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ANALYSIS OF THE FRAUD TRIANGLE IN DETECTING FINANCIAL STATEMENT FRAUD

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Abstract

This study aims to examine and analyze the influence of financial stability, external pressure, financial targets, industry nature, and rationalization on financial statement fraud. The research population comprises state-owned enterprises (BUMN) listed on the Indonesia Stock Exchange (IDX) for the period 2014–2018. A purposive sampling technique was used, yielding a final sample of 12 companies. Data were analyzed using logistic regression in SPSS. The empirical findings reveal that financial stability and industry characteristics significantly affect the detection of financial statement fraud. In contrast, external pressure, financial targets, and changes in auditors do not considerably affect fraudulent financial reporting. This study contributes to the literature on forensic accounting and fraud detection by highlighting key financial and contextual indicators that can serve as early warning signs for financial misreporting. The results also provide practical implications for auditors, regulators, and corporate governance bodies to strengthen fraud risk assessments in state-owned enterprises.

Keywords: Financial Statement Fraud, fraud triangle, pressure, opportunity, rationalization

INTRODUCTION

Financial statements serve a fundamental role in providing relevant and reliable information regarding a company's financial performance, position, and cash flows. They encompass various elements of business activities, including investment, financing, operations, and strategic achievements (Karunia et al., 2024). According to the Statement of Financial Accounting Concepts (SFAC) No. 1, the primary objective of financial reporting is to supply helpful information to investors, creditors, and other stakeholders to support rational investment and credit decisions (Sarmawa et al., 2022). As such, financial reports reflect the company's performance and serve as a key instrument in evaluating managerial accountability. However, this very visibility creates incentives for management to portray the best possible image of the company, even if it means manipulating the content of financial statements (Taufiq & Sholihin, 2024). When such

manipulation occurs intentionally to mislead users, it constitutes fraudulent financial reporting.

Fraudulent financial reporting is considered one of the most severe forms of fraud due to its potential to inflict widespread damage on stakeholders. According to the Association of Certified Fraud Examiners (ACFE, 2014), financial statement fraud leads in terms of economic impact compared to asset misappropriation or corruption (Karina, 2021; Sudaryana, 2021). The 2014 ACFE report further highlighted that the public sector, including state-owned enterprises, ranked second among the most affected sectors. In Indonesia, the Supreme Audit Agency (BPK) has regularly reported irregularities in financial reports of BUMN (state-owned enterprises), including manipulations aimed at overstating earnings to enhance company image or secure funding (liputan6.com).

One of Indonesia's earliest and most notorious financial reporting scandals occurred in 2001 and involved PT Kimia Farma, where state investigations revealed intentional profit inflation. Internationally, the 2015 accounting scandal involving Toshiba Corporation in Japan drew similar attention. Both cases underscore the global significance and consequences of fraudulent financial reporting and the urgent need for early detection frameworks (Sudaryana, 2021).

Financial statements essentially aim to report and provide information on a company's activities, including investments, funding, operational activities, and evaluations of the company's success in achieving its desired goals (Karunia et al., 2024). According to the Statement of Financial Accounting Concept (SFAC) No.1, one of the objectives of financial reporting is to provide useful information to potential investors and creditors to assist them in making rational decisions regarding investments, credit, and similar financial matters (Sarmawa et al., 2022). The information contained in financial statements reflects a company's performance, prompting management to present the best possible image of the company. However, this also opens the possibility for managers to manipulate financial reports to their advantage, making the information presented in financial statements biased (Taufiq & Sholihin, 2024).

Fraudulent financial reporting involves the intentional omission or misrepresentation of financial data to deceive users of financial statements. According to the Association of Certified Fraud Examiners (ACFE, 2014) as cited in (Karina, 2021),financial statement fraud is the most damaging type of fraud compared to other forms of fraud (Sudaryana, 2021). A 2014 survey conducted by the ACFE revealed that the government sector was the second most affected sector in terms of fraud cases compared to other industries. The Supreme Audit Agency of Indonesia (BPK) has frequently uncovered fraud cases committed by state- owned enterprises (BUMN), particularly in accounting calculations, where companies manipulated reports to exaggerate their profits (liputan6.com).

One of Indonesia's most notable accounting scandals occurred in 2001, involving PT Kimia Farma. Investigations by the Ministry of State-Owned Enterprises and the Capital Market Supervisory Agency (Bapepam) revealed a material misstatement in the company's financial statements, resulting in an overstatement of profits(Sudaryana, 2021). A similar high-profile accounting scandal occurred in Japan with PT Toshiba Corp. in 2015.

The American Institute of Certified Public Accountants (AICPA) proposed a solution to financial statement fraud through the issuance of Statement of Auditing Standards (SAS) No. 99. This standard introduces the concept of fraud risk factors based on the Fraud Triangle theory, developed by Cressey (1953). Cressey's theory suggests that three conditions are always present when fraud occurs: pressure, opportunity, and rationalization (Primasari et al., 2024).

A study aimed at detecting financial statement fraud was conducted by Skousen et al. (2009). The research examined the effectiveness of adopting Cressey's (1953) fraud risk factor framework, as outlined in SAS No. 99, to detect financial statement fraud. The study developed various variables and further refined them into specific proxies representing the three elements of the fraud triangle: pressure, opportunity, and rationalization (Antonio et al., 2020).

Another study by (Karunia et al., 2024) ,titled "Factors Influencing Financial Statement Fraud Using Fraud Triangle Analysis," found that financial stability significantly affects financial statement fraud, while external pressure, personal financial need, financial targets, nature of the industry, effective monitoring, and rationalization do not. Similarly, (Lina, 2024) conducted research on "Financial Statement Fraud Detection Using the Fraud Triangle Perspective Adopted by SAS No. 99," revealing that financial stability has a positive effect on financial statement fraud, whereas personal financial need, ineffective monitoring, effective monitoring, and financial targets do not.

The discrepancies in findings from previous studies make it intriguing to re-examine the fraud triangle's role in detecting financial statement fraud (Paramaratri et al., 2023). The selection of variables such as financial stability, external pressure, financial targets, nature of the industry, and rationalization is based on their significance in previous research concerning financial statement fraud (Winarno et al., 2022). Therefore, this study aims to determine whether these variables yield similar results when applied to state-owned enterprises (BUMN) listed on the Indonesia Stock Exchange (BEI)(Mulyana Dendi, 2024). This research employs the Beneish M-Score model to identify companies involved in fraudulent financial reporting. These considerations have led to the motivation behind this study, titled "Fraud Triangle Analysis in Detecting Financial Statement Fraud: An Empirical Study on State-Owned Enterprises Listed on the Indonesia Stock Exchange (2014- 2018)".

RESEARCH METHODS

The research approach used in this study is a quantitative approach. The data source utilized in this research is secondary data. The data was obtained from the annual financial reports of companies for the years 2014-2018, sourced from the official IDX website or the respective company websites. The population of this study consists of state-owned enterprises (SOEs) listed on the Indonesia Stock Exchange (IDX) from 2014 to 2018. The sample selection was conducted using purposive sampling, resulting in a final sample of 12 companies.

Research Target/Subject

Table 1
Research Subject

Description	Amount
State-Owned Enterprises (SOEs) Listed on the Indonesia Stock Exchange for the 2014-2018 Period	19
Companies that do not publish financial statements in Rupiah and do not publish reports consecutively.	-
Data related to research variables are not available in the financial statements.	(7)
Number of Samples	12
The number of companies multiplied by the research years (12x5)	60

Source: Data processed by the researcher, 2020.

Instruments, and Data Collection Techniques

Operational Definition of Variable Dependent Variable

The dependent variable in this study is financial statement fraud, measured using the Beneish M-Score model. The Beneish M-Score is calculated using eight financial ratios to identify whether a company has indications of manipulating revenue in its financial statements (Beneish, 1999) (Sarmawa et al., 2022). The eight financial ratios used to measure the Beneish M-Score are presented in Table 2.

If the result obtained from the Beneish model is greater than -2.22, the company is suspected of manipulating its financial statements. Beneish M-Score formula (1999):

$$Mscore = -4.84+0.920\ DSRI + 0.528\ GMI + 0.404\ AQI + 0.892\ SGI + 0.115\ DEPI + 0.172\ SGAI + 0.327\ LVGI + 4.697\ TATA$$

The eight financial ratios used to measure the Beneish M-Score are provided in Table 2.

Tabel 2
Beneish MScore

No	Ratio	Form
1	*Day Sales in Receivables* (DSRI)	$\text{DSRI} = \frac{(\frac{\text{Account Recivable}_t}{\text{Sales}_t})}{(\text{Account Recivable}_{t-1}/\text{Sales}_{t-1})}$
2	*Gross Margin Index* (GMI)	$GMI = \frac{\text{sales}_{t-1} - \text{COGS}_{t-1}/\text{sales}_{t-1}}{\text{sales}_t - \text{COGSt}/\text{sales}_t}$
3	*Asset Quality Index* (AQI)	$\text{AQI} = \frac{1-\text{Curent Asets}_t+\text{Net Fixed Asets}_t/\text{Total Asets}_t}{1-\text{Current Asets}_{t-1}+ \text{Net Fixed Asets}_{t-1}/\text{total asets}_{t-1}}$
4	Sales Growth Index (SGI)	$\text{SGI} = \frac{\text{sales}_t}{\text{sales}_{t-1}}$
5	*Depreciation Index* (DEPI)	$\text{DEPI} = \frac{(\text{Depreciation} / (\text{Depreciation} + \text{PPE}))_{t-1}}{(\text{Depreciation}/(\text{Depreciation} + \text{PPE}))_t}$
6	*Sales General and Administrative Expenses Index* (SGAI)	$\text{SGAI} = \frac{(\text{SGA Expenses}/\text{Sales})_t}{\text{SGA Expenses }/\text{Sales})_{t-1}}$
7	*Leverage Index* (LVGI)	$\text{LVGI} = \frac{((\text{Long Term Debt}+\text{Current Liabilities})/\text{Total Asset})_t}{((\text{Long Term Debt}+\text{Current Liabilities})/\text{Total Assets}_{t-1}}$
8	Total Accruals to Total Assets (TATA)	$\frac{\text{income before extraordinary Items} - \text{cash from operations}}{\text{Total Aset}}$

Source: Hafizah et al, 2016

Independent Variable

The independent variable in this study consists of variables from the three components of the fraud triangle: Pressure, Opportunity, and Rationalization. These three components cannot be examined directly; therefore, proxies are needed for each variable.

No	Research Variables	Measurement	Scale

1	*ACHANGE*	$\frac{\text{Aset Total}_t - \text{Aset Total}_{t-1}}{\text{Aset Total}_t}$	Ratio
2	*LEV*	$\frac{\text{Total Debt}}{\text{Total Aset}}$	Ratio
3	*ROA*	$\frac{\text{Earning after tax}}{\text{Total Aset}}$	Ratio
4	*RECEIVABLE*	$\frac{\text{Receivable}_t}{\text{Sale}_t}$ $-Receivable/\text{Sale}_{t-1}$	Ratio
5	*AUDCHANGE*	Dummy Variable:	Nominal
		1 = A company that changes its auditor 0 = A company that retains its auditor.	

Source: Data processed by the researcher, 2020

Data analysis technique

The hypothesis testing in this study employs logistic regression analysis, conducted with the assistance of the Statistical Package for Social Sciences (SPSS) 23.0 software. The logistic regression model used in this research is as follows:

$$FRAUD = \alpha + \beta_1 ACHANGE + \beta_2 LEV + \beta_3 ROA + \beta_4 RECEIVABLE + \beta_5 AUDCHANGE + \varepsilon$$

Where:

FRAUD	:	A dummy variable, where 1 indicates a company suspected of financial statement fraud, and 0 otherwise
A	:	Constant
$\beta_1, \beta_2, \beta_3, \ldots$	:	Coefficients of the variables
ACHANGE	:	Percentage change in total assets
LEV	:	Leverage ratio
ROA	:	Return on Assets
RECEIVABLE	:	Accounts receivable turnover ratio
AUDCHANGE	:	Auditor change
ε	:	Error term

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistics are intended to provide an overview of each research variable. The results of the descriptive statistical calculations are as follows:

Table 3
Descriptive Statistical Test Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ACHANGE	60	-.110	.586	.16842	.138314
LEV	60	.071	.838	.53379	.180332
ROA	60	-.088	.544	.05297	.087196
RECEIVABLE	60	-.147	.112	.00641	.055961
Valid N (listwise)	60				

Source: Processed SPSS Results

Based on Table 3 above, the results show that the sample data used consists of 60 data points. The financial stability variable, proxied by ACHANGE, has a minimum value of -0.110, a maximum value of 0.5856, a mean value of 0.16842, and a standard deviation of 0.138314. Furthermore, the external pressure variable, proxied by the LEV ratio, has a minimum value of 0.071, a maximum value of 0.838, a mean LEV ratio of 0.53379, and a standard deviation of 0.180332. The financial target variable, proxied by ROA, has a minimum value of -0.088, a maximum value of 0.544, a mean value of 0.05297, and a standard deviation of 0.087196. The nature of industry variable, proxied by RECEIVABLE, has a minimum value of -0.147, a maximum value of 0.112, a mean value of 0.00641, and a standard deviation of 0.55961.

The Auditor Change (AUDCHANGE) variable and Financial Statement Fraud (FRAUD) variable are nominal-scale variables, and their measurement uses statistical tests based on counting, such as mode and frequency distribution (Ghozali, 2016).

Table 4
Auditor Change Frequency Distribution
AUDCHANGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	31	51,7	51,7	51,7
	1	29	48,3	48,3	100,0
	Total	60	100,0	100,0	

Source: Processed SPSS Results

The detailed frequency distribution results of the auditor change variable can be seen in Appendix 2. Table 4.4 above shows that out of 60 data points, 51.7% did not change auditors, while 48.3% underwent an auditor change.

Table 5
Financial Statement Fraud Frequency Distribution
Financial Statement Fraud (Y)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	23	38,3	38,3	38,3
	1	37	61,7	61,7	100,0
	Total	60	100,0	100,0	

Source: Processed SPSS Results

The frequency distribution results of the financial statement fraud variable in Table 4.2 above show that out of 60 data points, 23 data points (38.3%) are not indicated to have committed fraud, while 37 data points (61.7%) are indicated to have committed financial statement fraud.

Logistic Regression Analysis

Assessing the Overall Model (Overall Model Test)

Table 6 Block 0: Beginning Block

Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	79,882	,467
	2	79,881	,475
	3	79,881	,475

Source: Processed SPSS Results

Tabel 7
Overall Model Fit Test Method = Enter

Iteration History[a,b,c,d]

Iteration		-2 Log likelihood	Coefficients					
			Constant	ACHANGE	LEV	ROA	RECEIVABLE	AUDCHANGE
Step 1	1	67,373	-,653	3,888	,842	-1,951	10,062	,113
	2	65,926	-,865	6,029	,797	-3,067	14,608	,170
	3	65,854	-,924	6,625	,776	-3,392	15,999	,189
	4	65,854	-,928	6,662	,775	-3,411	16,088	,190
	5	65,854	-,928	6,662	,775	-3,411	16,088	,190

Source: Processed SPSS Results

Table 6 shows that the -2 Log Likelihood value in Block 0 is 79.882, while Table 7 shows that the -2 Log Likelihood value in Block 1 is 65.854. This indicates a decrease in the -2 Log Likelihood value from Block 0 to Block 1 by 14.028. This decrease in likelihood suggests that, overall, the regression model used is good, or in other words, the hypothesized model fits the data.

Assessing the Feasibility of the Regression Model

Table 8
Hosmer and Lemeshow's Goodness of Fit Test

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	12,239	8	,141

Source: Processed SPSS Results

The data above shows that the Hosmer and Lem show's Goodness of Fit Test statistic is 12.239, with a significance probability of 0.141, which is greater than 0.05. Therefore, it can be concluded that the model is capable of predicting its observed values.

Coefficient of Determination

Table 9
Results of the Coefficient of Determination Test

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	65,854[a]	,208	,283

Source: Processed SPSS Results

The determination test results show that the Nagelkerke R Square value is 0.283, indicating that the independent variables explain 28.3% of the dependent variable. Meanwhile, the remaining 71.7% (100% - 28.3%) is explained by other variables outside the research model.

Wald Test

Table 10
Wald Test Results

	B	E.	ld	f	g.	p(B)	5% C.I.for I wer	P(B) Upper
StepX1	,662	,144	,491		034	82,047	,650	70750,050
[a] X2	775	,879	170		680	,171	055	6,310
X3	3,411	,609	893		345	033	000	8,972
X4	6,088	,936	,381		020	702106,766	2,114	770506542930,632
X5	190	616	095		757	,210	362	,044
Constant	,928	998	865		352	395		

. Variable(s) entered on step 1: ACHANGE, LEV, ROA, RECEIVABLE, AUDCHANGE.
Source: Processed SPSS Results

The resulting regression equation is as follows:

$$FRAUD = -0,928 + 6,662ACHANGE + 0,775\ LEV - 3,441ROA + 16,088RECEIVABLE + 0,190AUDCHANGE + e$$

DISCUSSION

The Effect of Financial Stability on Financial Statement Fraud

The test results show that the significance of the Financial Stability variable, proxied by asset change (ACHANGE), is 0.034, which is smaller than 0.05 (α = 5%). These results indicate that the first hypothesis (H1) is accepted, meaning that financial stability affects financial statement fraud. An unstable company condition creates pressure on management, increasing the likelihood of fraudulent actions. This finding is supported by (Lina, 2024), who state that financial stability influences financial statement fraud (Sagara & Akbar, 2021).

On the other hand, research conducted by (Nurkholis & Wiranti, 2019), (Winarno et al., 2022), (Paramaratri et al., 2023), and (Nugraheni et al., 2024) suggests that financial stability does not affect financial statement fraud. According to (Warmadewa et al., 2025), significant asset changes attract public attention, making companies more cautious in reporting financial conditions to maintain their credibility (Nugraheni et al., 2024).

The Effect of External Pressure on Financial Statement Fraud

The test results show that the significance of the External Pressure variable, proxied by the LEV ratio, is 0.680, which is greater than 0.05 (α = 5%). These results indicate that the second hypothesis (H2) is rejected, meaning that external pressure does not affect financial statement fraud. The LEV ratio does not create pressure on management to commit fraud.

This finding is supported by (Amaliyah, 2019) and (Ekayani et al., 2024),who state that external pressure does not influence financial statement fraud. On the other hand, research by (Bharata et al., 2021) and (Mulyana Dendi, 2024) suggests that external pressure, proxied by LEV, affects financial statement fraud. They argue that higher external pressure increases the likelihood of management engaging in fraudulent practices to meet expectations (Karina, 2021).

The Effect of Financial Target on Financial Statement Fraud

The test results show that the significance of the Financial Target variable, proxied by ROA change, is 0.345, which is greater than 0.05 (α = 5%). These results indicate that the third hypothesis (H3) is rejected, meaning that financial targets do not affect financial statement fraud. The financial target, measured by ROA, does not drive management to commit fraud.

This finding is supported by (Amaliyah, 2019), (Samuel et al., 2021), (Yendrawati & Kinanti, 2024), (Umlati et al., 2025), and (Maesaroh et al., 2023). However, research by Nugrahaeni & Hanung (2017) states that companies with high ROA values are perceived as capable of generating high profits compared to those with lower ROA values. As a result, management may be motivated to commit fraud to make financial reports appear better.

The Effect of Nature of Industry on Financial Statement Fraud

The test results show that the significance of the Nature of Industry variable, proxied by the change in receivables ratio (RECEIVABLE), is 0.020, which is smaller than 0.05 (α = 5%). These results indicate that the fourth hypothesis (H4) is accepted, meaning that the nature of the industry affects financial statement fraud. This finding aligns with (Nugraheni et al., 2024), who found that changes in accounts receivable ratios positively impact financial statement fraud. (Rahmantari et al., 2019) argue that a high amount of receivables reduces cash availability, and cash limitations may encourage management to commit fraud. On the other hand, research by (Umlati et al., 2025) and (Sarmawa et al., 2022) suggests that the nature of the industry does not affect financial statement fraud.

The Effect of Rationalization on Financial Statement Fraud

The test results show that the significance of the Rationalization variable, proxied by auditor change (AUDCHANGE), is 0.757, which is greater than 0.05 (α = 5%). These results indicate that the fifth hypothesis (H5) is rejected, meaning that rationalization does not affect financial statement fraud.

This study suggests that rationalization, proxied by auditor change (AUDCHANGE), is not a factor that drives companies to commit financial statement fraud. Sample companies comply with the Regulation of the Minister of Finance of the Republic of Indonesia No. 17/PMK.01/2008 Article 3 regarding Public Accounting Services, which states that a public accountant can audit a company for a maximum of three consecutive years, while a public accounting firm (KAP) can audit for a maximum of six consecutive years. This finding is in line with (Karina, 2021), (Sagara & Akbar, 2021), and (Sarmawa et al., 2022), who state that auditor change (AUDCHANGE) does not affect financial statement fraud. However, research conducted by (Taufiq & Sholihin, 2024), (Karina, 2021), and (Maesaroh et al., 2023) suggests that rationalization influences financial statement fraud. (Nahar, 2022) argue that frequent auditor changes make it easier for management to rationalize fraudulent actions to deceive auditors.

CONCLUSION

The results of this study highlight important dynamics in the relationship between various risk factors and financial statement fraud, offering both theoretical contributions and practical implications. The finding that financial stability, as proxied by asset change (ACHANGE), significantly influences the likelihood of financial statement fraud suggests that firms experiencing rapid asset growth may be under pressure to present favorable financial outcomes, potentially increasing the risk of fraudulent reporting. This insight underscores the need for regulatory bodies, auditors, and stakeholders to scrutinize asset expansion trends more closely, particularly in firms that operate in highly competitive environments or are undergoing aggressive investment phases.

The implication is that internal control systems and audit procedures should be designed to detect irregularities that may arise from such structural financial changes.

Conversely, the absence of a significant relationship between external pressure, as represented by the leverage ratio, and financial statement fraud indicates that debt levels alone may not compel management to manipulate financial reports. These finding challenges assumptions made in earlier frameworks, such as the Fraud Triangle, and encourages further investigation into how external financing constraints interact with corporate governance mechanisms. Similarly, the lack of impact from financial targets, measured by return on assets (ROA), suggests that profitability pressures, at least in isolation, do not necessarily incentivize fraudulent behavior. These outcomes suggest that not all commonly assumed fraud risk indicators operate uniformly across industries or firm sizes, emphasizing the importance of contextualizing fraud detection models.

The study also reveals that the nature of the industry, proxied by changes in receivables (RECEIVABLE), significantly and positively affects the occurrence of financial statement fraud. This implies that companies with higher proportions of receivables may face greater opportunities for manipulation, due to the inherent subjectivity and flexibility in revenue recognition practices. For practitioners, this underscores the importance of adopting more rigorous standards when auditing firms in sectors heavily reliant on credit sales. Moreover, this finding supports the inclusion of industry-specific variables in fraud risk assessment tools to enhance their predictive accuracy and practical relevance.

In contrast, the factor of rationalization, proxied by auditor changes (AUDCHANGE), did not show a significant effect on financial statement fraud. The result suggests that changes in external auditors are likely driven more by regulatory compliance than by managerial intent to rationalize fraudulent behavior. The sample firms' adherence to Ministry of Finance Regulation No. 17/PMK.01/2008—limiting auditor tenure—reinforces the notion that such changes may reflect procedural norms rather than fraud-related red flags. Nevertheless, future research may benefit from incorporating qualitative data or case-based investigations to explore whether subtler forms of rationalization manifest through internal justification processes not captured in this study's quantitative design.

These findings collectively contribute to a more nuanced understanding of fraud risk factors and signal the need for multi-dimensional fraud detection models that account for both financial and non-financial indicators. For future research, expanding the sample across sectors or time periods may provide deeper insights into how these variables behave under different macroeconomic conditions or regulatory landscapes. Additionally, the integration of behavioral or psychological factors, such as ethical climate, managerial pressure, or tone at the top, could enrich the

interpretation of rationalization and motivation constructs. Researchers are also encouraged to explore the mediating or moderating effects of corporate governance quality, internal control effectiveness, and audit committee independence in shaping the relationship between risk factors and fraudulent financial reporting.

In sum, while this study affirms certain elements of established fraud frameworks, it also invites scholars and practitioners to revisit commonly held assumptions and seek more tailored, evidence-based approaches to fraud risk assessment. The evolving complexity of corporate financial practices requires a continuous reevaluation of detection tools to ensure that they remain responsive to real-world challenges and organizational behavior patterns.

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