Fraud Detection Using Fraud Hexagon Model in Top Index Shares of KOMPAS 100

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Abstract. The company's performance is reflected in the financial statements that they prepare each period. This triggers fraud management, namely fraudulent financial statements. There are several approaches to detecting fraud, one of which is the Fraud Hexagon approach. Our research uses the Fraud Hexagon approach with a sample of companies going public on the Indonesia Stock Exchange which are included in the top index of KOMPAS 100. Our research is a causal quantitative study, we use statistical data analysis to test hypotheses. Our results state that capability and collusion have a significant effect on detecting fraudulent financial statements, while other variables do not have a significant effect.

Keywords: hexagon; statement; financial; fraud; KOMPAS 100

1. Introduction

Since financial statement is very important for stakeholders in the company, there is pressure for management to present a financial statements that is appealing to the stakeholders. In order to present an appealing financial statement, there is a risk for management to do fraud by manipulating their financial statement.

Fraud is an intentional act that violates the rules either done by individuals or groups for certain purposes that are believed to causes harm to others [1]. The factors that can influence a person to commit fraud are first explained through the fraud triangle, which consists of pressure, opportunity, and rationalization [2]. In 2004, this theory was developed into fraud diamond theory by adding capability element. [3] added a new element called arrogant as the fifth element to influence a person to commit fraud. This theory is also known as fraud pentagon theory or the SCORE Model (Stimulus, Capability, Opportunity, Rationalization, Ego). Fraud pentagon theory was then developed into the fraud hexagon theory by Vousinas adding collusion element [4]. This theory also known as the SCORE Model, consist of: Stimulus, Capability, Collusion, Opportunity, Rationalization, Ego.

The object of this study are companies listed on the KOMPAS100 index on the Indonesia Stock Exchange (IDX) during the period 2018 – 2020. The KOMPAS100 index is an index launched and managed by the IDX in collaboration with Kompas Gramedia Group. As companies that is considered to have high liquidity and market capitalization, KOMPAS100 companies have higher pressure to maintain their financial performance in order to maintain their position in the KOMPAS100 index list. With its important position, these companies are more likely to do fraud.

2. Hypothesis Development

1.1. Effect of Financial Target in Detecting Financial Statement Fraud

Excessive financial targets can give pressure to the management to commit financial statement frauds so that the financial target can be achieved [5]. The results of research by [6] show that pressure proxies by financial targets has an effect in detecting financial statement fraud. However, the results of research by [7] indicate that financial targets have no influence in detecting financial statement fraud.

H1: Financial Target has significant effect in detecting Financial Statement Fraud

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1.2. Effect of Change of Director in Detecting Financial Statement Fraud

Capability refers to the ability of individual to commit fraudulent acts within the company environment [8]. Change of directors can be used as a measure of the element of Capability [2]. The change of directors can be a sign of fraud where the previous director is considered to know about the company's fraud and company is likely to get rid of the director [9]. Research conducted by [10] shows that change in director has an influence in detecting financial statement fraud, meanwhile research conducted by [7] indicates that change in director has no effect in detecting financial statement fraud.

H2: Change of Director has significant effect in detecting Financial Statement Fraud

1.3. Effect of Government Project in Detecting Financial Statement Fraud

Collusion is an agreement between two or more people so that one party takes an action against another party for a bad purpose such as deceiving a third party of their rights. Collusion can be proxies by Government Project element because in general, companies can earn greater income if they have collaborate with government projects since they can show good company performance in financial statement. The results of research by [11] that the collusion proxies by government project have an influence in detecting financial statement fraud.

H3: Government Project has significant effect in detecting Financial Statement Fraud

1.4. Effect of Ineffective Monitoring in Detecting Financial Statement Fraud

Ineffective Monitoring is a condition where the internal control system of a company is not effective to monitor the company performance [10]. Ineffective internal control open up opportunities for employees to commit financial statement fraud because employees can freely commit fraud without being detected. The results of [12] show that ineffective monitoring has an effect in detecting financial statement fraud. On the other hand, research conducted by [7] shows that ineffective monitoring has no effect in detecting financial statement fraud.

H4: Ineffective Monitoring has significant effect in detecting Financial Statement Fraud

1.5. Effect of Change in Auditor in Detecting Financial Statement Fraud

Rationalization is a justification made by individual when he/she is committing fraudulent acts. Elements of rationalization can be proxies by Change in Auditor. The change of auditors can be considered as an effort to eliminate the traces of fraud that have been found by the previous auditors [13]. Research conducted by [7] shows that change in auditor has an influence in detecting financial statement fraud. However, the result of research conducted by [14] indicates that change in director has no effect in detecting financial statement fraud.

H5: Change in Auditor has significant effect in detecting Financial Statement Fraud

1.6. Effect of Frequent Number of CEO's Picture in Detecting Financial Statement Fraud

Ego (arrogance) is an attitude of superiority and greed of someone who believes that internal control does not affect him [14]. The number of CEO photos displayed in company's annual report represents the high level of arrogance of the CEO [15]. Research conducted by [11] shows that the frequent number of CEO's pictures has an effect in detecting financial statement. Meanwhile the research from [14] shows that frequent number of CEO's pictures has no effect in detecting financial statement fraud.

H6: Frequent number of CEO's pictures has significant effect in detecting Financial Statement Fraud

3. Research Methodology

This research uses a quantitative method and use secondary data from company's annual report that is obtained from Indonesia Stock Exchange (IDX) website and the company's website. The object of this research is the company listed on Indonesia KOMPAS100 Index in Indonesia Stock Exchange (IDX) for the period 2018 until 2020. The sampling method used is the purposive sampling method.

Multiple linear regression analysis method is used to determine the effect of several independent variables on one dependent variable. The classic assumptions test used in this research to test the eligibility

of the regression model consist of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The analysis method used to determine the effect of financial target, change of director, government project, ineffective monitoring, change in auditor, and frequent number of CEO's picture in detecting financial statement fraud are hypothesis T test, simultaneous F test, and coefficient of determination test (R^2). The data processing and analysis in this research is done by the help of SPSS Software.

4. Result and Discussion

The following Table 1 are the results of the selection of research samples in accordance with predetermined criteria:

Table 1: Sampling criteria

Criteria	Amount
Corporations that listed in KOMPAS 100 Index	141
Corporations that not listed in KOMPAS 100 Index between February 2018 – December 2020	(73)
Corporations that did not Rupiah as currency	(11)
Corporations selected as sample	57
Years of observation	3
Total of data observation	171
Outlier casewise diagnostic	10
Final total data observation	161

Source: processed data

Before the hypothesis test, we conducted classic assumption test, which is consist of: normality, heteroscedasticity, auto-correlation, and multicollinearity. After the data has passed those classic assumption test, we continue to hypothesis testing. Hypotheses Test result presented in table 2 and table 3

Table 2: ANOVA

	F	Sig
Regression	3.517	0.003

Source: IBM SPSS 26. Processed Data

Based on Table 2 ANOVA, it can be interpreted that the value of F arithmetic is 3.517 greater than F table which is 2.18, also p-value of 0.003 which is less than 0.05. It indicated that simultaneously all independent variable affect dependent variable.

Table 3: Hypothesis T test

Hypothesis	T	Sig	Result
H1: X1 →Y	1.614	0.109	H1 Rejected
H2: X2 → Y	-2.323	0.021	H2 Accepted
H3: X3 → Y	3.192	0.002	H3 Accepted
H4: X4 → Y	-1.314	0.191	H4 Rejected
H5: X5 → Y	-0.923	0.357	H5 Rejected
H6: X6 →Y	-1.875	0.063	H6 Rejected

Source: IBM SPSS 26. Processed Data

In Table 3, it can be seen that the Variable X1 financial target has a p-value of 0.109 which is above 0.05 and a t-arithmetic value of 1.614 which is smaller than a t-table of 1.95. This means that the financial target has no significant effect on financial statement fraud. This is because companies that are included in the KOMPAS 100 index on average achieve their financial targets and are not under financial pressure to commit fraud. This result in line with previous study by [14], [16] with got the similar result.

The variable X2 change of director has a p-value of 0.021 which is below 0.05 and a t-arithmetic of -2.323 which is smaller than a t-table of 1.95. This means that change of director has significant effect on financial statement fraud. This is because a change of directors can indicate a potential fraud, as in many cases where a change of directors occurs after an investigation into potential fraud occurs. Our result support previous research in [10], [16].

The variable X3 government project has a p-value 0.002 that is below 0.05 and a t-arithmetic of 3.192 which is greater than a t-table of 1.95. This means that government project has a significant effect on financial statement fraud. Collusion which is symbolized by the existence of linkages with government projects has a significant effect, this is because there are many companies that are included in the leading stock that have project cooperation with the government. Our result support previous study by [11] and similar with [14] in term of government project transparency.

The Variable X4 ineffective monitoring has p-value of 0.191 which is above 0.05 and a t-arithmetic value of -1.314 which is smaller than a t-table of 1.95. This means that the ineffective monitoring has no significant effect on financial statement fraud. This is because monitoring, which is part of internal control at the KOMPAS 100 index company, has been effective on average. This result in line with previous study by [7], [9] with got the same result.

The Variable X5 change of auditor has p-value of 0.357 which is above 0.05 and a t-arithmetic value of -0.923 which is smaller than a t-table of 1.95. This means that the change of auditor has no significant effect on financial statement fraud. This is because the change in auditors is mandatory, not voluntary. Mandatory change actually indicates not committing fraud because it maintains auditor independence by periodically making changes. This result in line with previous study by [10], [14] with got the same result.

The Variable X6 frequent number of CEO's picture has p-value of 0.063 which is above 0.05 and a t-arithmetic value of -1.875 which is smaller than a t-table of 1.95. This means that the frequent number of CEO's picture has no significant effect on financial statement fraud. This is because in top 100 companies, publication is mandatory, the company wants to show composition of the top management, so the number of photos of the management does not symbolize the arrogance of the management. This result in line with previous study by [14], [15] with got the same result.

5. Conclusion

The results of our study found that the change of directors and the existence of government projects had an effect on the potential for fraud. This has implications for auditors and forensic accountants that when conducting an examination the auditor must be aware of the existence of these two factors. The auditor must check whether there is a change of directors, why the company changes directors. Whether there is a project collaboration with the government and what kind of project, how is the tender process. This is to prevent collusion. We know that collusion is a key factor in hexagon fraud.

Our research can be a reference for future researchers in the future who want to conduct research in the realm of fraud detection using secondary data, especially for those using the leading or top index stock population. Researchers in other countries can make similar studies using fraud theory and its development using data from top indexes from other countries, the results of their research can be compared with our results.

6. References

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