Determinants of Financial Statement Fraud: Research Fraud Diamond Theory (Empirical Study on Manufacturing Company listed on the Stock Exchange)

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ABSTRACT

Aims of research is to assess the probable of financial statement fraud found on the theory of the fraud diamond. The Fraud diamond describes some   components lead a person to commit fraud; opportunity, capability, rationalization and pressure. Research uses Fraud Score to investigate probable of financial statements fraud. The method use purposive sampling, with criteria of financial statements of manufacturing companies classified in Indonesia Stock Exchange period in 2013-2017. Research was conducted with quantitative methods, the analysis technique used multiple regression analysis and hypothesis testing using coefficient of determination test, F test and t test. The issues of the reserach presented the pressure of variables which is replaced by financial targets and financial stability; also the opportunity of the variables are replaced by nature of industry are proven to be influential and significant in distinguish potential fraudulent financial statements.

1   Introduction

Financial Report is a mean of communication to convey company financial information to external internal and parties of company. It is supported by No.1 SFAC (Statement of Financial Accounting Concept) regarding the objectives of financial reporting, one of it is to provide useful informations for existing and potential investors and creditors. Moreover its also use financial statements for the manager to make a decision, for assessment of management performance, for assessing of feasibility of debt, tax calculations and for public accountability. Thus, in financial statements must be made correctly and meet existing information criteria. According to Romney and Steinbart (2012), in his book entitled "Accounting Information Systems" useful information criteria must be relevant, complete, reliable, timely, easy to understand, verifiable, and accessible.

But in reality, there are so many companies do not present financial reports in accordance with se criteria yet. One of reasons of fraud committed by the authority to obtain group or personal benefits. According to ACFE (Association of Certified Fraud Examiners) (2016) [1], there are 3 types of fraud committed by management and employees. This type was announced in 1996 and it has been continued to be refined today. ACFE represent in a cheating chart called "Fraud Tree". There are three branches of tree, corruption, misuse assets, and fraud/manipulation of financial statements.

Of three types of fraud, fraudulent financial statements have greatest loss impact for company. Huge loss occurs because of perpetrators of financial statement fraud are commanded by the higher-level controllers or anyone who have more authority in a company. Thus, y are easier to shape or defraud it. refore, extortion is also often referred to as "White Collar-Crime" or "White Collar Crime" (Prasmaulida 2016). [2]

PT Garuda Indonesia Tbk (GIAA) is said to beautify its financial statements in 2018. will only be dangerous for company later. financial statements of GIAA are odd because profits obtained in 2018 are quite significant. According to 2018 GIAA financial report, company recorded a net profit of US $ 809.85 thousand or equivalent to Rp 11.33 billion (exchange rate of Rp 14,000). Whereas in third quarter of 2018 Garuda Indonesia still suffered a loss of US $ 114.08 million or Rp. 1.66 trillion if it was multiplied by current exchange rate of around Rp. In GIAA General Meeting of Shareholders (AGM) held on January 24, 2019, Garuda Indonesia management acknowledged of US $ 239 million income from PT. Mahata Aero Teknologi, of which US $ 28 million was part of profit sharing should have been paid by PT. Mahata Aero Technology. In fact, money was still in form of receivables, but company admitted it was included in revenue. Deputy Chairman of House of Representatives Commission VI Mohamad Hekal considered

presentation of financial statements to be similar to window dressing phenomenon. phenomenon is when investment managers make various efforts to enhance ir portfolios. On June 28, 2019 Garuda Indonesia was subject to sanctions from various parties. Besides Garuda, sanctions were also received by Garuda Indonesia's financial statement auditors, namely Public Accountant (AP) Kasner Sirumapea and Tanubrata Public Accounting Firm (KAP), Sutanto, Fahmi, Bambang & Partners, auditors of Garuda Indonesia Corporation (GIAA) financial statements and Subsidiaries for Fiscal Year 2018. For Auditor, Minister of Finance Sri Mulyani gave a license freezing license for 12 months. In addition, FSA will also impose sanctions on Board of Directors and Commissioners of Garuda Indonesia. y are required to joint venture to pay a fine of Rp100 million. In addition re are two more sanction points given by FSA. Namely, Garuda Indonesia must pay Rp. 100 Million. In addition, each Director is also required to pay Rp100 million. In addition to sanctions from Ministry of Finance and also Financial Services Authority, Garuda Indonesia has also been sanctioned again by Indonesia Stock Exchange. Sanction for Garuda Indonesia is IDR 250 million. There are several ories explain analytical methods conducted to identify the financial statement fraud, one of which is fraud triangle or fraud triangle introduced by Cressey in 1953. According to Cressey (1953) [3] in Skousen, Smith, and Wright (2008), There are 3 factors cause anyone to act fraud. They are rationalization, opportunity and pressure. These three factors are based on the results of Cressey's interviews with embezzlers. Furrmore, Wolfe and Hermanson (2004) has added one more factor, namely capability. se four factors are often referred to as fraud diamonds.

Research with topics related to fraud triangle theory and diamond fraud is a related research due to the studies and the variables. The difference is in diamond fraud theory re is a supplementary one variable, or the variable of ability. According to the description on Auditing Standard No. 99 (AICPA 2002) [4], pressure

variable can be replaced by external pressure, financial targets and financial stability. Chance of the variable can be replaced by total accrual ratio, and ability is proxied by changes in board of directors. These four aspect have triggered an inflation in fraud, especially in recent years. desire of company to ensure its operational sustainability is (going concern), causing company to sometimes take shortcuts (illegal), namely Fraud.

There are so many researches have attempted to confirm the truth of both ories. Nonetheless, there is distinction in results between studies. In Sihombing and Rahardjo (2014) [5] results of research is to show the variables which is have an effect to the Financial Statement Fraud. While Financial Target variable, effevtive monitoring, Capability Change in auditor have no effect on Financial Statement Fraud. While in Indarto and Ghozali (2016) [6] results of research conclude financial targets and external pressure had a significant effect and positive to the financial statement fraud. The financial stability and capability have a negative and significant effect to the fraud report. As effective controlling and justification not having an influence on financial statement fraud. Therefore, the author tries to do a re-study to prove validity of two ories, specially diamond fraud theory because theory is recognized to be more accomplish, new, includes all variables in fraud triangle theory.

The problem of the formulation in inquiry is to analyze the influence potential for financial statement fraud. The Financial statements of manufacturing companies which is classify on IDX during 2013-2017 period is the object of this research. The Consideration for choosing manufacturing companies as research objects as a result of manufacturing companies have a deeper business process chain compared to or kinds of industries. Therefore, it has conclusion for the increase in the financial statement fraud.

2　Research Methodology

The purpose of the research is to identify existence of the financial statement fraud or the fraudulent financial statements by using the diamond fraud. Fraud detection in financial statements is important because financial statements play a role in providing financial information to parties who are interested in financial statements. proxy used to measure financial statement fraud is Fraud-Score Sukrisnadi (2010) [7] said Fraud-Score model is preferred because it is relatively easy to use by practitioner accountants. Like use of Z-Score bankruptcy prediction model in evaluating going concern of company has been widely used accountants in audit planning stage and evaluation of audit results.

The diamond fraud variable refers to SAS No.99 and Hermanson and Wolfe (2004). [8] Fraud diamond maps causes of fraud into four elements. The element that pressure is represented by some factors. They are financial target, financial stability and external pressure. The opportunity element is represented by the nature of industry and effective monitoring variables. Rationalization element is also represented by total accruals and capability element is represented by board change.
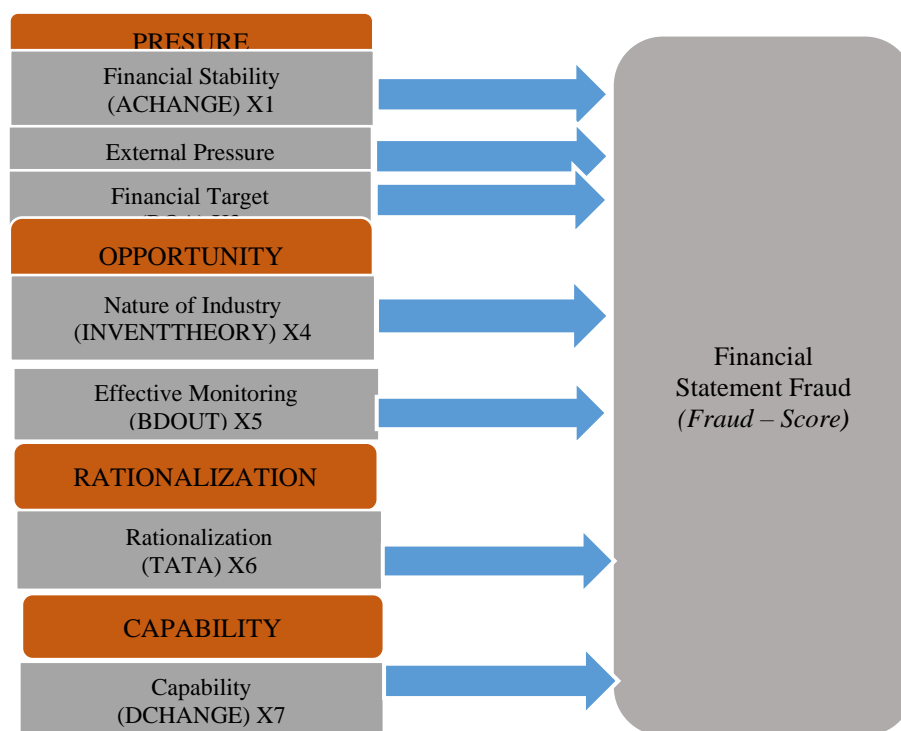
Fig. 1. Analytical framework

In testing hypothesis will test hypothesis from oretical framework of research. Testing Ha1, Ha2, Ha3, Ha4, Ha5, Ha6 and Ha7 using multiple linear regression analysis. basis for using multiple linear regression is a scheme of one dependent variable associated with two or more independent variables. The correlation between proxy of diamond fraud and financial statement fraud with multiple linear regression models is:

FRAUD-SCORE = β0 + β1ACHANGE + β2LEV + β3ROA + β4INVENTORY + β5BDOUBT+ β6TATA + β7DCHANGE + e

Information:
β0 = Regression coefficient constant
β1,2,3,4,5,6,7 = Regression coefficients of each proxy

Fraud-Score = Fraudulent Financial Statement
ACHANGE = Ratio of changes in total assets
LEV = Ratio of total liabilities to total assets
ROA = Return on Investment
INVENTORY = Inventory Change Ratio
BDOUBT = Independent Board of Commissioners Ratio
TATA = Total Accrual Ratio per total asset
DCHANGE = Change of directors
e = error

3   Result and Discussion

a. Analysis Factor

The analysis factor is a type of analysis used to recognize basic dimensions or regularity of a phenomenon. General objective of factor analysis is to summarize large amount of variable information content into a number of smaller factors.

The variables have been determined will be tested using Kaiser-Meiyer-Olkin (KMO) and Barlett's test methods. Reference for testing with test is a fairly strong correlation between variables, which must be greater than 0.5. To find out size of KMO provisions can be observed in following table:

Table 1. Bartlett's Test and KMO

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.424
Bartlett's Test of Sphericity	Approx. Chi-Square	87.060
	Df	21
	Sig.	.000

Source: Output Spss V.23, 2019

The table shows the KMO and Barlett's test number is 0.423, Chi-Square number is 87,060 with a significant 0,000. Whereas for df indicated by number 21. Because significant value is far below 0.05 (0,000 <0.05), variables and samples can already be analyzed by factor analysis.

Factoring and Rotation Factor

After testing what variables will be analyze and getting a feasible variable to analyze, next step is to carry out core process of factoring factor analysis, which is extracting or deriving one or more factors from variables have passed previous variable test so it is formed one or more factors

Table 2. Communalities

	Extraction
Financial Stability	.695
External Pressure	.638
Fiancial Target	.769
Nature Of Industry	.382
Effective Monitoring	.815
Rasionalization	.620
Capability	.428

Extraction Method: Principal Component Analysis.

Communalities are basically amount of variance (can be as a percentage) of an initial variable can be explained by existing factors. From table above it can be explained for financial stability variable number is 0.695. Means about 69.5% of variance of working capital variable can be explained by factors will be formed later. While External pressure variable, number is 0.638, which means 63.8% of variance of external pressure variable can be described by factors formed. target financial variable is 0.769, which means 76.9% of variance of financial target variable can be explained by factors formed. Nature of industry variable is 0.382, which means 38.2% of variance of nature of industry variable can be explained by factors formed when naming factors. Effective monitoring variable is 0.815 which means 81.5% of variance of effective monitoring variable is explained by factors formed. Ratio of variable rationalization is 0.620 which means 62% of variance of variable rationalization can be explained by forming factors. Capability variable is 0.428 which means 42.8% of variance of capability variable is explained by forming factor.

b. Regression

Multiple linear regression analysis was adopted to know the consequence of autonomous variable on dependent variable. Analysis is carried out in unstandardized coefficients column of issue of multiple linear regression analysis, could be recognized over the issues below:

Table 3. Issues of Multiple Linear Regression Analysis (Statistical Test t)

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-2509.615	2155.799		-1.164	.247
(ACHANGE)	.585	.113	.437	5.165	.000

(LEV)	-.059	.048	-.101	-1.229	.222
(ROA)	1.604	.803	.161	1.996	.049
(INV)	-.532	.096	-.439	-5.520	.000
(BDOUT)	.453	.463	.079	.977	.331
(TATA)	.111	.076	.123	1.465	.146
(DCHANGE)	167.268	874.298	.015	.191	.849

a. Dependent Variable: Financial Statement Fraud (*Fraud-Score*)

Source : Outpus SPSS (2019)

Based on results of analysis, equation used:

FRAUD – SCORE = -2509,615 + 0,585ACHANGE – 0,059LEV + 1,604ROA – 0,532 INV + 0,453BDOUT + 0,111 TATA + 167,268DCHANGE

Description of the equations mentioned on the previous is:

1. Constant values of -2509,615 indicate if ACHANGE, Leverage, Return on Asset, INV, BDOUT, TATA, and DCHANGE are constant, FRAUD-SCORE will be -2509,615,

2. ACHANGE regression coefficient value is 0.585. As conclusion if or independent variables are stable, it means any increase in ACHANGE by 1 unit. It is potential for fraudulent financial statements will increase by 0.585 units.

3. LEV regression coefficient value of -0.059. As conclusion if or independent variables are stable, it means any increase in LEV by 1 unit. It is potential for fraudulent financial statements will decrease by 0.059 units.

4. Return on Asset regression coefficient value of 1.604. Thus, it can be concluded if or independent variables are constant, it means each increase in Return on Asset by 1 unit. It is potential for fraudulent financial statements will increase by 1.604 units.

5. INVENTORY regression coefficient value of 0.532 with a negative direction. Thus, it can be assumed if or independent variables are constant, it means every increase in INVENTORY is 1 unit, potential for fraudulent financial statements will decrease by 0.532 units.

6. Value of BDOUT regression coefficient is 0.453. Thus, it can be assumed if or independent variables are constant, it means any BDOUT increase is 1 unit. It is potential for financial statement fraud will increase by 0.453 units.

7. TATA regression coefficient value of 0.111. Thus, it can be assumed if or independent variables are constant, it means each increase in TATA is 1 unit, potential for fraudulent financial statements will increase by 0, 0.111 units.

8. DCHANGE regression coefficient value of 167.268 with a positive direction. Thus, it can be assumed if or independent variables are constant, it means any DCHANGE increase of 1 unit, potential for fraudulent financial statements will increase by 167,268 units.

4 Conclusion

The determination of research is to decide the impact of external pressure, nature of industry, effective monitoring, financial stability, financial targets, capability variables and rationalization on potential variables of financial statement fraud in manufacturing companies classified in IDX during 2013-2017 period. The research shows the following conclusions:

1. Positive effect and a compelling on potential of the fraudulent financial statements of Financialstability (ACHANGE).
2. (LEV) External Pressure has no effect but it has compelling and positive to potential of fraudulent financial statements.
3. Financial targets (ROA) has a compelling and positive effect on potential of fraudulent financial statements.
4. Compelling effect and a negative effect on potential for fraudulent financial statements of Nature of industry (INVENTORY).
5. Effective monitoring (BDOUT) has no compelling and compelling effect on potential for fraudulent financial statements.
6. Rationalization (TATA) has no compelling and compelling effect of potential for fraudulent financial statements.
7. Capability (DCHANGE) has no compelling and compelling effect of potential for fraudulent financial statements.

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