

GUARDIANS OF INTEGRITY: EXPLORING THE ROLE OF CORPORATE GOVERNANCE IN PREVENTING FINANCIAL STATEMENT FRAUD

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Abstract

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Financial statement fraud (FSF) is a significant contributor to losses and has persisted for several years (Association of Certified Fraud Examiners [ACFE], 2022). Previous studies concluded that corporate governance (CG) can significantly reduce FSF (Mangala & Kumari, 2015; Rostami & Rezaei, 2022; Velte, 2023). However, while the literature study acknowledges that CG plays an important role in fraud prevention and emphasizes the importance of effective board composition, effective audit committees, independent commissioners, gender diversity, ownership structure, and engagement with Big 4 accounting firms to the occurrence of FSF, the empirical evidence in Indonesia suggests inconsistent results. This research investigates the role of CG in preventing FSF in Indonesia. The study tested a sample of 72 companies sanctioned by the Financial Services Authority (*Otoritas Jasa Keuangan*, OJK), Republic of Indonesia, in 2019–2021 and another 72 control sample companies from similar sectors and equivalent market capitalization. A total of 144 data units are analyzed using panel data regression and independent t-test. The study results show that the frequency of audit committee meetings and institutional ownership positively affect the indication of FSF. The study result also shows significant mean differences in the frequency of audit committee meetings and institutional ownership between companies indicated and not indicated to commit FSF. Besides enriching the global discourse on best CG practices, this study provides actionable recommendations for enhancing the integrity and transparency of financial reporting.

Keywords: Financial Statement Fraud, Corporate Governance, Audit Committee Meetings, Independent Commissioners, Female Commissioners, Institutional Ownership

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1. INTRODUCTION

Financial statement fraud (FSF) is the most significant corporate misconduct issue, outpacing corruption and asset misappropriation in terms of its impact on organizations. It is a troubling trend that has continued and intensified over the past decade. FSF contributes substantially to losses compared to corruption and misappropriation of assets (Association of Certified Fraud Examiners [ACFE], 2022). According to ACFE (2022), fraud committed by company executives is on the rise, from 15% in 2016 to 24% in 2018, 56% in 2020, and 62% in 2022. FSF is committed by corporate executives who are primarily accountable for financial reporting integrity. This group sets accounting policies and enforces internal controls for the organization. Such misconduct by upper management may have a greater impact as it undermines the credibility of financial reports (Rezaee, 2005).

Corporate governance (CG) is one of the most important factors in fraud prevention and detection, as it is an effective mechanism for reducing opportunistic management behavior, improving corporate reporting, and increasing corporate value (Cheng & Firth, 2006). By implementing CG, the management function can be optimized, and investor confidence is increased as it is perceived that the company has been managed effectively and professionally (Firmansyah et al., 2021). Based on agency theory, CG mechanisms are expected to mitigate the agency problems that can arise between managers and company owners that may lead to fraudulent behavior on the part of managers (Shleifer & Vishny, 1997).

Prior studies in developing countries have concluded that improving CG mechanisms can reduce fraud in companies (Agrawal & Chadha, 2005; Crutchley et al., 2007; du Toit, 2008; Mangala & Kumari, 2015; Rostami & Rezaei, 2022; Velte, 2023). Kaabi (2023) even stated that the board of directors is the most relevant governance mechanism in critical situations. Moreover, previous research identified that weak CG is described by conditions where companies have fewer independent directors (Beasley, 1996), lack of directors with financial and accounting expertise (Agrawal & Chadha, 2005; Moyes et al., 2005), lack of meetings of commissioners (Lennox, 1999; Xie et al., 2003), the small portion of independent commissioners (Persons, 2005) and the lack of audit committee meetings (Owens-Jackson et al., 2009). In addition, regarding external auditors, Lennox (1999) concluded that companies that use external audit services from Big 5 firms are less likely to be involved in FSF.

As Indonesia's economy continues to grow and its integration into the global marketplace increases, CG in relation to FSF has become increasingly relevant. There has been a significant transformation within the Indonesian financial sector combined with a series of corporate scandals in recent years, indicating the need to examine the role of CG in mitigating financial fraud. It is necessary to conduct in-depth research to confirm the role and influence of CG on FSF, especially in companies in Indonesia, as it is believed there are more cases of FSF that happen in practice than are reported

(Tuanakotta, 2017). The study would not only strengthen the country's financial transparency but also contribute to global discourse on best CG practices.

There have been numerous studies conducted in Indonesia examining the effect of CG on FSF, however, the results have been inconsistent. Tanjaya and Kwarto (2022) identified six components of CG structures, namely government, investors, boards of directors, management and institutional ownership, whistleblower mechanisms, and external auditors; however, none of these factors were identified as significant in reducing the likelihood of FSF. Additionally, managerial ownership of directors had a significant negative effect on the tendency to commit fraud with respect to financial statements. Probohudono et al. (2022) found that the age of directors, the gender of directors, and management ownership had a significant negative impact on the tendency to commit FSF. According to Nindito (2018) and Achmad et al. (2022), independent commissions do not affect the occurrence of FSF, whereas Rizkiawan and Subagio (2022) stated that independent commissioners as a proxy for effective monitoring result in negative significance effects on FSF occurrence. Furthermore, Rohmatin (2021) stated that effective CG at all levels would minimize fraud caused by opportunities and rationalization factors.

Despite the abundance of studies examining CG implementation in Indonesia, no confirmation has been found regarding whether CG differs between companies involved in FSF cases and those not involved. Such studies are important since they provide a deeper understanding of how CG influences the incidence of FSF. Thus, this study aims to investigate whether and how CG practices differ between companies in Indonesia that have been involved in FSF cases and those that have not. The findings of this study contribute to government efforts, relevant organizations, and companies in their capacities as CG regulators and advocates.

The rest of this paper is structured as follows. Section 2 reviews the relevant literature to develop research hypotheses. Section 3 analyses the methodology in conducting this empirical research. Section 4 provides the main test results. Section 5 provides analysis and discussion based on the research results. Section 6 provides conclusion, implications, and recommendations for future research.

2. LITERATURE REVIEW

2.1. Corporate governance to financial statement fraud

According to Jensen and Meckling (1976), agency relations refer to the contractual relationship between principals and agents that governs the conduct of company activities. A conflict of interest often exists between the owner of the company and the management due to different objectives between the two parties. As capital owners, company owners seek to maximize their return on investment while management seeks maximum rewards for their efforts in managing the company. Additionally, there is a potential for moral hazard as a justification for the performance

and rewards expected by management which may lead to activities that are averse to the interests of the principals. Fraud can be committed since the management has wide access to the company's control and can override it (Cressey, 1953; Wolfe & Hermanson, 2004). Therefore, Rezaee (2005) argues that companies should focus on CG to ensure the quality, integrity, transparency, and reliability of financial statements.

2.2. Boards of commissioners

A robust CG process requires particularly directors with substantial financial expertise. Previous studies have demonstrated that the absence of financial experts on a board leads to weaker CG mechanisms (Agrawal & Chadha, 2005; Christian et al., 2019). Having a lack of financial expertise among board members can severely impair the ability of the board to supervise financial reporting processes, assess financial risks, and ensure the integrity of financial statements (Pinto dos Santos, 2021). Insufficient financial knowledge may result in inadequate oversight of the company's financial strategies and policies, putting it at risk of financial misstatements or fraud (Mohd-Sulaiman, 2013). This connection between board composition and CG effectiveness underlines the need for stringent criteria in the selection of board members, advocating for a blend of expertise that includes strong financial literacy to strengthen the board's oversight capabilities (Whelan, 2021). Therefore, the first hypotheses are:

H1a: There is a difference in the proportion of boards of commissioners with financial expertise between companies that were found to commit financial statement fraud and those that were not.

H1b: The financial expertise of the board of commissioners negatively affects the occurrence of financial statement fraud.

2.3. Audit committees

Abbot et al. (2000) mentions that the audit committee's characteristics significantly influence the possibility of the company's financial statements being restated. Further, Persons (2005) emphasized that the possibility of FSF is lower in companies with audit committees that have longer tenure because they have better business/client knowledge that will support the integrity of the company's financial statements. Therefore, to understand CG practices in a company, one should understand the characteristics of the audit committee proxied by the number of audit committee meetings (Xie et al., 2003). Thus, the second hypotheses are:

H2a: There is a difference in the frequency of audit committee meetings between companies that were found to commit financial statement fraud and those that were not.

H2b: The frequency of audit committee meetings negatively affects the occurrence of financial statement fraud.

2.4. Independent commissioners

From the corporate culture perspective, independent commissioners are one of the critical parties of CG that can reduce the possibility of FSF (Dechow et al., 1996; Nasir & Hashim, 2020; Nasir et al., 2019).

Independent commissioners are parties outside the company who can be more objective in implementing the mechanism for supervising the company's operational activities and reporting and weaken the likelihood of corporate fraud (Xue et al., 2024). Independent commissioners are responsible for ensuring the effectiveness of the CG mechanism and responsible for advising and supervising the directors (Fujianti et al., 2022). Weak CG mechanisms as a cause of FSF can be described as having fewer independent directors on the board (Beasley, 1996). Therefore, the third hypotheses are:

H3a: There is a difference in the proportion of independent commissioners between companies that were found to commit financial statement fraud and those that were not.

H3b: Independent commissioners negatively affect the occurrence of financial statement fraud.

2.5. Female board of commissioners

Several previous studies have indicated that women on the board of directors negatively impact the tendency of companies to commit FSF (Gulzar et al., 2019; Kouaib & Almulhim, 2019; Martins & Ventura, 2020). They found that gender diversity on the board of commissioners enhances control effectiveness, minimizes fraud risk, and improves the quality of internal controls and financial reporting. Women are generally considered to be more diligent, responsible, independent, and conservative than men. Due to issues related to gender equality in some countries, women are less likely to be able to access positions, giving them a tendency not to cheat, since this could harm their careers and to place greater emphasis on building good relationships and maintaining ethical behavior than men (Wahyuningtyas & Aisyaturrahmi, 2022). Thus, the fourth hypotheses are:

H4a: There is a difference in the proportion of the number of female board of commissioners between companies that were found to commit financial statement fraud and those that were not.

H4b: The female board of commissioners negatively affects the occurrence of financial statement fraud.

2.6. Ownership structure

A company ownership structure also characterizes CG. Generally, there are three types of ownership structures: managerial, institutional, and public ownership. Petrou and Procopiou (2016), and Rostami and Rezaei (2022) indicate that management ownership affects FSF negatively. The negative effect management ownership has on FSF can be explained by the chief executive officers' (CEOs) cost and benefit perspective as the result of their action in committing to FSF (Petrou & Procopiou, 2016). CEO equity incentives that are linked to a significant portion of management compensation will shift the risk away from shareholders and onto management (Eisenhardt, 1989). Thus, as their share value increases, the CEO will be more reluctant to take the risk of financial loss if they are detected as engaging in FSF. Accordingly, the fifth hypotheses are:

H5a: There is a difference in managerial ownership between companies that were found to commit financial statement fraud and those that were not.

H5b: Managerial ownership negatively affects the occurrence of financial statement fraud.

Moreover, institutional ownership is also considered an influential party to the company's supervisory and control functions. Legal institutions that partake as shareholders are parties that operate to generate profits from each investment. They are rational intermediaries and long-term profit-oriented investors (Shayan-Nia et al., 2017). The institutional investors will have resources to supervise performance and management accountability that can suppress opportunistic management attitudes and reduce the possibility of FSF. Institutional investors play an external monitoring role in CG, thus minimizing manipulation due to its oversight and influence on management, which protects small investors (Ramos Montesdeoca et al., 2019). Therefore, the sixth hypotheses are:

H6a: There is a difference in institutional ownership between companies that were found to commit financial statement fraud and those that were not.

H6b: Institutional ownership negatively affects the occurrence of financial statement fraud.

2.7. External auditors

In addition, Rezaee (2005) revealed that external auditors are one of the key participants in CG in reducing FSF. External auditors are responsible for ensuring that financial statements are free from misstatements, either due to errors or fraud, and responsible for detecting financial fraud (Yang et al., 2017). Moreover, Moyes and Hasan (1996) revealed that experienced auditors are more able to detect fraud than inexperienced auditors. In this case, expansive experience and stricter quality control in Big 4 accounting firms will improve the quality and credibility of the company's audited financial statements. Previous studies stated that audit engagement by Big 4 accounting firms has a negative effect on earnings manipulations and higher conservatism (Mokoaleli-Mokoteli & Iatridis, 2017). Therefore, the seventh hypotheses are:

H7a: There are differences in Big 4/non-Big 4 public accounting firm engagement between companies that were found to commit financial statement fraud and those that were not.

H7b: The Big 4 firms' engagement negatively affects the occurrence of financial statement fraud.

3. RESEARCH METHODOLOGY

3.1. Design

This study applies a quantitative method that emphasizes theoretical testing by measuring and analyzing variables using statistical figures to formulate hypotheses. The study employs logistic regression and independent t-test analyses, using SPSS Statistic 29. An independent t-test is used to determine the difference in the mean values of two independent samples. A logistic regression analysis is conducted to determine the effect of each CG on the occurrence of FSF.

3.2. Sample and measurement

FSF was examined as a dependent variable using a sample of companies sanctioned by the Financial Services Authority (*Otoritas Jasa Keuangan*, OJK) between 2019 and 2021, which are also indicated by the Dechow F-Score Model as committing FSF. The F-Score Dechow is a model for assessing the level of risk or the likelihood of fraud in financial statements by applying a methodology similar to Beneish's (Beneish, 1999). F-Score Model is considered to be a more comprehensive model compared to the Beneish M-Score Model and is better in the context of developing countries such as Indonesia (Aghghaleh et al., 2016; Nurcahyono et al., 2021). The F-Score Model is composed of five dimensions: accrual quality, financial performance, non-financial measures, off-balance sheet activities, and market-related variables to detect misstatements in financial statements. The F-Score Model is explained below:

$$\text{Value} = -7.893 + 0.790 * \text{RSST} + 2.518 * \Delta \text{REC} + 1.191 * \Delta \text{INV} + 1.979 * \Delta \text{SOFTASSETS} + 0.171 * \Delta \text{CASHSALES} - 0.932 * \Delta \text{ROA} + 1.029 * \text{ISSUE} \quad (1)$$

Note: $\text{RSST} = (\Delta \text{WC} + \Delta \text{NCO} + \Delta \text{FIN}) / (\text{Average total assets})$. $\text{WC} = [\text{Current assets} - \text{Cash and short-term investment}] - [\text{Current Liabilities} - \text{Debt in Current Liabilities}]$. $\text{NCO} = [(\text{Total assets} - \text{Current assets} - \text{Investment and advances}) - (\text{Total liabilities} - \text{Current liabilities} - \text{Long-term debt})]$. $\text{Fin} = [\text{Short term investment} + \text{Long term investment}] - [\text{Long-term debt} + \text{Debt in current liabilities} + \text{Preferred stock}]$. $\Delta \text{REC} = (\Delta \text{Account receivables}) / (\text{Average total assets})$. $\Delta \text{INV} = (\Delta \text{Inventory}) / (\text{Average total assets})$. $\text{SOFTASSETS} = ((\text{Total assets} - \text{PPE} - \text{Cash and cash equivalents}) / (\text{Total assets}))$. $\Delta \text{CASHSALES} = \text{Percentage change in cash sales} / [\text{Sales} - \Delta \text{Account receivables}]$. $\Delta \text{ROA} = [(\text{Earnings } t) / (\text{Average total assets } t)] - [(\text{Earnings } t-1) / (\text{Average total assets } t-1)]$. $\text{ISSUE} = 1$ if securities is issued during year t .

Source: Dechow et al. (2011).

$$\text{F-Score value} = \text{value} / (1 + \text{value}) \quad (2)$$

$$\text{Probability} = \frac{e^{(\text{predicted value})}}{(1 + e^{(\text{predicted value})})} \quad (3)$$

$$\text{Unconditional probability} = 0.0037 \quad (4)$$

$$\text{F-Score} = \frac{\text{Probability}}{\text{Unconditional probability}} \quad (5)$$

If the F-Score value exceeds 1.00 indicates a higher probability of misstatement than the unconditional expectation, which shows the likeliness

to commit to FSF. Furthermore, a dummy variable was employed for this analysis to measure the dependent variable. The value of 1 is assigned to

companies that are sanctioned by OJK and identified as engaging in *FSF* by the F-Score Dechow. With a value of 0, the control group in this study is assigned to non-sanctioned companies and not engaging in *FSF* by the F-Score Dechow. In this sample, 72 companies were flagged for *FSF*, denoted with a categorization of 1. Another 72 companies not listed under OJK sanctions and not identified as *FSF* by the Dechow F-Score Model were assigned a categorization of 0. Therefore, 144 companies were analyzed in this research.

3.3. Measurement of variables

In this study, the independent variables of CG will be proxied with the following variables:

Financial and accounting expertise of the board of commissioners (*FINEXPERT*): measured by the proportion of the board of commissioners with financial and accounting expertise.

Frequency of audit committee meetings (*FREQ*): measured by the number of meetings held by the audit committee in one financial year.

Independent commissioners (*IND*): measured by the proportion of independent commissioners in the total company board of commissioners.

Women on the Board of Commissioners (*WOMAN*): measured by the proportion of women on the company's board of commissioners.

Managerial ownership (*MGTOWN*): measured by managerial ownership percentage.

Institutional ownership (*INSTOWN*): measured by institutional ownership percentage.

Engagement with Big 4/non-Big 4 public accounting firms (*FIRM*): measured by dummy variables; 1 if having an audit engagement with the Big 4 firm and 0 if otherwise.

Market capitalization (*MARKETCAP*) is a control variable in this research model, considering the various sizes of sample companies in this research.

4. RESULTS

The study identified 72 companies sanctioned by the OJK. It consists of nine consumer cycle companies, eight consumer noncyclic companies, 18 energy companies, four industrial companies, eight infrastructure companies, two healthcare companies, 10 basic materials companies, 11 property and real estate companies, and two transportation and logistics companies. The other 72 companies are selected in the same proportion as the control samples.

Table 1. Descriptive statistics

Variables	N	Min	Max	Mean	Std. dev.
	statistic	statistic	statistic	statistic	statistic
<i>FSF</i>	144	0	1	0.500	0.502
<i>FINEXPERT</i>	144	0.000	1.000	0.507	0.256
<i>FREQ</i>	144	2	73	6.35	7.228
<i>IND</i>	144	0.000	1.000	0.40890	0.114
<i>WOMAN</i>	144	0.000	1.000	0.10542	0.186
<i>MGTOWN</i>	144	0.000	0.769	0.06680	0.164
<i>INSTOWN</i>	144	0.000	1.000	0.71446	0.245
<i>FIRM</i>	144	0	1	0.08	0.267
<i>MARKETCAP</i>	144	33.000	161839.000	6909.063	19385.106

FINEXPERT has a minimum value of 0 since the 14 companies in the sample do not have any

board members with finance and accounting experience. With a mean value of 0.507, this proxy indicates that at least half of the company's commissioners have financial backgrounds. Furthermore, the minimum value of *FREQ* is 2, which means that the audit committee meets only twice per year. In addition, *FREQ* has a maximum value of 73. During the year 2020, one company held 73 meetings of its audit committee. A mean value of *FREQ* of 6.35 indicates that companies in the sample have at least six audit committee meetings each year. The most significant proportion of *IND* is 1. Considering the mean value of 40.89%, most companies have fulfilled the minimum requirement of Article 6 of OJK regulation No. 55/2015, which requires independent commissioners to account for at least 30% of the total number of members of the board of commissioners. Of 144 companies, 98 companies (68.05%), are without a woman on their board of directors. There is, however, one company whose board is entirely composed of women. There are only 10.54% of women on the board of directors of the sample company on average. The study sample exhibited the biggest managerial ownership at 76.93%, however, 75 of the companies in the sample have no management owners. This study indicates that managerial ownership is relatively small, with an average of 6.68%. A total of 16 of the companies in this study are owned by institutions, and three companies have no institutional ownership. As the average value of *INSTOWN* is 71.45% in this study sample, it is relatively concentrated and significant. A total of 133 of the sample companies are not engaged with the Big 4 accounting firms, while 11 are engaged with the non-Big 4. There are 8% of companies in the sample that have external audit engagements with the Big 4 accounting firm on average.

Multicollinearity is assessed using the variance inflation factor (VIF). A value of greater than 10 indicates multicollinearity. The results show that all VIF values are below 10, ranging from 1.022 to 1.97 (Table 2). So, it is concluded that the data set to be tested did not exhibit multicollinearity. The overall model fit test evaluates the suitability of the model, as shown in Tables 3 and 4. Accordingly, a value of 199.626 that decreased to 182.143 indicates that the research model is fit. An improved fit was achieved by adding variables such as *FINEXPERT*, *FREQ*, *IND*, *WOMAN*, *MGTOWN*, *INSTOWN*, *FIRM*, and *MARKETCAP*.

Table 2. Multicollinearity test

Model	Collinearity statistics	
	Tolerance	VIF
(Constant)		
<i>FINEXPERT</i>	0.978	1.022
Ln <i>FREQ</i>	0.950	1.053
<i>IND</i>	0.989	1.011
<i>WOMAN</i>	0.934	1.070
<i>MGTOWN</i>	0.508	1.970
<i>INSTOWN</i>	0.528	1.895
<i>FIRM</i>	0.982	1.019
Ln <i>MARKETCAP</i>	0.935	1.070

Table 3. Log-likelihood (-2 LL begin)

Iteration	-2 LL	Coefficients constant
Step 0 ... 1	199.626	0.000

Table 4. Log-likelihood (-2 LL end)

Iteration	-2 LL	Constant	FINEXPERT	Ln FREQ	IND	Coefficients		INSTOWN	FIRM	Ln MARKETCAP	
						WOMAN	MGTOWN				
Step 1	183.926	-2.124	0.767	0.044	-0.149	0.202	1.395	2.524	-0.175	-0.054	
1	2	182.254	-2.581	0.868	0.087	-0.275	0.206	1.822	3.010	-0.271	-0.076
	3	182.144	-2.700	0.876	0.102	-0.319	0.219	1.934	3.117	-0.301	-0.081
	4	182.143	-2.705	0.876	0.103	-0.323	0.220	1.948	3.121	-0.303	-0.081
	5	182.143	-2.705	0.876	0.10	-0.324	0.220	1.948	3.121	-0.303	-0.081

To evaluate the logistic regression model's feasibility, the goodness of fit was analyzed using the Hosmer-Lemeshow method (Table 5). The results revealed that the Chi-square value is 6.453, and the sig. value is 0.597 > 0.05, indicating that the model is well-fitted. Nagelkerke R-square was used to measure the coefficient of determination, representing the proportion of the variance in the dependent variable that is predictable from the independent variables. The statistical value of Nagelkerke R-square is 0.356. The results indicate that FINEXPERT, FREQ, IND, WOMAN, MGTOWN, INSTOWN, FIRM, and MARKETCAP can explain the occurrence of FSF by 35.6%, while 64.4% can be explained by other factors. Furthermore, the omnibus test shows the value of sig. is 0.025 < a significance level of 0.05; therefore, it is concluded that the research model is fit.

Table 5. Hosmer-Lemeshow test

Step	Chi-square	df	Sig.
1	6.453	8	0.597

Table 6. Omnibus test

		Chi-square	df	Sig.
Step 1	Step	17.483	8	0.025
	Block	17.483	8	0.025
	Model	17.483	8	0.025

$$\ln \frac{FSF}{1-FSF} = -2.705 + 0.876FINEXPERT - 0.103LN FREQ - 0.324IND + 0.220WOMAN + 1.938MGTOWN + 3.123INSTOWN - 0.303 FIRM + \epsilon \tag{6}$$

Table 9. Hypotheses testing independent sample t-test

Equality of variances		Levene's test		t-test for equality of means			
		F	Sig.	t	df	Significance	
						One-sided p	Two-sided p
FINEXPERT	Equal variances assumed	0.318	0.574	1.289	142	0.100	0.200
	Equal variances not assumed			1.289	141.467	0.100	0.200
FREQ	Equal variances assumed	7.255	0.008	1.932	142	0.028	0.055
	Equal variances not assumed			1.932	82.826	0.028	0.049
IND	Equal variances assumed	0.060	0.808	-0.193	142	0.424	0.847
	Equal variances not assumed			-0.193	135.960	0.424	0.847
WOMAN	Equal variances assumed	0.022	0.881	0.012	142	0.495	0.990
	Equal variances not assumed			0.012	140.148	0.495	0.990
MGTOWN	Equal variances assumed	4.395	0.038	-1.200	142	0.116	0.232
	Equal variances not assumed			-1.200	117.826	0.116	0.23
INSTOWN	Equal variances assumed	0.462	0.498	2.949	142	0.002	0.004
	Equal variances not assumed			2.949	139.031	0.002	0.004
FIRM	Equal variances assumed	0.389	0.534	-0.312	142	0.378	0.756
	Equal variances not assumed			-0.312	141.018	0.378	0.756

5. DISCUSSION

Based on Table 8, FINEXPERT shows a significant level of 0.215, which is greater than 0.05, indicating no relation between finance/accounting expertise and FSF. Consequently, H1a is rejected. Similarly, Table 9 reveals that for FINEXPERT, the F-test shows

Table 7. Nagelkerke R-square

Step	-2 log likelihood	Nagelkerke R-square
1	182.142 ^a	0.356

Note: a. Estimation terminated at iteration number 5 because parameter estimates changed by less than 0.001.

Table 8. Hypotheses testing

Step 1 ^a	B	S.E.	Wald	df	Sig.	Exp(B)
FINEXPERT	0.876	0.706	1.521	1	0.215	2.400
Ln FREQ	0.103	0.050	4.200	1	0.040	1.108
IND	-0.324	1.678	0.039	1	0.847	0.724
WOMAN	0.220	0.973	0.049	1	0.821	1.246
MGTOWN	1.938	1.613	1.454	1	0.229	6.977
INSTOWN	3.123	1.103	8.015	1	0.005	22.669
FIRM	-0.303	0.687	0.194	1	0.659	0.738
Ln MARKETCAP	-0.081	0.102	0.620	1	0.428	0.922
Constant	-2.705	1.342	3.818	1	0.057	0.067

Note: a. Variable(s) entered on step 1: FINEXPERT, Ln FREQ, IND, WOMAN, MGTOWN, INSTOWN, FIRM, Ln MARKETCAP.

Based on the results of logistic regression testing in Table 8, the regression model is as follows:

no significant variance differences between groups (p = 0.574 > 0.05), and the t-tests show no significant mean differences at the 0.05 level (p = 0.200). Thus, H1b is also rejected. The results support the findings of previous research by Nasir et al. (2019), which states that the financial and accounting expertise of the board is not a significant factor in FSF.

These results might be due to a few factors. Having finance experts on board does not guarantee they will actively use their skills to monitor financial statements. *FSF* can be very sophisticated and well-hidden. Uncovering complex fraud schemes often requires more than just financial knowledge; it needs thorough audits or forensic investigations. Therefore, preventing fraud effectively demands a multifaceted approach, not just reliance on financial expertise.

Table 8 shows that *FREQ* has a significance of 0.040, which is less than 0.05. This indicates a significant positive relationship between *FSF* and the frequency of audit committee meetings, leading to the acceptance of *H2a*. Table 9 reveals an F-test significance level of 0.008, also less than 0.05, indicating a variance difference between the two groups. Additionally, the 2-tailed significance is 0.049, which is below 0.05, showing significant mean differences. Therefore, *H2b* is accepted, indicating that the frequency of audit committee meetings significantly differs between companies with *FSF* and those without. The findings reinforce prior studies (Cziffra et al., 2021; Syofyan et al., 2021) that emphasize the importance of frequent audit committee meetings in reducing *FSF* through better monitoring, detection, and prevention. More frequent meetings allow committee members to communicate and collaborate more effectively, improving their ability to spot and address any red flags or suspicious activities in financial statements (Purwiyanti & Laksito, 2022).

Table 8 shows that *IND* has a significance of 0.847, which is greater than 0.05, indicating that the proportion of independent commissioners does not significantly impact *FSF*. Thus, *H3a* is rejected. Similarly, Table 9 shows that for *IND*, the F-test significance level is 0.808, and the t-tests show a p-value of 0.847, both above 0.05, indicating no significant differences in variances or means. Therefore, *H3b* is also rejected, showing no significant difference in the proportion of independent commissioners between companies with and without *FSF*.

These results align with previous studies, which found that the number of independent commissioners does not affect the incidence of *FSF* (Izzaty & Kurniawan, 2018). This may be because companies often appoint the minimum number of independent commissioners only to comply with OJK regulations. A more independent commissioners, will reduce opportunistic behavior by management and increase efficiency (Ramos Montesdeoca et al., 2019; Rostami & Rezaei, 2022). Other studies have indicated that strengthening the independence of the board of commissioners alone is insufficient to improve the quality of financial reporting (Ramos Montesdeoca et al., 2019; Nasir et al., 2019; Persons, 2005). Many Indonesian public companies are controlled by concentrated family ownership, which strongly impacts their operations, where independent commissioners are unable to perform their duties objectively (Kusumawati, 2007). Due to this, the role of independent commissioners as effective monitoring functions is less than optimal in practice.

Table 8 shows that *WOMAN* has a significance of 0.821, which is greater than 0.05, indicating that female directors do not influence *FSF*. Thus, *H4a* is

rejected. The F-test significance is 0.881, showing homogeneous data variance between the two groups. Additionally, the 2-tailed significance is 0.99, which is also greater than 0.05, leading to the rejection of *H4b*. This means there is no significant difference in the proportion of female board members between companies with and without *FSF*. These results are in line with research by Smith and Oakley (1997), which found no difference between boards with and without gender diversity in their likelihood of manipulating finances. They also found no difference in ethical behavior between men and women regarding violations of laws or organizational policies, suggesting that gender does not impact the occurrence of *FSF*.

Table 8 shows that *MGTOWN* has a significance of 0.229, which is greater than 0.05, indicating that managerial ownership does not impact *FSF*. Thus, *H5a* is rejected. The F-test significance is 0.038, less than 0.05, indicating data variance between the two groups. However, the 2-tailed significance in the equal means group is 0.232, greater than 0.05. Therefore, *H5b* is rejected, indicating no significant difference in managerial ownership between companies with and without *FSF*. This research result is in line with Kurniawan et al. (2020) who found that managerial ownership does not significantly affect *FSF* due to the low portion of management ownership in each company. Another explanation is the complexity of motivations behind *FSF*, which may not be mitigated by aligning ownership interests. While managerial ownership is often seen as a way to reduce agency conflicts between shareholders and managers, its effectiveness in preventing fraud is limited. This might be because individuals with fraudulent intent can exploit their power or information asymmetry, regardless of their ownership stake.

Table 8 shows that *INSTOWN* has a significance of 0.005, which is less than 0.05, indicating that institutional ownership affects the occurrence of *FSF*. Therefore, *H6a* is accepted. Levene's F-test significance is 0.498, greater than 0.05, indicating homogeneous data variance between the two groups. The 2-tailed significance in the equal variances group is 0.004, which is less than 0.05, so *H6b* is accepted. This means there is a significant difference in institutional ownership between companies with and without *FSF*. The findings confirm previous studies (Murtado et al., 2022; Syamsudin et al., 2017). Institutional investors are expected to be parties as mediators and become rational investors who are oriented toward long-term profits (Shayan-Nia et al., 2017). Institutional investors act as external supervisors in CG to reduce fraud incidents due to supervision and influence over management. The role of institutional investors as external supervisors is expected to protect small investors (Lin et al., 2014; Ramos Montesdeoca et al., 2019).

The *FIRM* variable shows a significance of 0.687, which is greater than 0.05, indicating that engagement with Big 4 accounting firms does not affect the occurrence of *FSF*. Therefore, *H7a* is rejected. Additionally, Levene's test significance is 0.534, and the 2-tailed significance in the equal variances group is 0.756, both greater than 0.05. This means the data variance is homogeneous, and there are no significant differences in means

between the groups. Thus, *H7b* is rejected, indicating no significant difference in the engagement of Big 4 versus non-Big 4 accounting firms between companies with and without *FSF*. This result is consistent with the research result by Tanjaya and Kwarto (2022). Despite the sample showing that most companies were audited by non-Big 4 firms in 2019-2020, the results indicate that the choice between Big 4 and non-Big 4 auditors does not significantly impact the occurrence of *FSF*.

This study contributes to the literature on CG and *FSF* by highlighting the limitations of current CG mechanisms in preventing *FSF*. It shows that the effectiveness of these mechanisms depends on their implementation and context. The study questions the universal effectiveness of financial expertise, audit committee activity, board independence, gender diversity, ownership structure, and Big 4 auditor engagement in fraud prevention. By focusing on the Indonesian context, it offers a global perspective on CG and fraud, challenging common assumptions in the literature. The study emphasizes the need to assess CG mechanisms within their specific cultural, regulatory, and market contexts.

Several practical implications emerge from the discussion. Companies should seek diverse expertise, including risk management, legal, and industry knowledge when forming their boards rather than focusing solely on financial expertise. Audit committees should prioritize the quality of their meetings, rigorously scrutinize financial reports, conduct risk assessments, and develop comprehensive fraud prevention strategies. Independent commissioners need the authority, resources, and support to effectively oversee company activities, which could be enhanced through training programs on *FSF* and its indicators.

A more diverse board of directors is crucial for bringing varied perspectives on risk and ethics. Evaluating CG practices should focus on quality rather than mere compliance with standards. Companies should disclose more information about their audit committee activities, board independence, and diversity, enabling stakeholders to assess the effectiveness of CG practices. Regulators should establish training programs on fraud in financial statements and best CG practices for board members and audit committees.

Auditors, including both Big 4 and non-Big 4 firms, should enhance their audit quality to better

detect *FSF*. Advanced forensic accounting skills and continuous professional development are essential. Despite the study's findings of no significant differences based on Big 4 engagement, all auditing firms should promote conservative reporting practices and improve financial reporting integrity. They can also help clients reduce fraud risks by advising on better internal controls and governance practices.

The study highlights the need for investor vigilance in analyzing audit committee activities and other aspects of a company's financial and operational performance. Effective CG practices and a robust regulatory framework are essential to prevent and detect *FSF*. Professional associations should lead in developing and disseminating best CG practices tailored to the Indonesian context. Workshops, seminars, and conferences can facilitate the sharing of CG and fraud prevention strategies. Professional associations should advocate for stronger CG standards and practices based on the latest research and international best practices with a consideration of political, cultural, economic, and country's legal framework when adapting CG regulations (Haroon & Zaka, 2023).

6. CONCLUSION

The results of hypothesis testing in this study show that only two out of seven factors in CG, namely the frequency of audit committee meetings and institutional ownership, affect the indication of *FSF*. The test results also showed that the seven CG factors tested in this study could only predict the variables indicating *FSF* by 15.2%, and the remaining 84.8% were explained by other variables or factors. Therefore, it can be concluded that CG does not contribute significantly to the possibility of fraud in financial statements in Indonesia.

Future researchers can explore other under-researched factors such as the tone of the top (Onesti & Palumbo, 2023). Other CG mechanisms such as CEO tenure, CEO and commissioners' compensation, internal auditors, whistle-blowing mechanisms, and foreign ownership can be explored as well to understand better factors that determine *FSF*. Referring to research by Abdullah et al. (2023), due to the religious environment in Indonesia, it will be interesting to investigate how the spiritual quotient can affect the occurrence of *FSF*.

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