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# Analysis of factors that influence financial statement fraud in the perspective fraud diamond: Empirical study on banking companies listed on the Indonesia Stock Exchange year 2012 to 2014

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## Abstract

This research aimed to get empirical evidence in detecting financial statement fraud with fraud perspective diamond. Research by Sihombing (2014) explained that diamond fraud is an outlook and new concepts about the phenomenon of fraud raised by Wolfe and Hermanson (2004). Proxy variables of this research using pressure that is proxied by financial stability, external pressure, and financial targets; opportunity is proxied by ineffective monitoring and nature of the industry; rationalization is proxied by the turn of the auditor and capability is proxied by the change of directors. This research examined the empirical evidence to detect financial statement fraud with fraud perspective diamond. This study refers to the banking company listed in Indonesia Stock Exchange. The results of this research indicate that the variable pressure is proxied by financial stability, external pressure, and financial targets; Opportunity is proxied by ineffective monitoring and nature of the industry; Rationalization is proxied by the turn of the auditor and Capability proxied by the change of directors. But in this research proves that the Variable Pressure with proxies financial stability, external pressure and financial targets; Opportunity Variable, Nature of the Industry, Ineffective Monitoring and Rationalization variables change in the Auditor does not affect the financial statement fraud while Capability variable with proxy turn of directors gave a positive and significant effect on the Financial Statement Fraud.

**Keyword:** Fraud triangle, diamond fraud, financial statement fraud

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## 1. INTRODUCTION

Financial statement fraud is a matter of social and economic concerns that are attacking this country. This led to a decline in market value and directly affect the company in bankruptcy and could harm the state and increasing attention on the act of fraud financial statements. Several cases of fraud in the financial statements of the accounting scandals could damage the image and confidence of investors to re-invest in the financial markets.

The increasing cases of fraud in the financial statements in the world led to various parties speculate that the management has done a fraud on financial statements (Skousen et al, 2009). This research was conducted by the Association of Certified Fraud Examiner (ACFE, 2014) found that the perpetrators of fraud based on the level of authority, 42% is done by employees, 36% level managers and about 19% done by the owner of the company itself, the results of this study are consistent from year to year, while the fraud in the banking and finance in the

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world there are 244 (37.3%) cases of fraud (<http://www.acfe.com/rtnn.aspx>). If the financial statement fraud is indeed a very significant problem, as responsible auditor must be able to detect any fraudulent activity before it eventually evolved into an accounting scandal that is very detrimental for companies and investors.

This research aimed to detect the financial statement fraud using fraud diamond analysis as the research that has been done by Sihombing (2014) explained that diamond fraud is an outlook and new concepts about the phenomenon of fraud raised by Wolfe and Hermanson (2004). If in the fraud triangle there are three elements, then in the diamond fraud there is a significant element influencing someone to doing fraud, and that is the *capability*. Proxy variables of this study can be used, *pressure* that is proxied by financial stability, external pressure, and financial targets; and *opportunity* proxied by ineffective monitoring and nature of the industry; *rationalization* is proxied by the turn of the auditor and *capability* are proxied by the change of directors.

## 2. LITERATURE REVIEW

### 2.1 Theory of Agency

According to Eisenhardt (1989) in Maudy (2013), using three assumptions of agency theory of human nature, namely: (1) humans is generally selfish (self interest), (2) humans have limited the power of thought about the perception of the future (bounded rationality) and (3) humans always avoid the risk (risk averse). The third trait causes of human-generated information to other human beings always questionable reliability and information submitted does not comply with generally accepted that the actual condition of the company, or better known as asymmetric information (Ujiyantho & Scouting, 2007). It gives the chance or opportunity to managers to manage earnings.

### 2.2 The concept of Fraud

Fraud is an act and the action taken deliberately, consciously know and want to abuse everything that belongs together, for example: resource companies and countries for personal enjoyment and then presenting misinformation to cover up such abuse.

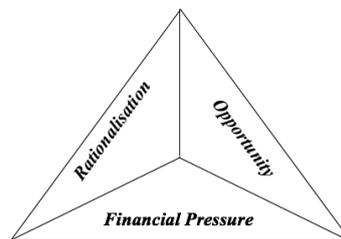


Figure 2.2 Fraud Triangle

The concept of the fraud triangle introduced in the professional literature on the SAS no. 99, Consideration of Fraud in a financial statement audit. Cressey (1953) in Skousen et al. (2009) concluded that fraud in general have three common characteristics. Fraud triangle composed of three conditions that are generally at the time the fraud occurred, i.e., incentive / pressure, opportunity and attitude / rationalization (Turner et al., 2003).

### 2.3 Fraud Diamond

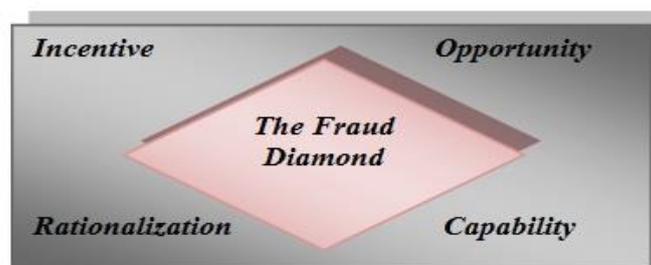


Figure 2.3 Fraud Diamond Model

Fraud diamond is a new view of the phenomenon Fraud proposed by Wolfe and Hermanson (2004). Fraud diamond is a form of refinement of the theory of fraud triangle by Cressey (1953). Fraud diamond adds a qualitative element that is believed to have a significant influence to the Fraud Capability. Although the fraud triangle are present and are still used in the relevant translation of the factors that influence the occurrence of fraud, fraud is expected to add to the reference diamond investigators, practitioners and academics in the development of fraud cases.

## **2.4 Earning Management**

Earnings management has been described differently by academics, researchers, practitioners and other authorized organizations (Rezaee, 2002). Schipper (1997) in Rezaee (2002) defines earnings management as an intervention against external financial reporting process to gain some personal advantage. Earnings management is often carried out on management intervention. The statement was in line with Healy and Wahlen (1999) which states that earnings management occurs when managers use judgment in financial reporting and manipulation of transactions to alter financial statements, either to mislead some stakeholders about the company's performance or to influence the contract that relies on figures in the financial statements.

The concept of earnings management by Salno and Baridwan (2000: 19) using agency theory approach which states that the practice of earnings management is influenced by conflict of interest that arise because each party seeks to achieve or take into consideration the level of prosperity it wants. Conflicts of interest is increasing mainly because the principal can not monitor the activities of daily management to ensure that management works in accordance with the wishes of shareholders.

## **2.5 Financial Statement Fraud**

Financial Statement Fraud is an intentional or omissions in the reporting of the financial statements in which the financial statements are not presented in accordance with generally acceptable accounting principles. This deliberate omission or material nature that may influence the decision to be taken by the parties concerned.

Wells (2011), Financial Statement Fraud includes several modes, among others:

1. Forgery, alteration, or manipulation of financial records (financial records), supporting documents or business transactions.
2. Removal of deliberate on events, transactions, accounts, or other significant information as a source of financial statement presentation.
3. Application of false and deliberate on the accounting principles, policies, and procedures used to measure, recognize, report and disclose economic events and business transactions.
4. Removal of deliberate on the information that should be presented and disclosed regarding the principles and accounting policies used in the financial reporting (Rezaee, 2002).

## **3. MODEL AND HYPOTHESIS**

This study uses quantitative methods to analyse the independent variable which is a component of the fraud triangle with financial statement fraud with the dependent variable Pressure categorized into financial stability, external pressure, financial targets, Opportunity categorized into the Nature of Industry and ineffective monitoring, rationalization categorized into in Change in auditors and capability with 7 dependent variables.

### **3.1 Hypothesis**

- H1: Financial stability can be used to detect financial statement fraud.
- H2: External Pressure can be used to detect financial statement fraud.
- H3: Financial Targets can be used to detect financial statement fraud.
- H4: Nature of Industry can be used to detect financial statement fraud.
- H5: Ineffective monitoring can be used to detect financial statement fraud.
- H6: Change in Auditor can be used to detect financial statement fraud.
- H7: Capability can be used to detect financial statement fraud.

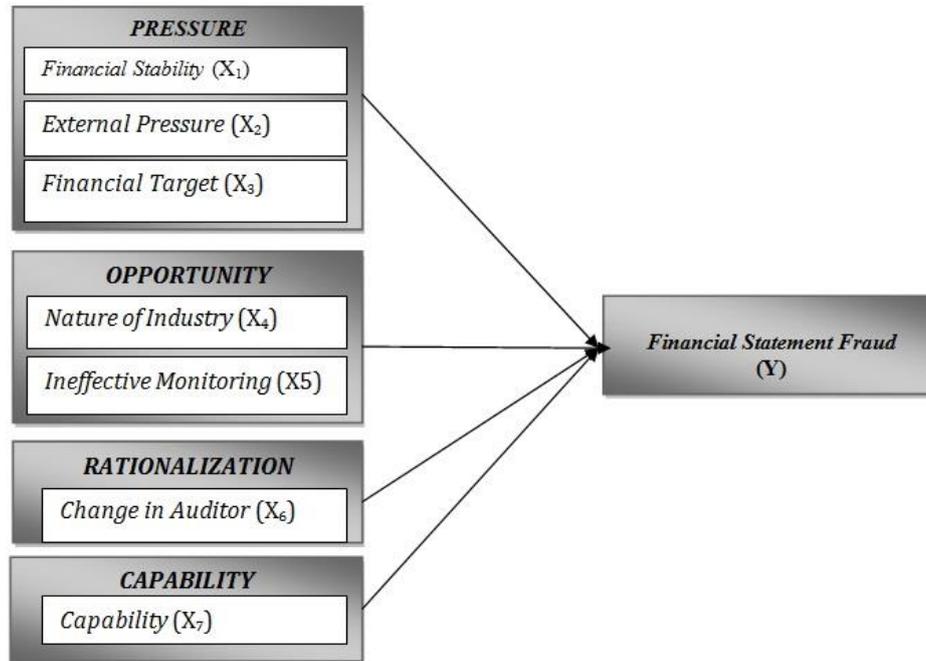


Figure 3.1 Conceptual Framework

#### 4. RESEARCH METHODOLOGY

The Dependent Variable in this research is financial statement fraud which proxied by *earning management*, namely: Value Discretionary Accrual of Modified Jones Model (DACCit), while the Independent Variables, *Pressure* categorized into groups, Financial Stability is proxied by the ratio of the change in total assets (ACHANGE), External Pressure proxied by the ratio Leverage (LEV), Financial Targets proxied by Return on Assets (ROA), Opportunity grouped into the Nature of the Industry proxied by the ratio of Receivables Business (RECEIVABLE), Ineffective Monitoring of proxies with an Independent Commissioner (BDOUT), Rationalization grouped into Change in Auditor proxied by Substitution Public Accountant ( $\Delta$ CPA) and Capability is proxied by the Board of Directors Change (DCHANGE).

##### 4.1 Population, Sample and Sampling Techniques

The population in this study are all banking companies listed in the Indonesia Stock Exchange during the period 2012-2014. Considerations for selecting a population of manufacturing enterprises is due to the company in one type of company that banks tend to have characteristics similar accrual (Halim et al., 2005). In addition, the banking company's financial reporting data is more reliable in the presentation of the accounts of the financial statements, such as assets, cash flow, sales, and others.

The sampling technique was done by purposive sampling in order to obtain a representative sample in accordance with prescribed criteria. The criteria used to select the sample are as follows:

1. Companies that go public banks or listed in the Indonesia Stock Exchange (BEI) during the period 2012-2014.
2. The Company publishes annual financial statements and independent audit reports on the website [www.idx.com](http://www.idx.com) on Indonesia Stock Exchange
3. Detailed data available relating to the variables in the banking company (overall data available on the publication during the period 2012-2014).

##### 4.2 Analysis Method

The relationship between discretionary accruals and proxies of fraud triangle was tested using a model according to research Skousen et al. (2009) in Sihombing (2014). Hypothesis testing is done by multiple regression, namely:

$$DACCit = \beta_0 + \beta_1ACHANGE + \beta_2LEV + \beta_3ROA + \beta_4RECEIVABLE + \beta_5BDOUT + \beta_6\Delta CPA + \beta_7\Delta DCHANGE + \epsilon_i$$

Specification:

|                         |   |
|-------------------------|---|
| $\beta_0$               | = coefficient of regression constants                         |
| $\beta_{1,2,3,4,5,6,7}$ | = regression coefficient of each proxy                        |
| DACCit                  | = discretionary accruals firm i year t                        |
| ACHANGE                 | = percentage change in the total assets of the year 2012-2014 |
| LEV                     | = Ratio of total liabilities per total assets                 |
| Receivable              | = accounts receivable ratio changes                           |
| BDOOUT                  | = ratio of independent directors                              |
| $\Delta$ CPA            | = Change of Independent Auditor                               |
| DCHANGE                 | = Change of Directors   |
| $\varepsilon$           | = error   |

## 5. RESULTS AND DISCUSSION

### 5.1 Description of Research Samples

Here's a table of descriptive statistical analysis that provides an overview of the data that is visible from a minimum value, maximum, average, and standard deviation of the variables tested.

### 5.2 Description of Research Samples

Descriptive Data aims to provide an overview of research data characteristics. The table below contains the descriptive data from the dependent variable Financial Statement Fraud and 7 (seven) independent variables used in this research

Table 1. Descriptive Statistics

|                           | N         | Range     | Min       | Max       | Mean      | Std. Deviation | Variance  |
|---------------------------|-----------|-----------|-----------|-----------|-----------|----------------|-----------|
| Statistic                 | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error     | Statistic |
| Financial_Stability       | 11        | .75       | -.05      | .70       | .2045     | .07021         | .23287    |
| External_Pressure         | 11        | 1.24      | .00       | 1.24      | .8300     | .09376         | .31097    |
| Financial_Target          | 11        | .03       | .00       | .02       | .0036     | .00310         | .01027    |
| Nature_Of_Industry        | 11        | 14.23     | -6.92     | 7.31      | .4509     | 1.29889        | 4.30792   |
| Ineffective_Monitoring    | 11        | .76       | .38       | 1.14      | .6609     | .05769         | .19134    |
| Change_In_Auditor         | 11        | 1.00      | .00       | 1.00      | .1818     | .12197         | .40452    |
| Capability                | 11        | 1.00      | .00       | 1.00      | .8182     | .12197         | .40452    |
| Financial_Statement_Fraud | 11        | 11.39     | -.22      | 11.17     | 1.0036    | 1.01712        | 3.37341   |
| Valid N (listwise)        | 11        |           |           |           |           |                |           |

Variable financial stability has a minimum value of -0.5, while the overall average of 0.2045 with a standard deviation of 0.23287. Variable external pressure has a value of 0.00, while the minimum overall average of 0.8300 with a standard deviation of 0.31097. The target financial variables have a minimum value of 0.00 while the overall average of 0.0036 with a standard deviation of 0.1027. The variable nature of the industry has a minimum value of -6.92 while the overall average of 0.4509 with a standard deviation of 4.30792. Variable ineffective monitoring has a minimum value of 0.38, while the overall average of 0.6609 with a standard deviation of 0.19134. Variable change in auditor has a minimum value of 0.00, while the overall average standard deviation of 0.18182 to 0.40452. Variable capability has a minimum value 0.00, while the overall average of 0.8182 with a standard deviation of 0.40452. Variable Financial Statement Fraud with earnings management proxies have a minimum value of -0.22, while the overall average of 1.0036 with a standard deviation of 3.37341.

### 5.3 Hypothesis Test

#### a. Test Coefficient of Determination ( $R^2$ )

Based on the results of data processing output SPSS 18, figures adjusted R square or coefficient is -0.87. This means that 8.7%, while 91.4% of the variation or change in financial statement fraud was obtained from Pressure, Opportunity, Rationalization and Capability Standard Error of Estimate (SEE) equal to 4.16050.

Table 2. Test Coefficient of Determination (R<sup>2</sup>)  
Summary Model<sup>b</sup>

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .296 <sup>a</sup> | .087     | -.521             | 4.16050                    | .087              | .144     | 4   | 6   | .959          | 1.214         |

a. Predictors: (Constant), Capability, Change\_In\_Auditor, Opportunity, Pressure

b. Dependent Variable: Financial\_Statement\_Fraud

#### b. Simultaneous Significance Test (Test Statistic F)

Based on the ANOVA test (F test) in Table 3, the calculated F value is obtained at 0.144 with 0.959 significance level < 0.05 then the hypothesis null hypothesis is accepted. The value of its F 0.144 with significant value 0.959 > 0.005, the null hypothesis is accepted. It can be concluded 7 (seven) independent variables simultaneously and significant effect on the financial statement fraud.

Table 3. Simultaneous Significance test (Test Statistic F)  
ANOVA<sup>b</sup>

| Model |            | Sum of Squares | df | Mean Square | F     | Sig.               |
|-------|------------|----------------|----|-------------|-------|--------------------|
| 1     | Regression | 9.940          | 4  | 2.485       | 0.144 | 0.959 <sup>a</sup> |
|       | Residual   | 103.859        | 6  | 17.310      |       |                    |
|       | Total      | 113.799        | 10 |             |       |                    |

a. Predictors: (Constant), Capability, Change\_In\_Auditor, Opportunity, Pressure

b. Dependent Variable: Financial\_Statement\_Fraud

#### c. Individual Parameter Significance Test (Test Statistic t)

Table 4. Significance Test (Test Statistic t)

| Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. | 95% Confidence Interval for B |             | Correlations |         |       | Collinearity Statistics |       |
|-----------------------------|------------|---------------------------|-------|------|-------------------------------|-------------|--------------|---------|-------|-------------------------|-------|
| B                           | Std. Error | Beta                      |       |      | Lower Bound                   | Upper Bound | Zero-order   | Partial | Part  | Tolerance               | VIF   |
| .951                        | 3.531      |                           | .269  | .797 | -7.690                        | 9.591       |              |         |       |                         |       |
| -2.008                      | 4.452      | -.261                     | -.451 | .668 | -12.902                       | 8.886       | -.077        | -.181   | -.176 | .453                    | 2.208 |
| -.059                       | .403       | -.073                     | -.147 | .888 | -1.045                        | .926        | .102         | -.060   | -.057 | .609                    | 1.642 |
| -1.353                      | 3.381      | -.162                     | -.400 | .703 | -9.625                        | 6.919       | -.152        | -.161   | -.156 | .926                    | 1.080 |
| 2.994                       | 5.116      | .359                      | .585  | .580 | -9.525                        | 15.513      | .139         | .232    | .228  | .404                    | 2.475 |

a. Dependent Variable: Financial\_Statement\_Fraud

Based on the results of individual parameter significance test (statistical test t) above are:

1. The value of the constant is positive 0.951 when variables that showed financial stability, external pressure, financial targets, nature of industry, ineffective monitoring, change in auditor and capability no change or equal to 0 it will increase the financial statement fraud.
2. Variable variable financial stability, external pressure, the pressure of financial targets has marked negative regression coefficient of -2.008, this means that if the value of pressure increase of 1 unit assuming other variables are fixed it will lower the financial statement fraud amounting to 2.008.
3. Variable variable nature of the industry and ineffective monitoring of the opportunity to have a regression coefficient is negative at -509, it means that when the opportunity value increased by 1 unit, assuming other variables are fixed it will lower the financial statement fraud of 0.59.
4. Variable variables change in auditor on the rationalization has a marked negative regression coefficient of -1.353, this means that if the value increased by 1 unit rationalization assuming other variables are fixed it will lower the financial statement fraud amounting to 2.008.
5. Variable capability variables have marked negative regression coefficient of 2.994, this means that if the value increased by 1-unit capability assuming other variables are fixed it will lower the financial statement fraud amounted to 2,994.

#### d. Regression Analysis

Regression equations were formed in this research are:

$$Y = 0951 - 2.008X_1 - 0.59X_2 - 1.353X_3 - 2.994X_4$$

Table 5. Regression Analysis

| Variable        | Regression coefficients | Standard Error | Value Statistics t | Probability Value |
|-----------------|-------------------------|----------------|--------------------|-------------------|
| Pressure        | -2.008                  | 4.452          | -0.451             | 0.797             |
| Opportunity     | -0.059                  | 0.403          | -0.147             | 0.668             |
| Rationalization | -1.353                  | 3.381          | -0.400             | 0.703             |
| Capability      | 2.994                   | 5.116          | 0.585              | 0.580             |

1. The first hypothesis shows t value of -0.451 with a regression coefficient of -2.008 and probability value of 0.797 can be concluded that the variable pressure by proxy financial stability, external pressure and financial targets can be a negative influence on the Financial Statement Fraud.
2. The second hypothesis show t value of -0.147 with a regression coefficient of -0.059 and probability value of 0.668 can be concluded that the variable nature of the industry Opportunity and ineffective monitoring can be a negative influence on the Financial Statement Fraud.
3. The third hypothesis indicates that the t value of -0.400 with a regression coefficient of -1.353 and Probability value of 0,703 can conclude that the rationalization variables change in the auditor can give a negative effect on the Financial Statement Fraud.
4. The fourth hypothesis indicates that the t value of 0.585 with a regression coefficient of 2.994 and a probability value of 0.580 to the variable Capability with proxy turn of directors gave a positive influence on the Financial Statement Fraud.

## 6. CONCLUSION AND SUGGESTION

This study examined the empirical evidence to detect financial statement fraud with fraud perspective diamond. This study refers to the banking company listed in Indonesia Stock Exchange. The results of this study indicate that the variable pressure is proxied by financial stability, external pressure, and financial targets; Opportunity is proxied by ineffective monitoring and nature of the industry; Rationalization is proxied by the turn of the auditor and Capability proxied by the change of directors. But in this study proves that the Variable Pressure with proxies financial stability, external pressure and financial targets; Opportunity variable nature of the industry and ineffective monitoring and rationalization variables change in the auditor does not affect the financial statement fraud while variable Capability with proxy turn of directors gave a positive and significant effect on the Financial Statement Fraud.

Based on the analysis and discussion on this research (empirical studies on banking companies listed on the Indonesia Stock Exchange Year 2012 to 2014), then the suggestion that researchers can provide as follows:

1. For the Company, financial statement fraud detection can be done by placing the employee in a company which has the ability in fraud detecting, internal control weaknesses and possess a strong ego and self-confidence detecting and be able to control job stress (Wolf & Hermanson, 2014 in Nursani & Irianto, 2014).
2. For investors, changes in board of directors can not accurately indicate cheating for it is expected to investors not to be too quick in doing the change of directors at the company.
3. For further research, the authors suggest may conduct research using other measurement methods to detect financial statement fraud, and may use a combination of methods with qualitative and quantitative methods

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