

## **FINANCIAL STATEMENT FRAUD IN SHARIA-COMPLIANT COMPANIES: THE PREDICTIVE RELEVANCE OF FRAUD HEXAGON THEORY**

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### **ABSTRACT**

*This study examines the influence of factors within the Fraud Hexagon theoretical framework on the occurrence of financial statement fraud among companies listed on the Jakarta Islamic Index (JII). The study applies the fraud hexagon model, where financial targets and financial stability proxy the stimulus factor; nature of industry and ineffective monitoring represent opportunity; auditor changes reflect rationalization; changes in the board of directors capture capability; CEO education level represents ego; and political connections proxy collusion. Financial statement fraud is detected using the Beneish M-Score Model. The research population comprises all firms listed on JII during the 2020–2024 period, with a final sample of 26 companies and 130 firm-year observations selected through purposive sampling. Logistic regression analysis is employed using SPSS version 29. The results indicate that financial stability has a positive and significant effect on financial statement fraud, while financial targets and nature of industry exhibit negative and significant effects. In contrast, ineffective monitoring, auditor changes, changes in directors, CEO education level, and political connections do not show a significant influence on financial statement fraud.*

**Keywords:** Beneish M-Score Model; Financial Statement Fraud; Fraud Hexagon Theory.

## INTRODUCTION

High corporate growth is attractive to investors as it signals the potential for higher returns. However, the pressure to maintain a favorable performance image may motivate management to engage in financial statement manipulation. Data from the Association of Certified Fraud Examiners (2022) indicate that although financial statement fraud occurs less frequently than other types of fraud, it results in substantially greater losses, with an average loss of USD 593,000 per case. Furthermore, fraud trends in Indonesia, based on the ACFE Indonesia survey (2016), reveal that financial statement fraud accounted for 2% of reported fraud cases, increasing to 7.2% during the 2017–2018 period and further rising to 9.2% in 2019, with total losses amounting to IDR 242,260,000,000 (ACFE Indonesia, 2019). These conditions underscore that fraud risk represents a serious threat to corporate sustainability and therefore necessitates the implementation of effective control mechanisms.

This risk of fraud is not limited to conventional firms but also applies to companies included in Sharia-based stock indices such as the Jakarta Islamic Index (JII). Although JII is widely recognized for its stringent selection process and for representing companies that comply with Islamic principles, several major fraud cases have occurred among its constituent firms. One notable example is PT Hanson International Tbk, which was proven to have manipulated its 2016 financial statements, resulting in misstatements amounting to IDR 732 billion (Idris, 2020). This case ultimately led to the company's bankruptcy declaration in 2020, as disclosed by the Indonesia Stock Exchange (Putri, 2020). Another significant fraud case involved PT Waskita Karya Tbk, which was found to be engaged in corruption and allegedly manipulated financial data related to fictitious subcontractor projects during the 2009–2015 period, causing state financial losses of approximately IDR 202 billion (Pratama, 2020). These facts demonstrate that, despite the Sharia compliance and the expected higher standards of corporate governance among JII-listed companies, performance pressure and business complexity continue to create substantial opportunities for financial statement fraud. Consequently, the characteristics of firms within Sharia-based indices cannot fully eliminate fraud risk. This underscores the critical importance of developing effective early fraud detection models to minimize both the probability of occurrence and the magnitude of potential losses.

In the context of cooperative relationships, each party pursues specific objectives. A conflict of interest arises between investors, as principals who seek to maximize firm value to obtain higher returns, and management, as agents who may pursue personal benefits through performance-based compensation. This misalignment of interests, as explained by agency theory proposed by Jensen and Meckling, can lead to distortions in financial reporting and increase the likelihood of fraud (Imtikhani & Sukirman, 2021). The foundational theory of fraud was first introduced through the fraud triangle, which posits that fraudulent behavior is influenced by three primary factors: pressure, opportunity, and rationalization. This model was subsequently expanded by the addition of a fourth element, giving rise

to the fraud diamond proposed by (Wolfe & Hermanson, 2004). Continuous efforts to refine the theory led Crowe to develop the fraud pentagon model in 2011. The evolution of fraud theory culminated in the expansion of this framework by Vousinas (2019) into the fraud hexagon, also widely known as the S.C.C.O.R.E model consisting of stimulus, capability, collusion, opportunity, rationalization, and ego.

**Figure 1.** The Fraud Hexagon Theory Framework



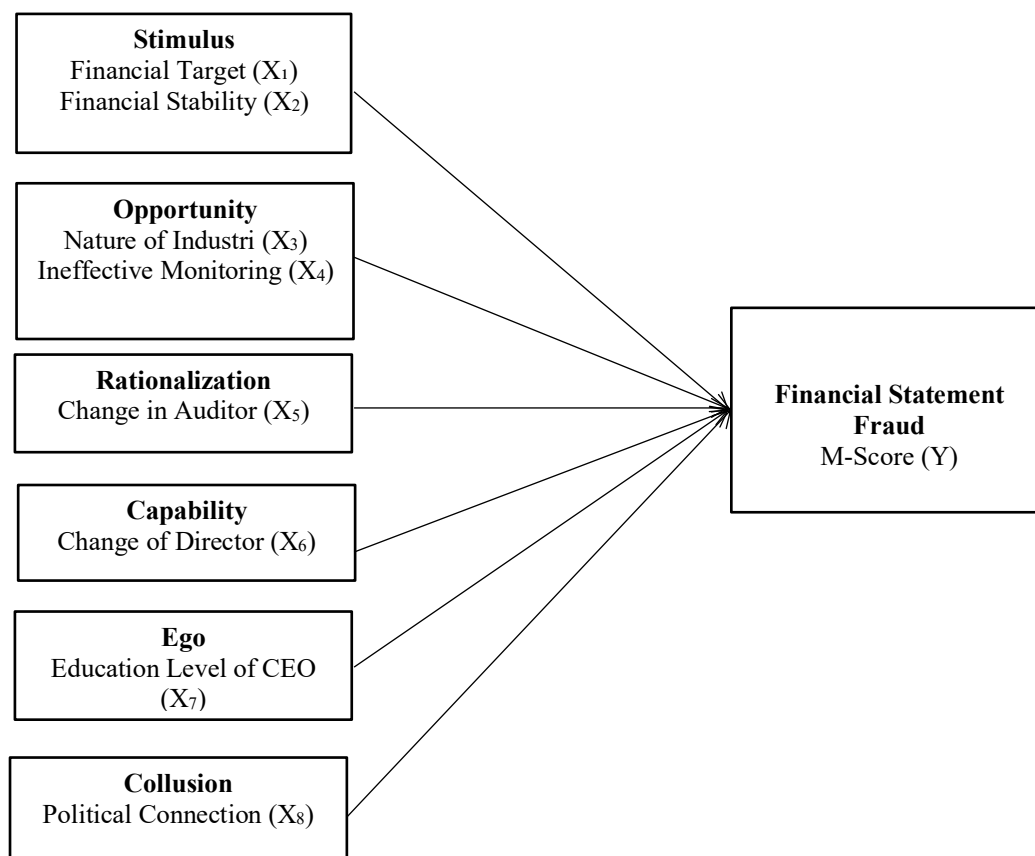
Source: Fraud Hexagon, Vousinas (2019)

This topic has been extensively examined in previous studies employing a wide range of proxies to operationalize the elements of the Fraud Hexagon Theory. Building on this body of literature, the present study integrates several variables adopted from prior research that have received comparatively limited empirical attention. Drawing primarily on the framework proposed by Naldo and Widuri (2023), this study extends their model by substituting selected proxies and employing an alternative approach to measuring financial statement fraud. Specifically, in contrast to Naldo and Widuri (2023), financial statement fraud is assessed using the Beneish M-Score Model (Beneish, 1999). The use of this model is supported by prior empirical evidence Alfarago et al. (2023), Sari et al. (2024), and Achmad et al. (2022), which demonstrates its effectiveness as a predictive tool for detecting financial statement fraud. Moreover, the Beneish M-Score Model has been widely applied within the Indonesian corporate context and across other developing economies, including Malaysia (Aris, Mohd Arif, Othman, & Zain, 2015), Bangladesh (Ahmed & Naima, 2016), Bosnia and Herzegovina (Halilbegovic, Celebic, Cero, Buljubasic, & Mekic, 2020), and China (Lu & Zhao, 2020), thereby reinforcing its contextual relevance and robustness.

This study aims to examine and analyze the effects of the factors embodied in the Fraud Hexagon Theory on the occurrence of financial statement fraud among companies listed on the Jakarta Islamic Index (JII) during the 2020–2024 period. The uniqueness of this study lies in its research object. Prior studies have predominantly focused on detecting fraud using the fraud hexagon model in manufacturing, state-owned enterprises, mining, real estate, and consumer goods companies—particularly food and beverage firms—listed on the Indonesia Stock

Exchange. Therefore, this study concentrates on a Sharia-compliant stock index, namely the Jakarta Islamic Index (JII), which is recognized as one of the leading stock indices in Indonesia due to its stringent stock selection process and its role as a benchmark for Sharia-based investment in the country.

**Figure 2. Research Framework**



Source: Developed by the Author based on Fraud Hexagon Theory (2025)

### *The Relationship of Financial Target to Financial Statement Fraud*

Statement on Auditing Standards (SAS) No. 99 indicates that the amount of bonuses and incentives awarded to management is determined by managerial performance in achieving corporate targets (Nurardi & Wijayanti, 2021; Mukaromah & Budiwitjaksono, 2021). The receipt of bonuses is often associated with the establishment of financial targets, which may motivate management to engage in financial statement fraud, particularly when the targets set exceed the organization's actual capacity to achieve them (Jao, Mardiana, Holly, & Chandra, 2020). This argument is consistent with agency theory, which posits that conflicts of interest between shareholders as principals and management as agents encourage opportunistic behavior when incentive systems are not aligned with the firm's long-term objectives. When managerial compensation is heavily tied to the achievement of specific financial targets, the pressure to maintain or enhance performance

intensifies, thereby increasing the risk of financial statement manipulation. In this study, financial targets are measured using Return on Assets (ROA), a key financial ratio that attracts significant attention from financial statement users, especially investors. Consequently, greater emphasis on ROA may increase the likelihood of financial statement fraud through the manipulation of accounting information (Emalia, Puspa Midiastuty, Suranta, & Indriani, 2020). Empirical evidence provided by Jao et al. (2020) and Mukaromah & Budiwitjaksono (2021) indicates that financial targets have a positive effect on financial statement fraud. Consistently, Tarjo et al. (2021) find that financial targets can be used as an indicator for fraud detection, where higher ROA levels are associated with a greater probability of fraudulent behavior by firms.

H<sub>1</sub>: Financial target has a positive effect on financial statement fraud

#### *The Relationship of Financial Stability to Financial Statement Fraud*

Financial stability refers to a condition that reflects a company's ability to maintain its financial position at a stable level (SAS No. 99). A firm's financial condition can be considered stable when it demonstrates consistent growth, which may be indicated by increasing sales, sustained annual profit growth, and continuous asset expansion. Conversely, financial instability may create significant pressure on management, particularly when the company's performance falls below expected standards (Dwianto, Puspitasari, & Setiawati, 2024). Empirical evidence provided by Jaunanda et al. (2020), who employed the Beneish M-Score model to examine the impact of fraud pentagon elements on financial statement fraud, indicates that financial stability has a positive and significant effect on the occurrence of financial statement fraud. These findings suggest that a certain level of financial stability may motivate management to engage in manipulative practices to maintain the appearance of strong corporate performance.

H<sub>2</sub>: Financial stability has a positive effect on financial statement fraud

#### *The Relationship of Nature of Industry to Financial Statement Fraud*

Nature of Industry describes the optimal conditions expected by companies when conducting their operational activities within a particular industry. Financial statement fraud may occur even when a company operates under favorable conditions, particularly in the presence of inadequate internal controls over certain accounts, such as accounts receivable and inventory assets (Himawan & Wijanarti, 2020). Limited cash availability resulting from a high level of receivables may motivate management to manipulate financial statements. Furthermore, companies may artificially increase sales growth through the manipulation of receivables, thereby presenting financial statements that portray a favorable view of the firm's performance (Novarina & Triyanto, 2022). Empirical evidence provided by Setyono et al. (2023) indicates that industry characteristics have a significant influence on financial statement fraud.

H<sub>3</sub>: Nature of Industry has a positive effect on financial statement fraud

*The Relationship of Ineffective Monitoring to Financial Statement Fraud*

Ineffective monitoring, as defined in SAS No. 99, refers to a condition in which a company lacks effective control systems or supervisory mechanisms to adequately oversee management performance. Weak internal control systems create opportunities for financial statement fraud (Roffia & Poffo, 2025). Under such circumstances, agency problems are more likely to arise. Therefore, companies are required to implement effective monitoring systems to ensure that management performance aligns with the expectations of the firm and its stakeholders. According to Agusputri and Sofie (2019), inadequate corporate controls increase the risk of fraud. In this context, insufficient oversight of the financial reporting process by independent commissioners enhances the opportunity for fraudulent practices. This argument is supported by the findings of Aulia Haqq and Budiwitjaksono (2019) as well as Mukaromah and Budiwitjaksono (2021), which demonstrate that ineffective monitoring has a positive effect on financial statement fraud.

H<sub>4</sub>: Ineffective monitoring has a positive effect on Financial Statement Fraud

*The Relationship of Change in Auditors to Financial Statement Fraud*

Frequent changes in auditors may indicate that a company is engaging in, or attempting to conceal, fraudulent activities in order to reduce the likelihood of fraud detection. Wijayani and Ratmono (2020) argue that the probability of financial statement fraud increases when auditor changes occur repeatedly. Such changes may intensify agency conflicts between principals and agents, as information asymmetry arising from auditor turnover can be exploited to commit fraud. Furthermore, the findings of Maryadi et al. (2020) suggest that greater flexibility to engage in fraudulent behavior is associated with a higher frequency of auditor changes. In addition, Septriyani and Handayani (2018) reveal that auditor changes are often employed to obscure indications of fraud previously identified by former auditors. Companies may replace auditors with the intention that newly appointed auditors are less capable of detecting or controlling ongoing manipulative practices.

H<sub>5</sub>: Auditor changes have a positive effect on financial statement fraud

*The Relationship of Change of Director to Financial Statement Fraud*

Changes in directors may serve as a strategic effort by companies to improve prior managerial performance by appointing more competent directors (Imtikhani & Sukirman, 2021). However, in the presence of conflicts of interest, director turnover can also be perceived as an attempt to conceal fraudulent practices by replacing existing directors (Uciati & Mukhibad, 2019). If newly appointed directors are able to prevent and reduce fraudulent activities, such changes in leadership can be considered appropriate. Conversely, if the new board fails to demonstrate effective fraud prevention, director turnover may instead provide opportunities for newly appointed directors to engage in financial statement fraud

(Wolfe & Hermanson, 2004). Empirical evidence provided by Suryani (2019) indicates that director turnover has a positive effect on financial statement fraud.  
H<sub>6</sub>: Change of director has a positive effect on financial statement fraud

#### *The Relationship of Education Level of CEO to Financial Statement Fraud*

Shareholders expect companies to be led by knowledgeable management. Education level of CEO reflects their knowledge and capability to understand business processes as well as to prepare and interpret corporate financial statements. However, a high level of education may represent a double-edged sword for the firm. The higher the CEO's educational attainment, the greater their understanding of the company's operations, which may also increase the likelihood of planning and committing financial statement fraud based on such knowledge (Sihombing, Panggulu, & Harapan, 2022). Previous studies by Hartono and Mukhibad (2024) showed that education level of CEO has a significant positive influence on financial statement fraud.

H<sub>7</sub>: CEO education level has a positive effect on financial statement fraud

#### *The Relationship of Political Connections to Financial Statement Fraud*

Political connections within the fraud hexagon theory refer to relationships established between corporate executives and political figures or government institutions (Wulandari & Raharja, 2013). Such connections provide firms with various advantages, including easier access to business licenses and debt financing. According to Chaney et al. (2011), political ties between top management and the government can generate substantial benefits, particularly when firms are involved in collaborative projects with public institutions. The relationship between political connections and agency theory lies in the divergence of interests and objectives that motivate the formation of these ties. Corporate management, acting as agents with political connections, may seek to maximize the benefits derived from these relationships for their own interests. The availability of special privileges and facilities potentially enables management to engage in financial statement fraud, regardless of the adverse consequences borne by the principals (Imtikhani & Sukirman, 2021).

H<sub>8</sub>: Political connections have a positive effect on financial statement fraud

## **METHODS**

This study employs a quantitative research approach. The population of this study consists of companies listed on the Jakarta Islamic Index (JII) during the 2020–2024 period. The sample was selected using a purposive sampling technique based on specific criteria. Logistic regression analysis was applied as the data analysis method, using SPSS version 29. The sample selection criteria are presented in the table below.

**Table 1.** Sample Selection Criteria

No	Sample Criteria	Amount
1.	Companies listed in the Jakarta Islamic Index (JII) during the 2020–2024 period	52
2.	(-) Companies that did not publish complete annual reports during the 2020–2024 period	(6)
3.	(-) Companies that did not have complete data and research variables for the 2020–2024 period	(11)
4.	(-) Companies that did not use the Indonesian rupiah as their reporting currency during the 2020–2024 research period	(9)
Sample (per year)		26
Observation Period 2020-2024		5
Total Sample (26 x 5)		130

Source: Compiled by the Author based on purposive sampling, 2025

Financial statement fraud is employed as the dependent variable in this study and is measured using the Beneish M-Score model. Consistent with prior studies Alfargo et al. (2023), Sari et al. (2024), and Achmad et al. (2022), that the M-Score model is considered one of the most efficient tools for detecting financial statement fraud and is applicable in the context of Indonesian companies, as it has also been widely used in other developing countries. A firm is classified as having a potential for financial statement fraud if its Beneish M-Score exceeds  $-2.22$ . Companies identified as having potential financial statement fraud are coded as 1, while those without such indications are coded as 0 (Beneish, 1999). The Beneish M-Score formula is presented as follows.

$$M\text{-Score} = -4.84 + 0.92*DSRI + 0.528*GMI + 0.404*AQI + 0.892*SGI + 0.115*DEPI - 0.172*SGAI + 4,679*TATA - 0.327*LVGI.$$

A detailed description of the eight ratios discussed above is provided in Table 2.

**Table. 2** Dependent Variable Measurement

Ratio	Measurement	Source
<b>DSRI</b> (Days' Sales in Receivable Index)	$(\text{Receivable}_t / \text{Sales}_t) / (\text{Receivable}_{t-1} / \text{Sales}_{t-1})$	Beneish, 1999
<b>GMI</b> (Gross Margin Index)	$[(\text{Sales}_{t-1} - \text{COGS}_{t-1}) / \text{Sales}_{t-1}] / [(\text{Sales}_t - \text{COGS}_t) / \text{Sales}_t]$	Beneish, 1999
<b>AQI</b> (Asset Quality Index)	$[1 - (\text{Current Asset}_t + \text{PPE}_t) / \text{Total Asset}_t] / [1 - ((\text{Current Asset}_{t-1} + \text{PPE}_{t-1}) / \text{Total Asset}_{t-1})]$	Beneish, 1999
<b>SGI</b> (Sales Growth Index)	$\text{Sales}_t / \text{Sales}_{t-1}$	Beneish, 1999
<b>DEPI</b> (Depreciation Index)	$[\text{Depreciation}_{t-1} / (\text{PPE}_{t-1} + \text{Depreciation}_{t-1})] / [\text{Depreciation}_t / (\text{PPE}_t + \text{Depreciation}_t)]$	Beneish, 1999



<b>SGAI</b> (Sales, General and Administrative Expenses Index)	$(\text{SGA Expenset} / \text{Salest}) / (\text{SGA Expenset-1} / \text{Salest-1})$	Beneish, 1999
<b>TATA</b> (Total Accruals to Total Assets)	$(\text{Income from Operatingt} - \text{Cash Flow from Operatingt}) / \text{Total Assetst}$	Beneish, 1999
<b>LVGI</b> = Leverage Index	$[(\text{Current Liabilitiest} + \text{Long Term Debtt}) / \text{Total Assetst}] / [(\text{Current Liabilitiest-1} + \text{Long Term Debtt-1}) / \text{Total Assetst-1}]$	Beneish, 1999

Source: Data processed, *SPSS-29*, 2025

The independent variables employed in this study are the six elements of the fraud hexagon, which consist of: (1) stimulus, proxied by financial targets and financial stability; (2) opportunity, proxied by industry characteristics and ineffective monitoring; (3) rationalization, proxied by auditor changes; (4) capability, proxied by changes in directors; (5) ego, proxied by the education level of CEO; and (6) collusion, proxied by political connections. The measurement of the independent variables applied in this study is presented in Table 3.

**Table. 3** Independent Variable Measurement

Variable	Measurement	Source
Financial Target (FT_X1)	$\text{ROA} = \text{Net profit} / \text{Total asset}$	(Skousen, Smith, & Wright, 2015)
Financial Stability (FS_X2)	$\text{GPM} = \text{Gross Profit Margin}$	(Jaunanda et al., 2020), (Adhania, Holiawati, & Nofryanti, 2024)
Nature of Industry (NOI_X3)	$\text{Reveivable}_t / \text{Sales}_t - \text{Reveivable}_{t-1} / \text{Sales}_{t-1}$	(Setyono et al., 2023), (Junus et al., 2025)
Ineffective Monitoring (IM_X4)	Number of independent commissioners/Total board of commissioners	(Skousen et al., 2015)
Change in Auditor (CIA_X5)	Coded 1 if there is a change of company's auditor, 0 otherwise	(Wolfe & Hermanson, 2004)

Change of Director (COD_X6)	Coded 1 if there is a change of company's director, 0 otherwise	(Skousen et al., 2015)
Education level of CEO (EDU_X7)	Coded 1 if the company's CEO has PhD/doctoral degree, 0 otherwise	(Aviantara, 2021), (Sihombing et al., 2022), (Naldo & Widuri, 2023)
Political Connection (PC_X8)	Coded 1 if the company's CEO has military or political connection, 0 otherwise	(Naldo & Widuri, 2023), (Chen et al., 2022)

Source: Data processed, *SPSS-29*, 2025

## RESULTS AND DISCUSSION

**Table. 4** Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
X1_FT	130	-.138	.349	.08693	.082790
X2_FS	130	.074	.682	.34006	.156258
X3_NOI	130	-.157	.121	-.00305	.034781
X4_IM	130	.364	.667	.48342	.091432
X5_CIA	130	.000	1.000	.34615	.477583
X6_COD	130	.000	1.000	.42308	.495995
X7_EDU	130	.000	1.000	.69231	.463324
X8_PC	130	.000	1.000	.53846	.500447
Y_FSF	130	0	1	.81	.396
Valid N (listwise)	130				

Source: Data processed, *SPSS-29*, 2025

Based on Table 4, the independent variable financial target (FT), which represents the stimulus element in the fraud hexagon model, has a mean value of 0.08693 with a standard deviation of 0.082790. This finding indicates that the average profitability level of the sampled firms is approximately 8%. The financial stability variable (FS), measured by the gross profit margin ratio, shows a mean value of 0.34006, suggesting that, on average, the firms are able to generate a gross profit of 34% from total sales. In other words, for every IDR 1 of sales, the firms earn approximately IDR 0.34 in gross profit after deducting the cost of goods sold. Furthermore, the opportunity variable, proxied by changes in total receivables (NOI), has a mean value of -0.00305 with a standard deviation of 0.03478. This result indicates that during the observation period, firms tended to experience a relatively small and stable decline in total receivables, with low variability in changes. Meanwhile, ineffective monitoring, proxied by the proportion of

independent commissioners (IM), has a mean value of 0.48342 and a standard deviation of 0.091432, indicating that independent commissioners account for approximately 48.3% of the board composition in the sampled firms.

The rationalization variable (CIA) has a mean value of 34.61%, implying that, on average, the firms in the sample changed their external auditors during the observation period. The change of directors variable (COD) records a mean value of 42.30%, indicating that a substantial proportion of firms listed in the Jakarta Islamic Index (JII) experienced changes in their boards of directors. In addition, the ego variable (EGO) shows a mean value of 0.69231, suggesting that approximately 69.23% of CEOs in the sample hold an educational level higher than a bachelor's degree, while the remaining 30.77% hold a bachelor's degree or lower. Moreover, the collusion variable (PC) has a mean value of 53.84%, indicating that more than half of the firms in the sample maintained political connections during the observation period. Finally, the financial statement fraud (FSF) variable, measured using the M-Score, has a mean value of 0.81. These results show that the M-Score  $> -2.22$ , which means that the companies in this research sample have the potential to commit financial statement fraud.

**Table. 5** Nagelkerke Test

Step	-2 Log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	109.684 <sup>a</sup>	.127	.203

Source: Data processed, *SPSS-29*, 2025

Based on the results of the Nagelkerke  $R^2$  test presented in Table 5, the value obtained is 0.203. This finding indicates that the independent variables included in this study can explain 20.3% of the variation in the dependent variable, while the remaining variation is attributable to other factors not examined in this research.

**Table. 6** F-Statistic Test

		Chi-square	df	Sig.
Step 1	Step	17.600	8	.024
	Block	17.600	8	.024
	Model	17.600	8	.024

Source: Data processed, *SPSS-29*, 2025

Table 6. shows that the logistic regression analysis employs a simultaneous significance test based on the chi-square statistic by comparing the difference in the  $-2$  log likelihood values before and after the independent variables are included in the model. This procedure is known as the likelihood ratio test (maximum likelihood test). The results show that there is a significant simultaneous influence of FT, FS, NOI, IM, CIA, COD, EDU, and PC on financial statement fraud. This is evidenced by a chi-square significance value of  $0.024 < 0.05$ , and a calculated chi-square value of 17.600, exceeding the critical chi-square value of 15.507. Therefore, it can be concluded that the independent variables examined in this study are collectively capable of predicting the occurrence of financial statement fraud.

**Table. 7** Wald Test Results (Logistic Regression)

		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>Df</b>	<b>Sig.</b>	<b>Exp(B)</b>	<b>Decision</b>
Step 1 <sup>a</sup>	X1_FT	-10.333	4.169	6.144	1	.013	.000	Rejected
	X2_FS	4.563	2.176	4.398	1	.036	95.840	Accepted
	X3_NOI	-21.698	7.965	7.421	1	.006	.000	Rejected
	X4_IM	2.002	3.645	.302	1	.583	7.402	Rejected
	X5_CIA	-.177	.550	.103	1	.748	.838	Rejected
	X6_COD	.868	.592	2.153	1	.142	2.383	Rejected
	X7_EDU	-.589	.572	1.062	1	.303	.555	Rejected
	X8_PC	-.069	.491	.020	1	.888	.933	Rejected
	Constant	.233	1.714	.018	1	.892	1.262	-

Source: Data processed, *SPSS-29*, 2025

### **The Effect of Stimulus Proxied by Financial Target on Financial Statement Fraud**

The results of this study indicate that the stimulus, represented by the financial target and measured using ROA, yielded a coefficient of -10.333 with a probability value of 0.013, which is less than the significance level (0.05); therefore, H1 is rejected. The findings suggest that ROA has a negative and significant effect on financial statement fraud in companies listed on the Jakarta Islamic Index (JII). A coefficient of -10.333 with a significance value of 0.013 indicates that the higher a company's profitability, the lower the tendency of management to engage in financial statement fraud. An increase in ROA does not necessarily imply that the company is committing fraud. This may be attributed to improvements in operational quality and the recruitment of competent employees. Consequently, when corporate targets are raised, management does not experience excessive pressure (Achmad et al., 2023; Naldo & Widuri, 2023). The characteristics of companies included in the Jakarta Islamic Index (JII) further reinforce this explanation, as these firms are selected based on strict compliance with Sharia principles and are subject to higher standards of transparency and accountability. This governance environment, which is grounded in Islamic ethical values, functions as a moral and institutional constraint that suppresses managerial tendencies to engage in fraudulent behavior, even when performance targets increase. Within the context of the Indonesian Islamic capital market, rising profitability is therefore not perceived as pressure that triggers fraud, but rather as an indicator of operational success and sound governance, which in turn reduces the risk of financial statement fraud. These findings do not support the hexagon theory proposed by Vousinas (2019), which posits a positive relationship between pressure and financial statement fraud, as the present study indicates a negative direction.

### **The Effect of Stimulus Proxied by Financial Stability on Financial Statement Fraud**

Based on the results of statistical analysis, Financial Stability (proxied by GPM) produces a regression coefficient of 4.563 with a significance level of 0.036, which is less than 0.05. Therefore, H2 is accepted, indicating that Financial Stability

(GPM) has a positive and significant effect on financial statement fraud. This finding suggests that companies with relatively high gross profit margins, which reflect substantial profits relative to production costs, do not necessarily demonstrate stable fundamental health. On the contrary, such conditions may create pressure to meet profit targets, market expectations, or internal corporate benchmarks (Dwianto et al., 2024). This pressure can potentially motivate management to manipulate figures in financial statements to maintain the company's image as "healthy" or to meet international/economic benchmarks, especially when high operational performance serves as a measure for external evaluations or internal bonuses. These findings are consistent with the study by Christian and Visakha (2021), which reported that Financial Stability has a positive and significant effect on financial statement fraud.

### **The Effect of Opportunity proxied by Nature of Industry on Financial Statement Fraud**

The coefficient of the Nature of Industry (NOI) variable is negative, at -21.698, indicating an inverse relationship between NOI and financial statement fraud. However, the probability values of other variables presented in Table 6 are below the 0.05 significance level, resulting in the rejection of hypothesis H3. These findings can be explained through the perspective of agency theory, which posits that conflicts of interest between owners (principals) and management (agents) arise due to information asymmetry and divergent objectives. In companies listed on the Jakarta Islamic Index (JII), internal control systems tend to be more mature, business processes more structured, and reporting mechanisms more transparent. Such conditions reduce managers' ability to exploit information asymmetry for personal gain, thereby mitigating agency conflicts and limiting opportunities for fraudulent behavior. These results indicate that strong corporate characteristics significantly decrease the likelihood of individuals engaging in financial statement fraud (Junus et al., 2025). This finding is consistent with prior research by Junus et al. (2025) and Setyono et al. (2023), which demonstrates that higher levels of Nature of Industry (NOI) within a firm are associated with a lower probability of financial statement fraud.

### **The Effect of Opportunity proxied by Ineffective Monitoring on Financial Statement Fraud**

Based on the results presented in Table 2, ineffective monitoring does not have a significant impact on financial statement fraud in companies listed on the Jakarta Islamic Index (JII), therefore H4 is rejected. The calculation of the independent commissioners ratio shows an average value of 48.34%, indicating that the sampled companies have complied with Article 19 of POJK No. 57/POJK.04/2017, as the proportion of independent commissioners exceeds 30% of the total board of commissioners. Yopie et al. (2019) argued that monitoring activities are more effective when independent commissioners constitute a larger proportion of the board. The findings of this study are consistent with those of Handoko and Tandean (2021) and Tarjo et al. (2021), who reported that the

presence of independent commissioners reduces the likelihood of fraud, as they do not hold shares in the company, thereby maintaining their independence. However, this study does not support the findings of Mukaromah and Budiwitjaksono (2021), who found that ineffective monitoring positively influences financial statement fraud.

### **The Effect of Rationalization Proxied by Change in Auditor on Financial Statement Fraud**

Auditor changes are understood as an effort by company management to minimize or avoid the likelihood of detection of manipulative practices by replacing the previous auditor (Lou & Wang, 2009). According to SAS No. 99, the relationship between management and auditors can reflect a form of managerial rationalization that may indicate potential fraud. However, the results of this study indicate that auditor changes do not significantly affect financial statement fraud in companies listed on the Jakarta Islamic Index (JII), therefore H5 is rejected. This finding is attributed to the fact that auditor changes are often carried out in compliance with the Government Regulation of the Republic of Indonesia No. 20 of 2015 concerning the provision of audit services by public accountants, which limits the auditor's engagement period to five consecutive years (PP RI, 2015). These results are consistent with the studies of Handoko and Tandean (2021) and Mukaromah and Budiwitjaksono (2021), which report that auditor changes do not have a significant positive effect on the detection of financial statement fraud. This perspective is further supported by (Achmad et al., 2022), who conclude that auditor changes are intended to enhance the performance of previous auditors and improve the quality of financial statements, thereby potentially increasing the company's attractiveness to investors.

### **The Effect of Capability Proxied by Change of Director on Financial Statement Fraud**

The results of the hypothesis testing show that changes in the board of directors do not have a significant effect on financial statement fraud in companies listed on the Jakarta Islamic Index (JII), H6 is rejected. This finding indicates that changes in leadership structure among JII-listed companies are more reflective of efforts to enhance the quality of corporate governance rather than serving as a mechanism to conceal or facilitate fraudulent practices. From the perspective of agency theory, conflicts of interest between owners (principals) and management (agents) may encourage opportunistic behavior, including financial statement manipulation. However, within companies included in the Jakarta Islamic Index, such conflicts tend to be mitigated by the presence of stricter governance mechanisms, arising both from capital market regulations and compliance with Sharia principles. The principles of trustworthiness (*amanah*), honesty (*sidq*), and accountability (*mas'uliyah*) embedded in the operations of Sharia-compliant firms establish ethical norms that narrow the scope for managerial opportunism. Consequently, changes in directors are not exploited as instruments to engage in fraudulent activities. These findings are consistent with the research conducted by

Mukaromah and Budiwitjaksono (2021), which suggests that the term of office, changes in positions, and adherence to laws and regulations governing the board of directors are among the reasons for implementing director changes. The results of this study are in line with previous studies by Aviantara (2021) and Kusumosari & Solikhah (2021) which show that change of directors do not have a significant impact on financial statement fraud.

### **The Effect of Ego Proxied by Education Level of CEO on Financial Statement Fraud**

The coefficient for CEO education level is -0.589, with a significance value of 0.303, which is greater than 0.05. This indicates that CEO education has a negative but not significant effect on financial statement fraud, leading to the rejection of H7. The insignificance of the CEO's education effect is also associated with the characteristics of the research sample, which consists of companies listed in the Jakarta Islamic Index (JII). As Sharia-compliant entities, these firms operate not only under capital market regulations but also within an ethical framework grounded in Islamic values that emphasize honesty (*sidq*), trustworthiness (*amanah*), and justice in business conduct. Such a governance environment fosters relatively strong social and moral control mechanisms, thereby mitigating potential conflicts of interest as described in agency theory through the internalization of religious values and Islamic business ethics. These findings contradict the results of the study by (Sihombing et al., 2022), which reported a positive and significant relationship between CEO education and financial statement fraud. Nevertheless, the results of this study are consistent with the findings of Kusumosari and Solikhah (2021) and Earlyda et al. (2024) who concluded that CEO education does not have a significant impact on financial statement fraud.

### **The Effect of Collusion Proxied by Political Connection on Financial Statement Fraud**

The results of this study indicate that political connections do not have a significant effect on financial statement fraud among companies listed on the Jakarta Islamic Index (JII), as evidenced by a probability value of  $0.888 > 0.05$  and a regression coefficient of  $-0.069$ ; therefore, H8 is rejected. However, this finding does not necessarily imply that political connections are entirely irrelevant to the occurrence of financial statement fraud. The measurement of political connections in this study employs a dummy variable approach, assigning a value of 1 if the company's CEO has a military background or political affiliation and 0 otherwise. This approach is not yet able to adequately capture the intensity, strength, and complexity of the political relationships maintained by firms. Furthermore, the use of a binary indicator does not distinguish between firms with weak political connections and those with strong political influence, thereby limiting the model's ability to fully reflect variations in the impact of political connections on fraudulent financial reporting behavior. This limitation may result in a statistically insignificant coefficient, even though political connections can substantially play a significant role in shaping corporate financial reporting fraudulent practices. This

finding is consistent with previous research (Sari, Mahardika, Suryandari, & Raharja, 2022), which also found that political connections do not significantly influence financial statement fraud.

## CONCLUSION

Based on the results of the analysis and discussion, this study concludes that financial stability has a positive and significant effect on the likelihood of financial statement fraud among companies listed on the Jakarta Islamic Index (JII). This finding indicates that firms with higher levels of financial stability may experience increased pressure to maintain a favorable performance image, which in turn elevates the risk of financial statement manipulation. In contrast, financial targets, proxied by Return on Assets (ROA), exhibit a negative and significant effect on financial statement fraud, suggesting that higher profitability does not necessarily reflect fraudulent behavior but may instead signal improvements in operational efficiency and managerial effectiveness. In addition, the nature of industry shows a negative and significant influence, implying that strong firm characteristics and sound operational conditions reduce opportunities for fraudulent behavior. Meanwhile, ineffective monitoring, auditor changes, changes in directors, CEO education level, and political connections do not demonstrate a significant impact on financial statement fraud within JII-listed companies.

From a theoretical perspective, these findings contribute to the development of fraud literature by extending empirical evidence on the applicability of the Fraud Hexagon Theory in the context of Sharia-compliant firms. The results indicate that the relationships among fraud elements are not universally consistent with classical theoretical assumptions, particularly within Islamic capital market environments where ethical principles and governance mechanisms may alter managerial behavior. From a practical standpoint, this study provides valuable insights for corporate management, auditors, regulators, and investors by highlighting the importance of maintaining sustainable financial stability and strengthening governance structures to mitigate performance pressure that may trigger fraudulent reporting. The findings also support the enhancement of fraud risk assessment frameworks and more informed investment decision-making in Sharia-based capital markets.

Despite its contributions, this study has several limitations. The research scope is limited to companies listed on the Jakarta Islamic Index during the 2020–2024 period, which may constrain the generalizability of the findings. In addition, the explanatory power of the model remains relatively modest, as the independent variables account for only 20.3% of the variation in financial statement fraud, indicating the presence of other influential factors not captured in this study. Moreover, fraud detection relies solely on the Beneish M-Score model, which may not fully capture all forms of financial manipulation. Therefore, future research is encouraged to expand the sample across different industries and longer observation periods, incorporate alternative fraud detection models such as the F-Score, and integrate qualitative approaches, including case studies. The inclusion of additional



explanatory variables, such as audit quality, corporate governance practices, organizational culture, and competitive pressure, is also expected to enhance the robustness and explanatory power of future research.

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## **REFERENCES**

- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon Fraud: Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia. *Economies*, 10(13), 1–16.
- Achmad, Tarmizi, Ghozali, I., & Pamungkas, I. D. (2022). Hexagon Fraud : Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia. *Economies*, 10(13), 1–16.
- Achmad, Tarmizi, Ghozali, I., Rahardian, M., Helmina, A., Hapsari, D. I., & Pamungkas, I. D. (2023). Detecting Fraudulent Financial Reporting Using the Fraud Hexagon Model : Evidence from the Banking Sector in Indonesia.
- Adhania, S., Holiawati, & Nofryanti. (2024). The Effect of Hexagon Fraud Theory in Detecting Financial Statement Fraud. *International Journal of Digital Marketing Science*, 1(1), 10–22.
- Agusputri, H., & Sofie, S. (2019). Faktor-Faktor Yang Berpengaruh Terhadap Fraudulent Financial Reporting Dengan Menggunakan Analisis Fraud Pentagon. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, 4(2), 105–124.
- Ahmed, T., & Naima, J. (2016). Detection and analysis of probable earnings manipulation by firms in a developing country. *Asian Journal of Business and Accounting*, 9(1), 59–8.
- Alfarago, D., Syukur, M., & Maburur, A. (2023). The Likelihood of Fraud Fom The Fraud Hexagon Perspective : Evidence From Indonesia. *ABAC Journal*, 43(1), 34–51.
- Aris, N. A., Mohd Arif, S. M., Othman, R., & Zain, M. M. (2015). Fraudulent Financial Statement Detection Using Statistical Techniques: The Case of Small Medium Automotive Enterprise. *Journal of Applied Business Research (JABR)*, 31(4), 1469.

- Aulia Haqq, A. P. N., & Budiwitjaksono, G. S. (2019). Fraud pentagon for detecting financial statement fraud. *Journal of Economics, Business, & Accountancy Ventura*, 22(3), 319–332.
- Aviantara, R. (2021). The Association Between Fraud Hexagon and Government's Fraudulent Financial Repor. *Asia Pacific Fraud Journal*, 6(1), 26–42. <https://doi.org/10.21532/apfjournal.v6i1.192>
- Beneish, M. D. (1999). The Detection of Earnings Manipulation. *Financial Analysts Journal*, 55(5), 24–36.
- Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics*, 51, 58–76.
- Chen, Z., Hu, L., He, X., Liu, Z., Chen, D., & Wang, W. (2022). Green Financial Reform and Corporate ESG Performance in China: Empirical Evidence from the Green Financial Reform and Innovation Pilot Zone. *International Journal of Environmental Research and Public Health*, 19(22), 1–17. <https://doi.org/10.3390/ijerph192214981>
- Christian, N., & Visakha, B. (2021). Analisis Teori Fraud Pentagon dalam Mendeteksi Fraud pada Laporan Keuangan Perusahaan yang Terdaftar di Bursa Efek Indonesia. *Conference on Management, Business, Innovation, Education and Social Science*, 1(1), 1325–1342.
- Dwianto, A., Puspitasari, D., & Setiawati, E. (2024). Moderasi Komite Audit Sebagai Peredam Kecurangan Pelaporan Keuangan. *OWNER: Riset & Jurnal Akuntansi*, 8(1), 839–860.
- Earlyda, Y., Putri, P., & Suryani, E. (2024). Determinan Faktor-Faktor Capability sebagai Perspektif Fraud Diamond terhadap Kecurangan Laporan Keuangan. *OWNER: Riset & Jurnal Akuntansi*, 8(1), 402–413.
- Emalia, D., Puspa Midiastuty, P., Suranta, E., & Indriani, R. (2020). Dampak dari auditor quality, financial stability, dan financial target terhadap fraudulent financial reporting. *Studi Ilmu Manajemen Dan Organisasi*, 1(1), 1–11.
- Halilbegovic, S., Celebic, N., Cero, E., Buljubasic, E., & Mekic, A. (2020). Application of Beneish M-score model on small and medium enterprises in Federation of Bosnia and Herzegovina. *Eastern Journal of European Studies*, 11(1), 146–163.
- Handoko, B. L., & Tandean, D. (2021). An Analysis of Fraud Hexagon in Detecting Financial Statement Fraud (Empirical Study of Listed Banking Companies on Indonesia Stock Exchange for Period 2017-2019). *ACM International Conference Proceeding Series*, 93–100.

- Hartono, F., & Mukhibad, H. (2024). Analysis Of The Influence of Hexagon Fraud Perspective on Financial Statement Fraud With Audit Committee Quality as a Moderating Variable. *International Student Conference on Economics and Business Excellence (ISCEBE)*, 1, 1–6.
- Himawan, F. A., & Wijanarti, R. S. (2020). Analisis Pengaruh Fraud Pentagon Terhadap Pendeteksian Kecurangan Laporan Keuangan Pada Perusahaan Manufaktur Yang Terdaftar Di Bei Tahun 2014-2018. *ESENSI: Jurnal Manajemen Bisnis*, 23(2), 137–154.
- Idris, M. (2020). Jejak Hitam PT Hanson International, Manipulasi Laporan Keuangan 2016.
- Imtikhani, L., & Sukirman. (2021). Determinan Fraudulent Financial Statement Melalui Perspektif Fraud Hexagon Theory Pada Perusahaan Pertambangan. *Jurnal Akuntansi Bisnis*, 19(1), 96–113.
- Jao, R., Mardiana, A., Holly, A., & Chandra, E. (2020). Pengaruh Financial Target dan Financial Stability terhadap Financial Statement Fraud. *YUME : Journal of Management*, 4(1), 27–42.
- Jaunanda, M., Tian, C., Edita, K., & Vivien, V. (2020). Analisis Pengaruh Fraud Pentagon Terhadap Fraudulent Financial Reporting Menggunakan Beneish Model. *Jurnal Penelitian Akuntansi*, 1(1), 80–98.
- Junus, A., Sundari, S., Azzahra, S. Z., Junus, A., Sundari, S., & Innovations, F. (2025). Fraudulent financial reporting and firm value : An empirical analysis from the fraud hexagon perspective. *Investment Management and Financial Innovations*, 22(1), 339–350. [https://doi.org/10.21511/imfi.22\(1\).2025.26](https://doi.org/10.21511/imfi.22(1).2025.26)
- Kusumosari, L., & Solikhah, B. (2021). Analisis Kecurangan Laporan Keuangan Melalui Fraud Hexagon Theory. *Jurnal Ilmiah Akuntansi Dan Keuangan*, 4(3), 753–767.
- Lou, Y. I., & Wang, M.-L. (2009). Fraud Risk Factor Of The Fraud Triangle Assessing The Likelihood Of Fraudulent Financial Reporting. *Journal of Business & Economics Research (JBERR)*, 7(2), 61–78.
- Lu, W., & Zhao, X. (2020). Research and improvement of fraud identification model of Chinese A-share listed companies based on M-score. *Journal of Financial Crime*, 28(2), 566–579.
- Maryadi, A. D., Midiastuty, P. P., Suranta, E., & Robiansyah, A. (2020). Pengaruh Fraud Pentagon Dalam Mendeteksi Fraudulent Financial Reporting (The Influence of Fraud Pentagon in Detecting Fraudulent Financial Reporting). *Jurnal Akuntansi, Keuangan, Dan Manajemen (Jakman)*, 2(1), 13–25.
- Mukaromah, I., & Budiwitjaksono, G. S. (2021). Fraud Hexagon Theory dalam

- Mendeteksi Kecurangan Laporan Keuangan pada Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019. *Jurnal Ilmiah Komputerisasi Akuntansi*, 14(1), 61–72.
- Naldo, R. R., & Widuri, R. (2023). Fraudulent Financial Reporting and Fraud Hexagon : Evidence from Infrastructure Companies in ASEAN. *Economic Affairs*, 68(03), 1455–1468. <https://doi.org/10.46852/0424-2513.3.2023.14>
- Novarina, D., & Triyanto, D. N. (2022). Pengaruh Fraud Hexagon Terhadap Kecurangan Laporan Keuangan Pada Perusahaan LQ 45 Yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020. *Jurnal Akuntansi Dan Keuangan (JAK)*, 10(2), 182–193.
- Nurardi, D. S., & Wijayanti, R. (2021). Determinan Financial Statement Fraud Dengan Analisis Fraud Hexagon Model (Studi Empiris pada Perusahaan Sektor LQ 45 yang Terdaftar di Bursa Efek Indonesia Periode II Agustus-Januari 2016-2019). *The 13th University Research Colloquium 2021*, 430–441.
- Pratama, I. R. (2020). Kasus Proyek Fiktif, Eks Pejabat Waskita Karya Diduga Manipulasi Data Keuangan. *M.Tribunnews.Com*.
- Putri, C. A. (2020). Perusahaan Milik Benny Tjokro “Hanson” Dinyatakan Pailit.
- Roffia, P., & Poffo, M. (2025). Revisiting the Fraud Triangle in Corporate Frauds : Towards a Polygon of Elements. *Journal of Risk and Financial Management*, 18(3), 1–23.
- Sari, M. P., Mahardika, E., Suryandari, D., & Raharja, S. (2022). The audit committee as moderating the effect of hexagon’s fraud on fraudulent financial statements in mining companies listed on the Indonesia stock exchange. *Cogent Business & Management*, 9(1), 1–23. <https://doi.org/10.1080/23311975.2022.2150118>
- Sari, M. P., Sihombing, R. M., & Utaminingsih, N. S. (2024). Analysis of Hexagon on Fraudulent Financial Reporting with The Audit Committee and Independent Commissioners as Moderating Variables. *General Management Journal*, 25(198), 10–19. <https://doi.org/10.47750/QAS/25.198.02>
- Septriyani, Y., & Handayani, D. (2018). Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon. *Jurnal Akuntansi, Keuangan Dan Bisnis*, 11(1), 11–23.
- Setyono, D., Hariyanto, E., Wahyuni, S., & Pratama, B. C. (2023). Penggunaan Fraud Hexagon dalam Mendeteksi Kecurangan Laporan Keuangan. *OWNER: Riset & Jurnal Akuntansi*, 7(2), 1036–1048.
- Sihombing, T., Panggulu, G. E., & Harapan, U. P. (2022). Fraud Hexagon Theory

And Fraudulent Financial Statement In It Industry In Asean. *Jurnal Reviu Akuntansi Dan Keuangan*, 12(3), 524–544.  
<https://doi.org/10.22219/jrak.v12i3.23334>

- Skousen, C. J., Smith, K. R., & Wright, C. J. (2015). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Corporate Governance and Firm Performance*, 13, 53–81.
- Suryani, I. C. (2019). Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud: Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (Bei) Tahun 2016–2018. *Prosiding Seminar Nasional Cendekiawan*, 1–6.
- Tarjo, Anggono, A., & Sakti, E. (2021). Detecting Indications of Financial Statement Fraud: a Hexagon Fraud Theory Approach. *AKRUAL: Jurnal Akuntansi*, 13(1), 119–131.
- Uciati, N., & Mukhibad, H. (2019). Fraudulent Financial Statements at Sharia Banks. *Accounting Analysis Journal*, 8(3), 198–206.
- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372–381.
- Wijayani, D. R., & Ratmono, D. (2020). Fraud hexagon in islamic companies. *Economic Faculty & Muria Business*, 32(3), 6137–6149.
- Wolfe, D. T., & Hermanson, D. R. (2004). The Fraud Diamond: Considering the Four Elements of Fraud. *The CPA Journal*, 74(12), 38–42.
- Wulandari, T., & Raharja, R. (2013). Analisis Pengaruh Political Connection Dan Struktur Kepemilikan Terhadap Kinerja Perusahaan. *Diponegoro: Journal of Accounting*, 2(1), 1–12.
- Yopie, S., Supriyanto, S., & Chandra, B. (2019). Peran Struktur Dewan Dalam Mempengaruhi Kinerja Pada Nilai Perusahaan Keluarga. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 2(1), 45–53.