

## **Detecting Potential Financial Statement Fraud Using the Fraud Pentagon Analysis: Evidence from Indonesia**

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### **ABSTRACT**

This study aims to detect potential fraudulent financial statements using the Fraud Pentagon Analysis. Detection of potential fraudulent financial statements is measured using the Beneish M-Score. The study was conducted on the mining companies listed on the Indonesia Stock Exchange during 2015-2019. The research sample was obtained based on purposive sampling, and there were 190 companies whose data met the criteria of research samples. The data analysis used the logistic regression analysis. The results show that rationalization and capability have a positive effect on the potential for fraudulent financial statements, while pressure, opportunity, and arrogance have no effects on the potential for fraudulent financial statements. This research is expected to provide benefits for interested parties. It is also expected to provide benefits for other researchers and be used as a reference for developing further research. Company managements need to pay attention to the potential for fraud in the financial statements that can have an impact on the interest of investors to invest their funds. For investors, this study is expected to be used as a reference to make them more careful in selecting investments and as a basis for making decisions.

Keywords: Beneish M-score, financial statement fraud, Fraud Pentagon Analysis.

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### **1. INTRODUCTION**

The purpose of financial reporting is to provide information containing the financial position, performance, and changes in a company's finance that is useful for users of financial statements in making economic decisions (Indonesian Institute of Accountants, 2017). If a financial statement shows that a company is in a good condition, it will certainly have an impact on increasing stakeholders' confidence to make crucial decisions, which will positively affect the company. Therefore, company managers tend to present financial reports in a good look to obtain positive feedback from users of financial reports. One factor that should be considered in financial reporting is that financial statements must be relevant and presented accurately to avoid fraudulent financial statements that will harm

the users of financial statements in making decisions. So that the financial statements must be prepared well (Puspaningsih and Ristya, 2022).

Fraud is an act that is deliberately carried out for personal or other people's gain, conversely causing losses for certain parties. The tendency to cheat depends on such three factors as opportunity, motive, and rationalization. Safitri & Sari (2018) revealed several types of fraud, including corruption, investment fraud, misuse of assets, and fraudulent financial statements. According to the Association of Certified Fraud Examiners (2016), Indonesia's largest percentage of fraud comes from 77% corruption, 19% misuse of assets, and 4% fraudulent financial statements. Meanwhile, based on the results of research by the Association of Certified Fraud Examiners (2018) conducted on 2,690 cases of fraud from 125 countries in the world, financial statement fraud is the most harmful act of fraud. The 2020 Corruption Perception Index (CPI) issued by Transparency International (TI) places Indonesia at 102nd out of 180 countries, 5th in Southeast Asia (Gamayuni et.al, 2023).

West & Bhattacharya (2016) revealed that fraud in financial statements can cause problems that have broad consequences in various aspects because it can reduce trust and disrupt the economic stability of individuals and even an entity. Cases of fraudulent financial reporting have occurred in Indonesia and abroad. The large companies involved in cases related to accounting fraud in foreign countries include Xerox, WorldCom, and Enron Corporation. Enron Corporation committed fraud by inflating profits and hiding debts. In addition, Enron Corporation cheated at the electricity and energy market in Texas, California. This case caused huge losses to the investors, employees, and retirees. The greatest impact caused by the Enron case was the collapse of one of the big-five accounting firms in the world, namely Arthur Andersen, because, with the fraudulent case of financial statements, global public trust in the independence and professionalism of public accountants decreased (Handoyo, 2016).

Financial report fraud scandals in Indonesia also occurred, one of which was done by PT Kimia Farma Tbk. The indication of fraudulent financial statements began with the discovery of misstatements in the financial statement resulting in an overstatement of net income. This was done by inflating the inventory and inventory prices. In addition, the management of PT Kimia Farma also manipulated sales accounts by double recording sales (Mukhtaruddin *et al*, 2022). This case resulted in the board of directors of PT Kimia Farma Tbk being punished with a fine of one billion rupiah (Apriani & Nuzula, 2019). Cressey (1953) revealed that three conditions can motivate individuals to commit fraud: pressure, opportunity, and rationalization. The theory is called the Fraud Triangle. In a further development, Wolfe and Hermanson (2004) added capability to the conditions that Cressey (1953) had stated as they believed that fraud will not occur without the right people and the right abilities; therefore, the four conditions represent a fraud diamond.

Horwath (2011) stated that, in the current environment, the fraud triangle theory can be expanded into a Fraud Pentagon Theory, in which capability (competence) and arrogance in employees can become the factors that support fraud to occur. Competence is an element of opportunity which includes an individual's ability to exercise internal control and to control situations for his own benefit. Meanwhile, arrogance is the superiority and greed behavior of criminals who believe that company policies and procedures are not applied to them.

A unique research conducted by Mohamed *et al.* (2021) examined the elements of Fraud Pentagon Theory in influencing the employee fraud in Malaysian financial institutions. The research revealed that pressure, opportunity, rationalization, capability, and arrogance have a positive and significant impact on the employee fraud. The research concluded that all the elements of the Fraud Pentagon Theory have a significant impact on

the occurrence of employee fraud. However, it leaves a challenge when the theory is employed to test its impact on the financial statement fraud nearly conducted by managers.

Financial pressure imposed on managers can lead to fraudulent financial statements. This is in accordance with the results of research by Septriani and Handayani (2018) as well as Agusputri and Sofie (2019), which concluded that financial targets positively affect financial statement fraud. However, the results of this study are different from those of Quraini and Rimawati (2019), Tessa and Harto (2016), and Apprilliana and Agustina (2017), which stated that financial targets do not affect fraudulent financial statements.

Prayitno (2018) concluded that the greater the proportion of independent commissioners, the more effective the monitoring process in a company. This increases the management's potential to commit fraudulent financial statements. In contrast to Hanifa & Laksito's (2015) research results, Sihombing & Rahardjo (2014) proved that supervision does not facilitate fraudulent financial reporting.

According to Devy, Wahyuni, and Sulindawati (2017), changing the directors can lead to stress, thereby increasing the likelihood of financial fraud. This is supported by the research results of Siddiq, Achyani, and Zulfikar (2016), Ulfah, Nuraina, and Wijaya (2017), and Puspitha and Wirawan (2018). In contrast, Apriliana & Agustina (2017), Bawekess, Helda, Simanjuntak, and Daat (2018), Prayitno (2018), and Quraini and Rimawati (2018) found that there are no relationships between changes of the directors and financial adequacy. Research on fraud has been widely conducted, but the results remain inconsistent, so re-researching is always worth doing. In this study, the authors used the fraud pentagon elements as the basis for detecting fraud in financial statements. The fraud pentagon theory explains the five factors that underlie a fraud committed by an individual: pressure, opportunity, rationalization, capability, and arrogance. In this research added company size as control variable.

This study used the Beneish M-Score method to detect fraudulent financial statements. Beneish (1999) stated that the occurrence of manipulation in financial statements can be indicated by an increase in extraordinary accounts receivable, a decrease in assets, a decrease in gross profit, and an increase in accruals. The indication is then measured using eight financial ratio indexes, namely the Days Sales in Receivable Index (DSRI), Asset Quality Index (AQI), Gross Margin Index (GMI), Sales Growth Index (SGI), Depreciation Index (DEPI), Sales General and Administrative Expenses Index (SGAI), Leverage Index (LVGI), and Total Accruals to Total Assets Index (TATA).

This research was conducted on the mining companies listed on the Indonesia Stock Exchange from 2015 to 2019. Mining companies were chosen because during that period they were experiencing financial pressure. In 2015, no mining companies in Indonesia had a market capitalization exceeding US\$4 billion. The figure of US\$4 billion is a requirement for being included in the ranks of the 40 largest mining companies in the world based on market capitalization (PwC, 2016). In 2018, the condition of mining companies began to improve, but the Director of the Center for Strategic Studies of Indonesian Resources (Cirrus) Budi Santoso stated that the mining conditions in 2018 remained worrying (Investor.id, 2018). Until September 2019, the Indonesia Stock Exchange removed six stocks from its listing board, three of which are mining sector companies. The companies were removed from the listing board due to going concern problem (market.bisnis.com, 2019).

The formulation of the problem in this study includes 1) Does pressure affect the potential for financial statement fraud? 2) Does opportunity affect the potential for financial statement fraud? 3) Does rationalization affect the potential for financial statement fraud?

4) Does capability affect the potential for financial statement fraud? and 5) Does arrogance affect the potential for financial statement fraud?

## **2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

### **2.1. Agency Theory**

In the agency theory, there are two related parties, namely the principal and the agent. The principal is the party who gives authority to the agent to manage the company. Investors act as the principal. Meanwhile, the agent (performed by managers) is the party authorized by the principal to run the company optimally (Jensen & Meckling, 1976).

The contract that has been agreed between the principal and the agent has the potential for a conflict of interest. Conflicts of interest can hinder a company in achieving positive performance. This happens because investors have a primary interest to receive a high level of return on investment. On the other hand, managers as the party that manages the company have an interest of their welfare (Scott, 2015). Therefore, managers will make various efforts to ensure good performance usually by, among others, manipulating financial reports. This can be true especially when a person involved in the process is an opportunist and is highly- driven by personal interest (Jusoh *et al.*, 2022).

### **2.2. Fraud Pentagon Theory**

The fraud pentagon theory is a theory that examines the causes of fraud. This idea was first put forward by Donald R. Cressey (1953) and called the fraud triangle. There are three elements that encourage fraud, namely pressure, opportunity, and rationalization. Then, in 2004, Wolfe and Hermanson added one more fraud element, namely capability, which made the four elements called the fraud diamond. Then in 2011, Crowe added another element, arrogance. These five elements are then called the fraud pentagon.

### **2.3. Hypothesis Development**

One form of pressure is financial targets. Managements will usually try to achieve specified financial targets because companies often associate financial targets with bonuses or rewards, thus encouraging managers to try to get the bonus. They seek to achieve targets by any means, including fraudulent financial reporting. Septriani and Handayani (2018) as well as Agusputri and Sofie (2019) stated that financial targets have an effect on fraud. Therefore, the hypothesis proposed in this study is:

H1: Pressure has a positive effect on the potential for fraudulent financial reporting.

Weak supervision within a company gives a chance (Opportunity) for managers to commit fraud. The lack of internal control within the company (ineffective monitoring) is an opportunity for some parties to manipulate data in financial reports. Kusumawardhani (2013), Puspitha and Wirawan (2018), and Agusputri and Sofie (2019) showed that effective monitoring can detect fraud. This is reinforced by research from Diany (2014) and Tiffani and Marfuah (2015) which revealed that effective monitoring has a significant positive effect on financial statement fraud. Based on this explanation, the following hypothesis can be made:

H2: Opportunity has a positive effect on the potential for financial statement fraud.

An auditor's opinion is a statement expressed by independent auditors about their clients' financial statements resulted from auditors' examination. An audit opinion is used to assess the effectiveness of a company's performance and to assess whether the financial

statements prepared and presented by the management are accountable and transparent. The audit opinion received from an auditor can be used as a rationalization for managers to provide fraudulent financial statements. Research conducted by Ulfah, Nuraina, and Wijaya (2017) as well as Septriani and Handayani (2018) showed that an auditor's opinion significantly affects fraudulent financial reporting. Based on this explanation, the hypothesis to be tested is as follows:

H3: Rationalization has a positive effect on the potential for fraudulent financial statements.

Changing the directors becomes one of the company's efforts to improve the performance in previous periods by passing the authority to a new director. According to Wolfe and Hermanson (2004), director replacement can cause stress that develops greater potential for fraud. A manager will feel that he has the ability (Competence) to commit fraud with his capacity. Research conducted by Saputra and Kesumaningrum (2017), Shiddiq, Achyani and Zulfikar (2017), and Puspitha and Wirawan (2018) also showed that director substitutions have an impact on fraudulent financial reporting. Based on the description above, the hypothesis to be tested is as follows:

H4: Capability has a positive effect on the potential for fraudulent financial statements.

The number of CEO's photos displayed in a company's annual report can represent the CEO's level of arrogance. A CEO tends to show his status and position. According to Tessa and Harto (2016), a high level of arrogance can lead to fraud because the arrogance of a CEO can make him do anything to maintain his current level and position. The results of research conducted by Tessa & Harto (2016), Siddiq *et al.* (2017), Bawekes *et al.* (2018), and Puspitha and Wirawan (2018) indicated that CEOs' arrogance has a positive effect on fraudulent financial reporting. Based on this description, the following hypothesis can be taken:

H5: Arrogance has a positive effect on the potential for financial statement fraud.

#### 2.4. Research Model

The model of this study is as follows:

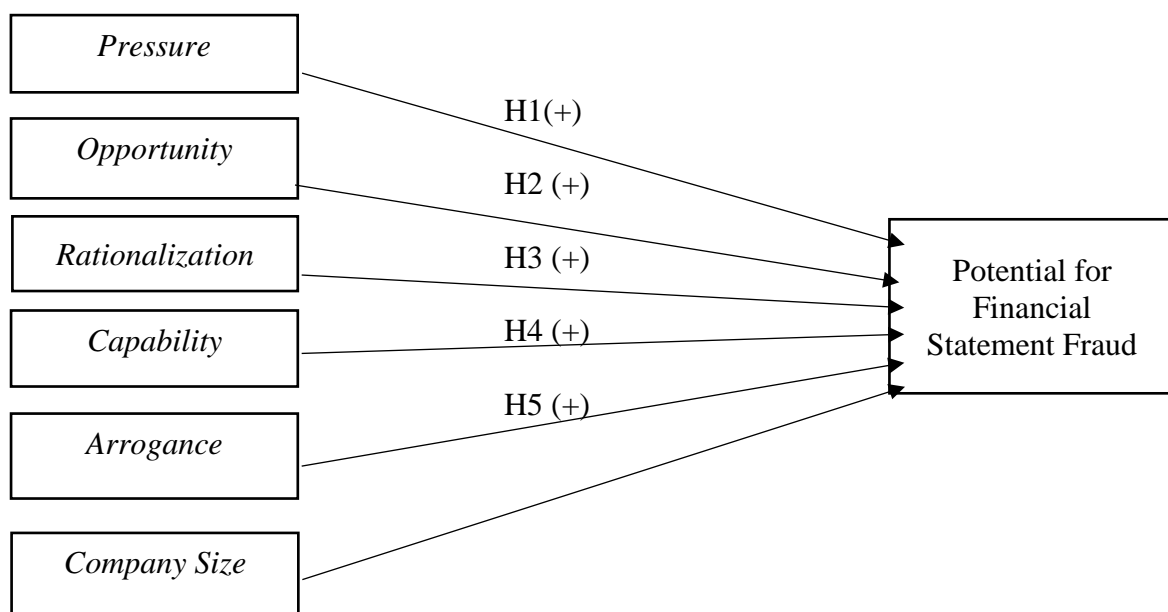


Figure 1. Research Model

### 3. RESEARCH METHOD

#### 3.1. Population and Research Sample

The population used in this study was the financial statements of the mining companies listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019. The method of sample selection in this study involved purposive sampling based on certain criteria. The criteria for determining the sample were 1) mining companies listed on the IDX during 2015-2019, 2) companies not delisted from the IDX during the 2015-2019 period, 3) annual financial reports published on the company's website or the IDX website ([www.idx.co.id](http://www.idx.co.id)) for the period of 2015-2019, and 4) disclosed data related to the research variables during the 2015-2019 period.

#### 3.2. Measurement of Research Variables

The dependent variable in this study was the potential for fraudulent financial statements. According to Nugraheni & Triatmoko (2017), fraudulent financial statements are deliberate actions carried out by a management by manipulating the value of financial reports to mislead users of financial statements. In this study, the variable of financial statement fraud was measured using the Beneish M-Score which consisted of 8 financial ratio indexes, including 1) Days Sales in Receivable Index (DSRI); DSRI is a ratio that compares trade receivables to sales generated by the company in one year (t) and the previous year (t-1), 2) Gross Margin Index (GMI); GMI is a ratio that compares changes in the company's gross profit in one year (t) and the previous year (t-1), 3) Asset Quality Index (AQI); AQI is the ratio that compares the non-current assets owned by the company other than fixed assets to the total assets changes in one year (t) and the previous year (t-1), 4) Sales Growth Index (SGI); SGI is a ratio that compares the sales of one year (t) and the previous year (t-1), 5) Depreciation Index (DEPI); DEPI is the ratio that compares depreciation expense to fixed assets before depreciation in one year (t) and the previous year (t-1), 6) Sales General and Administrative Expenses Index (SGAI); SGAI is a ratio that compares general and administrative selling expenses to sales in one year (t) and the previous year (t-1), 7) Leverage Index (LVGI); LVGI is the ratio comparing total debt to total assets in one year (t) and the previous year (t-1), and 8) Total Accruals to Total Assets (TATA); TATA is a ratio that compares total accruals to total assets.

Then, the calculation results of the 8 ratio indexes are put into a mathematical model to obtain the Benesih M-Score value:

$$MSORE = -4.84 + 0.920 * DSRI + 0.528 * GMI + 0.404 * AQI + 0.892 * SGI + 0.115 * DEPI - 0.172 * SGAI - 0.327 * LVGI + 4.697 * TATA$$

If the company's score shows M-SCORE > -2.22, it means that the company is detected as cheating, then it is given code 1. If the company's score shows M-SCORE < -2.22, it means that the company is not detected to have committed fraud, so it is given code 0.

Meanwhile, an independent variable is a variable that affects the dependent variable. The independent variables used in this study were pressure, opportunity, rationalization, capability, and arrogance. The measurement of these variables is as follows:

#### *Pressure*

According to Cressey (1953), a person cheats when he is under pressure. This pressure can come from himself or other parties. In this study, the pressure was represented by financial targets. Financial targets are measured using ROA.

$$RoA = \frac{Net\ Income}{Total\ Assets}$$

### **Opportunity**

Fraud occurs because an individual has the opportunity to do it. The opportunity to commit fraud occurs when there is ineffective monitoring. Ineffective monitoring is a company situation where there is no internal control that works well. This occurs due to ineffective supervision of the board of commissioners, board of directors, and audit committee on financial reporting and company's internal control. According to Dechow *et al.* (2009), companies with fewer members of the independent board of commissioners are more prone to potential financial statement fraud. Therefore, in this research, opportunity was represented by ineffective monitoring. Ineffective monitoring is measured using the ratio of the independent board of commissioners (BDOUT). The following formula can be used to calculate the ratio of the independent board of commissioners (BDOUT):

$$BDOUT = \frac{Total\ Independent\ Boards}{Total\ Boards}$$

### **Rationalization**

Rationalization means justifying actions and feeling that everything an individual does is normal. In this study, the rationalization was proxied by the auditor's opinion. The audit opinion (OPNADT) in this study was measured using dummy variables. If the company received a modified opinion, it would be coded 1. In contrast, if the company received an unqualified audit opinion, it would be given code 0.

### **Capability**

According to Horwarth (2011), capability is a person's expertise with the aim of weakening internal control to enable the fraud planning to be executed while being hidden to prevent other parties from noticing it. A change of directors is the delegation of duties and authority from old directors to new directors aiming to improve the performance of the previous directors. This shows that the performance of the old board of directors is not good and satisfactory, and it indicates fraud in financial statements.

In this study, the capability variable was proxied by the change of company directors (DCHANGE). The measurement of the change of company directors used dummy variables. If there was a change of the company directors during the 2015-2019 period, it would be coded 1; otherwise, if there were no changes of the company directors during 2015-2019, it would be coded 0.

### **Arrogance**

According to Horwarth (2011), arrogance is an attitude of superiority over a right that is owned and a feeling that internal control or a company's policy does not apply to an individual who has a high position in the company. Those with high positions in the company believe that the established policies will not limit them, and they commit fraud because they think their actions will not be detected. The number of photos displayed in a company's annual report can represent the CEO's level of arrogance or superiority, indicating that the CEO wants to show everyone about his status and position (Tessa and Harto, 2016). In this study, the frequent number of CEO's pictures was measured by looking at the total number of CEO's photos in the annual report.

Table 1: Category of the Number of CEO's Photos

1	Does not display photos of the directors
2	1 to 4 photos

3	5 to 8 photos
4	9 to 12 photos
5	13 to 16 photos

The control variable in this research is company size which is measured by the natural logarithm of Total Assets.

## 4. RESULTS AND DISCUSSION

### 4.1. Population and Sample

The population used in this study were the mining companies listed on the Indonesia Stock Exchange (IDX) in 2015 - 2019, totaling 49 companies. The companies involved have been registered since January 1, 2014 and did not experience delisting during the study period. The sample was selected using a purposive sampling method. Table 2 demonstrates sample determination.

Table 2: Sample of the Research

No	Criteria	Quantity
1	Total number of the mining companies listed on the IDX in 2015-2019	49
2	Mining companies on the IDX listed after 1 January 2014	(7)
3	Mining companies delisted from the Indonesia Stock Exchange (IDX) during 2015-2019	(2)
4	Mining companies not including complete information to support the research	(2)
	Number of sample companies	38
	Total years of observation (2015-2019)	5
	Number of sample companies during the years of observation	190

### 4.2. Data Analysis

#### 4.2.1. Descriptive Statistical Analysis

Descriptive statistics provides an overview of the data used in a study. The mean, minimum, maximum, and standard deviation values to describe the dependent variable and independent variables used in this study are shown in Table 3.

Table 3: Results of Descriptive Statistics

	n	Minimum	Maximum	Mean	Std. Deviation
Potential fraud	190	0	1	0.3526	0.47905
Pressure	190	-3.93	1.21	-0.0224	0.40792
Oppurtunity	190	0.17	1.00	0.3870	0.12309
Rationalization	190	0	1	0.2579	0.43863
Capability	190	0	1	0.3737	0.48506
Arogance	190	1	6	2.5632	0.91646
Company Size	190	12.88	28.98	21.0503	3.97530
Valid N (listwise)	190				



Table 3 shows a description of the dependent and independent variables in this study. The value of n is the number of valid data totaling 190 obtained from a sample of the mining companies listed on the IDX for the 2015-2019 period.

#### 4.2.2. Logistic Regression Analysis

##### 4.2.2.1. Testing the Overall Model (Overall Fit Model)

The test of the entire model in the logistic regression analysis was done by comparing the Likelihood function as seen from the initial -2 Log Likelihood value (Block Number = 0) and -2 Log Likelihood end (Block Number = 1). Table 4 shows the results of the analysis used to test the entire model.

Table 4: Overall Fit Model

<i>-2 Log Likelihood</i>	Value
Block Number = 0 (Beginning)	216.649
Block Number = 1 (Ending)	113.230

The results of the analysis showed that the initial -2 Log Likelihood value (Block Number = 0) was 216.649, and the final -2 Log Likelihood (Block Number = 1) was 113.230. A decrease in the value of the model can indicate that the hypothesized model fits the data or the addition of an independent variable to the model improves the fitness of the model.

##### 4.2.2.2. Testing the Coefficient of Determination (Nagelkerke R Square)

The test of the coefficient of determination in the logistic regression analysis used the Nagelkerke R Square value, which is shown in Table 5.

Table 5: Coefficient of Determination

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
113.230	0.504	0.694

The results of the analysis showed the Nagelkerke R Square value of 0.694. This means that the variability of the independent variables (pressure, opportunity, rationalization, capability, arrogance) is able to explain the variability of the dependent variable by 69.4%, while the remaining 30.6% is explained by other variables outside the study.

##### 4.2.2.3. Testing the Feasibility of the Regression Model

The feasibility of the regression model in the study was tested by using the Hosmer and Lemeshow Test as presented in Table 6.

Table 6: Feasibility of the Regression Model

Hosmer and Lemeshow Test		
Chi-square	df	Sig.
8.515	8	0.385

The results of the analysis in Table 6 showed a Chi-square value of 8.515 with a significance of 0.385. The Chi-square value in the table of df 8 is 15.507 while the Chi-square count was 8.515. Because the calculated Chi-square value is smaller than the Chi square value in the table and the significance value is  $0.385 > 0.05$ , the null hypothesis cannot be rejected (accepted). This means that the model is able to predict the value of the observation, or the model is acceptable because it is in accordance with the observation data.

#### 4.2.2.4. Preparing the Regression Model

Based on the results of the logistic regression test, a regression model can then be made. The following are the results of the logistic regression test:

Tabel 7: Results of Logistic Regression

	B	S.E.	Sig.
Pressure	0.787	1.130	0.486
Opportunity	2.778	3.620	0.060
Rationalization	0.360	0.516	0.008
Capability	1.243	0.486	0.010
Arrogance	0.546	0.299	0.068
Company Size	0.037	0.067	0.577
Constant	-13.459	2.587	0.000

Table 7 shows the results of the logistic regression coefficients that form the logistic regression equation as follows:

$$\text{PotentialFraud} = -13.459 + 0.787\text{Pressure} + 2.778\text{Opportunity} + 0.360\text{Rationalization} + 1.243\text{Capability} + 0.546\text{Arrogance} + 0.037\text{CompSize} + e$$

### 4.3. Discussion

#### 4.3.1. The Effect of Pressure on the Potential for Fraudulent Financial Statements

The test of H1 shows that H1 is not supported. This means that pressure has no effects on the potential for fraudulent financial statements. The results of the data analysis show that, although mining companies are experiencing bad times and managers face pressure, they are not proven to increase the potential for fraud in financial statements. This is probably because all mining companies face the same problems, so it does not result in an increase in the potential for fraudulent financial statements. This finding is different from the results of research by Aprilia (2017), Tessa and Harto (2016), and Quraini and Rimawati (2018). This result is also different from the research results of Septriani and Handayani (2018) and Agusputri and Sofie (2019) which revealed that financial targets have an effect on fraud.

#### 4.3.2. The Effect of Opportunity on the Potential for Fraudulent Financial Statements

The test of H2 shows that H2 is not supported. This means that opportunity has no influence on the potential for fraudulent financial statements. Efforts are often made to prevent fraud, one of which is the supervision by an independent board of commissioners. The fewer the number of independent commissioners in a company, the more frequent the fraudulent financial statements will be. With the existence of independent commissioners, it is expected that they will carry out good supervision. However, it is possible that the

independent board of commissioners does not work professionally. Therefore, the size of the supervisory value carried out by the board of commissioners does not affect a company to commit fraudulent financial statements.

The results of the research by Tessa & Harto (2016), Hanifa & Laksito (2015), and Sihombing & Rahardjo (2014) are in line with the results of this study in which the ineffectiveness of monitoring does not affect the existence of financial statement fraud. The results of this study are also consistent with the results of research by Annisya *et al.* (2016), Nugraheni and Triatmoko (2016), and Ulfah, Nuraina, and Wijaya (2017), which found that external pressure has no effects on fraud.

#### **4.3.3. The Effect of Rationalization on the Potential for Fraudulent Financial Statements**

The test of H3 shows that H3 is supported. This means that rationalization has an influence on the potential for fraudulent financial statements. An audit opinion is used to assess the effectiveness of a company's performance and to assess whether the financial statements prepared and presented by a management are accountable and transparent. The audit opinion received from an auditor can be used as a rationalization by managers to commit fraudulent financial statements. The less favorable the audit opinion obtained, the higher the potential for fraudulent financial statements. The results of this study are in line with the results of research conducted by Ulfah, Nuraina, and Wijaya (2017) as well as Septriani and Handayani (2018), which showed that the auditor's opinion has a significant effect on fraudulent financial reporting.

#### **4.3.4. The Effect of Capability on the Potential for Fraudulent Financial Statements**

The test of H4 shows that H4 is supported. This means that capability has a positive influence on the potential for fraudulent financial statements. The change in the composition of the board of directors in a company is intended to improve the management performance. Changes of the directors also cause stress, which has an impact on the potential for fraud (Wolfe and Hermanson, 2004). The members of the board of directors also realize that they have the ability, so they use their ability to commit fraud.

The results of this study are in line with the results of research conducted by Saputra and Kesumaningrum (2017), Shiddiq, Achyani, and Zulfikar (2017), and Puspitha and Wirawan (2018) which showed that a change of directors has an impact on fraudulent financial reporting. On the other hand, the results of this study are different from the results of research by Bawekess, Helda, Simanjuntak and Daat (2018), Prayitno (2018), and Akbar (2017), which found that a change of directors has no effects on the potential for fraudulent financial statements.

#### **4.3.5. The Effect of Arrogance on the Potential for Fraudulent Financial Statements**

The test of H5 shows that H5 is not supported. This means that arrogance has no effects on the potential for fraudulent financial statements. The number of CEO's photos displayed in the company's annual reports has no effects on fraudulent financial statements. This is because the photos of the CEO in the annual report is used to introduce the CEO to a wider community, especially the stakeholders. In this study, several companies also displayed the photos of the CEO participating in company activities, indicating that the CEO was active and directly involved in company activities. This is not a form of arrogance that has the potential to cause fraudulent financial statements.

The results of this study are in line with the results of research by Aprilia (2017), and Ulfah, Nuraini, and Wijaya (2017) who also had the opinion that arrogance (frequent number of CEO's pictures) has no effects on financial statement fraud. However, different

results are found in the research of Tessa & Harto (2016), Siddiq *et al.* (2017), Bawekes *et al.* (2018), and Puspitha and Wirawan (2018).

## 5. CONCLUSIONS

Based on the results of the analysis that has been carried out, the following conclusions can be drawn. 1) Pressure has no effects on the potential for fraudulent financial statements. 2) Opportunity does not affect the potential for fraudulent financial statements. 3) Rationalization affects the potential for fraudulent financial statements. 4) Capability affects the potential for fraudulent financial statements. 5) Arrogance has no effects on the potential for fraudulent financial statements.

This study is expected to provide benefits for interested parties. It is also expected to provide benefits for future researchers and be used as a reference for developing further research. Managements need to pay attention to the potential for fraud in financial statements that can have an impact on the interest of investors to invest their funds. For investors, it is expected that the findings can be used as a reference to become more careful in selecting investments, and they can be used as a basis for making decisions.

This study found that opportunity and pressure have no impact on financial statement fraud. The findings are not in line with the research findings of Mohamed *et al.*, (2021), Sánchez-Aguayo *et al.*, (2021), Aprilia (2017), Tessa and Harto (2016), Quraini and Rimawati (2018), Septriani and Handayani (2018), and Agusputri and Sofie (2019). Meanwhile, rationalization, capability, and arrogance have an impact on financial statement fraud. This is confirmed by the studies from Mohamed *et al.*, (2021), Sánchez-Aguayo *et al.*, (2021), Aprilia (2017), Tessa and Harto (2016), Quraini and Rimawati (2018), Septriani and Handayani (2018), and Agusputri and Sofie (2019).

Our findings suggest that the agency theory should be taken into account in protecting the shareholders' interest from the fraud conducted by managers. It cannot be denied that managers as the agent tend to be creative in preparing the financial statements. In contrast, shareholders as the principal ask for high quality of financial statements. The current solution offered by accounting is mandating an independent auditor to audit the financial statements. However, the reputation of the auditors will determine the quality of their assessment. Finally, it remains a challenge for future research to examine how shareholders can be protected from financial statement fraud that may involve auditors.

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