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Article

Corporate Governance and Financial Statement Fraud During the COVID-19: Study of Companies under Special Monitoring in Indonesia

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Abstract: The COVID-19 pandemic had a wide-ranging impact, resulting in a global recession due to weakened purchasing power. This circumstance necessitates business organizations adapting to developments and being more conscious of the risk of financial statement fraud. The intention of this research is to investigate the way corporate governance affected financial statement fraud during the COVID-19 pandemic. To acquire empirical data for examining corporate governance variables on financial statement fraud, the research was examined using quantitative methods. The study takes advantage of secondary data acquired from annual reports of companies under special monitoring listed on the Indonesia Stock Exchange of 2020-2021. The logistic regression method was used to evaluate 134 data sets, and financial statement fraud was measured using the Z-Score and F-Score models. The results indicate that using the Z-score, only the board size has a negative effect on financial statement fraud during the COVID-19 pandemic. Meanwhile, using the F-Score, the corporate governance variables studied are not proven to have an influence on financial statement fraud during the COVID 19 pandemic.

Keywords: audit committee; internal auditor; board's experience; board size; financial statement fraud

1. Introduction

The COVID-19 pandemic affected all industrial sectors in various regions. Economic growth has stagnated as the purchasing power of people has weakened due to restrictions on people's activities in various fields, leading to a global recession (Shen, et al., 2020). Each entity tries to adapt to changes due to the pandemic and needs to increase awareness of fraud risks related to financial statements that may occur (Campanelli, et al., 2020). The weakening economy is feared to have an impact on management performance assessments, especially those measured by financial targets. Efforts made to stabilize the financial statements can encourage management to commit fraud to cover up various deficiencies that occur in the company (Schilit, et al., 2018). This condition gives the industry and companies the opportunity to commit financial statement fraud during the pandemic (Putra, 2022).

Financial statement fraud is the intentional falsification of financial information in order to defraud investors, creditors, or other stakeholders. This can be done by both internal and external parties (Carmichael, 2020). Personal gain, keeping the business viable, and maintaining a position as a leader in the organization are all motivations for perpetrating financial statement fraud. Fraudsters seek to inflate the perceived value of the firm in order to make the stock appear more appealing to investors, gain bank loan approvals, and/or justify huge salaries and bonuses when compensation is related to corporate performance (Beaver, 2022).

Management fraud to manipulate financial statements can be discovered in the instance of PT Hanson International Tbk, which recognized revenue at the beginning using the full accrual technique and did not present the sale and purchase agreement in the 2016 financial statements. Due to this revenue recognition, the December 2016 financial statements were overstated by IDR 613 billion

(Sandria, 2021). Another case related to financial statement fraud also occurred at PT Tiga Pilar Sejahtera Food Tbk in 2018. In the 2017 financial statements, based on the auditor's findings, there was an exaggeration of funds of IDR 4 trillion in the company's accounts receivable, inventory, and fixed assets. The auditor also found an exaggeration in the sales item of IDR 622 billion and an exaggeration of earnings before interest, taxes, depreciation, and amortization of IDR 322 billion (Wareza, 2019).

Agency theory explains the relationship between principals (shareholders) and agents (management), who have different interests (Jensen & Meckling, 1976). The difference in information between agents and principals can lead to a condition known as information asymmetry, which can lead management to commit fraud. Agency theory suggests that conflicts of interest and information asymmetry can be reduced by appropriate monitoring mechanisms that align the interests of different parts of the company. Monitoring mechanisms in accordance with the objectives of agency theory can be implemented by using corporate governance mechanisms.

Financial statement fraud is an act of fraud committed intentionally to provide information that misleads users of financial statements because it contains errors and manipulations (ACFE, 2020). This negligence or intent is material so that it can affect the decisions that will be made by interested parties. The motivation behind financial statement fraud is to maintain share prices so that investors feel their investments are secure. Another factor underlying financial statement fraud is the need to support bond and stock offerings in the capital market (Zimbelman, 2014).

There have only been a few studies that have investigated financial statement fraud during the COVID-19 pandemic. The findings do not address financial statement fraud directly, but they do show that the quality of financial reporting has worsened throughout the COVID-19 pandemic. The results of Xiao & Xi's (2021) research show that many companies engage in earnings management during the pandemic, especially those located in the most affected areas in China. Furthermore, the results of Hsu & Yang (2022) also show that the quality of financial statements decreases during the pandemic. In this case, companies use real earnings management to avoid further negative reactions from investors (Persakis & Iatridis, 2015) or to survive during the crisis (Trombetta & Imperatore, 2014). Referring to the research results of Xiao & Xi (2021) and Hsu & Yang (2022), management committed more corporate financial statement fraud during the pandemic.

Corporate governance is a method to resolve conflicts of interest between principals and agents through the disclosure of financial information. Furthermore, corporate governance is an important practice to reduce the information asymmetry that exists in stock market transactions and can prevent opportunistic actions by insider investors. Financial reporting fraud can be effectively reduced by corporate governance structures. Each structure has a distinct role to play in strengthening governance in order to prevent financial statement fraud, earnings manipulation, and the likelihood of bankruptcy (Martins & Júnior, 2020). Corporate governance can reduce conflicts of interest because it reduces opportunistic attitudes and can inhibit fraud in a company's financial statements (Razali & Arshad, 2014).

Several relevant studies indicate that the existence of corporate governance can mitigate the occurrence of financial statement fraud (Razali & Arshad, 2014; Girau et al., 2019; Mulyadianto et al., 2020). Regarding crisis or pandemic conditions, several studies have found that the financial crisis improves the quality of corporate financial statements (Arthur et al., 2015; Filip & Raffournier, 2014; Cimini, 2015), while some others showed that the quality of financial statements decreased during the financial crisis (Persakis & Iatridis, 2015; Trombetta & Imperatore, 2014). Moreover, research showed that the COVID-19 pandemic affects financial statement fraud (Putra, 2022) and reduces the quality of financial statements (Hsu & Yang, 2022).

The boards play an important role in the structure of corporate governance by supervising to ensure the success of the organization. In the context of financial information, the boards are responsible for the transparency and credibility of financial statements because they have the highest level of control in a company (Alzoubi & Selamat, 2012). A large board will effectively promote the supervisory function with overarching control, gathering numerous managers' viewpoints and experiences (Fathi, 2013). Large boards are correlated with outstanding performance on company reputation (Orozco, et al., 2018) and minimized the likelihood of financial statement fraud (Kalbuana, et al.,

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2022). However, several other research findings show that there is no effect of board size on financial statement fraud (Nguyen, et al., 2022); (Shan, et al., 2013); (Salleh & Othman, 2016). Hence, the first hypothesis in this study is:

Hypothesis 1 (H1). Board size affects financial statement fraud.

Hypothesis 1a (H1a). Board size affects financial statement fraud measured by Z-score.

Hypothesis 1b (H1b). Board size affects financial statement fraud measured by F-score.

Boards with international experience have valuable, rare, and inimitable characteristic features that can contribute to the company's competitive advantage by using their experiences. International experience for board members can be gained through international obligations in foreign companies that are accustomed to monitoring activities in organizations by foreign companies. The practice is likely to be influenced by the culture, rules, laws, and regulations in the country where the company operates. Such experience can assist board members in managing the complexities associated with earnings management practices. At the same time, with international experience different from local experience, it is also believed that board members will assist in promoting and implementing more proactive earnings management prevention mechanisms within the organization (Razali & Arshad, 2014). The inclusion of international board experience on supervisory boards may result in improved financial reporting quality (Dobija & Puławska, 2022). Several studies have discovered that board experience has an impact on financial statement fraud (Alzoubi & Selamat, 2012); (Mousavi, et al., 2022). Hence, the second hypothesis in this research is:

Hypothesis 2 (H2). International board experience affects financial statement fraud.

Hypothesis 2a (H2a). International board experience affects financial statement fraud measured by Z-score.

Hypothesis 2b (H2b). *International board experience affects financial statement fraud measured by F-score.*

The audit committee is an important element of the corporate governance structure because it reviews the independence and integrity of the company's financial statements. A strong audit committee can encourage better and more effective assessment and monitoring to inhibit financial statement fraud (Razali & Arshad, 2014). One of the valuable audit committee characteristics for effective monitoring is financial expertise. Audit committees with finance competence are related with lower levels of earnings management, which also reduces financial statement fraud (Badolato, et al., 2014). Several studies found that the financial expertise of the audit committee improves monitoring capabilities, which in turn improves the quality of financial reporting (Alzoubi & Selamat, 2012); (Mousavi, et al., 2022); (Subair, et al., 2020). Furthermore, audit committee members that are financially literate have a greater ability to detect and prevent fraudulent financial reporting (Kamarudin & Ismail, 2014). However, the findings of research conducted by Razali & Arshad (2014) show that international board experience has no effect on financial statement fraud. Based on this argument, the third hypothesis in this study is:

Hypothesis 3 (H3). Audit committee financial expertise affects financial statement fraud.

Hypothesis 3a (H3a). Audit committee financial expertise affects financial statement fraud measured by *Z-score*.

Hypothesis 3b (H3b). Audit committee financial expertise affects financial statement fraud measured by F-score.

The internal audit function is one of the strongest mechanisms for monitoring and promoting a good governance system in an organization. Internal audit plays an essential role in reviewing control

system activities, offering input for improvement, and supervising activities (Putra, et al., 2022). An effective internal audit function will assist management generate high-quality financial statements (Arum & Wahyudi, 2020). Several studies have found that the internal audit function can prevent financial statement fraud (Abdullah, et al., 2018); (Jarah, et al., 2022); (Onoja & Usman, 2015); (Petraşcu & Tieanu, 2014). One of the determinants of the effectiveness of the internal audit function is competence and sufficient training (Arens, et al., 2020). Thus, the fourth hypothesis in this study is:

Hypothesis 4 (H4). Internal auditor competence affects financial statement fraud.

Hypothesis 4a (H4a). Internal auditor competence affects financial statement fraud measured by Z-score.

Hypothesis 4a (H4a). Internal auditor competence affects financial statement fraud measured by Z-score.

2. Methodology

The type of research in this study is quantitative, using secondary data analyzed by the logistic regression method. Secondary data is obtained from the annual report of the company that is the subject of the study.

The population in this study is made up of companies on the special monitoring list on the Indonesia Stock Exchange (IDX). The sampling technique used is total sampling, which means that all companies on the monitoring list on the IDX are sampled in this study if the variables studied are available. Observations were carried out for the company's annual report data for 2020 and 2021. The research sample data amounted to 136. According to the IDX Director's Decree on Regulation Number II-S on Trading Equity Securities under Special Monitoring, there are 11 criteria in assessing the stocks under special monitoring, which are:

- 1. the average share price over the last 6 months in the regular market is less than IDR 51 per share.
- 2. the last audited financial report received a disclaimer opinion.
- 3. companies that have no revenue or no change in revenue in the audited financial statements and/or the latest interim financial statements compared to the previously submitted financial statements.
- 4. a) for mineral and coal mining issuers that have carried out the production operation stage but have not yet reached the sales stage or that have not started the production operation stage at the end of the 4th fiscal year since being listed on the Exchange and have not obtained revenue from the main business activities (core business); b. for issuers that are holding companies that have controlled companies engaged in the mineral and coal sectors that have carried out the production operation stage but have not yet reached the sales stage or that have not yet started the production operation stage at the end of the 4th fiscal year since they were listed on the Exchange, has not obtained revenue from core business activities.
- 5. companies that have negative equity in the last financial report.
- 6. a) companies that do not meet the requirements set out in Regulation Number I-A concerning the Listing of Shares and Equity Securities Other Than Shares Issued by Listed Companies, for Listed Companies whose shares are listed on the Main Board or the Development Board; b) companies that fail to comply with the requirements to remain listed on the Exchange as stipulated in Regulation Number I-V concerning Special Provisions for the Listing of Shares and Equity Securities Other Than Shares on the Accelerated Board Issued by Listed Companies, for Listed Companies that have shares that are listed on the Accelerated Board.
- 7. companies with low liquidity based on a daily average share transaction value of less than IDR 5 million and a daily average share transaction volume of less than 10,000 shares on the main market during the last 6 months.
- 8. the company has either petitioned for postponement of debt payment obligations or filed for bankruptcy.

- companies with subsidiaries whose revenue contribution to the listed firm is material, and the subsidiaries are in the process of requesting the postponement of debt payment obligations or filing for bankruptcy.
- 10. companies that are subject to a temporary suspension of securities trading for more than 1 trading day caused by trading activities.
- 11. other conditions determined by the IDX after obtaining approval or orders from the Financial Services Authority (OJK).

Financial statement fraud in this study is measured by the Altman Z-score model (Altman, 2000) and the Dechow F-score model (Dechow et al., 2011). The Z-score model is a proxy for bankruptcy risk, which can be an early warning sign for a potential collapse that will lead to fraud or manipulation in an organization. The Z-score of less than 1.81 is an indicator that the organization is in the "distress" zone; the score between 1.81 and 2.99 indicates that the organization is in the "gray" zone; and scores greater than 2.99 are an indicator that the organization is in the "safe" zone (Altman, 2000). Meanwhile, the Dechow F-score model is optimized to estimate the likelihood of manipulation rather than bankruptcy (Dechow et al., 2011). If F-Score > 1, the risk of financial statement fraud is high, and if F-Score > 1.85, the risk of financial statement fraud is low or normal. Z-score and F-score model equations are described in Table 1 and Table 2.

Table 1. Measurement of Z-score.

Variables	Measurement	Scale
Financial Statement Fraud using Z-score (FSFZ)	Z - score = (1.2xX1) + (1.4xX2) + (3.3xX3) + (0.6xX4) + (0.99xX5)	Nominal
X1	Working Capital Total Assets	Ratio
X2	Retained Earnings Total Assets	Ratio
X3	EBIT Total Assets	Ratio
X4	Market Capitalization Total Liabilities	Ratio
X5	Sales Total Assets	Ratio

Source: Altman (2000); Razali & Arshad (2014).

Table 2. Measurement of F-score.

Variables	Variables Measurement		
	F-score = -7.893 + 0.790RSST +		
Einen de l'Orate no est Europa l'ora	2.518REC + 1.191INV +		
Financial Statement Fraud us-	1.979SOFTASSETS+	Nominal	
ing F-score (FSFF)	0.171CASHSALES - 0.932ROA +		
	1.029ISSUE		
RSST	$\frac{WC + NCO + FIN}{Average\ Total\ Assets}$	Ratio	

	<pre>WC = (Current Assets - Cash and Short-term Investments) - (Current Li- abilities - Debt in Current Liabilities);</pre>	
	NCO = (Total Assets – Current Assets – Investments and Advances) – (Total Liabilities – Current Liabilities – Longterm Debt);	
	Fin = (Short-term Investments + Long- term Investments) – (Long-term Debt +	
	Debt in Current Liabilities + Prederred Stock)	
REC	Accounts Receivables Average Total Assets	Ratio
INV	$\frac{Inventory}{Average\ Total\ Assets}$	Ratio
SOFTASSETS	(Total Assets - PPE - Cash and cash equivalents) Total Assets	Ratio
CASHSALES	Percentage change in cash sales (Sales - Accounts Receivables)	Ratio
ROA	$\frac{(\textit{Earnings t/Average total assets t})}{(\textit{Earnings t-1/Average total assets t-1})}$	Ratio
ISSUE	If a firm issued securities during the year-t, it is worth 1, else it is worth 0.	Nominal

Source: Dechow, et al. (2011); Aghghaleh, et al. (2016).

The corporate governance structure, which is an independent variable, is measured by the board size (BS), board members' international experience (IBE), audit committee financial expertise (ACE), and internal audit competence (IAC). In addition to the independent variables, this study also uses two control variables to improve the relationship between the independent and dependent variables. The control variables used are company size (SIZE) and leverage ratio (LEV). The measurements of each variable are shown in Table 3.

Table 3. Measurement of Independent Variables.

Variables	Measurement	Scale
	Total number of commission-	
D 1 C' (DC)	ers on the board (Martins &	D ('
Board Size (BS)	Júnior, 2020); (Razali & Ar-	Ratio
	shad, 2014)	
	The percentage of members of	
International Board Experi-	the commissioners' board with	D. (*
ence (IBE)	international experience to the	Ratio
	total number of	

Ratio

Total Assets

Source: developed for this research from several sources (2022).

Total Debt

Two models were developed in this study to examine the hypotheses. The first model investigates the effect of BS, IBE, ACE, IAC, LNSIZE, and LEV on FSF with the Z-zcore Model. The second model examines the effect of BS, IBE, ACE, IAC, LNSIZE, and LEV on FSF with the F-zcore Model. The logistic regression equation model in this study is as follows:

$$Ln\frac{FSFZ}{1 - FSZ_{it}} = \beta_{0it} + \beta_1 BS_{it} + \beta_2 BIE_{it} + \beta_3 ACE_{it} + \beta_4 IAC_{it} + \beta_5 LNSIZE_{it} + \beta_6 LEV_{it} + \varepsilon$$

$$(1)$$

$$Ln\frac{FSFF}{1 - FSFF_{it}} = \beta_{0it} + \beta_1 BS_{it} + \beta_2 BIE_{it} + \beta_3 ACE_{it} + \beta_4 IAC_{it} + \beta_5 LNSIZE_{it} + \beta_6 LEV_{it} + \varepsilon$$
(2)

Where:

FSFZ is financial statement fraud, which measured by Z-score model

FSFF is financial statement fraud, which measured by F-score model

BS is board size

Leverage (LEV)

IBE is board members' international experience

ACE is audit committee financial expertise

IAC is internal auditor competence

LNSIZE is company size

LEV is leverage.

3. Results

The data analysis method employed in this study is logistic regression analysis, which has four tests: assessing the overall model, determining the goodness of fit of the regression model, the coefficient of determination (Nagelkerke's R Square), and the correlation matrix (Ghozali, 2018).

The outcome of the statistical test results in Table 4 reveals that the total sample size is 136.

Table 4. Descriptive Statistics.

Variables	N	Min	Max	Mean	Std. Deviation
FSFZ	134	0.00	1.00	0.7761	0.41841
FSFF	134	0.00	1.00	0.0746	0.26377
BS	134	2.00	7.00	3.2985	1.34349
IBE	134	0.00	1.00	0.3768	0.34057
ACE	134	0.00	1.00	0.5482	0.32622
IAC	134	0.33	1.00	0.5820	0.23828
LNSIZE	134	4.25	18.44	13.3891	2.96147
LEV	134	0.00	5.53	0.7425	0.96431

Source: descriptive statistical output of processed data (2022).

According to the descriptive statistical testing results in Table 3, the mean value of FSF with Z-Score is 0.7761 and with F-Score is 0.0746. The mean values of the independent variables are as follows: BS = 3.2985; IBE = 0.3768; ACE = 0.5482; IAC = 0.5820; LNSIZE = 13.3891; and LEV = 0.7425.

3.1. Financial Statement Fraud Analysis Using Z-score

The overall model is reflected in the significant value of the omnibus test, which must be below 0.05. Based on the research results in Table 5, the omnibus test value of the independent variables produces a significance value of 0.00, which is lower than 0.05. This indicates that there is a significant effect of the independent variables simultaneously affecting the dependent variable. The goodness of fit of the logistic regression model is reflected in the Nagelkerke R Square value in Table 6, which shows that the independent variable can explain 38.2 percent of the dependent variable, as seen from the Nagelkerke Square value of 0.382. Meanwhile, the other 61.8 percent can be explained by other factors outside the independent variables in the logistic regression equation.

Table 5. Omnibus Tests of Model Coefficients.

		Chi-square		Sig.
Step 1	Step	38.554	6	0.000
	Block	38.554	6	0.000
	Model	38.554	6	0.000

Source: Output of processed data (2022).

Table 6. Model Summary.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	103.962a	0.250	0.382

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than ,001.

Source: Output of processed data (2022).

The model feasibility test is shown in the Hosmer and Lemeshow Test, with the category considered good if the significant value is more than 0.05. Based on Table 7, the Hosmer and Lemeshow value is 0.068, which is greater than 0.05, indicating that it is a good model.

Table 7. Hosmer and Lemeshow Test.

Step	Chi-square	df	Sig.
1	15.041	8	0.068

Source: Output of processed data (2022).

Table 8 describes the logistic regression analysis used in this study, while Table 9 describes the correlations matrix. According to Table 8, only BS, LNSIZE, and LEV have a value less than 0.05, indicating that they have a significant effect on financial statement fraud as measured by the Z-score. While IBE, ACE, and IAC have greater than 0.05, which indicates that they have no effect on financial statement fraud as determined by Z-score.

Table 8. Variables in the Equation.

								95% (C.I.for
								EXI	P(B)
									Up-
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	per
Step	BS	-	0.195	12.030	1	0.001	0.509	0.347	0.745
1ª		0.676							
	IBE	-	0.931	0.341	1	0.559	0.580	0.094	3.601
		0.544							
	ACE	1.088	0.822	1.752	1	0.186	2.968	0.593	14.864
	IAC	1.361	1.128	1.456	1	0.228	3.901	0.428	35.581
	LNSIZE	0.231	0.088	6.870	1	0.009	1.260	1.060	1.497
	LEV	1.640	0.599	7.501	1	0.006	5.155	1.594	16.667
	Con-	-	1.293	1.114	1	0.291	0.255		
	stant	1.365							

Source: Output of processed data (2022).

Table 9. Correlation Matrix.

		Con-						
		stant	BS	IBE	ACE	IAC	LNSIZE	LEV
Step 1	Constant	1.000	-0.102	0.069	-0.064	-0.459	-0.764	-0.110
	BS	-0.102	1.000	-0.265	-0.069	-0.128	-0.328	-0.027
	IBE	0.069	-0.265	1.000	-0.348	-0.070	0.028	-0.242
	ACE	-0.064	-0.069	-0.348	1.000	-0.255	-0.035	0.085
	IAC	-0.459	-0.128	-0.070	-0.255	1.000	0.161	0.031
	LNSIZE	-0.764	-0.328	0.028	-0.035	0.161	1.000	-0.027
	LEV	-0.110	-0.027	-0.242	0.085	0.031	-0.027	1.000

Source: Output of processed data (2022).

3.2. Financial Statement Fraud Analysis Using F-score

The overall model is reflected in the omnibus test's significant value, which must be less than 0.05. According to the findings in Table 10, the omnibus test value of the independent variables provides a significant value of 0.02, which is less than 0.05. This indicates that there is a significant effect of the independent variables on the dependent variable simultaneously. The logistic regression model's goodness of fit is shown in Table 11, where the Nagelkerke R Square value of 0.140 indicates that the independent variable can explain 14.0 percent of the dependent variable. Meanwhile, other factors than the independent variables in the logistic regression equation can explain the remaining 86.0 percent.

Table 10. Omnibus Tests of Model Coefficients.

		Chi-square	df	Sig.
Step 1	Step	17.986	6	0.020
	Block	17.986	6	0.020
	Model	17.986	6	0.020

Source: Output of processed data (2022).

Table 11. Model Summary.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	63,154a	0.058	0.140

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Source: Output of processed data (2022).

The Hosmer and Lemeshow Test incorporates a model feasibility test, with the category considered good if the significant value is greater than 0.05. According to Table 12, the Hosmer and Lemeshow value is 0.737, which is greater than 0.05, indicating that it is a good model.

Table 12. Hosmer and Lemeshow Test.

Step	Chi-square	df	Sig.
1	5.188	8	0.737

Source: Output of processed data (2022).

The logistic model employed in this investigation is shown in Table 13, while the correlations matrix is described in Table 14. Table 13 shows that all factors have a significance level greater than 0.05, indicating that they have no effect on financial statement fraud as measured by the F-score.

Table 13. Variables in the Equation.

								95% C.I.for	
								EXP(B)	
									Up-
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	per
Step	BS	0.040	0.256	0.025	1	0.875	1.041	0.630	1,.721
1ª	IBE	-	1.373	0.597	1	0.440	0.346	0.023	5.106
		1.061							

ACE	0.230	1.110	0.043	1	0.836	1.259	0.143	11.080
IAC	1.161	1.498	0.600	1	0.438	3.193	0.169	60.204
LNSIZE	0.260	0.196	1.760	1	0.185	1.296	0.883	1.903
LEV	-	1.048	2.373	1	0.123	0.199	0.026	1.552
	1.614							
Con-	-	2.881	4.381	1	0.036	0.002		
stant	6.030							

Source: Output of processed data (2022).

Table 14. Correlation Matrix.

		Con-						
		stant	BS	IBE	ACE	IAC	LNSIZE	LEV
Step 1	Constant	1.000	-0.092	0.250	0.039	-0.448	-0.893	0.047
	BS	-0.092	1.000	-0.276	0.028	-0.011	-0.216	0.227
	IBE	0.250	-0.276	1.000	-0.206	-0.203	-0.155	-0.330
	ACE	0.039	0.028	-0.206	1.000	-0.324	-0.152	0.053
	IAC	-0.448	-0.011	-0.203	-0.324	1.000	0.232	0.017
	LNSIZE	-0.893	-0.216	-0.155	-0.152	0.232	1.000	-0.210
	LEV	0.047	0.227	-0.330	0.053	0.017	-0.210	1.000

Source: Output of processed data (2022).

4. Discussion

4.1. Board Size and Financial Statement Fraud Analysis

According to the Z-score test results, board size has a significant negative effect on financial statement fraud. Thus, H1a is accepted. This result indicates that the bigger the number of board members, the lower the possibility of financial statement fraud. Therefore, it may be stated that the more people involved actively oversight, the lower the likelihood of fraud. This finding supports agency theory, in which the supervisory board is required to provide assurance to the principal regarding the performance of agent. This result is consistent with the findings of study completed by (Fathi, 2013); (Orozco, et al., 2018); and (Kalbuana, et al., 2022), but contradicts several research that show that there is no effect of board size on financial statement fraud (Nguyen, et al., 2022); (Shan, et al., 2013); (Salleh & Othman, 2016).

In contrast to the previous findings, F-score testing shows that board size has no effect on financial statement fraud. Thus, H1b is rejected. The research data shows that the sample that is indicated to have committed fraud with the F-score size is relatively small, only 7.46%, so it can affect the output of statistical analysis. The sample selection of companies under special monitoring may also affect the research results, where there are many criteria that do not merely refer to fraud committed by the company. Observing data during the COVID-19 pandemic also slightly affects the results of the study because unusual business conditions require board oversight that can only be conducted remotely. The results of this study confirm the findings of Nguyen, et al. (2022); Shan, et al. (2013); (Salleh & Othman, 2016).

4.2. International Board Experience and Financial Statement Fraud Analysis

The logistic regression on Z-score indicates that there is no effect of international board experience on financial statement fraud. Thus, H2a is rejected. Logistic regression on the Z-score indicates that there is no effect of international board experience on financial statement fraud. Thus, H2a is rejected. This finding indicates that international board experience does not contribute to its expertise in overseeing corporate governance. The results of this study contradict the research findings of Alzoubi & Selamat (2012) and Mousavi, et al. (2022).

In a similar manner to the prior result, F-score testing revealed that board international experience has no effect on financial statement fraud. H2b is rejected as well. This finding is consistent with the research findings of Razali & Arshad (2014) and Subair, et al. (2020). The results of this study have not supported agency theory where the board as a corporate governance structure should have extensive insight to carry out a good monitoring role in order to provide reasonable assurance regarding the performance of company management as an agent.

Observations of sample data during the COVID-19 pandemic reveal that the international board experience does not appear to improve its roles and duties in enhancing overall corporate governance performance, particularly those connected to financial statement fraud prevention.

4.3. Audit Committee Financial Expertise and Financial Statement Fraud Analysis

According to the output of logistic regression testing, there is no evidence that shows the effect of audit committee financial expertise on financial statement fraud, whether measured by Z-score or F-score. Therefore, H3a and H3b. These study results are in accordance with the findings of research conducted by Razali & Arshad (2014). But contrary to the findings of research conducted by Alzoubi & Selamat (2012); Badolato, et al. (2014); Kamarudin & Ismail (2014); Mousavi, et al. (2022); Subair, et al. (2020).

Observations of sample data collected during the COVID-19 pandemic show that audit committee financial expertise fails to improve its function and responsibilities in improving overall corporate governance performance, including ones related to financial statement fraud prevention. In addition, based on data from the research sample, some companies lack an audit committee with expertise in finance. These companies seem not to pay much attention to financial matters in terms of determining the members of the audit committee. Whereas based on the Financial Services Authority (OJK) Regulation No. 55 of 2015, the main task of the Audit Committee is to review the company's internal control system, ensure the quality of financial statements, and improve the effectiveness of the audit function (OJK, 2015). Therefore, it is appropriate for companies to consider expertise in finance as a requirement for the audit committee.

4.4. Internal Audit Competence and Financial Statement Fraud Analysis

There is no evidence that reveals the effect of internal audit competence on financial statement fraud, whether measured by Z-score or F-score, according to the results of logistic regression testing. As a result, H4a and H4b are rejected. The results of this study are inconsistent with the findings of several previous researchers who found that internal audit can prevent and reduce financial statement fraud (Abdullah, et al., 2018); (Jarah, et al., 2022); (Onoja & Usman, 2015); (Petraşcu & Tieanu, 2014).

Sample data observed during the COVID-19 pandemic suggests that internal audit competence has not contributed to reducing financial statement fraud. Uncertain situations require quick adaptation to enhance the performance. Therefore, in addition to being competent, internal audit should also place more emphasis on increasing its involvement in risk management, primarily in uncertain situations.

5. Conclusions

The COVID-19 pandemic affected various aspects of society and eventually resulted in a global recession due to weakened purchasing power. Many companies are affected by this crisis condition. The decline in activity during the pandemic also had an impact on the decline in the company's financial performance. This condition requires business entities to adapt to changes and become more aware of the risk of financial statement fraud. Although activities may not run normally during a crisis or pandemic, effective corporate governance is expected to mitigate the occurrence of financial statement fraud.

The purpose of this study is to examine the impact of corporate governance, as measured by the board size, the percentage of board members with international experience, the percentage of audit committee members with a financial expertise, and the competence of internal auditors toward financial statement fraud in companies on the IDX special monitoring list during the COVID-19 pandemic. The logistic regression equation includes control factors such as company size and leverage ratio. Since financial statement fraud is measured by using Z-score and F-score, two logistic regression models are examined in this study.

The results showed that using the Z-Score, the board size proved to have a significant negative effect on financial statement fraud during the COVID-19 pandemic. The larger the number of boards, the smaller the chance of financial statement fraud. However, it turns out that testing using F-Score shows that the corporate governance variables under investigation have no proven effect on financial statement fraud during the COVID-19 pandemic.

Future research should expand the observation data to get a broader description of corporate governance mitigation in preventing financial statement fraud, in particular during a crisis or pandemic. Future research should also employ different indicators to measure corporate governance and financial statement fraud variables from different perspectives.

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References

Abdullah, Razimah, Zubaidah Ismail, and Malcolm Smith. 2018. Audit committees' involvement and the effects of quality in the internal audit function on corporate governance. *International Journal of Auditing*, 22(3), pp. 385-403. https://doi.org/10.1111/ijau.12124

ACFE. 2020. Survei Fraud Indonesia 2019. Jakarta: ACFE Indonesia Chapter. https://acfe-indonesia.or.id/wp-content/uploads/2021/02/SURVEI-FRAUD-INDONESIA-2019.pdf.

Altman, Edward I. 2000. Predicting financial distress of companies: revisiting the Z-score and Zeta® Models. *Journal of Banking & Finance*, p. 1. https://pages.stern.nyu.edu/~ealtman/Zscores.pdf.

Alzoubi, Ebraheem Saleem, and Selamat, Mohamad Hisyam. 2012. The effectiveness of corporate governance mechanisms on constraining earning management: literature review and proposed framework. *International Journal of Global Business*, 5(1), pp. 17-35. https://doi.org/10.5296/ijafr.v2i1.1561

Arens, Alvin A., Randal J. Elder, Mark S. Beasley, and Chris E. Hogan. 2020. *Auditing and assurance services*. 17th edition ed. Upper Saddle River, NJ: Pearson.

Arthur, Neal, Tang, Qingliang, and Lin, Zhiwey (Stanley) Lin. 2015. Corporate accruals quality during the 2008–2010 global financial crisis. *J. Int. Account. Audit. Tax,* Volume 25, pp. 1-15. https://doi.org/10.1016/j.intaccaudtax.2015.10.004

- Arum, Enggar Diah Puspa, and Wahyudi, Ilham. 2020. Fraudulent Financial Reporting Detection in Banking Sector: Evidence from Indonesia. *International Journal of Psychosocial Rehabilitation*, Issue Conference Special Issue, pp. 199-211. PsychoSocial
- Badolato, Patrick G., Dain C. Donelson, and Matthew Ege. 2014. Audit committee financial expertise and earnings management: The role of status. *Journal of Accounting and Economics*, 58(2-3), pp. 208-230. https://doi.org/10.1016/j.jacceco.2014.08.006
- Beaver, Scott. 2022. *Financial Statement Fraud: Detection & Prevention*. Available online: Financial Statement Fraud: Detection & Prevention | NetSuite (accessed 4 March 2022).
- Campanelli, Anthony, Kevin Corbett, and Christopher Georgiou. 2020. Financial Statement Fraud Risk Escalates in Pandemic.
 - Available online: Financial Statement Fraud Risk Escalates in Pandemic WSJ (accessed 2 March 2022).
- Carmichael, Douglas R. 2020. Financial Statement Fraud by External Parties.

 Available online: Financial Statement Fraud by External Parties The CPA Journal (accessed 26 January 2022)
- Cimini, Riccardo. 2015. How has the financial crisis affected earnings management? A European study. *Appl. Econ*, 47(3), p. 302–317. https://doi.org/10.1080/00036846.2014.969828
- Dechow, Patricia M., Weili Ge, Chad R. Larson, and Richard G. Sloan. 2011. Predicting Material Accounting Misstatements. *Contemporary Accounting Research*, 28(1), p. 17–82. https://doi.org/10.1111/j.1911-3846.2010.01041.x
- Dobija, Dorota, and Karolina Puławska. 2022. The influence of board members with foreign experience on the timely delivery of financial reports. *Journal of Management and Governance*, Volume 26, p. 287–313. https://doi.org/10.1007/s10997-020-09559-1
- Fathi, Jouini. 2013. The determinants of the quality of financial information disclosed by French listed companies.. *Mediterranean Journal of Social Sciences*, 9(1), pp. 1-12. https://doi.org/10.5901/mjss.2013.v4n2p319
- Filip, Andrei, and Bernard Raffournier. 2014. Financial crisis and earnings management: the European evidence. *Int. J. Account*, 49(4), p. 455–478. https://doi.org/10.1016/j.intacc.2014.10.004
- Girau, Emelia A., Dg Ku Habibah Ag Kee, Imbarine Bujang, and Jidwin, Agnes Paulus. 2019. The empirical analysis of corporate fraud and corporate governance in Malaysia. *The Business and Management Review*, 10(3), pp. 168-175. 2019-07-30-23-18-00-PM.pdf (cberuk.com)
- Hsu, Yu-Lin, and Ya-Chih Yang. 2022. Corporate governance and financial reporting quality during the COVID-19 pandemic. *Finance Research Letters*, Volume 45, pp. 1 13. https://doi.org/10.1016/j.frl.2022.102778
- Jarah, Baker Akram, Mufleh Amin AL Jarrah, Murad Ali Ahmad Al-Zaqeba, and Mefleh Faisal Mefleh Al-Jarrah. 2022. The Role of Internal Audit to Reduce the Effects of Creative Accounting on the Reliability of Financial Statements in the Jordanian Islamic Banks. *Int. J. Financial Stud*, pp. 1-16. https://doi.org/10.3390/ijfs10030060
- Jensen, Michael C, and William H, Meckling. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, Volume 3, pp. 305-360. https://doi.org/10.1016/0304-405X(76)90026-X
- Kalbuana, Nawang, Muhamad Taqi, Lia Uzliawati, and Dadan Ramdhani. 2022. The Effect of Profitability, Board Size, Woman on Boards, and Political Connection on Financial Distress Conditions,. Cogent Business & Management, 9(1). https://doi.org/10.1080/23311975.2022.2142997
- Kamarudin, Khairul Anuar, Wan Adibah Wan Ismail, and Airul Aezza Kamaruzzaman. 2018. Board Members Diversity and Financial Statements Fraud: Malaysian Evidence. In: *State-of-the-Art Theories and Empirical Evidence*. s.l.:Springer, pp. 165-183. https://doi.org/10.1007/978-981-10-6926-0_10
- Martins, Orleans Silva, and Raul Ventura Júnior. 2020. The Influence of Corporate Governance on the Mitigation of Fraudulent Financial Reporting. *Revista Brasileira De Gestao De Negocios*, 22(1), pp. 65-84. https://doi.org/10.7819/rbgn.v22i1.4039
- Mousavi, Maryam, Grzegorz Zimon, Mahdi Salehi, and Nina Stępnicka. 2022. The Effect of Corporate Governance Structure on Fraud and Money Laundering. *Risks*, 10(176), pp. 1-25. https://doi.org/10.3390/risks10090176
- Mulyadianto, Arief, Dwi Jaya Kirana, and Aniek Wijayanti. 2020. Kontribusi Corporate Governance Dalam Mengurangi Kecurangan Laporan Keuangan. *Jurnal Ilmiah Akuntansi Kesatuan*, 8(3), pp. 297-308. https://doi.org/10.37641/jiakes.v8i3.369
- Nguyen, Hong Thi Xuan, Huyen Thu Pham, Nung Thi Dao, and Nga Thi Nguyen. 2022. mpact of characteristics of the board of directors on the truthfulness of financial statement information of listed firms in Vietnam. *Cogent Business & Management*, 9(1), pp. 1-12. https://doi.org/10.1080/23311975.2022.2148870
- OJK, 2015. Peraturan OJK No. 55 Tahun 2015. s.l.:Otoritas Jasa Keuangan.
- Onoja, Emmanuel E, and Haruna Usman. 2015. Internal Audit Techniques and Fraud Prevention: A Case Study of Selected Local Government Councils in Bauch State. *Mediterranean Journal of Social Sciences*, 6(4), pp. 232-244. https://doi.org/10.5901/mjss.2015.v6n4p232

- Orozco, Luis Antonio, Jose Vargas, and Raquel Galindo-Dorado. 2018. Trends on the relationship between board size and financial and reputational corporate performance: The Colombian case. *European Journal of Management and Business Economics*, 27 (2), pp. 183-197. https://doi.org/10.1108/EJMBE-02-2018-0029
- Persakis, Anthony, and George Emmanuel Iatridis. 2015. Earnings quality under financial crisis: a global empirical investigation. *J. Multinatl. Financ. Manag*, Volume 30, p. 1–35. https://doi.org/10.1016/j.mulfin.2014.12.002
- Petraşcu, Daniela, and Alexandra Tieanu. 2014. The Role of Internal Audit in Fraud Prevention and Detection. *Procedia Economics and Finance*, Volume 16, pp. 489-497. https://doi.org/10.1016/S2212-5671(14)00829-6
- Putra, Iwan, Urip Sulistyo, Enggar Diah Puspa Arum, Sri Rahayu, Syurya Hidayat. 2022. The influence of internal audit, risk management, whistleblowing system and big data analytics on the financial crime behavior prevention. *Cogent Economics & Finance*, 10(2148363), pp. 1-27. https://doi.org/10.1080/23322039.2022.2148363
- Putra, Wahyu Manuhara, 2022. The Effect of Corporate Financial Pressure on Financial Statement Fraud during the COVID-19 Pandemic. Yogyakarta, Atlantis Press, pp. 125 132. https://doi.org/10.2991/aebmr.k.211225.018
- Razali, Wan Ainul Asyiqin Wan Mohd, and Roshayani Arshad, 2014. Disclosure of corporate governance structure and the likelihood of fraudulent financial reporting. *Procedia Social and Behavioral Sciences*, Volume 145, p. 243 253. https://doi.org/10.1016/j.sbspro.2014.06.032
- Salleh, Sharina Mohd, and Rohana Othman. 2016. Board of Director's Attributes as Deterrence to Corporate Fraud. *Procedia Economics and Finance*, Volume 35, pp. 82-91. https://doi.org/10.1016/S2212-5671(16)00012-5
- Sandria, F., 2021. *CNBC Indonesia*, Available online: Deretan Skandal Lapkeu di Pasar Saham RI, Indofarma-Hanson! (cnbcindonesia.com) (Accessed 3 March 2022).
- Schilit, Howard M., Jeremy Perler, and Yoni Engelhart. 2018. Financial Shenanigans, Fourth Edition: How to Detect Accounting Gimmicks and Fraud in Financial Reports. New York: McGraw-Hill Education.
- Shan, Yuan George, Chris Graves, and Hussen Hassan Ali. 2013. Effect of Board Composition and Ownership Characteristics on Fraud: Evidence from Malaysian Listed Companies. *South East Asia Research*, 21(2), p. 323–342. https://doi.org/10.5367/sear.2013.0149
- Shen, Shen, Mengyao Fu, Hongyu Pan, Zhongfu Yu, and Yongquan Chen, 2020. The Impact of the COVID-19 Pandemic on Firm Performance. *Emerging Markets Finance and Trade*, 56(10), p. 2213–2230. https://doi.org/10.1080/1540496X.2020.1785863
- Subair, Muhammed Lawal, Ramat Titlayo Salman, Ayodeji Fatai Abolarin, Abdulrasheed Taiwo Abdullahi, Akeem Sisofa Othman. 2020. Board Characteristics and the Likelihood of Financial Statement Fraud. *Copernican Journal of Finance & Accounting*, Volume 9, p. 57–76. https://doi.org/10.12775/CJFA.2020.003
- Trombetta, Marco, and Claudia Imperatore. 2014. The dynamic of financial crises and its non-monotonic effects on earnings quality. *J. Account. Public Policy*, 33(3), p. 205–232. https://doi.org/10.1016/j.jaccpubpol.2014.02.002
- Wareza, Monica. 2019. CNBC Indonesia. Available online: Tiga Pilar dan Drama Penggelembungan Dana (cnbcindonesia.com) (Accessed 2 March 2022).
- Xiao, He, and Xi, Jianqun. 2021. The COVID-19 and earnings management: Chinas evidence. *J. Account. Tax*, 13(2), p. 59–77. 8686CB666438 (academicjournals.org)
- Zimbelman, Mark F. 2014. Akuntansi Forensik. 4th Edition ed. Jakarta: Salemba Empat.

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