

## DETECTING FINANCIAL STATEMENT FRAUD USING FRAUD DIAMOND (A Study on Banking Companies Listed On the Indonesia Stock Exchange Period 2012-2016)

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### ABSTRACT

*Financial statement fraud is one type of fraud that causes more adverse effect than other types of fraud. Based on this phenomenon, this study aims to detect financial statement fraud using fraud diamond. There are four factors that encourage a person to commit fraud; pressure, opportunity, rationalization and capability. The dependent variable used in this study was financial statement fraud and the independent variables used were financial stability, external pressure, financial target (pressure), external auditor quality (opportunity), change in auditor (rationalization), and change of directors (capability). This study employed quantitative research approach. The population was the entire banking companies listed on the Stock Exchange in the period of 2012-2016. Sampling was conducted using purposive sampling method and acquired a sample of 19 banking companies. Data analysis was conducted using a logistic regression analysis with SPSS 16 software. The results show that financial stability and change in auditors have an effect on financial statement fraud. However, external pressure, financial target (pressure), external auditor quality (opportunity), and change of directors (capability) have no effect on financial statement fraud.*

*Keyword: Fraud, Financial Statement Fraud, Fraud Diamond*

### 1. INTRODUCTION

A financial statement will function optimally if it is presented in accordance with its qualitative elements, such as easy to understand, reliable, comparable, and relevant (Institute of Indonesia Chartered Accountants / IAI), 2016). However, there are still some business people who commit fraud in their financial statements. Most financial statement fraud occurs in financial and banking sector companies.

One example of fraud occurring in the banking industry is the case of Century

Bank. Century Bank issued a financial report that was deemed misleading because there were many material errors in it. Until now the case of Century Bank has not been completed and even it is now starting to drag a number of prominent people in Indonesia. The next example is Lippo Bank. Lippo Bank committed fraud by making multiple reports so that the bank could get recapitulation from the government. In its financial statement, it was reported that the company was in a state of loss in which the asset value was

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made smaller than the actual asset value (Tuanakotta, 2013).

Based on a survey conducted by the Association of Certified Fraud Examiners (ACFE) in 2016, it shows that the financial and banking sectors are in fact the sectors with the most fraud cases, when compared to other sectors

## 2. THEORICAL BASIS

### Definition of Fraud

There are several definitions of fraud. According to the Association of Certified Fraud Examiners (ACFE, 2016), fraud is unlawful acts carried out intentionally for certain purposes (manipulating or giving false reports to other parties), carried out by people from inside or outside the organization to obtain personal or group benefits, which directly or indirectly harm other parties. Statement of Auditing Standard No. 99 defines fraud as a deliberate action to produce material misstatements in financial statements that are subject to audit. In addition, there are still many definitions of fraud from various opinions.

### Types of Fraud

#### Corruption

Corruption is one type of fraud that is difficult to detect because it involves cooperation with other parties or collusion. Many parties collaborate to enjoy the benefits of this type of fraud. The collaboration can be in the form of abuse of authority, bribery, acceptance of illegal gifts and economic extortion.

#### Asset Misappropriation

Asset Misappropriation is an illegal use of assets by someone who is given the responsibility to manage or oversee the assets (Tuanakotta, 2012: 199).

#### Financial Statement Fraud

Association of Certified Fraud Examiners (ACFE, 2016) defines fraud as unlawful acts carried out intentionally for certain purposes (manipulating or giving false reports to other parties), carried out by people from inside or outside the

organization to obtain personal or group benefits, which directly or indirectly harm other parties. This type of fraud is committed by manipulating financial statements to cover the actual condition of the company in order to obtain benefits from various parties. In this study, the financial statement fraud is used as the dependent variable by using restatement as its proxy. Restatement is used as the dependent variable because there is no official data regarding companies that commit fraud. Restatement can provide a sign of financial statement fraud (Salavei and Moore, 2005). Empirically, fraud that occurred in corporations, including the Bank, was only revealed ex-post facto.

### Elements of Fraud

According to Priantara (2013: 6) the following elements must be present in every case of fraud, or otherwise the case is only in the stage of error, negligence, ethical violations, or violations of service commitments. The elements in question are:

1. There is a misrepresentation or misleading statement in the form of report, data, or information, or proof of transaction.
2. It is not only about making false statements, but fraud is an act that violates regulations, standards, and provisions. And in certain situations it violates the law.
3. There is abuse of position, occupation, and authority for personal interests and benefits
4. Involving the past and the present, because the calculation of losses suffered by victims is generally associated with actions that happened in the past and are happening at present.
5. Supported by material facts, such as objective evidence and in accordance with the law
6. Intentional actions or deliberate carelessness.
7. Parties who are harmed

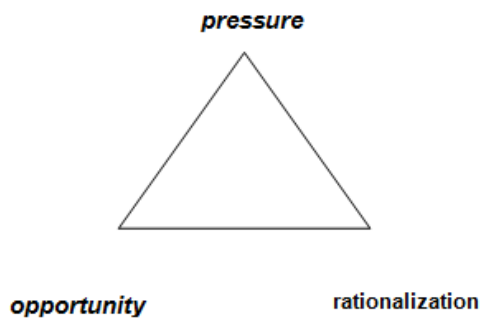
### Factors that cause Fraud

According to the GONE theory created by G. Jack Bologna in Priantara (2013, 48), there are four factors that encourage a person to commit fraud:

1. Greed
2. Opportunity
3. Need
4. Exposure

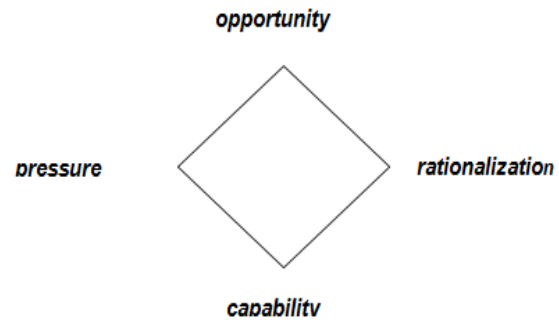
### Fraud Triangle Theory

Fraud Triangle theory was first created by Cressey (1953). This theory is basically an idea that examines the causes of fraud. This theory emerged in the research conducted by Donald R. Cressey in 1953 published under the title: *"Other People's Money: A Study in the Social Psychology of embezzlement."* Cressey's research generally explains the reasons why people commit fraud.



### Fraud Diamond Theory

Fraud Diamond theory was first proposed by David T. Wolfe and Dana R. Hermanson (2004). This theory considers for elements of fraud. According to Wolfe and Hermanson (2004), fraud will not occur without the right person with the right capability to carry out every detail of fraud. The following is an overview of Fraud Diamond:



### Conceptual Framework

This study aims to detect financial statement fraud using diamond fraud. This study uses 7 variables consisting of 1 dependent variable (bound) and 6 independent variables. The dependent variable used is financial statement fraud proxied by restatement, and the independent variables used are financial stability (ACHANGE), external pressure (LEV), financial target (ROA), external auditor quality (BIG), change in auditor (CPA) and change of directors (DCHANGE) (Figure 1).

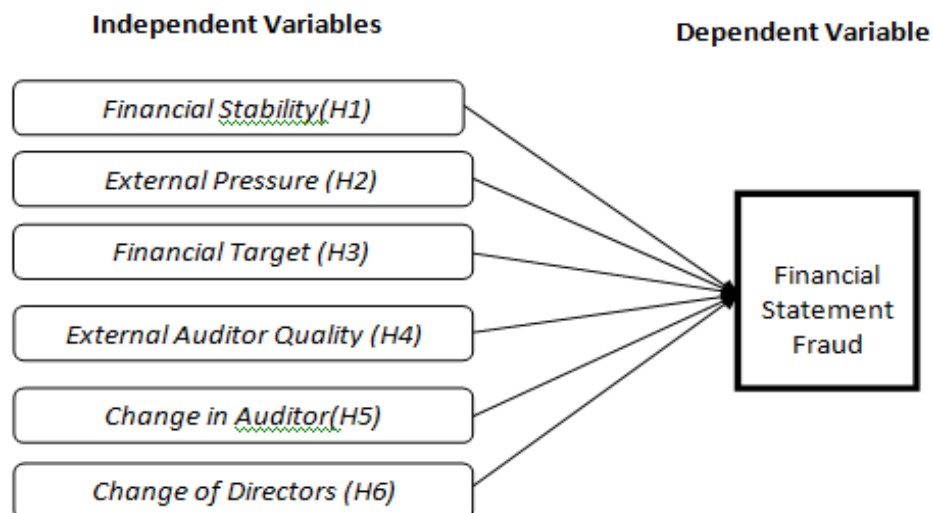


Figure 1

## FORMULATION OF RESEARCH HYPOTHESIS

### The Effect of Financial Stability on Financial Statement Fraud

According to SAS No 99, financial stability is a stable financial condition that a company has to attract investors and creditors. SAS No. 99 also explains that managers will face pressure to commit fraud and manipulation in financial statements when the company's financial stability and profitability decrease or are threatened by economic or industrial conditions and the situation of the operating entity. The greater the economic or industrial pressure on the company, the stronger the desire of management to commit fraud in the financial statements so that the company's financial statements appear to remain stable (Selano et al. 2017). Based on the description, the hypothesis proposed in this study is:

H1: Financial stability has an effect on financial statement fraud

### The Effect of External Pressure on Financial Statement Fraud

SAS NO. 99 states that external pressure is excessive pressure experienced by company management to fulfill the interests and requests of external parties or directors so that the company's operations continue to increase and achieve the expectations of the directors. According to Skousen et al. (2008), one source of external pressure is the company's ability to pay debts or fulfill debt requirements. If the company has high leverage, it means that the company is considered to have a large debt and high credit risk. The higher the credit risk, the greater the level of concern for creditors to provide loans to the company. Based on the description, the hypothesis proposed in this study is

H2: External pressure has an effect on financial statement fraud

### The Effect of Financial Target on Financial Statement Fraud

SAS No. 99 defines financial target as a level of corporate financial performance

that will be achieved for the effort made. Managers strive to improve their performance in order to achieve various company targets, one of which is financial target. The research conducted by Manurung and Hadian proves that financial target affects financial statement fraud. The higher the ROA, the better the management performance, which means that the overall operation of the company has been effective. Thus, it can increase the attractiveness of investors to invest in the company, so that it can increase the value of shares. However, increasing the performance by targeting higher ROA will allow management to commit financial statement fraud in the form of earnings management. Based on the description, the hypothesis proposed in this study is:

H3: Financial target has an effect on financial statement fraud

### The Effect of External Auditor Quality on Financial Statement Fraud

The appointment of an external auditor by the company's audit committee is considered to be able to conduct an independent audit so as to avoid conflicts of interest and to ensure the integrity of the audit process. Research on the quality of external auditors focuses on the difference in the selection of audit services from public accounting firms (KAP) between the big four accounting firms (PWC, Deloitte, Erns & Young, KPMG) and non big four accounting firms. The reason is that the big four accounting firm is considered to have more ability to detect and disclose reporting errors in management. This is also proven through research conducted by Lennox and Pittman (2010) that external auditors working on big four accounting firms have more ability to detect fraud than those working on non big four accounting firms. Based on the description, the hypothesis proposed is:

H4: *External auditor quality has an effect on financial statement fraud*



### The Effect of Change in Auditor on Financial Statement Fraud

Change in auditor is a proxy of rationalization. Shelton (2014) argues that rationalization is how to justify his mind in committing a crime. One of the factors that cause a person to commit fraud is rationalization. Rationalization provides a reason that a person commits fraud because of a reasonable and supposed thing. Before committing fraud, one will look for rationalization.

Change in auditor used by a company can be considered as a way to eliminate the fraud trail found by the previous auditor. Then this trend encourages the company to replace its independent auditor to cover fraud within the company. Based on the description, the hypothesis proposed is:

H5: Change in auditor has an effect on financial statement fraud

### The Effect of Change of Directors on Financial Statement Fraud

In Cressey's theory (1953), there are three factors that influence someone to commit fraud, that is, pressure, opportunity and rationalization. However, Wolfe and Hermanson (2004) added one factor in Cressey's theory, that is, capability. According to Wolfe and Hermanson (2004), fraud will not occur without the right person with the right ability to carry out every detail of fraud. Based on the description, the hypothesis proposed is:

H6: Change of directors has an effect on financial statement fraud

## 3. METHOD

This study employed a quantitative approach, with population consisting of all banking companies listed on the Indonesia Stock Exchange. Sampling was conducted using purposive sampling method. The data used were secondary data.

### Data Analysis Method

This study used logistic regression to analyze the research variables. The dependent variable used was financial statement fraud proxied by restatement using dummy variables. There were 6

independent variables involved, such as financial stability (ACHANGE), external pressure (LEV), financial target (ROA), external auditor quality (BIG), change in auditor (CPA), and change of directors (DCHANGE).

$$FFR = \beta_0 + \beta_1 ACHANGE + \beta_2 LEV + \beta_3 ROA + \beta_4 BIG + \beta_5 CPA + \beta_6 DCHANGE + e$$

Note:

FFR = dummy variable, code 1 is for companies that restate financial statements, code 2 for those that do not.

$\beta_0$  = Constant, regression coefficient

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$  = Regression coefficient of each proxy

ACHANGE = Ratio of change in total asset (financial stability)

LEV = Ratio of total liabilities per total asset (external pressure)

ROA = Return on asset ratio (financial target)

BIG = External auditor quality

CPA = Change in independent auditor

DCHANGE = Change of directors

e = error

## 4. RESEARCH RESULT AND DISCUSSION

### Multicollinearity Test

Multicollinearity test aims to determine whether there is multicollinearity between independent variables. A good regression model is indicated by no symptoms of multicollinearity between the independent variables. Multicollinearity can be seen from the value of tolerance and the value of VIF (Variance Inflation Factor). If the tolerance value is  $\geq 0.10$  and the VIF value is  $\leq 10$ , the proposed model is free from multicollinearity (Table 1).

Multicollinearity test results indicate that all tolerance values are greater than 0.10, indicating that there is no correlation between independent variables (free from multicollinearity). All VIF values are less than 10.0, indicating that there is no correlation between independent variables (free from multicollinearity).

#### Hypothesis Test (Table 2).

#### The Effect of Financial Stability on Financial Statement Fraud

The result of the first hypothesis (H1) test indicates that the variable of financial stability (ACHANGE) has a significance level of  $0.046 < 0.05$ , which means that the first hypothesis (H1) is accepted or financial stability (ACHANGE) has an effect on financial statement fraud. Thus, financial stability can be used to detect financial statement fraud.

#### The Effect of External Pressure on Financial Statement Fraud

The result of the second hypothesis (H2) test indicates that the variable of external pressure (LEV) has a significance level of  $0.38 > 0.05$ , which means that the second hypothesis (H2) is rejected or external pressure has no effect on financial statement fraud. Thus, external pressure cannot be used to detect financial statement fraud.

#### The Effect of Financial Target on Financial Statement Fraud

The result of the third hypothesis (H3) test indicates that the variable of financial target which is proxied by the return on assets (ROA) has a significance level of  $0.06 > 0.05$ , which means that the third hypothesis (H3) is rejected or financial target has no effect on financial statement fraud. Thus, financial target cannot be used to detect financial statement fraud.

**Table 1**  
**Multicollinearity Test Results**

| Variable | Tolerance | VIF   | Multicollinearity           |
|----------|-----------|-------|-----------------------------|
| ACHANGE  | .988      | 1.012 | Free from multicollinearity |
| LEV      | .952      | 1.051 | Free from multicollinearity |
| ROA      | .808      | 1.237 | Free from multicollinearity |
| BIG      | .835      | 1.197 | Free from multicollinearity |
| CPA      | .963      | 1.039 | Free from multicollinearity |
| DCHANGE  | .905      | 1.105 | Free from multicollinearity |

Source: Processed Data, 2018

**Table 2**  
**Variable in Equation**

|                        |          | B      | S.E    | Wald  | df | Sig.        |
|------------------------|----------|--------|--------|-------|----|-------------|
| Step<br>1 <sup>a</sup> | ACHANGE  | -5.528 | 2.768  | 3.988 | 1  | <b>.046</b> |
|                        | LEV      | 3.009  | 4.884  | .380  | 1  | .538        |
|                        | ROA      | 64.962 | 35.428 | 3.362 | 1  | .067        |
|                        | BIG      | -.834  | .611   | 1.861 | 1  | .172        |
|                        | BIG      | 1.298  | .661   | 3,857 | 1  | <b>.050</b> |
|                        | CPA      | .208   | .710   | .086  | 1  | .769        |
|                        | DCHANGE  | -3.174 | 4.346  | .534  | 1  | .465        |
|                        | Constant |        |        |       |    |             |

**a. Variable (s) entered on step 1: ACHANGE, LEV, ROA, BIG, CPA, DCHANGE**

Source: Processed Data, 2018

### The Effect of External Auditor Quality on Financial Statement Fraud

The result of the fourth hypothesis (H4) test indicates that the variable of external auditor quality, which is proxied by the dummy variable, that is, 1 for companies that use the big four audit services and 0 for companies that do not use the big four audit services has a significance level of  $0.172 > 0.05$ , which means the fourth hypothesis (H4) is rejected or external auditor quality has no effect on financial statement fraud. Thus, external auditor quality cannot be used to detect financial statement fraud.

### The Effect of Change in Auditor on Financial Statement Fraud

The result of the fifth hypothesis (H5) test indicates that the variable of change in auditor which is proxied by the dummy variable, that is, 1 for companies that make a change in auditor and 0 for companies that do not make a change in auditor has a significance level of  $0.050 = 0.05$ , which means the change in auditor has an effect on financial statement fraud. Thus, change in auditor can be used to detect financial statement fraud.

### The Effect of Change of Directors on Financial Statement Fraud

The result of the six hypothesis (H6) test indicates that the variable of change of directors which is proxied by the dummy variable, that is, 1 for companies that make change of directors and 0 for companies that do not make change of directors has a significance level of  $0.769 > 0.05$ , which means that the sixth hypothesis (H6) is rejected or change of directors has no effect on financial statement fraud. Thus, change of directors cannot be used to detect financial statement fraud.

### CONCLUSION

The variable of financial stability, which is proxied by change in assets (ACHANGE), and the variable of change in auditor, which is measured using dummy variable whether making change in auditor or no change in auditor, have an effect on

financial statement fraud so that they can be used to detect financial statement. The variable of external pressure, which is proxied by leverage (LEV), the variable of financial target, which is proxied by return on assets (ROA), the variable of external auditor quality, which is measured using dummy variable whether using big four auditors or non big four, and the variable of change of directors, which is measured using dummy variable whether making change of directors or no change of directors have no effect on financial statement fraud. Thus, they cannot be used to detect financial statement fraud.

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