

Determination of Fraudulent Financial Statements in Indonesia

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Received: March 28, 2022

Revised: May 26, 2022

Accepted: June 13, 2022

Abstract

This study intends to examine the causations of fraudulent financial statement in Indonesia based on The Fraud Hexagon Theory. It uses secondary data from Indonesia's companies that have history of doing fraudulent financial statement and delisting from Indonesia Stock Exchange, for the year 2010 until 2020. Data analysis was carried out with logistic regression method. The study views the company as a single party that commits fraudulent financial statements. Result shows pressure (ROA), arrogance (CEO dismissal) and collusion (whistle blowing system implementation) statistically have correlation with fraudulent financial statements. To the contrary, other fraud elements such opportunity (numbers of internal auditors), rationalization (total accrual), and capability (good governance implementation), statistically have no correlation with fraudulent financial statement. Simultaneously, all variables used in this study affect fraudulent financial statements.

Keywords: Fraud, Fraudulent, Financial Statement, Hexagon Theory

Introduction

In Indonesia, the most recent financial statement fraud case was detected in July 2021, namely at PT Truba Alam Manunggal Engineering Tbk for the 2010 to 2013 financial year period. It led to the imposition of sanctions by The Indonesian Financial Services Authority, the company was delisted from the Indonesia Stock Exchange in 2018. The sanction was penalty for 500 million rupiahs, as the company did not disclose the increase of ownership in other companies, did not use fair value accordance with generally accepted principles in the measurement of company assets and liabilities, and did not fully disclose the company's debt. In this case, delisting can be seen as a result of improper disclosure of financial statements which ultimately affects the company's going concern in carrying out its operations. The impact of inappropriate accounting practices will not show its impact in a short time. Fraudulent practices will continue until a company finds its difficult obstacles to re-manipulate its financial statements. As a long-term result, the company's continuity will be disrupted, that will also impact the company's status as a public company with an increased risk of delisting. Thus, this condition will always continue, so it is necessary to be mitigated early in order to prevent the fraud and losses, especially for investors. The survey of the Association of Certified Fraud Examiners (ACFE) in 2020 shows that

the fraudulent financial report is the lowest cases of fraud happened, in the other hand it gives the biggest loss in amount.

In addition to this background, there have not many studies associated to the use of the hexagon fraud theory on fraudulent financial statements. This study intends to examine the causations of fraudulent financial statement in Indonesia based on The Fraud Hexagon Theory. The novelties are the samples used in the form of companies that have committed fraud and delisting as the dependent variable; consistency in viewing the company as a party which commits fraudulent financial statements; and the use of the hexagon fraud theory as the latest theory in fraud so the proxies of opportunity and arrogance are updated. Fraudulent financial statement is defined by ACFE as an intentional misstatement that is achieved through misstatement of the company's financial condition or omission of disclosure of the amounts in the financial statements to mislead the financial statement users. Fraud in financial statements is a misstatement of amounts or falsifying disclosure that are intentionally made with the aim of deceiving users (Arens et al., 2012). Fraudulent presentation of information in financial statements with the aim of misleading investors, has the potential to destroy the value of the company. Previous research has shown that managers have the aim of manipulating financial statements to achieve certain goals, both internal goals which can be in the form of incentives or external goals (Zainudin and Hashim, 2016)

The latest fraud theory is the hexagon fraud theory by Vousinas (2019). Vousinas identified the element of collusion as a new element in the theory of fraud so that his fraud model developed into the S.C.C.O.R.E model, namely Stimulus, Capability, Collusion, Opportunity, Rationalization and Ego. Vousinas assesses that the main cause of fraud cases that have occurred such as Enron, WorldCom and Parmalat are collusion with white-collar crimes so that they can have a large financial impact.

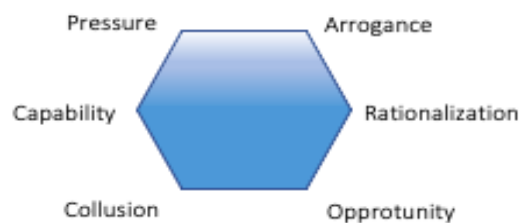


Figure 1. Fraud Hexagon

The elements of the fraud hexagon and their causations on fraudulent financial statements can be presented as follows:

Pressure

The success of the company's management can be indicated from the achievement of corporate profits. Return of Asset (ROA) ratio can be used to measure the efficiency of corporate operational activity (Skousen, 2009). The pressure for the management comes from the lower ROA. It motivates management to do anything in order to achieve shareholder expectation, which is efficient operational of the company.

The conditions mentioned above are one of the objectives of this study to examine the correlation between ROA and fraudulent financial statements. The first hypothesis is formulated as follows:

H1: ROA and fraudulent financial statements have negative correlation.

Opportunity

A situation that concedes a person or organization to commit and allow unfair actions and take advantage of it for personal gain described as opportunity (Romney and Steinbart, 2016). As the impacts of lack supervision, management have opportunity to behave dishonestly by carrying out earnings management (Nurbaiti and Hanafi, 2017). The proxy that used to measure this element as suggested by Ozcelik (2020) is the number of internal auditors. Along with the higher level of supervision of internal auditors, fraud is expected to be minimized. In addition, mitigation of risks can be carried out on a wider scope by the greater number of internal auditors, so that fraud can be further minimized. Based on these conditions, the following hypothesis is formulated:

H2: Number of internal audit and fraudulent financial statements have negative correlation.

Rationalization

Rationalization provides reasons for fraud perpetrators to justify their illegal actions. This justification appears on an environment that not supports fraudulent actions as a mistake, and it can arise from the desire of the perpetrators of fraud to be free from punishment (Muranto and Sandra, 2019). Septriani and Handayani (2018) argues that total accruals are regarded as the company's overall activities. Research by Sunardi and Amin (2018) consistently shows that total accruals have significant and positive effect on financial statement fraud. Total accrual is interpreted as the management accounting policy, so the hypothesis is formulated as follows:

H3: Total accrual and fraudulent financial statements have positive correlation.

Capability

This element shows that high-level fraud will not be possible by parties who do not have the capability (Ozcelik, 2020). With a good corporate institutional level, fraud can be prevented. In a company that has low institutional, the opportunity for fraud to occur will be even greater. Dalgur and Pekin (2011) in Ozcelik (2020) argue that companies that have a strong institutional structure will be able to reduce fraud in their financial statements. Ozcelik (2020) assesses that if the company does not have a strong structure, employees with sufficient capabilities will easily take advantage of their ability to commit fraud. By the implementation of good corporate governance, fraud incidents are expected to be avoided so that the company can run its operations optimally. The hypothesis is formulated as follows:

H4: Good governance and fraudulent financial statement have negative correlation.

Arrogance

An attitude of denying the internal control for him/herself based on the superiority of his/her own pride is defined as arrogance (Aprilia, 2017). At the company's point of view as a fraud perpetrator, the company's arrogance can be shown by the CEO dismissal by the shareholders only if the company give less profit than the shareholders expectation. This policy interpreted as

scapegoating ritual theory in order to share positive signal to the market (Lindrianasari, 2011). This condition shows at least five of eleven criteria of company arrogance as explained Godkin and Allcorn (2009). The greater arrogance of a company to achieve its goals, can encourage the fraud itself. The hypothesis is formulated as follows:

H5: CEO dismissal and fraudulent financial statement have positive correlation

Collusion

Collusion is a factor that causes a lot of fraud, including white-collar crime. It is an agreement and cooperation between several people to commit fraud (Vousinas, 2019). In relation to agency theory, agents (supervisors and subordinates) have a high potential for collusion that is difficult for the principal to know. By providing a whistle blowing mechanism for supervisors and subordinates, it is expected that it can encourage the achievement of company goals and reduce the opportunity for collusion to occur among agents (Felli & Vallve, 2015). So that on these conditions the hypothesis can be formulated as follows:

H6: Whistle blowing system implementation and fraudulent financial statement have negative correlation.

Methods

This research is a quantitative research by using secondary data. The object of this research is the annual reports and financial statements of companies that listed on the Indonesia Stock Exchange. The sample of this study was eliminated by purposive sampling. First, sample elected based on the history of fraudulent financial statements, based on the regulatory sanctions or publication in reputable media, as well as the delisted companies (force delisting). Second, the same number of companies was elected based on the similarity of industrial sector and sub-industrial sector. Based on the availability, this study used 371 data of 42 companies. The analysis in this study uses logistic regression as the use of dummy score as the dependent variable. By using logistic regression, this study does not require the normality assumption in the independent variables (Ghozali, 2018). The proxies and measurements in this study are:

Table 1. Variabel Measurement

Variabel	Proxy	Measurement
Variable Dependent		
Fraudulent Financial Report (Y)	companies that have a history of fraudulent financial statements and delisting companies	1 if the company have fraudulent financial statement history / delisted from the stock exchange 0 if the company have no fraudulent financial statement history / delisted from the stock exchange
Variable Independent		
Pressure (X1)	Return of Assets	Return of Assets = Net Profit / Total Assets
Opportunity (X2)	Internal auditor monitoring	Number of internal auditor

Rationalization (X3)	Total Accrual	Total Accrual = $\frac{\Delta Working\ Capital - \Delta Cash - \Delta Current\ Tax\ Payable - Depreciation\ Amortization}{Total\ Asset}$
Capability (X4)	Good Governance Implementation	The implementation number of good governance recommendation from Financial Services Authority
Arrogance (X5)	CEO dismissal	1 if there is an CEO dismissal 0 if there is no CEO dismissal
Collusion (X6)	Whistle Blowing System implementation	1 if the whistle blowing system is implemented 0 if the whistle blowing system is not implemented

Results and Discussion

The results of descriptive statistical analysis research can be described as follows:

Tabel 2. Descriptive Statistical Analysis – variable Y

Y					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	207	55.8	55.8	55.8
	1	164	44.2	44.2	100.0
	Total	371	100.0	100.0	

Source: Primary Data, 2022

Tabel 3. Descriptive Statistical Analysis – variable X1, X2, X3, X4

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
X1	371	-2.837	2.632	.02549	.243829
X2	371	0	93	9.88	16.771
X3	371	-2.910	1.987	-.04484	.309248
X4	371	0.000%	100.000%	24.61456%	40.593565%
Valid N (listwise)	371				

Source: Primary Data, 2022

Tabel 4. Descriptive Statistical Analysis – variable X5

X5					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	326	87.9	87.9	87.9
	1	45	12.1	12.1	100.0
	Total	371	100.0	100.0	

Source: Primary Data, 2022

Tabel 5. Decsriptive Statistical Analysis – variable X6

		X6			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	151	40.7	40.7	40.7
	1	220	59.3	59.3	100.0
	Total	371	100.0	100.0	

Source: Primary Data, 2022

Logistic Regression Test

Overall Model Fit

The regression model can be accepted because the hypothesized model fits the data, based on the decrease of value in comparison of the value between -2 Log Likelihood (-2LL) at the beginning (Block Number = 0) and the value of -2 Log Likelihood (-2LL) at the end (Block Number = 1), as follows.

Tabel 6. Value comparison between -2LL at beginning and at the end

Block Number = 0	Block Number = 1	Decrease/Increase
509.320	459.882	Decrease

Source: Primary Data, 2022

Determination Coefficient (Nagelkarke R²)

Tabel 7. Nagelkerk R Square Results

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	163.098 ^a	.537	.737
a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.			

Source: Primary Data, 2022

Based on table 7, the Nagelkerke R Square value indicating that the dependent variable can be explained by the independent variable in the number of 73,7% while the remaining 26,3% explained by other variables outside the research model. It is concluded that the independent variable can provides almost all the information needed to predict the dependent variable.

Feasibility of Regression Model (Hosmer and Lomeshow's Goodness of Fit Test)

Tabel 8. Hosmer and Lemeshow Test Result

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	9.669	8	.289

Source: Primary Data, 2022

The SPSS output table from the Hosmer and Lemeshow's Test result shows that the model can be accepted because it is in accordance with the observation data, showed by the Chi-Square value at 9,669 with a significance at 0,289 (>0,05).

Hypothesis test

Partial Significance Test of Model (Wald Test)

Tabel 9. Wald Test Results

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	X1	-26.603	4.336	37.643	1	.000	.000	.000	.000
	X2	.137	.021	41.279	1	.000	1.147	1.100	1.196
	X3	-10.924	2.110	26.811	1	.000	.000	.000	.001
	X4	-.014	.008	3.585	1	.058	.986	.971	1.001
	X5	2.782	.708	15.438	1	.000	16.159	4.033	64.745
	X6	-5.540	.894	38.409	1	.000	.004	.001	.023
	Constant	.040	.272	.021	1	.884	1.040		
a. Variable(s) entered on step 1: X1, X2, X3, X4, X5, X6									

Source: Primary Data, 2022

Based on Table 8, the test results can be explained as follows:

Variable X1 shows a negative coefficient at -26.603 with a significance level at $0.000 < 0.05$, which means that H1 is acceptable or X1 has significant negative correlation with Y. ROA as a proxy for pressure elements show an effect on fraudulent financial statement. This result is in line with Rusmana and Tanjung (2019), Lestari and Henny (2019), Septriani and Handayani (2018), and Saputra and Kesumaningrum (2017). This result indicates that lower ROA give more pressure to the management to increase the further ROA in any ways, include misstatement in financial report. Variable X2 shows a positive coefficient at 0.137 with a significance level at $0.000 < 0.05$, which means that H2 is unacceptable or X2 has no effect on Y. This result shows that the bigger number of internal auditors, give no effect on fraudulent financial statement. This can be interpreted as the lack of internal auditor independence, while it should be interpreted in the organization structure. Structurally, internal auditor directly under the CEO, so the independence can be achieved only if internal auditor have direct communication access to the audit committee. Variable X3 shows a negative coefficient at -10.924 with a significance level at $0.000 < 0.05$, which means that H3 is unacceptable or X3 has no effect on Y. The result shows that the total accrual is interpreted as the accounting policy taken by the management. This results is in line with the research of Handayani and Evana (2022), Skousen et al. (2009), Septriani and Handayani (2018).

Variable X4 shows a negative coefficient at -0.014 with a significance level at $0.058 > 0.05$ which means H4 is unacceptable or X4 has no effect on Y. The result of this study is not in line with Ozcelik (2020), which shows that good corporate governance can minimize the occurrence of fraud. This can be because the score used in Ozcelik's (2020) research is a Corporate Governance Index published on the Istanbul stock exchange whose assessment is carried out by the Capital Market Board, while in this study the score used based on the number of authority recommendation in good corporate disclosed by "comply" or "not comply".

Variable X5 shows a positive coefficient at 2.782 with a significance level at $0.000 < 0.05$, which means that H5 is acceptable or X5 has significant positive correlation with Y. The element of CEO that is proxied by the dismissal of employees show significant effect on fraudulent financial statement. This term of shareholders arrogance shown as the motive for the CEO to do their best to achieve the financial goal, so they can extend their position as CEO. The X6 variable shows a negative coefficient at -5.540 with a significance level at $0.000 < 0.05$, which means that H6 is acceptable or X6 has significant positive correlation with Y. The implementation of whistle blower system can be interpreted as support mechanism of company control, in order to minimize the number of fraudulent financial report.

Simultaneous testing (Omnibus)

Tabel 10. Omnibus Test Results

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	235.440	6	.000
	Block	235.440	6	.000
	Model	235.440	6	.000

Source: Primary Data, 2022

Based on Table 10, the value of Sig. $0.000 < 0.05$, then the model that involves independent variables (simultaneously) is better in terms of matching the data than a simple model, or the independent variables used in this study together have an effect on the dependent variable (Omnibus).

Conclusion

Based on the outcome of the analysis and the research that have been put forward, it can be determined that the element of pressure, arrogance and collusion have correlation in fraudulent financial statement in Indonesia. While other elements such as opportunity, rationalization and capability statistically show no correlation on fraudulent financial statements. However, simultaneously, all variables used in this study affect fraudulent financial statements.

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