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Corporate Governance and Fraudulent Financial Reporting: The Moderating Role of Asset Change

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Abstract

This study examines the effects of the Corporate Governance Perception Index (CGPI), board independence (BIND), board experience (BEXP), and managerial ownership (MO) on fraudulent financial reporting (FRAUD), proxied by the Beneish M-Score, with asset change (ACHANGE) as a moderating variable and firm size (SIZE) and financial leverage (LEV) as control variables. The sample comprises 348 firm-year observations of companies rated in the CGPI by the Indonesian Institute for Corporate Governance (IICG) from 2011 to 2023. We test the hypotheses using moderated regression analysis (MRA). The results show that board independence has a significant negative effect on fraudulent financial reporting, whereas the CGPI and managerial ownership have no significant effect. Contrary to expectations, board experience exhibits a significant positive association, suggesting that directorial expertise without integrity may heighten rather than mitigate fraud risk. Asset change strengthens the negative effects of the CGPI and board independence, amplifies the positive effect of board experience, and has a significant positive direct effect on fraud. Firm size is significantly and negatively associated with fraudulent financial reporting, whereas financial leverage is not significant. These findings underscore the role of sound corporate governance, particularly independent commissioners, in reducing the risk of financial statement fraud.

Keywords fraudulent financial reporting, Beneish M-Score, asset change, corporate governance, board independence, board experience, managerial ownership.

1. Introduction

Fraudulent financial reporting (FFR) is a serious concern in the corporate world because it directly undermines the accuracy of the information relied upon by investors, creditors, regulators, and the wider public. FFR is a form of intentional deception in which management presents financial data that deviate from the firm's actual condition in order to project a more favorable corporate image (Vousinas, 2019). Such conduct not only breaches business ethics and the law but also erodes public trust in the economic system and in financial institutions.

In recent years, the disclosure of numerous corporate corruption cases has prompted Indonesian netizens to satirically coin the term "Indonesian Corruption League" (*Liga Korupsi Indonesia*), a ranking of corporate corruption cases by total state losses. One of the most prominent is the PT Jiwasraya scandal. Between 2008 and 2018, this state-owned insurer was proven to have engineered its financial statements by manipulating the value of its investments in illiquid, speculatively inflated stocks. As a result, Jiwasraya defaulted on policy obligations exceeding IDR 16.8 trillion. Thirteen defendants, including former directors and commissioners, were convicted (CNBC Indonesia, 2025).

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Another case occurred at PT Timah, where the Attorney General's Office uncovered a corruption network involving illegal mining and falsified production reports. The scheme implicated several senior executives of state-owned and private enterprises, with estimated state losses of IDR 271 trillion (Tempo, 2025a). Alleged corruption has also surfaced at PT Pertamina, implicating several senior officials in the procurement of refineries and major national energy projects. Investigators uncovered project mark-ups, abuse of authority, and the diversion of funds through fictitious transactions, causing state losses amounting to trillions of rupiah (Tempo, 2025d).

An ongoing case at PT Antam has attracted considerable public attention, as it concerns alleged manipulation in the sale of 109 tonnes of gold bullion that were not recorded in official reports. The alleged irregularities were estimated at IDR 5.9 quadrillion, and prosecutors suspect the involvement of insiders and Antam's gold distribution network in mark-up practices and certificate forgery (Tempo, 2025b). Meanwhile, PT Taspen, which manages pension funds for Indonesian civil servants, allegedly placed investment funds in breach of established procedures. The Corruption Eradication Commission (KPK) has seized several assets to secure state losses estimated at hundreds of billions of rupiah (Tempo, 2025c). A final and equally striking case involves Garuda Indonesia, whose former President Director, Emirsyah Satar, was sentenced to prison for accepting bribes from aircraft suppliers and arranging aircraft purchases at unreasonable prices. Garuda's financial statements were subsequently engineered to conceal losses, and the airline later reported net losses far larger than previously disclosed (Tempo, 2025e).

Financial statement fraud is not merely a technical accounting issue; it is closely tied to weak corporate governance. The cases above point to deficient internal and external oversight and demonstrate that existing governance systems have not fully succeeded in curbing fraud. The Kroll/ACFE Indonesia Fraud Risk Survey (Kroll, 2022) reports that 64% of fraud in Indonesia is perpetrated by internal parties, 35% takes the form of bribery and corruption, and 33% is committed by external parties. These conditions underscore the need for further research on the governance structures that may influence the occurrence of fraud.

One way to alleviate the pressures faced by management is through an effective good corporate governance (GCG) structure. GCG aims to establish oversight and control systems that operate transparently and accountably and that are oriented toward stakeholders' long-term interests. Agency theory (Jensen & Meckling, 1976) posits a potential conflict between owners (principals) and managers (agents). As agents, managers possess more information about the firm than capital providers do. This imbalance, known as information asymmetry, can be exploited by managers to commit fraud. Robust monitoring mechanisms embedded in the governance structure are therefore required to keep management aligned with shareholders' objectives.

Recent studies confirm the importance of corporate governance in preventing fraud. Rostami and Rezaei (2022) show that experienced boards and concentrated ownership structures significantly reduce the risk of fraudulent financial reporting. Haron et al. (2021) likewise find

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that board independence and board experience have significant negative effects on fraud, and Razali and Arshad (2014) report that the extent of corporate governance structure disclosure is negatively associated with the likelihood of fraudulent reporting.

Nevertheless, the evidence remains inconsistent. A. Girau et al. (2021) report that, in Malaysia, only board size and executive director remuneration effectively curb corporate fraud, whereas other governance attributes—board independence, board meeting frequency, CEO duality, CEO age, and share ownership by directors and the CEO—have no significant effect on the incidence of corporate fraud. These mixed findings reinforce the need to re-examine the relationship between corporate governance and FFR in a broader context and with additional moderating variables.

The fraud triangle holds that fraudulent financial reporting generally arises from a combination of pressure, opportunity, and rationalization. The theory has since evolved into the fraud hexagon (Vousinas, 2019), which adds capability, collusion, and arrogance. Pressure is the most widely examined element in the context of financial reporting manipulation. Beyond governance structures, internal pressures arising from operating conditions also play a major role in inducing fraud. One such pressure is the dynamics of changes in total assets, or asset change (ACHANGE).

Skousen et al. (2009) argue that managers tend to manipulate financial information to create an illusion of stable growth, particularly when actual asset growth falls short of market expectations. In other words, the greater the pressure to present a favorable asset position, the greater the potential for fraud. Snoussi et al. (2025) find that asset growth is positively correlated with the risk of fraudulent financial reporting: rapid asset expansion is associated with greater earnings manipulation, as management may overstate performance to meet growth expectations. These studies highlight the importance of considering asset change as an indicator of financial reporting fraud risk.

Taken together, these cases and prior studies suggest that financial statement fraud stems not only from managerial malfeasance but also from internal pressures such as asset growth demands and investor expectations. A strong governance structure is among the most important tools for mitigating fraud, yet its effectiveness depends heavily on the pressures a firm faces.

This study integrates several strands of prior research by adopting corporate governance components as independent variables to examine their effect on fraudulent financial reporting, with asset change as a moderating variable. Accordingly, this study addresses the following research questions: (1) Does corporate governance affect fraudulent financial reporting? (2) Does asset change moderate the effect of corporate governance on fraudulent financial reporting?

2. Literature Review

Agency theory. Agency theory is one of the foundational theories in corporate governance and financial management. It rests on the premise that organizations separate the roles of capital owners (principals) and those who manage the firm's operations (agents). Jensen and Meckling

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(1976) describe the agency relationship as a contract under which the principal delegates to the agent the authority to manage and control organizational resources on the owner's behalf. The central challenge in this relationship is the potential for conflicts of interest. This study draws on Type I agency theory (the principal–agent problem), because conflicts between management and owners can give rise to dishonest financial reporting, especially under performance pressure or high investor expectations. This agency problem arises from information asymmetry: agents have access to more complete information than principals. Managers therefore have opportunities to act in ways that are misaligned with owners' interests (Panda & Leepsa, 2017), such as concealing material information, misappropriating corporate assets for personal gain, or even manipulating financial statements to attain personal objectives such as higher bonuses or favorable performance evaluations. Such situations are a primary concern of good corporate governance, which seeks to reduce the propensity for fraud.

Corporate governance and fraudulent financial reporting. Good corporate governance (GCG) refers to the system and principles that govern and control the relationships among the parties involved in managing a firm, including shareholders, management, the board of commissioners, employees, and other stakeholders. GCG implementation is essential for mitigating potential conflicts in the principal–agent relationship described by agency theory. When management holds more information than capital providers, information asymmetry may create opportunities for misconduct or fraud; GCG serves to close this gap through stronger oversight and clear accountability. Prior studies show that GCG implementation is significantly related to fraud prevention. Rostami and Rezaei (2022) find that core governance components such as board independence, audit committee effectiveness, and ownership concentration have significant negative effects on fraud; that is, the stronger a firm's oversight structure, the lower the likelihood of fraudulent financial reporting. Similar findings are reported by Razali and Arshad (2014) and Popa et al. (2024), who show that open and transparent disclosure of GCG structures is significantly and negatively associated with the probability of fraud. Hence, higher GCG scores should correspond to lower fraud potential as detected by indicators such as the M-Score.

Haron et al. (2021) find that a higher proportion of independent commissioners is associated with a lower propensity for fraud. Their study, conducted across public companies in Southeast Asia, emphasizes that board independence is significantly and negatively related to the likelihood of financial statement manipulation. Rostami and Rezaei (2022) similarly show that firms with strong oversight structures, including independent boards, exhibit lower fraudulent financial reporting scores. This suggests that independent boards can restrain managerial opportunism and contribute to improved financial reporting quality.

According to Mishra and Jhunjhunwala (2013), directors with finance and accounting backgrounds have an advantage in understanding the complexity of financial statements and are better able to identify potential irregularities. Directors lacking such experience may struggle to interpret the figures presented by management and may overlook hidden indications of fraud. Technical expertise in relevant fields is therefore an important asset in safeguarding the transparency and integrity of financial statements. Dass et al. (2014) argue that strong industry experience on the board narrows the information gap between management and the

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board, making the board more responsive in understanding managerial decisions and the risks that management may conceal. Haron et al. (2021) show that board experience has a significant negative effect on fraud: boards with industry and accounting experience are significantly more effective in reducing the likelihood of financial statement manipulation. This supports the view that strong professional backgrounds enhance the quality of internal oversight.

Ma and Qiu (2024) show that managers holding equity stakes tend to use strategies such as employee stock ownership plans (ESOPs) to sustain positive perceptions of firm performance, particularly when the firm is under pressure. Their study implies that managerial share ownership can serve as a mechanism for maintaining control and stabilizing market perceptions, but it can also become a tool for concealing fraud if it is not combined with strong oversight. Rostami and Rezaei (2022), in turn, argue that ownership structure, including the proportion of shares held by management, affects financial reporting quality. They find that managerial ownership significantly reduces fraud, as managers become more cautious about the impact of financial statements on the value of their own shareholdings.

The literature nonetheless reports divergent findings on GCG and fraud. A. Girau et al. (2021) show that only board size and executive director remuneration are effective in combating corporate fraud in Malaysia, whereas board independence, board meeting frequency, CEO duality, CEO age, and share ownership by directors and the CEO have no significant effect. Arum et al. (2023) report that aggregate corporate governance scores have no significant effect on fraudulent financial reporting. According to Ozcelik (2020), corporate governance indices tend to be symbolic and do not necessarily reflect the effectiveness of internal oversight in preventing fraud.

Based on the foregoing discussion, the hypotheses without the moderating variable are formulated as follows:

H1: The Corporate Governance Perception Index has a significant negative effect on fraudulent financial reporting.

H2: Board independence has a significant negative effect on fraudulent financial reporting.

H3: Board experience has a significant negative effect on fraudulent financial reporting.

H4: Managerial ownership has a significant negative effect on fraudulent financial reporting.

The moderating role of asset change

In the finance and accounting literature, understanding of the causes of fraud has evolved from the original fraud triangle (Cressey, 1953) to the fraud hexagon (Vousinas, 2019). The fraud hexagon identifies six principal drivers of fraud: pressure, opportunity, rationalization, capability, arrogance, and collusion. Among them, pressure is regarded as the initial trigger. Pressure may arise from many sources, such as earnings demands, market expectations, debt burdens, or deteriorating financial conditions, and it motivates managers to manipulate financial statements so that the firm continues to appear healthy and attractive to investors and creditors. One indicator of such pressure is asset change, that is, the change in a firm's total assets from

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one period to the next. Statement on Auditing Standards (SAS) No. 99 (AICPA, 2002), also cited by Skousen et al. (2009), emphasizes that pressures arising from threats to profitability or to the firm's economic condition are a key indicator of fraud risk. When a firm's condition deteriorates—particularly when asset growth slows or declines—management comes under considerable pressure to continue presenting strong performance to the public. This pressure encourages management to use the financial statements as a means of creating an illusion of stability and growth.

According to Skousen et al. (2009), the larger the ratio of change in total assets, the higher the likelihood that a firm engages in financial statement fraud. Such pressure may stem from the need to meet growth targets, maintain competitive position, or preserve investor confidence. In the context of fraud theory, therefore, asset change is not merely a measure of financial performance but also an indicator of pressure that can trigger fraud. High asset growth may be used by management to obscure the firm's true financial condition. Under such conditions, managers tend to manipulate financial statements so that they appear stable or improving, even when performance is in fact declining. Djatnicka et al. (2023) argue that management manipulates information about the firm's wealth to enhance positive prospects, since greater total assets signal greater wealth. Djatnicka et al. (2023) and Narsa et al. (2023) find that asset growth affects the risk of fraudulent financial reporting. However, other studies do not consistently find a positive effect of asset change on fraud; Ozcelik (2020), for instance, reports that asset change has no effect on fraudulent financial reporting.

Based on the foregoing discussion, the hypotheses involving the moderating variable are formulated as follows:

H5: Asset change moderates the negative effect of the Corporate Governance Perception Index on fraudulent financial reporting.

H6: Asset change moderates the negative effect of board independence on fraudulent financial reporting.

H7: Asset change moderates the negative effect of board experience on fraudulent financial reporting.

H8: Asset change moderates the negative effect of managerial ownership on fraudulent financial reporting.

This study examines whether corporate governance affects fraudulent financial reporting and whether asset change moderates this relationship. The conceptual framework is presented in Figure 1.

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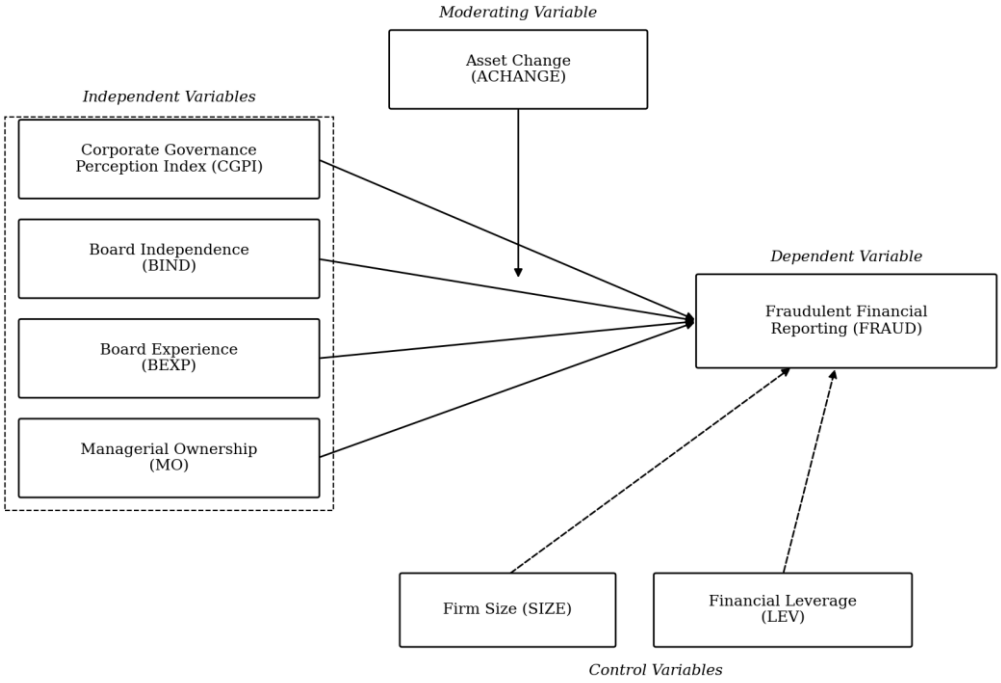

Figure 1. Conceptual framework

3. Research Method

Population, sample, and research period. This study adopts a quantitative approach using secondary data selected through purposive sampling, a technique in which the sample is determined on the basis of specific criteria. The data are drawn from the financial statements of companies listed on the Indonesia Stock Exchange (IDX) that participated in the Corporate Governance Perception Index (CGPI) rating administered by the Indonesian Institute for Corporate Governance (IICG). The variables are sourced from the IICG, official company websites, annual reports, financial statements, and other relevant sources. The study covers the 2011–2023 period, yielding 348 firm-year observations of companies assessed in the IICG's CGPI rating. After the classical assumption tests are satisfied, multiple linear regression analysis is employed to estimate the effects of the independent variables on the dependent variable, which allows the contribution of each explanatory variable to variation in the dependent variable to be assessed. Moderated regression analysis (MRA) is subsequently performed using SPSS to test the effects of the independent variables on the dependent variable in the presence of the moderating variable.

Dependent variable. Fraudulent financial reporting (FRAUD) is the intentional misrepresentation of a firm's financial condition, through either misstatement or omission of material information in the financial statements, with the aim of deceiving financial statement users. One method for detecting fraudulent financial reporting in the form of earnings manipulation is the Beneish M-Score, which is calculated from a set of financial ratios: the

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days' sales in receivables index (DSRI), gross margin index (GMI), asset quality index (AQI), sales growth index (SGI), depreciation index (DEPI), sales, general, and administrative expenses index (SGAI), leverage index (LVGI), and total accruals to total assets (TATA). A firm with an M-Score greater than −2.22 is classified as a likely manipulator, whereas a firm with an M-Score below −2.22 is classified as a non-manipulator.

Independent variables. The Corporate Governance Perception Index (CGPI) is a research and rating program on good corporate governance practices among public companies in Indonesia, developed by the Indonesian Institute for Corporate Governance (IICG). Each company's CGPI score is interpreted according to the rating criteria presented in Table 1. Board independence (BIND) refers to members of the board of commissioners who are free from financial, managerial, shareholding, and family relationships with other commissioners, directors, or controlling shareholders. It is measured as the ratio of independent commissioners to the total number of commissioners, as shown in Table 1. Board experience (BEXP) refers to a board composed of directors with diverse functional experience—including industry experience, accounting/finance experience, and information and communication technology (ICT) experience—as well as diverse thinking styles. Following Haron et al. (2021), BEXP is calculated using the equation presented in Table 1. Managerial ownership (MO) refers to shares held by the firm's management, including members of the boards of commissioners and directors, who actively participate in corporate decision-making. It is measured as the percentage of common shares held by management relative to total shares outstanding.

Moderating variable. Asset change (ACHANGE) is the change in a firm's total assets from one period to the next, calculated using the equation presented in Table 1.

Control variables. Firm size (SIZE) reflects the scale of a company and is calculated using the equation presented in Table 1. Financial leverage (LEV) captures the firm's capacity to meet its obligations and is proxied by the total debt to total assets ratio (DAR).

Table 1. Variable measurement

Variable	Measurement
Fraudulent financial reporting (FRAUD)	M-Score = −4.84 + 0.920 DSRI + 0.528 GMI + 0.404 AQI + 0.892 SGI + 0.115 DEPI − 0.172 SGAI − 0.327 LVGI + 4.679 TATA
Corporate Governance Perception Index (CGPI)	CGPI score: 55.01–70.00: Fairly Trusted 70.01–85.00: Trusted 85.01–100: Most Trusted
Board independence (BIND)	(Number of independent commissioners / Total board of commissioners) × 100%
Board experience (BEXP)	[(% of directors with industry experience) + (% of directors with business education)] / 2

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Variable	Measurement
Managerial ownership (MO)	(Number of managerial shares / Number of shares outstanding) × 100%
Asset change (ACHANGE)	(Total assets$_t$ − Total assets$_{t-1}$) / Total assets$_t$
Firm size (SIZE)	Ln (Total assets$_{i,t}$)
Financial leverage (LEV)	(Total debt$_{i,t}$ / Total assets$_{i,t}$) × 100%

The following models are estimated in this study:

Model 1 (without the moderating variable):

$$FRAUD_{i,t} = \alpha + \beta_1 CGPI_{i,t} + \beta_2 BIND_{i,t} + \beta_3 BEXP_{i,t} + \beta_4 MO_{i,t} + \beta_5 SIZE_{i,t} + \beta_6 LEV_{i,t} + \varepsilon_{i,t} \quad (1)$$

Model 2 (with the moderating variable):

$$FRAUD_{i,t} = \alpha + \beta_1 CGPI_{i,t} + \beta_2 BIND_{i,t} + \beta_3 BEXP_{i,t} + \beta_4 MO_{i,t} + \beta_5 ACHANGE_{i,t} + \beta_6 (CGPI \times ACHANGE)_{i,t} + \beta_7 (BIND \times ACHANGE)_{i,t} + \beta_8 (BEXP \times ACHANGE)_{i,t} + \beta_9 (MO \times ACHANGE)_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} LEV_{i,t} + \varepsilon_{i,t} \quad (2)$$

4. Finding and Discussion

Descriptive statistics and diagnostic tests. Table 2 reports the number of observations and the minimum, maximum, mean, and standard deviation of each variable.

Table 2. Descriptive statistics

Variable	N	Minimum	Maximum	Mean	Std. deviation
FRAUD	348	−5.67	1.98	−2.17	0.7198
CGPI	348	65.94	95.31	83.81	5.5093
BIND	348	0.00	100.00	44.46	17.0805
BEXP	348	30.00	100.00	82.02	13.7306
MO	348	0.00	13.07	0.12	1.0062
ACHANGE	348	−112.10	84.03	9.40	16.7185
SIZE	348	12.33	21.50	17.51	1.8103
LEV	348	1.05	192.28	63.77	27.3118

Source: SPSS 25 output, processed data (2025).

The normality test examines whether the residuals of the regression models are normally distributed, using the Kolmogorov–Smirnov test. The results in Table 3 show Sig. < 0.05 for both models, indicating that the residuals are not normally distributed. Given the large sample (N = 348), however, the t-tests remain approximately valid by the central limit theorem.

The multicollinearity test examines whether strong linear correlations exist among the explanatory variables. A model is considered free of multicollinearity if tolerance ≥ 0.10 and

VIF ≤ 10. To address multicollinearity, the CGPI × ACHANGE and BEXP × ACHANGE terms were transformed using the severe negative skewness transformation, 1/(K − X), where K is a constant (the maximum value + 1) and X is the variable. As shown in Table 4, all variables in Model 1 and most variables in Model 2 satisfy these thresholds. However, the transformed CGPI × ACHANGE and BEXP × ACHANGE terms still have tolerance values below 0.10 (VIF > 30), indicating multicollinearity between these interaction terms and their component variables; their coefficients should therefore be interpreted with caution.

The autocorrelation test examines whether the residuals at time t are correlated with those at t − 1, using the Durbin–Watson (DW) test. A model is free from autocorrelation if the DW statistic lies between dU and 4 − dU. For Model 1, dU = 1.85957 and 4 − dU = 2.14043; for Model 2, dU = 1.88969 and 4 − dU = 2.11031. As shown in Table 3, the DW statistics of both models fall within these bounds, indicating that both models are free from autocorrelation.

Heteroskedasticity is assessed using the Glejser test. The absence of heteroskedasticity is indicated by Sig. > 0.05, whereas Sig. < 0.05 indicates its presence. Table 4 shows that BIND and SIZE have Glejser significance values below 0.05 in both models, indicating heteroskedasticity. As a robustness check, the models are therefore also estimated with heteroskedasticity-consistent (HC3) standard errors, as reported in the hypothesis testing section.

Table 3. Kolmogorov–Smirnov and Durbin–Watson tests

Model	K–S Asymp. Sig.	Durbin–Watson statistic
Model 1 (without moderating variable)	0.000	2.134
Model 2 (with moderating variable)	0.001	2.102

Source: SPSS 25 output, processed data (2025).

Table 4. Multicollinearity and Glejser heteroskedasticity tests

Model	Variable	Tolerance	VIF	Glejser Sig.
Model 1	CGPI	0.490	2.041	0.198
	BIND	0.753	1.328	0.005
	BEXP	0.779	1.283	0.920
	MO	0.976	1.024	0.052
	SIZE	0.462	2.165	0.010
	LEV	0.796	1.257	0.992
Model 2	CGPI	0.481	2.081	0.115
	BIND	0.678	1.475	0.208
	BEXP	0.757	1.322	0.199

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Model	Variable	Tolerance	VIF	Glejser Sig.
	MO	0.408	2.451	0.141
	ACHANGE	0.112	8.933	0.684
	CGPI × ACHANGE (a)	0.032	31.260	0.437
	BIND × ACHANGE	0.112	8.892	0.592
	BEXP × ACHANGE (a)	0.031	32.556	0.538
	MO × ACHANGE	0.406	2.462	0.877
	SIZE	0.458	2.185	0.023
	LEV	0.773	1.294	0.200

Notes: (a) Transformed variable. Source: SPSS 25 output, processed data (2025).

Hypothesis testing. Table 5 presents the multiple regression results for both models, examining the effect of corporate governance on fraudulent financial reporting and the moderating role of asset change. The hypotheses are tested using t-tests at significance levels (α) of 1%, 5%, and 10%.

Table 5. Multiple regression results (dependent variable: FRAUD, M-Score)

Variable	Model 1	Model 2
(Constant)	−1.874*** (−3.114)	−1.898*** (−3.406)
CGPI	0.006 (0.593)	0.005 (0.570)
BIND	−0.004* (−1.681)	−0.002 (−0.990)
BEXP	0.008** (2.430)	0.005 (1.616)
MO	0.051 (1.349)	0.085 (1.582)
ACHANGE	–	0.024*** (3.884)
CGPI × ACHANGE (a)	–	−14.335*** (−3.934)
BIND × ACHANGE	–	−0.027** (−2.371)
BEXP × ACHANGE (a)	–	15.410*** (4.262)

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Variable	Model 1	Model 2
MO × ACHANGE	–	−0.027 (−1.166)
SIZE	−0.065** (−2.108)	−0.060** (−2.132)
LEV	−0.001 (−0.929)	−0.002 (−1.269)
R^2	0.058	0.229
Adjusted R^2	0.042	0.204
N	348	348

Notes: *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. t-statistics are reported in parentheses. (a) Transformed variable. Source: SPSS 25 output, processed data (2025).

The Model 1 results in Table 5 show that CGPI has a t-value of 0.593 with a significance value of 0.553, which exceeds the 5% significance level; H1 is therefore rejected, indicating that the Corporate Governance Perception Index has no significant negative effect on FRAUD (M-Score). BIND has a t-value of −1.681 with a significance value of 0.094, below the 10% significance level; H2 is therefore supported, indicating that board independence has a significant negative effect on FRAUD (M-Score). BEXP has a t-value of 2.430 with a significance value of 0.016, below the 5% level; H3 is therefore rejected, as board experience has a significant positive effect on FRAUD (M-Score). MO has a t-value of 1.349 with a significance value of 0.178, above the 5% level; H4 is therefore rejected, indicating that managerial ownership has no significant negative effect on FRAUD (M-Score). Among the control variables, SIZE has a t-value of −2.108 with a significance value of 0.036, below the 5% level, indicating that firm size has a significant negative effect on FRAUD (M-Score). LEV has a t-value of −0.929 with a significance value of 0.353, above the 5% level, indicating that financial leverage has no significant effect on FRAUD (M-Score).

The Model 2 results in Table 5 show that ACHANGE has a t-value of 3.884 with a significance value of 0.000, below the 1% level, indicating that asset change has a significant positive effect on FRAUD (M-Score). The interaction terms CGPI × ACHANGE (t = −3.934, Sig. = 0.000) and BIND × ACHANGE (t = −2.371, Sig. = 0.018) are negative and significant, indicating that asset change strengthens the negative effects of CGPI and board independence on FRAUD; H5 and H6 are therefore supported. BEXP × ACHANGE is significant but positive (t = 4.262, Sig. = 0.000), so asset change moderates the effect of board experience in the direction opposite to that hypothesized; H7 is rejected. MO × ACHANGE is not significant (t = −1.166, Sig. = 0.244); H8 is rejected. SIZE has a t-value of −2.132 with a significance value of 0.034, below the 5% level, indicating that firm size has a significant negative effect on FRAUD (M-Score). LEV has a t-value of −1.269 with a significance value of 0.205, above the 5% level, indicating that financial leverage has no significant effect on FRAUD (M-Score). When HC3 robust standard errors are used, BIND × ACHANGE remains significant (Sig. = 0.020), whereas CGPI

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× ACHANGE (Sig. = 0.556) and BEXP × ACHANGE (Sig. = 0.118) lose significance. In Model 1, board independence also becomes insignificant (Sig. = 0.167), while managerial ownership becomes significant (Sig. = 0.028). The findings for H2, H5, and H7 should therefore be interpreted with caution.

The effect of corporate governance on fraudulent financial reporting. The Model 1 results reveal mixed relationships between corporate governance and fraudulent financial reporting. The independent variables comprise the Corporate Governance Perception Index (CGPI), board independence (BIND), board experience (BEXP), and managerial ownership (MO). CGPI has no significant effect on fraudulent financial reporting; thus, H1 is rejected. This suggests that perceived overall governance implementation has not yet had a tangible effect in curbing financial statement fraud. The finding is consistent with A. Girau et al. (2021) and Arum et al. (2023), who report that aggregate corporate governance scores have no significant effect on fraudulent financial reporting. Ozcelik (2020) argues that corporate governance indices tend to be symbolic and do not necessarily reflect the effectiveness of internal oversight in preventing fraud. The result implies that even where governance structures are in place, weak implementation may leave agency problems unresolved, allowing fraud to persist.

Board independence (BIND) has a significant negative effect on fraudulent financial reporting, supporting H2. That is, a higher proportion of independent commissioners reduces the likelihood of fraud. This is consistent with Rostami and Rezaei (2022) and Ebaid (2023), who document a significant negative association between board independence and fraud, as independent commissioners play an important role in reducing information asymmetry between management and shareholders, thereby substantially curbing the potential for fraud. Mousavi et al. (2022) similarly find that board independence is strongly and negatively associated with fraud and money laundering. Independent oversight thus reduces management's opportunistic behavior to the detriment of owners.

Board experience (BEXP) exhibits a significant positive effect on fraudulent financial reporting; H3 is therefore rejected. This finding runs counter to the hypothesis that board experience enhances monitoring effectiveness and reduces fraud (Haron et al., 2021; Rostami & Rezaei, 2022). The positive association may partly reflect the composition of the sample, which is dominated by banking firms whose BEXP values are higher than those of firms in other industries. High levels of experience and expertise may cut both ways: on the one hand, they strengthen monitoring; on the other, they confer the capability to design more sophisticated earnings management practices. Financial statement manipulation is often aimed at reporting asset or earnings growth that does not reflect reality in order to meet market pressures (Brennan, 2021; Yang et al., 2025). Moreover, several studies show that experienced directors align earnings manipulation with tax avoidance strategies (Delgado et al., 2023; Hlel, 2024). These patterns suggest that greater board experience and expertise do not necessarily translate into greater financial reporting integrity, as such expertise may instead be used to manipulate financial statements in more sophisticated and less detectable ways.

Managerial ownership (MO) has no significant effect on fraudulent financial reporting; H4 is

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therefore rejected. This indicates that the level of share ownership by management neither effectively prevents nor increases the likelihood of financial statement fraud. The result is consistent with A. Girau et al. (2021), who find that managerial ownership has no significant effect on fraud because the size of management's shareholding is insufficient to influence its motivation to commit or prevent fraud. From an agency theory perspective, although managerial ownership should align the interests of management (agents) and owners (principals), its effect becomes insignificant when the ownership stake is too small or when other monitoring mechanisms are weak.

The effect of corporate governance on fraudulent financial reporting moderated by asset change. The Model 2 results show that asset change significantly moderates the effects of CGPI, board independence, and board experience on fraudulent financial reporting, but not that of managerial ownership; H5 and H6 are supported, whereas H7 (opposite direction) and H8 are rejected. This finding differs from several recent studies indicating that changes in total assets do not significantly alter the effect of corporate governance on fraudulent reporting or earnings management. Fitri et al. (2018) report that firm size, which reflects asset scale, does not moderate the effects of independent commissioners or institutional ownership on earnings management, meaning that the effects of these governance mechanisms remain consistent across large and small firms; asset growth or scale therefore does not alter these relationships. Ozcelik (2020), studying manufacturing firms listed on Borsa Istanbul, finds that the asset change ratio (ACHANGE) has no significant effect on the likelihood of financial statement fraud. Although high asset growth pressure was expected to induce management to commit fraud, the results reveal no difference in fraud levels between high- and low-growth firms once other mechanisms (e.g., governance indices) are taken into account. In the present sample, by contrast, asset growth does condition the relationship between governance and fraud.

Effective corporate governance is rooted in efforts to align the interests of managers and owners. Shi et al. (2017) show that strengthening governance mechanisms can reduce managers' motivation to issue misleading financial statements. If internal monitoring mechanisms (e.g., independent commissioners, strong audit committees, and high managerial ownership) are already able to restrain opportunistic behavior, additional pressures such as demands for high asset growth do little to change managerial behavior; managers tend to refrain from fraud because incentives and monitoring are already aligned with owners' interests. Razali and Arshad (2014) note that failures in governance structures are a leading cause of widespread corporate fraud. In other words, where oversight is weak, managers have opportunities to commit fraud irrespective of the firm's asset growth; conversely, where governance is strong, closely monitored management will be reluctant to commit fraud even under high growth pressure. Consistent with this reasoning, the negative CGPI × ACHANGE and BIND × ACHANGE interactions suggest that governance mechanisms, particularly independent commissioners, become more effective in restraining fraud when growth pressure is high, whereas the positive BEXP × ACHANGE interaction suggests that experienced boards may exploit growth pressure to engage in more sophisticated manipulation.

In addition to its moderating role, asset change as a direct factor exhibits a significant positive

association with fraudulent financial reporting and earnings manipulation. Skousen et al. (2009) observe that rapid asset expansion is associated with greater earnings manipulation, as management may overstate performance to meet growth expectations. Djatnicka et al. (2023) hypothesize and find that asset growth is positively related to the risk of fraudulent financial reporting. As a direct variable, asset change exhibits a significant positive effect, indicating that it plays an important role as a source of pressure that increases the propensity for fraud and earnings manipulation.

The effect of control variables on fraudulent financial reporting. Firm size has a significant negative effect on fraudulent financial reporting: the larger the firm, the lower the likelihood of financial statement manipulation or fraud. Large firms typically have stronger internal control mechanisms that mitigate conflicts of interest between management and owners. They also tend to face stricter external scrutiny from regulators, investors, and auditors, which enhances financial reporting transparency. Saeed et al. (2025) show that large firms are significantly less likely to commit fraud than small firms, as increasing firm size strengthens effective internal and external monitoring structures. Consistent with this, Utomo and Mawardi (2024) find a significant negative relationship between firm size and fraud among Indonesian manufacturing firms, arguing that large firms face intense public scrutiny, which leads management to avoid manipulative actions in order to protect corporate reputation. Ebaid (2023) further argues that large firms face higher "political costs," which make managers reluctant to commit fraud given the greater negative consequences. Maulidiyah and Harto (2025) show that social control significantly reduces the likelihood of financial statement fraud. Social control creates external pressure that encourages firms to behave more ethically. Larger firms are therefore able to reduce fraud through tighter monitoring mechanisms and social control over their corporate image.

Financial leverage (LEV) has no significant effect on fraudulent financial reporting as measured by the M-Score. This means that a firm's level of indebtedness has no direct bearing on management's propensity to manipulate financial statements. This finding is consistent with Santoso (2023), who finds that leverage has no statistically significant effect on earnings management, suggesting that debt pressure is not necessarily the primary motive for accounting manipulation, which depends more on other factors such as corporate governance or liquidity. Anagnostopoulou and Tsekrekos (2017) likewise argue that financial leverage has no significant effect on financial statement manipulation. Although high leverage may theoretically increase financial pressure, other internal and external control mechanisms are likely to be more influential in preventing or encouraging financial statement manipulation. Leverage, as a control variable, thus does not directly explain the occurrence of fraud in the context of this study.

5. Conclusion

The Model 1 results indicate that the effectiveness of corporate governance in curbing fraud cannot be generalized. Board independence emerges as the most effective mechanism for curbing fraudulent financial reporting, whereas the Corporate Governance Perception Index

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and managerial ownership have no significant effect. Moreover, board experience is significantly and positively associated with fraud, contrary to the initial hypothesis, suggesting that high levels of directorial experience and expertise, when not accompanied by integrity, may increase fraud risk. Asset change strengthens the negative effects of the CGPI and board independence on fraud and amplifies the positive effect of board experience, whereas it does not moderate the effect of managerial ownership; however, only the board independence interaction remains significant under heteroskedasticity-robust standard errors. As a direct variable, asset change has a significant positive effect, indicating that it acts as an important source of pressure that increases the propensity for fraud and earnings manipulation. Firm size has a significant negative effect on fraudulent financial reporting: the larger the firm, the lower the likelihood of financial statement manipulation or fraud. Financial leverage (LEV) has no significant effect on fraudulent financial reporting, meaning that a firm's level of debt has no direct bearing on management's propensity to manipulate financial statements.

Future research should expand the sample or focus on specific industries to obtain more representative results. Incorporating additional variables that may influence fraud, such as the effectiveness of internal and external audit or managerial incentive structures, could also yield more comprehensive insights. Investors should consider corporate governance practices as an indicator when assessing the risk of financial statement fraud. Firms with sound governance and independent boards of commissioners tend to be more transparent and to carry a lower risk of fraud. Investors should also be wary of unusual changes in a firm's total assets. Firms should strengthen their corporate governance practices and ensure the presence of independent commissioners to reduce fraud risk. Large firms should tighten internal oversight and controls to further mitigate fraud risk.

References

A. Girau, E., Bujang, I., Paulus Jidwin, A., & Said, J. (2021). Corporate governance challenges and opportunities in mitigating corporate fraud in Malaysia. *Journal of Financial Crime, 29*(2), 620–638. https://doi.org/10.1108/JFC-02-2021-0045

American Institute of Certified Public Accountants. (2002). *Statement on Auditing Standards No. 99: Consideration of fraud in a financial statement audit*. https://us.aicpa.org/research/standards/auditattest/sas#SAS84

Anagnostopoulou, S. C., & Tsekrekos, A. E. (2017). The effect of financial leverage on real and accrual-based earnings management. *Accounting and Business Research, 47*(2), 191–236. https://doi.org/10.1080/00014788.2016.1204217

Arum, E. D., Wijaya, R., Wahyudi, I., & Brilliant, A. B. (2023). Corporate governance and financial statement fraud during the COVID-19: Study of companies under special monitoring in Indonesia. *Journal of Risk and Financial Management, 16*(7), 318. https://doi.org/10.3390/jrfm16070318

Brennan, N. M. (2021). Connecting earnings management to the real world: What happens in the black box of the boardroom? *The British Accounting Review, 53*(6), Article 101036.

https://doi.org/10.1016/j.bar.2021.101036

CNBC Indonesia. (2025). *Kronologi kasus mega korupsi Jiwasraya hingga akhirnya ditutup OJK* [Chronology of the Jiwasraya mega-corruption case until its closure by the OJK]. https://www.cnbcindonesia.com/market/20250221095520-17-612478/kronologi-kasus-mega-korupsi-jiwasraya-hingga-akhirnya-ditutup-ojk

Cressey, D. R. (1953). *Other people's money: A study of the social psychology of embezzlement*. Free Press.

Dass, N., Kini, O., Nanda, V., Onal, B., & Wang, J. (2014). Board expertise: Do directors from related industries help bridge the information gap? *The Review of Financial Studies, 27*(5), 1533–1592. https://doi.org/10.1093/rfs/hht071

Delgado, F. J., Fernández-Rodríguez, E., García-Fernández, R., Landajo, M., & Martínez-Arias, A. (2023). Tax avoidance and earnings management: A neural network approach for the largest European economies. *Financial Innovation, 9*(1), 19. https://doi.org/10.1186/s40854-022-00424-8

Djatnicka, E. W., Purba, J., & Wulandari, D. S. (2023). Fraud triangle perspective: Detecting financial statement fraud using the Beneish M-Score model in property and real estate companies listed on the Indonesia Stock Exchange. *East Asian Journal of Multidisciplinary Research, 2*(7), 3113–3130. https://doi.org/10.55927/eajmr.v2i7.4894

Ebaid, I. E.-S. (2023). Board characteristics and the likelihood of financial statements fraud: Empirical evidence from an emerging market. *Future Business Journal, 9*(1), 1–12. https://doi.org/10.1186/s43093-023-00218-z

Fitri, A., Muda, I., Badaruddin, & Anisafitri. (2018). The influence of good corporate governance, leverage, and profitability on earning management with firm size as moderating variable in the banking companies listed in Indonesia Stock Exchange in the period of 2012–2016. *International Journal of Research and Review*. https://doi.org/10.4444/ijrr.1002/747

Haron, N. H., Abdul Halim, N. A., & Alias, N. (2021). The relationship between board diversity, board independence and corporate fraud. *Advances in Business Research International Journal, 7*(1), 33–55. https://doi.org/10.24191/abrij.v7i1.10108

Hlel, K. (2024). Tax avoidance and earnings management: Evidence from French firms. *International Journal of Financial Engineering, 12*(2), 2450013. https://doi.org/10.1142/S2424786324500130

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Kroll. (2022). *Unreported fraud: A risky blindspot for Indonesia* (Kroll/ACFE Indonesia Fraud Risk Survey). https://www.kroll.com/en/insights/publications/unreported-fraud-a-risky-blindspot-for-indonesia

Ma, B., & Qiu, Y. (2024). Employee stock ownership plan as a measure of covering up corporate fraud: Evidence from China. *The Quarterly Review of Economics and Finance, 98*, Article 101934. https://doi.org/10.1016/j.qref.2024.101934

Maulidiyah, D. N., & Harto, P. (2025). The role of social control in deterring corporate financial statement fraud. *Discover Global Society, 3*(1), 20. https://doi.org/10.1007/s44282-025-00155-y

Mishra, R. K., & Jhunjhunwala, S. (2013). *Diversity and the effective corporate board*. Academic Press. https://doi.org/10.1016/C2012-0-06237-0

Mousavi, M., Zimon, G., Salehi, M., & Stępnicka, N. (2022). The effect of corporate governance structure on fraud and money laundering. *Risks, 10*(9), 176. https://doi.org/10.3390/risks10090176

Narsa, N. P. D. R. H., Afifa, L. M. E., & Wardhaningrum, O. A. (2023). Fraud triangle and earnings management based on the modified M-score: A study on manufacturing company in Indonesia. *Heliyon, 9*(2), e13649. https://doi.org/10.1016/j.heliyon.2023.e13649

Ozcelik, H. (2020). An analysis of fraudulent financial reporting using the fraud diamond theory perspective: An empirical study on the manufacturing sector companies listed on the Borsa Istanbul. In S. Grima, E. Boztepe, & P. J. Baldacchino (Eds.), *Contemporary issues in audit management and forensic accounting* (Vol. 102, pp. 131–153). Emerald Publishing Limited. https://doi.org/10.1108/S1569-375920200000102012

Panda, B., & Leepsa, N. M. (2017). Agency theory: Review of theory and evidence on problems and perspectives. *Indian Journal of Corporate Governance, 10*(1), 74–95. https://doi.org/10.1177/0974686217701467

Popa, A., Violeta, A., & Teusdea, A. (2024). Corporate governance and financial fraud occurrence: Case study on Romanian companies. *The Journal of Risk Finance, 25*. https://doi.org/10.1108/JRF-10-2023-0257

Razali, W. A. A. W. M., & Arshad, R. (2014). Disclosure of corporate governance structure and the likelihood of fraudulent financial reporting. *Procedia - Social and Behavioral Sciences, 145*, 243–253. https://doi.org/10.1016/j.sbspro.2014.06.032

Rostami, V., & Rezaei, L. (2022). Corporate governance and fraudulent financial reporting. *Journal of Financial Crime, 29*(3), 1009–1026. https://doi.org/10.1108/JFC-07-2021-0160

Saeed, A., Hamid, S., Manita, R., & Suntraruk, P. (2025). CSR decoupling and financial fraud: Unveiling the hidden nexus in US-listed firms. *Research in International Business and Finance, 75*, Article 102791. https://doi.org/10.1016/j.ribaf.2025.102791

Santoso, A. (2023). The effect of free cash flow and leverage on earnings management: Moderating role of good corporate governance. *Asian Management and Business Review, 3*(1), 14–23. https://doi.org/10.20885/AMBR.vol3.iss1.art2

Shi, W., Connelly, B. L., & Hoskisson, R. E. (2017). External corporate governance and

financial fraud: Cognitive evaluation theory insights on agency theory prescriptions. *Strategic Management Journal, 38*(6), 1268–1286. https://doi.org/10.1002/smj.2560

Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. In M. Hirschey, K. John, & A. K. Makhija (Eds.), *Corporate governance and firm performance* (Vol. 13, pp. 53–81). Emerald Group Publishing Limited. https://doi.org/10.1108/S1569-3732(2009)0000013005

Snoussi, S. N., Salem, F. N., & Taktak, N. B. (2025). Impact of pressures on the detection of financial statement fraud risk. *Corporate Ownership and Control, 22*(2), Article 34. https://doi.org/10.22495/cocv22i2art3

Tempo. (2025a). *Dampak kasus korupsi, PT Timah hadapi tambang ilegal dan krisis internal* [Impact of the corruption case: PT Timah faces illegal mining and an internal crisis]. https://www.tempo.co/ekonomi/dampak-kasus-korupsi-pt-timah-hadapi-tambang-ilegal-dan-krisis-internal-1434044

Tempo. (2025b). *Isu korupsi PT Antam Rp 5,9 kuadriliun dan emas palsu 109 ton, ini penjelasan Kejaksaan Agung* [The alleged IDR 5.9 quadrillion PT Antam corruption and 109 tonnes of counterfeit gold: The Attorney General's Office explains]. https://www.tempo.co/hukum/isu-korupsi-pt-antam-rp-5-9-kuadriliun-dan-emas-palsu-109-ton-ini-penjelasan-kejaksaan-agung-1218554

Tempo. (2025c). *KPK sita sejumlah aset tersangka korupsi PT Taspen* [KPK seizes assets of PT Taspen corruption suspects]. https://www.tempo.co/hukum/kpk-sita-sejumlah-aset-tersangka-korupsi-pt-taspen-1573525

Tempo. (2025d). *Perjalanan kasus dugaan korupsi Pertamina, Kejagung periksa 8 saksi* [The course of the alleged Pertamina corruption case: The Attorney General's Office examines eight witnesses]. https://www.tempo.co/hukum/perjalanan-kasus-dugaan-korupsi-pertamina-kejagung-periksa-8-saksi--1216714

Tempo. (2025e). *Perkara korupsi pengadaan pesawat Garuda Indonesia, hakim bacakan vonis Emirsyah Satar hari ini* [Garuda Indonesia aircraft procurement corruption case: Judges deliver Emirsyah Satar's verdict today]. https://www.tempo.co/hukum/perkara-korupsi-pengadaan-pesawat-garuda-indonesia-hakim-bacakan-vonis-emirsyah-satar-hari-ini-34263

Utomo, S. T., & Mawardi, W. (2024). The impact of ownership structure and company size on corporate financial fraud: An empirical study of manufacturing companies. *Corporate Law & Governance Review, 6*(4), 74. https://doi.org/10.22495/clgrv6i4p7

Vousinas, G. L. (2019). Advancing theory of fraud: The S.C.O.R.E. model. *Journal of Financial Crime, 26*(1), 372–381. https://doi.org/10.1108/JFC-12-2017-0128

Yang, Y.-J., Hsu, Y., Kweh, Q. L., & Asif, J. (2025). Accrual vs. real earnings management in internationally diversified firms: The role of institutional supervision. *Journal of Risk and*

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