\text{Net Income}}{\text{Total Aset}}$
External Pressure (LEV)	Leverage is a financial metric that evaluates the relationship between debt and assets, illustrating the extent to which assets	$LEV = \frac{\text{Total Debt}}{\text{Total Asset}}$

	are funded by borrowed funds.	
Ineffective Monitoring (IND)	Independent commissioners are commissioners who are not affiliated with the company and are tasked with overseeing the company.	IND = Number of independent commisioneirs
Rationalization (GROWTH)	Sales growth serves as an indicator of a firm's achievements in the preceding timeframe as depicted in financial statements, aiding in forecasting future expansion.	$SG = \frac{\text{Sales (t) - Sales (t-1)}}{\text{Sales (t-1)}}$

Hypothesis testing employs multiple regression analysis, with the regression equation model utilized in the research defined as follows:

$$Fraud = \beta_0 + \beta_1\ ROA + \beta_2\ LEV + \beta_3\ IND + \beta_4\ GROWTH + e$$

Description

β_0 = Constanta
β_1-β_7 = Coefficient
Fraud = Financial Report Fraud
ROA = Financial Target
LEV = External Pressure
IND = Ineffective Monitoring
GROWTH = Rationalization
e = Error

4. RESULT

Table 3 presents the descriptive statistics for each variable. The subsequent section outlines the findings derived from these descriptive analyses.

Table 3. Descriptive Statistic

	N	Minimum	Maximum	Mean
Fraud	198	-.228294382908435	.839357746308976	.004512865030503
ROA	198	.000232417348231	.493030755361253	.079982746297396
LEV	198	.000414692155350	3.955417532333734	.823867340267373
IND	198	.333333333333333	.833333333333333	.438943001443001
GROWTH	198	-1.000000000000000	2.655227831398836	.125835933741013

Table 3 illustrates that the observed level of deviation is 0.8393, suggesting a relatively minor deviation. Furthermore, the average proportion of independent commissioners within the research sample was found to be 43%, indicating that the number of independent commissioners in the company exceeds the minimum requirement established by law.

Table 4. Hypothesis Result

	B	Std. Error	Beta	t	Sig.
(Constant)	-.013	.029		-.461	.646
ROA	.514	.104	.337	4.943	.000*
DER	-.024	.010	-.167	-2.463	.015*
IND	-.013	.066	-.014	-.201	.841
GROWTH	.016	.022	.049	.730	.466
F-Statistic					7,936
Sig					0,000*
*Significant 0,005					

The findings presented in Table 4 indicate that financial targets exert a significant influence on the occurrence of financial statement fraud. Specifically, as the targets set for company management become more ambitious, the propensity for financial statement manipulation increases correspondingly. The challenges faced by management in meeting these expectations often lead to the adoption of deceptive practices as a means to portray the company's performance in a favorable light, thereby aligning with investor expectations. This result supported by research conducted by (Julianto et al., 2022; Rachman et al., 2023) indicates that elevated financial targets correlate with an increased likelihood of fraudulent activities.

Moreover, external pressures play a crucial role in mitigating the incidence of fraudulent financial reporting. Creditors, who extend loans to businesses, actively monitor management practices to deter fraudulent behavior. The potential risk of default on both principal and interest payments compels creditors to implement oversight measures aimed at minimizing such risks. This result supported by findings from (Achmad et al., 2022, 2023; Adhania et al., 2024) indicate that such external pressures might actually result in a reduction of fraudulent reporting, as heightened security is likely to arise from the fear of default, which poses a significant threat to creditors.

5. CONCLUSION

This study seeks to provide empirical evidence regarding the impact of the factors associated with the fraud triangle on fraudulent activities. The three components of the fraud triangle include pressure, opportunity, and rationalization. Analyzing data from 66 cyclical and non-cyclical firms listed on the Indonesian stock exchange, the findings indicate that pressure significantly contributes to the occurrence of fraud in financial reporting. Specifically, pressure exerted by investors and creditors can drive management to engage in fraudulent behavior. Investor pressure, stemming from a desire to enhance company performance for greater personal gain, can lead to an increase in financial reporting fraud. Conversely, creditor pressure tends to mitigate the likelihood of fraud, as creditors actively monitor management to prevent actions that could jeopardize their interests. The insights derived from this research enhance the existing literature by encouraging investors to conduct more thorough analyses of companies, thereby reducing the risk of falling victim to detrimental fraudulent activities, as the findings suggest that investor expectations can inadvertently foster

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