

# Fraud Pentagon for Detecting Financial Statement Fraud

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## ABSTRACT

A financial statement is a result of financial reporting that describes the results of an entity's financial performance for a specified period. Financial statements can also cause managers in an entity to commit financial reporting fraud because they want to describe an excellent financial performance. This study aims to test fraud pentagon theory in detecting fraudulent financial reporting. More specifically, this study attempts to test the financial target, financial stability, external pressure, ineffective monitoring, nature of the industry, change in auditor, change in director, CEOs photo frequency, political connection, and company existence against fraudulence in the companies' financial reporting. These companies are classified in the LQ45 index on the Indonesian Stock Exchange (IDX) during the period 2015-2017. It used 78 annual report data taken by a proportional random sampling based on the number of proportions in each sector of the company. The data were analyzed using multiple regression analysis. The results indicate that financial stability and CEO photo frequency can be used to detect fraudulence in financial reporting. However, financial targets, external pressure, ineffective monitoring, nature of the industry, changes in auditor, changes in director, political connection, and company existence cannot be used to detect fraudulence in financial reporting.

## ABSTRAK

Laporan keuangan adalah hasil dari pelaporan keuangan yang dapat menggambarkan hasil kinerja keuangan suatu entitas selama satu periode. Laporan keuangan juga dapat menyebabkan manajer pada suatu entitas melakukan kecurangan pelaporan keuangan karena ingin menggambarkan kinerja keuangan yang baik. Penelitian ini bertujuan untuk menguji teori fraud pentagon dalam mendeteksi kecurangan pelaporan keuangan. Fokus penelitian ini adalah pengujian terhadap financial target, financial stability, external pressure, ineffective monitoring, nature of industry, change in auditor, change in director, CEO's photo frequency, political connection dan company existence terhadap kecurangan pelaporan keuangan pada perusahaan yang terklasifikasi dalam LQ45 pada BEI selama periode 2015-2017. Penelitian ini menggunakan 78 data laporan tahunan yang diambil dengan proportional random sampling berdasarkan jumlah proporsi pada tiap sektor perusahaan. Analisis data menggunakan analisis regresi linear berganda. Hasil penelitian ini menunjukkan bahwa financial stability dan CEO's photo frequency berpengaruh signifikan terhadap kecurangan pelaporan keuangan. Sementara, financial target, external pressure, ineffective monitoring, nature of industry, change in auditor, change in director, political connection dan company existence tidak berpengaruh signifikan terhadap kecurangan pelaporan keuangan.

## 1. INTRODUCTION

Indonesian Accountant Association or IAI (2015), in SAK No.1, states that financial reporting contains vital information concerning the entity's financial reporting. Kasmir (2016) also described that the objective of making financial is for the report to the stakeholders and management. Sudana (2019), more specifically, stated that the information in the

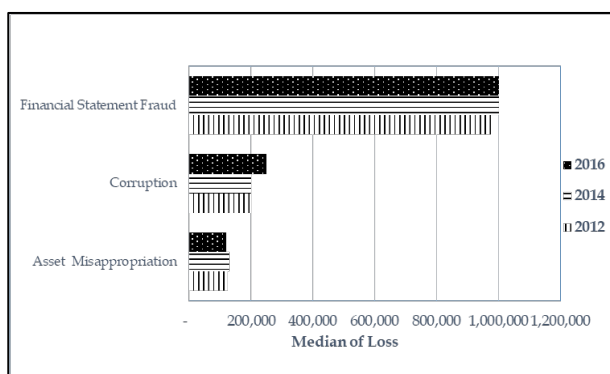
financial report could be used by both the stakeholders as a basis for making a decision.

Managers have their interest in presenting a good-look financial report though they can also manipulate it (Perols & Lougee, 2011; Ratmono, 2017; Skousen, Smith, & Wright, 2009). They manipulate some information in financial reports in order that the report shows excellent financial

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performance; in fact, the company is not in good condition. In this case, the managers commit fraud.

Association of Certified Fraud Examiners, in a report to the nation (ACFE, 2016), stated that there are three kinds of fraudulence: corruption, asset misappropriation, and financial statement fraud. Also, it reveals a graph of fraud, which causes the most significant loss, as presented in Figure 1. The data in Figure 1 indicates that financial statement fraud is a type of fraud with the highest degree of losses compared to asset mis-appropriation and corruption. For that reason, this study focuses on financial statement fraud.



Source: ACFE (2016)

Figure 1  
Occupational Frauds Category – Median Loss

Association of Certified Fraud Examiners (ACFE, 2016) also describes that in 2016, it was the most critical period of financial statement fraud compared to the year 2012 and 2014. Figure 2 shows the graph of the frequency of financial statement fraud.

Figure 1 shows that the frequency of financial statement fraud in 2016 was higher than that in 2012 and 2014. As such, this study used the periods of 2016, 2015, and 2017 as the before and after the year that report. The reason is that the increase in fraud frequency can be related to that in the previous year, and this can affect the following year.

In Indonesia, fraudulent financial reporting cases also occur in the banking sector. An example is the fraud audit case at Bank Rakyat Indonesia (BRI) Tapung Raya District, Kampar Regency, Riau, and the case is a fictitious transfer carried out by the unit head of Rp 1.6 billion. The chronology of the discovery of the fictitious transfer was revealed on February 23, 2015, when an internal inspection team from the BRI branch of Bangkinang conducted an inspection of the BRI Tapung unit to find transaction irregularities. The results of the examination show that there is a discrepancy for a balance sheet with

unbalanced cash; this is due to a record of money transfer but not accompanied by the money. After further examination, the opening of a cash deposit was Rp. 1.6 billion. The money is transferred from BRI's Sand Pangaraian II unit to the BRI Tapung Raya unit. So the embezzlement case was reported to the police. In this case, the perpetrators were charged with Law No. 10 of 1998 concerning banking, the perpetrators were threatened with a sentence of 10 years in prison plus fines (Ningtyas, 2015). From this case, it can be seen that banking fraud occurred at the BRI Tapung Raya unit due to the embezzlement of money and recording of money transfers without money (Ningtyas, 2015).

Fraud Pentagon explained the factors driving the company's fraud either in corruption, misuse of assets, or manipulation of the company's financial statements (Crowe, 2011). However, Ratmono et al. (2018) revealed that the pentagon fraud theory in Indonesia has not been generalized properly due to differences in social, political, cultural, and economic conditions. However, if applied, people can use this pentagon fraud theory as a medium to detect and even prevent fraud in company management.

There are three driving elements for people to commit fraud, called the fraud triangle theory: pressure, opportunity, and rationalization (Crowe, 2011). The fraud triangle theory is developed into diamond fraud with the existence of a fourth element, namely capability. Crowe (2011) then developed a fraud pentagon theory, which is the development of the diamond fraud theory, by adding the fifth element, namely arrogance. It is because of the previous theories were deemed unable to be used in all situations.

The first element is the pressure. It emphasizes the encouragement of management pressure to commit fraud (Singleton, 2010; Zahra, Priem, & Rasheed, 2005). Pressure for management can affect fraud in a financial statement, due to the pressure from financial targets. The management, in this case, tends to be pressured to meet investor expectations for presenting good financial statements. The pressure on management can also be pressure through the stability of the company's financial performance. In such a position, the management wants to save the company by presenting financial reports showing rapid growth and high profitability.

The element of opportunity can be a motivator for committing fraud. Of course, the opportunity is possible for someone to commit fraud (Singleton, 2010; Wilks & Zimbelman, 2004; Zahra et al., 2005).

An ineffective monitoring system can provoke acts of fraud against financial statements because they think that the existing laws are not so strict. The nature of the industry can also provide management with the opportunity to commit fraud. For example, management can be more freely manipulate accounts whose valuations use subjective judgment or estimation.

The existence of rationalization can provide an impetus for fraud and consider fraud as the right or rational act (Singleton, 2010; Skousen et al., 2009). Change in Auditors can influence the rationalization of fraud because when there is a change of auditors or public accounting firms, there will be a transition period in the company. Therefore, management can rationalize the act of fraud.

The element of capability or competence may also encourage fraud because there are competent human resources that understand well the company's condition. This experienced managers can take advantage of these conditions as opportunities to commit fraud (Kurnia & Anis, 2017; Zahra et al., 2005). Change in directors can also drive to commit fraud. When there is no change in directors in a long time, the directors in the office must understand all the conditions and problems experienced by the company. This board of directors certainly understands the company's condition. With its capabilities, it is easy for them to commit fraud. Therefore, when these directors have not been replaced for a long time, this Board of Directors certainly understands the company's conditions. Then, with their capabilities, they can easily commit fraud.

The last element is arrogance, in which managers are arrogant or feeling superior. They feel that the company's policies and internal controls do not apply to management. They think that they are free from the company's policies and internal control (Kurnia & Anis, 2017; Zahra et al., 2005). The CEO photo frequency that is displayed on the financial statements can represent their arrogance or superiority because of their position in management (Bastomi, 2018; Habib & Hossain, 2013; Schrand & Zechman, 2012). Political connection to the CEOs can be a factor of committing fraud because having a close relationship with the government or the ruling party can maintain their position and reputation. For example, in a difficult circumstance, CEOs with political relations can use this relationship to maintain the company's value (Nurbaiti & Hanafi, 2017; Wang, Chen, Chin, & Zheng, 2017). The company's existence is a driving force for committing fraud because of the

management's interests to maintain the company's existence in public. They do it by developing the company's performance through published financial statements. Therefore—in any condition—the company will depend on its existence (Handayani, 2008).

This research was to test the pentagon fraud theory as the detection of fraud in financial statements using financial targets, financial stability, and external pressure as the pressure element. This study used the effective monitoring and nature of the industry for the elements of opportunity. It also used changes in auditor for the rationalization element, change in directors for the capability element, and the CEO's photo frequency, political connection, as well as company existence for the arrogance element.

This study attempts to provide benefits for education about the factors causing fraud in both the academic field and in practice. It can also be used for a suggestion of implementing internal control for the entity in decision making for the stakeholders. The stock index consists of 45 issuers with high liquidity levels after meeting the selection criteria (Sahamok, 2009). In selecting the issuers to enter into the LQ45 index, the re-searchers used liquidity and market capitalization, and the change in LQ45 shares was done every six months.

## **2. THEORETICAL FRAMEWORK AND HYPOTHESES**

### **Agency Theory**

Anthony & Govindarajan (2007) define agency theory as a formal link between agents or parties with an interest in the budgeting process, for example, the directors of the company and the division manager. This theory emphasizes the design of performance measurement and rewards so that managers behave positively or favorably towards the company as a whole. The analysis in agency theory requires formal specification from the budgeter regarding his preferences and attitude to risk and confidence as well as statement about the situation, actions, and functions of the outcome.

### **Fraud Triangle**

The concept of the fraud triangle originated from research conducted by Cressey (1953), arguing that fraud can be triggered by three factors such as trust violators, namely those who deny or violate the trust or trust entrusted to them. Cressey, specifically, discussed it caused violators to lose temptation at work. The three factors are pressure, opportunity, and rationalization (Figure 2).

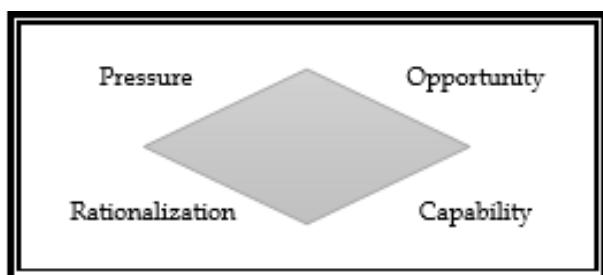


Sources: Crowe (2011)

Figure 2  
Fraud Triangle

### Fraud Diamond

The concept of diamond fraud theory is a development of the theory of fraud triangle where in this theory the fourth element has been developed in the driving factor of fraud: the ability (capability). Wolfe and Hermanson (2004) argue that in fraud measures even push door there any chance with pressure and rationalization, but the players must have the ability to recognize the right opportunity as an opportunity and take advantage of such as the person doesn't have the ability being the right, and then, the possibility of fraud may happen smaller. For illustration, fraud diamond can be described in Figure 3.



Source: Priantara (2013)

Figure 3  
Fraud Diamond

### Fraud Pentagon

Crowe, (2011) stated that fraud pentagon is a refinement of the fraud triangle, where there is a fifth element, namely arrogance. Crowe (2011) stated that there is a fifth element in fraud pentagon because the element in the fraud triangle and fraud diamond cannot be used in all situations. With the fifth element, namely arrogance, fraud pentagon can be used in all situations to detect fraud in the financial statements. In general, Crowe, (2011) described fraud pentagon as in Figure 4.



Source: Crowe (2011)

Figure 4  
Fraud Pentagon

### Financial Statement Fraud

Fraud on financial statements is known as fraudulent financial reporting is defined as a black law dictionary (Priantera, 2013). It is a report or statement that is untrue or is made carelessly without realizing or caring whether the report is true or false and intended to influence the people who use the report so that they suffer losses. Priantara (2013) also defined fraud according to ACFE, that it is a description or financial presentation of an organization that is intentionally wrong. It can be achieved through intentional misstatement or the removal of a value or disclosure in financial statements re-search model based on the previous description, the research model can be drawn as on Figure 5.

### Financial Target

With a financial target, management must strive to make the company's good performance by meeting the target or the company's expectation towards financial performance they have determined. In this case, fraud in the financial statements might occur if the company cannot meet the financial targets. In that, managers manipulate their financial statement so that they feel they achieve the target (Bawekes, Simanjuntak, & Daat, 2018; Dechow, Ge, Larson, & Sloan, 2011; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Wahyuni & Budiwitjaksono, 2017).

A study by Bawekes et al., (2018) and Kurnia & Anis, (2017) proved that financial targets proxied by return on assets (ROA) can affect the occurrence of fraud in the financial statements. Kirkos, Spathis, and Manolopoulos (2007) and Summers and Sweeney (1998) revealed that a higher ROA encourages financial fraud. Based on the above arguments, the hypothesis is stated as follows.

**H1:** Financial target can detect fraud in financial statement.

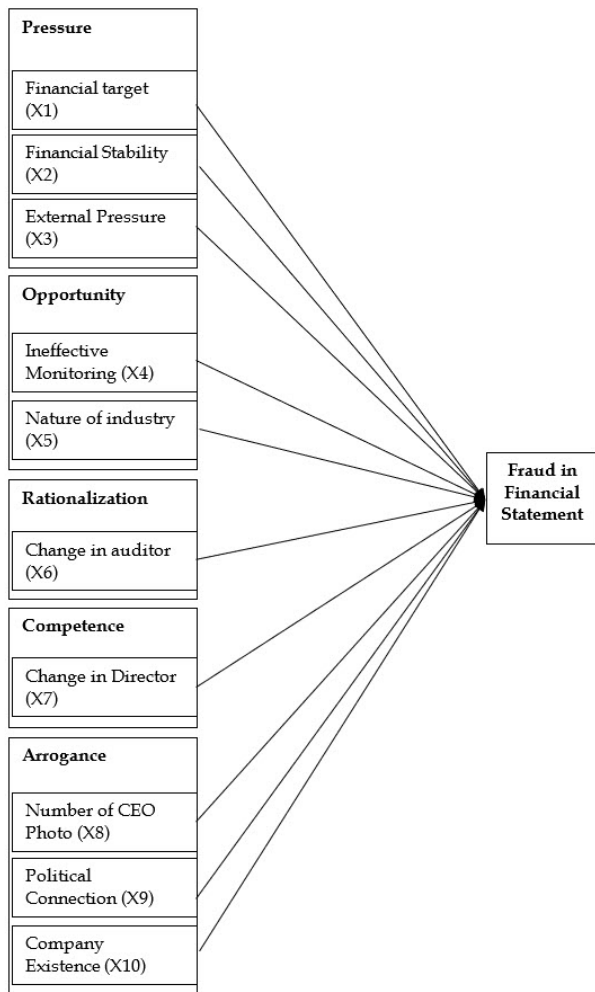


Figure 5: Research Model

### Financial Stability

The company's unstable condition can trigger fraud because of financial stability as a benchmark for company performance through stable financial growth. the company's financial condition is considered stable when the company can meet current and future needs and sudden or sudden needs. Therefore, managers will take various measures in order to make the company into stable condition (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Wahyuni & Budiwitjaksono, 2017).

Kurnia & Anis, (2017) proved that financial stability, proxied by a change in total assets, can affect the occurrence of fraud in financial statement. The higher the ratio of changes in assets, the greater the possibility of financial fraud through earnings manipulation. In other words, the more stable the

asset, the less likely it is to commit financial fraud. This is done to show the company's strong financial position. Hence, the hypothesis is stated as follows:

**H2:** Financial stability can detect fraud in financial statement.

### External Pressure

Sometimes, management faces pressure from external parties to fulfill their obligations (Skousen et al., 2009). The existence of external pressure can trigger management to commit fraud because of the need to return the capital they obtained. a company can return their debts if their operational activities run continuously and do not experience losses (Ravisankar, Ravi, Rao, & Bose, 2011). If the company has a high leverage ratio, they have a large amount of debt and high credit risk. As such, fraud is used as a solution by manipulating the profits generated (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Wahyuni & Budiwitjaksono, 2017). Kurnia and Anis (2017) proved that external pressure from creditors affects the occurrence of fraud in financial statements. Managers are motivated to increase profits to give the impression that the company' performance is good and is able to pay their debts. Therefore, the hypothesis is stated as follows:

**H3:** External pressure can detect fraud on financial statements.

### Ineffective monitoring

The ineffective monitoring or supervision can trigger fraud. They feel given opportunities to do anything, including fraud. With ineffective supervision, it is the same as providing opportunities for committing fraud (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Wahyuni & Budiwitjaksono, 2017). An ineffective monitoring system can lead to fraud against financial statements because managers may think that supervision or existing laws are not so strict and they think it good. The perpetrators can freely commit fraud without worrying that their actions will be detected (Robison & Santore, 2011; Singleton, 2010).

Bawekes et al., (2018) and Robison and Santore (2011) proved that ineffective monitoring has a positive effect on fraud because ineffective supervision can provide opportunities for committing fraud. Company managers manipulate financial statements because they are not monitored well (Rezaee, 2005; Schrand & Zechman, 2012).

Based on the above arguments, the hypothesis is stated as follows:

**H4:** Ineffective monitoring can detect fraud on financial statements.

#### **Nature of the Industry**

The nature of the industry or company is the company's nature. There is an estimate of uncollectible receivables or by the existence of budgeting, estimated or not appropriately counted (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Wahyuni & Budiwitjaksono, 2017). Summers and Sweeney (1998) stated that the valuation of accounts receivable is done subjectively related to determining uncollectible accounts receivable. However, due to the subjective valuation, there is the potential for management to use the account as a tool to manipulate financial statements. In that case, the perpetrators can use it to commit fraud.

Bastomi (2018) proved that the nature of industry could influence the occurrence of fraud in financial statements due to subjective judgments in the valuation and determination of uncollectible receivables. Bastomi (2018) also proved that the nature of industry can influence the occurrence of fraud in financial statements due to subjective judgments in the valuation and determination of uncollectible receivables.

**H5:** Nature of the industry can detect fraud on financial statements.

#### **Change in auditor**

When changing auditors, the company needs adjustments or transitional periods for the auditor and the company. At the time of the change of auditors, the company has reasons by rationalising for committing fraud. They do it by taking the absence of supervision or control from the auditor so that mistakes either intentionally or unintentionally can occur (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017; Skousen et al., 2009). Summers and Sweeney (1998) and Skousen et al. (2009) stated that many financial frauds were perpetrated in the first two years of an auditor's tenure.

Bawekes et al., (2018) proved that the change in auditor can affect the occurrence of fraud in the financial statements. When there are changes in the auditor, the company has a transition period and stress period where management can rationalize the occurrence of fraud (Skousen et al., 2009).

**H6:** Change in auditors can detect fraud on financial statements.

#### **Change in Director**

Change of director is one of the factors that allows fraud because a director has very important information about the company that allows the director to commit fraud. Wolfe & Hermanson (2014) said that financial statement fraud could occur if done by the right people that understood the company's condition well because they could take advantage of the opportunities that exist. The perpetrators need the ability to carry out their fraudulent deeds. The director's ability can increase when the directors serve for a long time in the company. The negative impact of this is that the board of directors increasingly understands the conditions of the company due to having a too long position. This allows for fraudulent financial statements in the company.

Kurnia & Anis, (2017) proved that change in director affects fraud because directors who have long served can understand how they can commit fraud based on the information they have. Chen, Firth, Gao, and Rui (2006) stated that CEO tenure increased the incident of fraud. Based on the above arguments, the hypothesis can be stated as follows:

**H7:** Change in director can detect fraud in financial statements.

#### **CEO Photo Frequency**

The CEOs photo frequency posted in the financial statements can indicate the CEO is not paying enough attention to the annual report and use the media to display its status (Bawekes et al., 2018; Kurnia & Anis, 2017; Nurbaiti & Hanafi, 2017). CEOs intent to show to everyone the status and position in the company because they do not want to lose the status or position (Crowe, 2011). The number CEOs photo on the financial statements can reflect the arrogance of the CEOs. A high level of arrogance can induce fraud because with the arrogance and superiority of a CEO makes any internal control will not apply to him because of his status and position. According to Crowe (2011), there is also a possibility that the CEOs will do whatever they want to maintain their position. The number of CEOs photo in the annual report also reflects the CEOs overconfidence (Habib & Hossain, 2013; Schrand & Zechman, 2012). Overconfident managers tend to engage in fraudulent financial reporting.

Bawekes et al., (2018) proved that the number of CEOs photos contained in the financial statements can affect fraud due to the high likelihood of the CEOs committing fraud in order to maintain their current position. Schrand and Zechman (2012) found that the combination of CEOs pay and photo in the annual report increased the probability of financial fraud made the CEOs. Referring to the above arguments, the hypothesis is stated as follows.

**H8:** CEOs photo frequency can detect fraud in financial statements.

### Political Connection

The existence of political connections can be beneficial because it is easier to get a loan. Chaney, Faccio, and Parsley (2011) stated that companies that have political relations are easier to get loans from banks, ease in terms of taxes, easier to get contracts from the government, and when experiencing financial distress, will be easier to be bailed out by the government compared to companies that are have no political relations (Bawekes et al., 2018; Kurnia & anis, 2017; Nurbaiti & Hanafi, 2017).

Companies with CEOs having political connections tend to want to have good financial statements to maintain their reputation. They do it even by manipulating financial statements, as long as they maintain their reputation in the business. Chaney et al. (2011) and Kurnia & ANIS (2017) proved that political connections affect the occurrence of fraud because companies with CEOs having political connections tend to easily commit fraud. Nonetheless, Wang et al. (2017) provides evidence that political connections reduce the likelihood that managers commit financial statement fraud. Based on the arguments above, the hypothesis can be stated as follows:

**H9:** Political connections can detect fraud in financial statements.

### Company Existence

Handayani (2008) stated that under any circumstances, the company continues to have dependence on existence and cannot be separated forever. The existence of a company can be a trigger for fraud because of the desire of management to maintain the existence of the company. Companies that have existed for a long time have top management with high arrogance. In order to maintain their existence, management must strive for the company to have a good result through

manipulation of financial statements. Therefore, there is a possibility that if a company with a high level of existence will commit financial statement fraud when its performance decreases or is not good enough to show its good performance and the company's existence. The hypothesis, then, can be stated as follows:

**H10:** Company existences can detect fraud in financial statements.

## 3. RESEARCH METHOD

### Sample and Sampling Technique

This study used a proportional random sampling method by lottery for taking the sample (Sugiyono, 2008). This study used proportional sampling because the sample is companies that consistently belong to the LQ 45 Index, consists of several sectors with the number of companies in each sector.

### Dependent Variables

In this study, fraud on financial statements is measured using the Fraud score model or F-Score developed by Dechow, Ge, Larson, & Sloan, (2011) and Kurnia & Anis, (2017). The F-Score Model has two variable components, namely accrual quality and financial performance. The following is the F-Score calculation.

$$F\text{-Score} = \text{Accrual Quality} + \text{Financial Performance} \quad (1)$$

Accrual quality is calculated using RSST Accrual. Richardson in Kurnia & Anis, (2017) used working capital (WC), non-current operating (NCO), and financial accrual (FIN) and the asset component in the form of accruals. The calculation model is as follows.

$$RSST \text{ Accrual} = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{\text{Average Total Assets}} \quad (2)$$

where:

WC = (Current Assets - Cash - Short Term Investments) - (Current Liabilities - Short Term Debt).

NCO = (Total Assets - Current Assets - Investment) - (Total Liabilities - Current Liabilities - Long Term Debt).

FIN = (Short-term investments + Long-term investments) - (Long-term debt + Short-term debt).

ATS = (First Aset Awal + Last Total Asset)/2

Skousen et al. (2009) explained the calculation of financial performance as follows.

Financial Performance = Change in Receivable + Change in Inventories + Change in cash sales + Change in earnings.

where:

*Change in receivable* =  $\Delta \text{ Receivables} / \text{Average Total Assets}$

*Change in Inventory* =  $\Delta \text{ Inventory} / \text{Average Total Assets}$

*Change in cash sales* =  $(\Delta \text{ Sales} / \text{Sales (t)}) - (\Delta \text{ Receivables} / \text{Receivables (t)})$

*Change in earnings* =  $(\text{Profit (t)} / \text{Average Total Assets (t)}) - (\text{Profit (t-1)} / \text{Average Total Assets (t-1)})$

### Independent Variables

The independent variables are financial targets, financial stability, external pressure, effective monitoring, nature of the industry, change in auditors, change in directors, CEO photos frequency, political connection, and company existence. The measurement variables used are as follows:

*Financial Target (X1)*

$$ROA = \frac{\text{Earning after taxes}}{\text{Total Assets}} \quad (3)$$

*Financial Stability (X2)*

$$\text{ACHANGE} = (\text{Total Aset}_t - \text{Total Aset}_{t-1}) / \text{Total Aset}_t \quad (4)$$

*External Pressure (X3)*

$$\text{Leverage} = \frac{\text{Total Debt}}{\text{Total Assets}} \quad (5)$$

*Ineffective Monitoring (X4)*

$$\text{BDOUT} = \frac{\text{Number of Independent board of commissioner}}{\text{number of board of commissioners}} \quad (6)$$

*Nature of Industry (X5)*

$$\text{Receivable ratio} = \frac{\text{Receivable}_t}{\text{Sales}_t} - \frac{\text{Receivable}_{t-1}}{\text{Sales}_{t-1}} \quad (7)$$

*Change in Auditor (X6)*

It is a dummy variable which equals 1 if there is a

change in the public accounting firm, 0 otherwise.

*Change in Director (X7)*

It is a dummy variable which equals 1 if there is a change of director, 0 otherwise.

*CEO Photo Frequency (X8)*

This variable is measured based on the frequency of CEO photos in the financial statements.

*Political Connection (X9)*

It is a dummy variable which equals 1 if the CEO or the board of commissioners have a political connection, 0 otherwise.

*The existence (X10)*

It is a dummy variable which equals 1 if the company has been established for ten years or more, 0 otherwise.

### Population and Sample

The population consists of companies classified in LQ45 during the period 2015-2017 or calculated from February 2015 to January 2018. It has 35 companies from seven sectors. The sample was determined by using the Slovin formula, as follows:

$$n = \frac{35}{1 + 35 (0,1)^2} \quad (8)$$

$$n = 25,926$$

$$n = 26$$

where:

n : Sample Size

N : Population Size

e : Tolerance for sampling errors or errors (e = 10%)

After that, the sample was taken using Proportional random sampling with a simple draw. The company provisions taken from each sector are as presented in Table 1. It indicates that the research sample consists of annual reports of 26 companies during 2015-2017, with the total number of 78 annual report data.

Table 1  
Calculation of Proportional Random Sampling

Sectors	Population	(n/35) x 26	Sample
Industries	8	5.9429	6
Infrastructures, Utilities, and Transportation	3	2,2286	2
Finance	5	3,7143	4
Trades, Service, and Investment	5	3,7143	4



Minings	3	2,2286	2
Agriculture	3	2,2286	2
Property, Real Estate, and Building Construction	8	5,9429	6
Total	35	26	26

#### Data Analysis Method

The analytical method is multiple linear regression analysis and the model is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + e \quad (9)$$

Description:

Y = Fraud in Financial Statement (F-SCORE)

$\alpha$  = Constant

$\beta_{1-10}$  = Regression Coefficient

$X_1$  = Financial Target (ROA)

$X_2$  = Financial Stability (ACHANGE)

$X_3$  = External Pressure (LEVERAGE)

$X_4$  = Innefective Monitoring (BDOUT)

$X_5$  = Nature of Industry (RECRATIO)

$X_6$  = Change in Auditor (AUDCHANGE)

$X_7$  = Change in Dirrector (DIRCHANGE)

$X_8$  = CEO Photo Frequency (CEOPHOTO)

$X_9$  = Political Connection (POLCON)

$X_{10}$  = Company Existence (EXISTENCE)

e = Error

#### 4. DATA ANALYSIS AND DISCUSSION

There are 78 annual reports from 26 companies belonging to the LQ45 index in 2015-2017. They have fulfilled the classical assumption tests such as the Normality Test, Heteroscedasticity Test, Multicollinearity Test, Autocorrelation Test. The

researchers did multiple linear regression tests with the F test for simultaneous or simultaneous hypothesis testing and multiple linear regression tests with the t-test for partial or separate hypothesis testing. Table 2 shows the results of the descriptive statistics analysis.

Table 2  
Descriptive Statistics

	N	Min	Max	Mean	SD
F-SCORE	78	-1.3900	1.2100	0.1497	0.3773
ROA	78	0.0100	0.4600	0.1048	0.1063
ACHANGE	78	-.01200	0.6200	-0.1209	0.1223
LEVERAGE	78	0.0500	1.3000	0.5336	0.2420
BDOUT	78	0.2900	0.8000	0.4407	0.1317
RECRATIO	78	-4.6400	4.9500	0.0523	0.7888
AUDCHANGE	78	0.0000	1.0000	0.1900	0.3970
DIRCHANGE	78	0.0000	1.0000	0.3800	0.4900
CEOPHOTO	78	3.0000	12.0000	7.5400	2.0620
POLCON	78	0.0000	1.0000	0.4400	0.4990
EXISTENCE	78	0.0000	1.0000	0.8800	0.3220
Valid N (listwise)	78				

Table 2 shows that the F-Score as the dependent variable has an average of 0.1497. This figure shows that the company's normal F-Score is 0.1497. However, there are companies that get a high F-Score

of 1.21 who get the lowest F-Score of -1.39. The independent variable of the financial target, measured by ROA, has an average of 0.1048 with a standard deviation of 0.10634. This figure shows that

the average profit obtained by the sample in the study period was 10.48%. Financial stability, measured using changes in assets (ACHANGE), has an average of 0.1209. This figure shows that there are around 12.09% of total assets in the study sample has changed from the previous year.

External pressure (LEV) has an average of 0.5336. This figure shows that the sample has an average debt level of 53.36%. Effective monitoring (BDOUT)) has an average of 0.4407. This figure shows that the average number of independent commissioners owned by the sample is 44.07% of the total number of the board of commissioners. The nature of the industry (RECRATIO) has an average of 0.523. This figure shows that the sample has an average receivables ratio of 52%. Change in auditor (AUDCHANGE) has an average of 0.19, which means there is a change of auditors of 19% in the sample.

Change in director (DIRCHANGE) has an average of 0.38. It means that the study sample has 38% who made changes in directors

The frequency of CEOs photo (CEOPHOTO) has an average of 7.54, which means that they are an average of 7 to 8 appear in the annual report. Political Connection (POLCON) has an average of 0.44. It means that there are 44% of CEOs who have political connections. Company existence (EXISTENCE)) has an average of 0.88, which means that 88% of the sample has more than 20 years of age. Here are the results of multiple linear regression analysis testing with the F test (Simultaneous hypothesis testing) in Table 3. Table 3 shows that the significant level of 0.001 (<0.05). It indicates that H0 is rejected, and H1 is accepted, which means the regression model used in this study is suitable

Table 3  
Results of Multiple Regression Analysis with F-test

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3.6710	10	0.3670	3.37300	.0010 <sup>b</sup>
	Residual	7.2930	67	0.1090		
	Total	10.9640	77			
a. Dependent Variable: F-score						
b. Predictors: (Constant), EXISTENCE, BDOUT, REC RATIO, POLITICAL CONNECTION, AUDITOR CHANGE, CEO NUMBER, DIRECTOR CHANGE, LEV, ACHANGE, ROA						

The results of multiple linear regression analysis testing with the t-test is presented in Tabel 4.

Tabel 4  
Result from Multiple Regression Analysis with t-test

Model		Coefficient	t-value	Sig.
1	(Constant)	-0.3550	-1.6070	0.1130
	ROA	0.3030	0.0560	0.9550
	ACHANGE	1.7020	4.0370	0.0000
	LEVERAGE	0.0190	0.0940	0.9250
	BDOUT	-0.2640	-0.6760	0.5020
	RECRATIO	0.0190	0.3990	0.6910
	AUDCHANGE	0.0510	0.4710	0.6390
	DIRCHANGE	0.0760	0.9030	0.3700
	CEOPHOTO	0.0490	2.0130	0.0480
	POLCON	0.1260	1.3020	0.1970
	EXISTENCE	-0.0670	-0.5340	0.5950

### Financial Target and Financial Statement Fraud

Financial Target, measured by ROA, has a coefficient of -0.3550 and a t-value of 0.056, with a significance level of 0.955 ( $> 0.05$ ). Therefore, H1, which states that the financial target can be used to detect fraud on the financial statements, is rejected. This is in line with research by Wahyuni & Budiwitjaksono (2017) and Nurbaiti & Hanafi (2017), stating that those financial targets have no significant effect on fraud in financial statements.

This can occur because some of the targets or expectations of the company's performance have been achieved. Another cause is the absence of a significant influence on financial targets that are proxied by ROA because ROA is a portrait of the company's performance during one period. When the ROA of an entity in the previous year is high, it will trigger the company to increase ROA to show increased performance. By doing so, the company can create a substantial profit from proper asset management. Wahyuni & Budiwitjaksono (2017) state that stock price is basically very related to the company's financial condition. If the company earning is high, the investor confidence is also high so that the stock price is also high. However, if ROA were low, investors would ignore ROA in full. Therefore, management is not interested in cheating on financial statements in the form of earnings manipulation. Another reason is ROA may not be the right proxy for a financial target. (Dechow et al., 2011) suggests using ROA changes as a proxy for a financial target.

### Financial Stability and Financial Statement Fraud

Financial Target, measured by asset change (ACHANGE), has a coefficient of 1.7020 and a t-value of 4.037, with a significance level of 0.000 ( $< 0.05$ ). That is why H2 stating that financial stability can be used to detect fraud in the financial statements, is accepted. This result is in accordance with the study by Bawekes et al. (2018), stating that financial stability can be used to detect fraud on financial statements.

This study used financial stability proxied by changes in assets to detect fraud in financial statements. The effect of financial stability in detecting fraud in financial statements can be due to the fact that most of the fraud occurs in order to meet some needs, in this case, is to reduce negative perceptions of unstable assets. A positive sign of the ACHANGE indicates that the higher the financial instability of a company, the higher the fraud in the financial statements. The unstable financial condition reflects the high business risks faced by the company. To reduce the negative perceptions of external parties

to the condition of the company, company managers try to give a positive signal in the form of excellent earnings performance, and this is done by manipulating profits. This evidence is supported by research done by Kurnia & Anis (2017), stating that basically, the company's financial stability is used as a benchmark of company performance.

### External Pressure and Financial Statement Fraud

External pressure, as shown in Table 4, has a coefficient of 0.0190 and a t-value of 0.094, with a significance level of 0.925 ( $> 0.05$ ). Therefore, H3, which states that external pressure can be used to detect fraud on the financial statements, is rejected. The result is in line with that by Wahyuni & Budiwitjaksono (2017) and Nurbaiti & Hanafi (2017) that state that external pressure has no significant effect in detecting fraud on financial statements.

This refutes the hypothesis that external pressure occurs due to high financial leverage. A higher debt ratio does not motivate companies to manipulate financial statements to show excellent performance. As such, the cause of the absence of influence from the debt to fraud ratio on the financial statements is identified. The effect of the debt ratio is not so strong as to trigger fraud in the financial statements (Wahyuni & Budiwitjaksono, 2017). In addition, Wahyuni & Budiwitjaksono (2017) also revealed that many companies could pay off obligations and meet their needs with their own capital without using debt.

### Ineffective Monitoring and Financial Statement Fraud

Effective monitoring has a coefficient of 0.2640 and a t-value is -0.676, with a significance level of 0.502 ( $> 0.05$ ). Therefore, H4, which states that ineffective monitoring can be used to detect fraud on financial statements, is rejected. This result is in line with that of the study Wahyuni & Budiwitjaksono, (2017); Nurbaiti & Hanafi, (2017); Bawekes et al., (2018) stating that ineffective monitoring does not have a significant effect on fraud in financial statements.

The result refutes the hypothesis that ineffective monitoring manifested in the presence of weak control or control can lead to fraud. It is also supported by that of the study Wahyuni & Budiwitjaksono (2017) which mentions the cause of the absence of significant influence on ineffective monitoring as proxied by independent commissioners is because it is not the independent board of commissioners that influences fraud on the financial statements, but it is the quality of the board of commissioners itself that affects the existence of fraud on the financial statements. In addition, the

existence of POJK No. 33/ POJK.04/ 2014 (OJK, 2014) regarding the existence of independent commissioners reduces the possibility of an opportunity to do suspicion the financial statements.

#### **Nature of Industry and Financial Statement Fraud**

The nature of the industry, as shown in Table 4, has a coefficient of 0.2640 and a t-value is 0.399, with a significance level of 0.691 ( $> 0.05$ ). Therefore, H5 stating the nature of the industry can be used to detect fraud on financial statements, is rejected. This result is in line with the results of the study Nurbaiti & Hanafi (2017); Bawekes et al. (2018), which states that the nature of the industry does not have a significant influence on fraud in financial statements.

The result refutes the hypotheses that the level of uncollectible receivables is made with estimates or not calculated precisely (Wahyuni & Budiwitjaksono, 2017), or the assessment of receivables is carried out appropriately subjective related to uncollectible receivables (Dechow et al., 2011; Summers & Sweeney, 1998). The reason for the absence of a significant influence on the nature of industry proxied by the ratio of receivables is due to many companies that collect uncollectible receivables according to the age and amount of the receivables. As such, they are unlikely to manipulating their receivable. The results of this study are consistent with Skousen et al. (2009) which states that changes in receivables cannot detect financial fraud. This implies that companies in the LQ 45 index do not do earnings management using discretion in the receivables policy

#### **Change in Auditor and Financial Statement Fraud**

Change in auditors has a coefficient of 0.0510 and a t-value of 0.471, with a significance level of 0.639 ( $> 0.05$ ). Thus, H6 stating that change in auditor can be used to detect fraud on the financial statements is rejected. This is because there are not many companies that have replaced their audiences. The result refutes the hypothesis that fraud can occur during the transition of auditor changes because, at that time, there was a stressful period in the company (Kurnia & Anis, 2017).

The hypothesis being rejected can be due to the fact that not many samples have experienced auditor changes (Bawekes et al., 2018). The reason the company did not change the external auditor was that it was possible that the auditor had previously agreed on the accounting practices and methods applied by the company, as well as companies that had understood the way each other worked. According to Kurnia & Anis (2017), the company did not change

auditors because they felt the result of the audit opinion in the previous period was quite good and had a match in terms of the company's budgeted costs for audit purposes. On the contrary, the companies that make external audit changes were caused by the desire to change from non-big four public account firms to big four public account firms which have better quality. Therefore, auditor changes do not increase financial fraud by managers.

#### **Change in Director and Financial Statement Fraud**

Change in director has a coefficient of 0.0760 and a t-value of 0.903, with a significance level of 0.370 ( $> 0.05$ ). Thus, H7, which states that change in director can be used to detect fraud on the financial statements, is rejected. This is also in line with that Nurbaiti & Hanafi (2017) and Bawekes et al. (2018), stating that change in director does not have a significant influence on fraud in financial statements. This study rejects the hypothesis that directors who have served for an extended period of time can have the ability or capability to commit fraud because of the information they have so that they can take advantage of existing opportunities (Wolfe & Hermanson, 2004). This insignificant effect may be due to the change of directors made in order to improve company performance. The newly appointed directors who are considered more compatible with the hope of contributing to the development and innovation of the company.

#### **COE Photo Frequency and Financial Statement Fraud**

The frequent number of CEO photo, as shown in Table 4, has a coefficient of 0.0490 and a t-value of 2.013, with a significance level of 0.048 ( $< 0.05$ ). Thus, H8 stating that the frequent number of CEOs that can be used to detect fraud on financial statements is accepted. The result of this study is in accordance with the study by Bawekes et al. (2018), stating that the frequent number of CEOs can be used to detect fraud in financial statements.

The result of this study accepts the hypothesis that the frequent number of CEOs influences fraud in financial statements. The number of CEO photos posted in the annual report reflects the arrogance of the CEO. This high arrogance and superiority make CEOs feel that any internal control will not apply to them because their status and position make it easy for them to commit fraud. Bawekes et al. (2018), the CEO commits fraud in order to maintain his position. The number of CEOs photo in the annual report also reflects the CEOs over-confidence (Habib & Hossain, 2013; Schrand & Zechman, 2012). Overconfident

managers tend to engage in fraudulent financial reporting.

#### **Political Connection and Financial Statement Fraud**

Political Connection has a coefficient of 0.1260 and a t-value of 1.302, with a significance level of 0.197 ( $> 0.05$ ). Therefore, H9, which states political connections can be used to detect fraud on financial statements, is rejected. This result is in line with research Kurnia & Anis (2017), stating that political connections do not have a significant effect on fraud on financial statements.

The result rejects the hypothesis stating that companies with CEOs or directors who have political connections desire good financial reports to maintain their reputation and position. It is part of the company's political connections obtained from the company's status in the form of state-owned enterprises (SOEs). Therefore, the sample companies have a sound system so that there is no need to maintain the directors' reputation with manipulates their financial statements. According to Nurbaiti & Hanafi (2017), political connections can be said that the CEO with these political connections does not utilize his political connections in the framework of managing the company. Kurnia & Anis (2017), stated that CEOs who have political connections do not include their positions in the political field in the annual report. In addition, CEOs who have political connections can reduce their arrogance. Therefore, it does not have an effect on fraud on the financial statements.

#### **Company Existence and Financial Statement Fraud**

Company Existence has a coefficient of -0.0670 and a t-value of -0.534, with a significance level of 0.595 ( $> 0.05$ ). Therefore, H10 stating that company existence can be used to detect fraud in financial reports is reject-ed. It is due to the absence of a significant influence on company existence. Almost all companies in this study have been established for more than 20 years, which means they have a good experience so that with the long-standing, the company can be said to have had an existence that is quite high among the people. Therefore, without cheating on any financial statements, the company already has a high existence among the public.

### **5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS**

The results of the study provide evidence related to the prediction of whether all the variables are able to affect the fraud in financial statements. These factors are such as financial targets, external pressure,

effective monitoring, nature of the industry, change in auditor, change in director, political connection, and company existence in which they cannot be used to detect fraud on financial statements. However, financial stability and the number of CEO photos can be used to detect fraud on the financial statements. Financial stability can affect financial statement fraud. As an element of pressure from fraud pentagon, the company's high financial instability can lead to fraudulent financial statements. The unstable financial conditions can encourage managers to take actions that can bring the company in a stable condition. In this case, the company needs to pay attention to their financial stability. The number of CEO photos can affect financial statement fraud. As part of the arrogance element of pentagon fraud, many CEO profiles listed in the annual report will provide an incentive for the CEO not to lose his status or position in the company's structure. With his high position, they give superior power in making decisions. A large number of CEOs have power, and their profile listed in the annual report arrogance can increase the CEO's desire to have excellent performance in the annual report by using their power.

The results of this study can be used as input for internal controllers for considering when evaluating the company's performance. The financial stability and frequent number of CEOs can affect fraud. Internal auditors, external auditors, investors, and regulators can be used to detect fraud in the financial statements. Meanwhile, this study can also be used by stakeholders as a material consideration in decision making in order to be more careful in making decisions regarding the appointment of CEOs.

This study has several limitations, namely the data used were secondary data obtained from financial reports and annual reports. The data might have a possibility of errors in the management of data sources caused by system errors or human errors. The sample data used in the research were only from the Indonesia Stock Exchange without going through a direct survey on the sample. Therefore, the truth of the data used cannot be verified. Future research should develop better variables and proxies of financial fraud so that the research scope can be much more comprehensive. Future studies can also use a sample of the company's financial statements or annual reports that can be verified so that research results are more effective.

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