Analysis of Fraudulent Financial Statement in Fraud Triangle Perspective (Study at Listed Companies in Indonesia Stock Exchange (BEI) in Period 2010-2014)

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Abstract

This study aims to analyze fraudulent financial statement in fraud triangle perspective that form factor of pressure, opportunity, and rationalization. The population in this study are listed companies on the Indonesia Stock Exchange who received penalty from the Indonesia Financial Services Authority. Data were selected using purposive sampling techniques so acquired 13 sample companies over five years of research from 2010 to 2014. Technical analysis used logistic regression. The results showed partially that only the pressure factor was measured by changes in the value of assets had an influence on fraudulent financial statements. While the opportunity and rationalization factor had not influence on fraudulent financial statements.

Keywords : fraud triangle and fraudulent financial statement

1. *Introduction*

Fraudulent financial statement still happens because companies want to deliver the information based on their wishes not the fact. Fraud is a deliberate act by one or more persons in the management team, supervisors, employees, third parties, a way to cheat to get benefit illegally. Fraud perpetrators tried to hide his actions. Fraud committed intentionally and there is an element of malice and fraud [Tuanakotta, (2015), p. 195].

Based on International Standards on Auditing 240, there are several factors trigger fraudulent financial statement, namely: pressure, opportunity, and rationalization. Cressey (1953) as described in Skousen *et al*. (2009) introduced the three risk factors in terms fraud triangle.

Over the past decade, fraudulent financial statement is still occur. The latest case of fraudulent financial statement is Toshiba Corp. in 2015. Management is demanded to restore the company's earnings after the world economic crisis in 2008. According to the investigation report dated July 20, 2015, Japan Financial Services Agency explained that Toshiba Corp. overstated profit of around US$ 1.22 billion since 2008. Analysis of fraud through pressure factors can be done by using indicator like ratio earning after tax to total assets. Skousen *et al*. (2009) proved that the ratio of earnings after-tax to total assets had influence on fraudulent financial statement. Different results obtained by Rachmawati and Marsono (2014) that proved ratio earning after tax to total assets had not influnce on fraudulent financial statement.

The investigation report dated July 20, 2015, Japan Financial Services Agency described the case of Toshiba Corp. involve cooperation between the president, vice president and corporate consultant. This happens due to the lack of a monitoring system which is applied in the company so that it appears the opportunity to commit fraud. Fraudulent financial statement related opportunities factor can be measured either by indicators of the number of independent board of the company. This indicator has been tested by Manurung and Hadian (2013), the number of independent board members had influence on fraudulent financial statement. However, that results are not in line with the results of the study has done by Sihombing and Rahardjo (2014) that proved that the number of independent board members had not influnce on fraudulent financial statement.

Japan Financial Services Agency via the official website, which was released on December 22, 2015 give administrative penalty to the external auditor Toshiba Corp. These penalty due to the negligence of Ernst & Young ShinNihon LLC on the financial statements of Toshiba Corp. 2009, 2011, and 2012 (for the year ended March 31, 2010, 2012, and 2013). Negligences in this case are the financial statements contain material misstatements, but Ernst & Young ShinNihon LLC considers the financial statements do not contain material misstatements. Another factor driving the fraudulent financial statement is a rationalization or justification for acts of fraud had been carried out. This factor can be measured using indicators of the change of external auditor two years prior to the occurrence of fraudulent financial statements. Rachmawati and Marsono (2014) proved that a change of external auditor had influnce on fraudulent financial statement. However, Sihombing and Rahardjo (2014) proved that a change of external auditor had not influnce on fraudulent financial statement.

The number of indicators that can be used to measure the fraud triangle actors possible to undertake further research about relationship fraud triangle factors on fraudulent financial statements.

2. *Literature Review*

2.1. *Fraudulent Financial Statement*

Elder *et al.* (2011, p.372) states that fraud in the financial statements are misstated or elimination of the amount or disclosure deliberately carried out with the aim to trick users. Moreover, Sukirman dan Sari (2013) said that Association of Certified Fraud Examinations (ACFE) defines cheating or fraud is intentional misstatement or omission of material facts, or accounting data is misleading and, when considered with all the information that has been made, will cause the reader to change the judgment or decision.

2.2. *Fraud Triangle*

2.2.1. *Pressure*

Management and employes have an incentive, encouragement or pressure to commit fraud. For the entity, the pressure to do fraudulent financial statements arises when a decrease or instability in the financial prospects of the entity, which is caused by the economic, industry, or entity operating [Hery, (2016), p.200]. Pressure factor can be measured using the indicators include:

1. Change in Total Asset (ACHANGE)

Asset can show the outlook of a company. It would be an attraction for investors, creditors, and other decision makers (Martantya and Daljono, 2013). Changes in total asset can be calculated by the formula:

$$\mathbf{ACHANGE} = \frac{(\mathbf{total\ aset}_t - \mathbf{total\ aset}_{t-1})}{\mathbf{total\ aset}_t} \quad (1)$$

2. Total Liabilities to Total Asset (LEV)

The ratio of total debt to total assets intended to illustrate the company's ability to pay off all liabilities. This ratio is used to measure the ratio between total debt to total assets [Hery, (2015), p.167]. This ratio is calculated by the formula:

$$\mathbf{LEV} = \frac{\mathbf{total\ liabilities}}{\mathbf{total\ asset}} \quad (2)$$

3. Earning After Tax to Total Asset (ROA)

This ratio can use as a tool to measure the company's ability to utilize the assets for a profit (Hery, 2016). This ratio is calculated by the formula:

$$ROA = \frac{\text{earning after tax}}{\text{total aset}} \quad (3)$$

2.2.2. *Opportunity*

An opportunity to commit fraud because fraud perpetrators believe that their activities will not be detected. The control systems are weak, inadequate management supervision and uncertain procedures contribute in opening up opportunities for fraud (Sukirman and Sari, 2014). Opportunity factor can be measured using the indicators :

1. Amount of independence member of commissioner (IND)

Oversight of the board has the responsibility to prevent acts of fraud by management. The auditor may consider the independence member of commissioner in overseeing the process of preparing financial statement (Elder *et al.*, (2011), p.389]. The ratio of the number of independent member of commissioner (IND) can be calculated using the formula:

$$IND = \frac{\textit{total member of independent commissioner}}{\textit{total commissioner board}} \quad (4)$$

2. The existence of financial expert in audit committe (EXPERT)

Kartika and Sudarno (2014) conducted research on the companies that have at least one financial expert in audit commmitee. This research proved that companies who have at least one financial expert in audit commmitee can decrease fraudulent financial statement. This data is obtained by using a dummy variable, which gives a value of 1 if the audit committee have at least one financial expert, and a value of 0 if the audit committee does not have at least one financial expert.

2.2.3. Rationalization

According to Hery (2016, p.200), the rationalization is a behavior or character that makes the management and employees to insincere, or an environment that makes them to commit dishonest act and justify a dishonest act. This factor can be measured using indicators based on change of external auditor the company in the two years prior to the occurrence of fraud. Score 1 if the sample companies change external auditor within two years prior to the study, a value of 0 if the sample companies change external auditor within two years prior to the study.

2.3. Rational Framework

Below is the rational framework of this research:

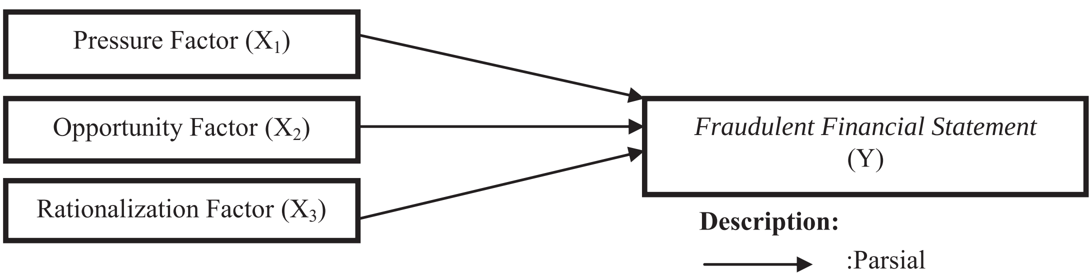

Fig 1. Rational Framework

Effect of Pressure Factor Towards Fraudulent Financial Statement

The management is always trying to convince users that the company's financial statements are in good condition. Assets were owned by companies is a reflection of the condition of the company. The more assets a company has, the better the condition of the company. Pressure may also come from external parties hope to meet the expectations of management and their expectations. Management is expected to pay off the debt at maturity. The existence of these pressures encourage enterprises to carry out fraudulent financial statements. This action taken by the management to ensure external parties that the company has the ability to repay their obligations. Profit can describe how efficiently the company of using its assets to generate earnings. The management tries to convince users of financial statements that management has efficiently utilize its assets to generate earnings. Skousen et al. (2009) proved that pressure factors had influence on fraudulent financial statement.

Effect of Opportunity Factor Towards Fraudulent Financial Statement

Performance management is overseen by a board of commissioners, some of them are independent commissioners who have no family or business relationship with the management or the company. The more the number of independent commissioner who owned by the company, the less likely management to conduct fraudulent financial statements. When commissioners was monitoring the performance of management, independent directors assisted by the audit committee which gives insight in the field of accounting and other matters related to compliance. The existence of audit committee members who have a background in accounting and finance will facilitate the process of monitoring of management performance, thus reduce the level of the possibility of fraudulent financial statements. Manurung and Hadian (2013) that proved opportunity factors had influnce on fraudulent financial statements.

Effect of Rasionalization Factor Towards Fraudulent Financial Statement

Before being given to the public, management performance reports should be examined by an external auditor. The role of the external auditor is expected to reduce the number of fraudulent financial statements. Companies could change external auditor to reduce probability of fraudulent financial statements. Rachmawati and Marsono (2014) research also obtained results that rationalization factor as measured by change of external auditor had influnce on fraudulent financial statement.

3. Research Methodology

The population in this study is a listed companies on the Indonesian Stock Exchange (BEI) in the period 2010-2014. Sampling technique used in this research is purposive sampling with criteria that non-bank listed companies on the Indonesia Stock Exchange who received penalty from Indonesia Financial Securities Agency in the period 2010-2014 and publishes an audited annual report in that period. The observational data is 65, consists of 13 companies with 5-year study period. The analysis technique used in this study is logistic regression analysis. Model for logistic regression is as follows:

$$\mathbf{Ln}\ \frac{Fraud}{1-Fraud} = b_0 + b_1ACHANGE + b_2LEV + b_3ROA + b_4IND + b_5EXPERT + b_6AUDCHANGE$$

Or it revealed to be:

$$\mathbf{Fraud} = \frac{1}{1+e^{-(b0 + b1ACHANGE + b2LEV + b3ROA + b4IND + b5EXPERT + b6AUDCHANGE)}}$$

Where:

FRAUD	= Fraudulent financial statement
Ln	= Natural logarithm
e	= base of natural logarithm
b0	= constanta
b1,2,3,4,5,6	= Regression coefficients of each indicator
ACHANGE	= ratio of the change of total assets from previous year
LEV	= ratio between total debt to total assets
ROA	= ratio of earning after tax to total assets
IND	= ratio of the number of independent board with the total number of commissioners
EXPERT	= where financial experts in the membership of the audit committee

AUDCHANGE = change of external auditors in the two prior years of research

4. Result

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	ACHANGE	1.571	.761	4.265	1	.039	4.811
	LEV	-1.679	1.725	.948	1	.330	.187
	ROA	-1.783	2.509	.505	1	.477	.168
	IND	3.548	5.263	.454	1	.500	34.740
	EXPERT(1)	.486	.938	.269	1	.604	1.626
	AUDCHANGE(1)	-.567	.764	.550	1	.458	.567
	Constant	-2.365	2.415	.959	1	.327	.094

Sumber: Output SPSS 22

Based on the data in table 1, the logistic regression equation in this research is as follows :

$$\text{Ln}\ \frac{Fraud}{1-Fraud} = \textbf{-2,365 + 1,571 ACHANGE – 1,679 LEV – 1,783 ROA + 3,548 IND + 0,486 XPERT - 0,567 AUDCHANGE}$$

Or it revealed to be:

$$\textbf{Fraud} = \frac{1}{1+e^{-(-2{,}365\ +\ 1{,}571\ ACHANGE\ -\ 1{,}679\ LEV\ -\ 1{,}783\ ROA\ +\ 3{,}548\ IND\ +\ 0{,}486\ XPERT\ -\ 0{,}567\ AUDCHANGE\ )}}$$

Based on these equations can be described as follows:

1. The value of Exp (B) of 0.094 states that if the value of independent variable as change of assets (ACHANGE), the ratio of total debt to total assets (LEV), the ratio of profit after tax to total assets (ROA), the ratio of independent directors on the number of commissioners (IND), the existence of a financial expert within the ranks of the audit committee (EXPERT), and the change of the external auditor in two years (AUDCHANGE) are 0, then probability fraudulent financial statements is 0.094.
2. ACHANGE indicator has significance value 0.039 < 0.05, which means that ACHANGE indicator had influence on fraudulent financial statetment. The value of Exp (B) for ACHANGE indicator is 4.811. It means if any changes to one unit in this indicator, then probability fraudulent financial statements increase 4.811 times.
3. LEV indicator has significance value 0.330 > 0.05, which means that LEV indicator had not influence on fraudulent financial statetment. The value of Exp (B) for LEV indicator is 0.187. It means if any changes to one unit in this indicator, then probability fraudulent financial statements decrease 0.187 times.
4. ROA indicator has significance value 0.477 > 0.05, which means that ROA indicator had not influence on fraudulent financial statetment. The value of Exp (B) for ROA indicator is 0.168. It means if any changes to one unit in this indicator, then probability fraudulent financial statements decrease 0.168 times.
5. IND indicator has significance value 0.500 > 0.05, which means that IND indicator had not influence on fraudulent financial statetment. The value of Exp (B) for IND indicator is 34.740. It means if any changes to one unit in this indicator, then probability fraudulent financial statements increase 34.740 times.
6. EXPERT indicator has significance value 0.604 > 0.05, which means that EXPERT indicator had not influence on fraudulent financial statetment. The value of Exp (B) for EXPERT indicator is 1.626. It means if any changes to one unit in this indicator, then probability fraudulent financial statements increase 1.626 times.
7. AUDCHANGE indicator has significance value 0.458 > 0.05, which means that AUDCHANGE indicator had not influence on fraudulent financial statetment. The value of Exp (B) for AUDCHANGE indicator is 0.567. It means if any changes to one unit in this indicator, then probability fraudulent financial statements decrease 0.567 times.

5. Conclusion and Suggestion

The results showed partially that only the pressure factor was measured by changes in the value of assets had influence on fraudulent financial statements. While the opportunity and rationalization factors had not influence on on fraudulent financial statements. For suggestion, future research may add the number of years of research to get better results.

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