



## Fraudulent Financial Statements in Mining Sector Companies Listed on the Bei for the Period 2018 – 2021

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### ABSTRACT

This study aims to determine the effect of pressure, opportunity, rationalization, ability, arrogance, and Fraud Confirmation on financial statement fraud in mining sector companies listed on the Indonesia Stock Exchange in 2018-2021. The data used in this study are secondary data obtained from annual reports & reports. annual finance. By using purposive sampling technique, this study has a sample of 19 mining sector companies for 4 years, the observation data obtained is 76. The data analysis technique used is logistic regression analysis using SPSS 20 software. The results of this study indicate that the variables of pressure, opportunity, rationalization, the ability and arrogance to have no influence on fraudulent financial statements in mining sector companies listed on the Indonesia Stock Exchange in 2018-2021. Meanwhile, the variables of confirmation of fraud have an influence on fraudulent financial statements in mining sector companies listed on the Indonesia Stock Exchange in 2018-2021.

**Keywords:** *Pentagon Fraud, Financial Statement, Fraudulent Financial*

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## INTRODUCTION

Corruption in Indonesia has become a topic of conversation, especially in 2019, where the Corruption Perpeption Index (CPI) states that out of 180 countries that have measured the level of corruption and fraud, Indonesia is ranked 85th. (Sung dkk., 2021). Corruption should be detected in the financial statements, because the financial statements are a reflection of the company's financial position, where the information will always be used for investment decision making (Kalluri & LeBleu, 2020). The information contained in the financial statements is presented over a period of time as a

form of management responsibility in their operational activities. Management must be responsible for each decision, to interested parties, the preparation of financial statements must follow the rules so that the Financial Statements can reflect the entire process of activities that take place within the company (Blanco-Melo dkk., 2020). However, in its application, there are several companies that have not announced financial reports accurately. One of the causes is due to certain factors, so that fraud still occurs (Zhao dkk., 2019).

The case of the requirement to build a Smelter, by the government, is because there is allegedly a tendency for companies to commit fraud. This is in accordance with the news conveyed by several media, which according to CNBC Indonesia, Tuesday (2/22/2022) (Fegert dkk., 2020). The construction of smelter facilities at the new factory, he continued, PT Smelting is able to process 1.3 million tons of copper concentrate per year, up from the previous 1 million. This means that before the construction of the smelter, there was an inaccuracy in the previous calculation. The above certainly cannot be directly said to be Fraud, but the above conditions can also be called an inaccurate production calculation (Xue dkk., 2019). Fraudulent financial statement verification is the identification and testing of risk factors that lead to fraudulent financial statements, including financial stability, the nature of the company, efficient monitoring and streamlining, etc (Wortham dkk., 2020). Fraudulent financial statements are a serious problem, from year to year fraud cases are always revealed. For this reason, the position of auditors is needed to detect fraud as early as possible to prevent fraud (Gielen dkk., 2019). Auditors must be able to consider factors that allow fraud to occur, and from a different perspective, auditors must also be able to capture signals, for the possibility of fraud (Wang dkk., 2019). In line with the need for Auditor competence to detect fraud, researchers propose two theories that can be used to detect fraud, namely first; pentagon theory.

found 5 (five) elements that influence fraudulent financial statements, namely pressure, opportunity, rationalization, capability, arrogance. and Second (Xue dkk., 2019); The variable proposed by Durya (2019) (Yang dkk., 2019), where his research proposes the Fraud Confirmation variable for predicting a behavior. The Fraud Confirmation variable researchers use to signal / predict the existence of fraudulent behavior.

## **LITERATURE REVIEW**

### **Agency Theory**

Agency theory describes the correlation or relationship between principals & agents (management). In this theory, it explains that if in a business institution, there are 2 groups, namely managers (management) & examiners (owners), there will definitely be conflicts. The conflict occurs due to differences in the information they have, where the information they have is not the same and congruent / information asymmetry occurs. The management group will manage its daily business activities, while the owner group will only be a supervisor. The difference in function results in management having more

complete information than owners who rarely carry out business activities in these activities. The difference in information owned causes information asymmetry which creates suspicion between the two. The suspicion that exists, resulting in Agency conflicts.

Researchers at the same time want to test / find evidence for the existence of Agency Theory, by looking at and analyzing the data collected. When the independent variables (Pressure, Opportunity, Rationalization, Arrogance Ability and Confirmation Fraud) significantly affect the dependent variable (Financial Statement Fraud), then the researcher can be said to have succeeded in providing evidence related to the existence of Agency Theory, in the research methodology that the researcher has chosen and determined.

### **Fraud**

Fraud is behavior and actions that include deliberate factors, intentions, benefiting oneself or others, cheating, misappropriation of funds, and abuse of trust for unlawful and illegal benefits such as money, goods / property, services, and not paying for services, by one or more individuals responsible for management, workers, or other groups (Badan Pemeriksa Keuangan Republik Indonesia, 2017) in (Al Farizi et al., 2020).

### **Fraudulent Financial Statement**

Financial statement fraud is negligence and intentional errors in the preparation of financial statements that are not in accordance with generally accepted accounting principles. This can cause information that deceives and misleads investors, creditors, and related parties that affect economic decision making (Arens et al., 2008) in (Wiranti et al., 2022). Researchers provide a slight modification of the definition, namely that in this study what is meant by Financial Statement Fraud is a tendency or indication that it should be suspected, that fraud has occurred in the presentation of financial statements.

### **Pressure**

Pressure can occur from external and internal parties. When the company gets unstable pressure in its finances, it allows the company to commit financial statement fraud (Yanti, 2021) in (Wiranti et al., 2022). The risk of management being exposed to undue pressure to achieve financial goals decided by the board of directors / management, including goals from sales and profit incentives which are the definition of financial targets. Financial targets are usually proxied by Return On Asset (ROA) (Wiranti et al., 2022).

H1 : Pressure (Pressure) affects Fraudulent financial statements

### **Opportunity**

Opportunity is the creation of opportunities to commit fraud. In this case, company management will take advantage of the situation to hide the fraud so that many people do not find out. There will be no fraud if there are opportunities and powerless management policies (Aprilia, 2017).

H2 : Opportunity affects Fraudulent financial statements.

### **Rationalization**

Rationalization is an important factor in the occurrence of fraud, and fraudsters look for strong reasons to justify their actions. Rationalization is proxied by total accruals (TA). In general, accruals have a relatively fixed amount each year (Wiranti et al., 2022).

H3 : Rationalization affects Fraudulent financial statements.

### **Capability**

Capability is the ability of company personnel to provide opportunities when committing fraud (Siddiq et al., 2017). Wolfe and Hermanson (2004) in (Siddiq et al., 2017) convey that fraud can occur with the nature and ability of a person who has an important role in the organization. Capability in this theory means the ability of individuals to take advantage of attractive opportunities to commit fraud.

H4 : Capability affects Fraudulent financial statements.

### **Arrogance**

Arrogance is prioritizing the rights that the perpetrator has and feeling that internal controls and company policies do not apply to him. Arrogance is proxied by Frequent number of CEO's picture measured by the number of CEO descriptions in the company by showing display pictures as well as biographies, achievements, photos, and other information regarding the CEO's track of record which is often described in the company's annual report.

H5 : Arrogance affects Fraudulent financial statements.

### **Confirmation Fraud (Confirmation Fraud)**

Researchers suspect that any information should be meaningful to economic actors, and can be seen from the reflection of the stock price that occurs. This is in accordance with the Efficiency Market Hypothesis (EMH) or SFAC No. 1, which gives credit / credit to information, because it believes that any information that exists will be very important to be considered, and processed by business people. This confirmation can be obtained by looking at various information in the community, mainstream media and other social media. From the above understanding, the researcher has the hypothesis below.

H6 : Confirmation Fraud affects Fraudulent financial statements.

## **RESEARCH METHODOLOGY**

### **Population and Sample**

A general area that includes objects and subjects with specific qualities and characteristics identified by researchers and draws conclusions is called a population (Martins dkk., 2019). The population in this research includes Mining Sector companies listed on the IDX for the period 2018-2021. The sampling technique used is purposive sampling technique with an observation year of 4 years and obtained a sample of 19 companies, so that the data is 76.

### **Research Variables and Operational Definitions**

**The dependent variable** or dependent variable is the variable that affects the independent variable. The dependent variable in this research is Fraudulent financial statement (Y). Fraudulent financial statement is a misstatement of a certain amount to deceive users of

financial statements. Fraudulent financial statements are calculated using the Beneish Model adopted in 1999.

$$M - Score = -4.84 + 0.920DSRI + 0.528GMI + 0.404AQI + 0.892SGI + 0.11DEPI - 0.172SGAI + 4.679TATA - 0.327LVGI$$

Independent variables or independent variables are variables that can affect changes in the dependent variable. The independent variables of this research are variables developed from the fraud pentagon elements, as follows:

#### **Pressure (X1)**

Pressure is a person's encouragement to commit financial and non-financial fraud (Wiranti et al., 2022). However, the variable that will be used in this research is the financial target variable. Pressure is measured using the Return on Asset (ROA) ratio. The following is the equation for measuring Return on Asset.

#### **Opportunity (X2)**

Opportunity is an opportunity that allows cases of fraud (Wiranti et al., 2022). The ratio of the number of independent committees (BDOUT) is used as a proxy for the opportunity variable in this study.

#### **Rationalization (Rationalization) (X3)**

Rationalization in fraud is to justify fraud that will or has occurred. In this study, total accruals (TA) are used as a proxy for the rationalization variable.

$$TA = \text{Pendapatan bersih} - \text{Arus kas dari aktivitas operasi}$$

#### **Capability (X4)**

Capability as one of the causes of fraud is that changes in directors can indicate fraud. The proxy used for capability is the change of directors which is assessed by a dummy variable. Given code 1 if there is a change of director in 2018-2020, and given code 0 if there is no change of director in 2018-2020.

#### **Arrogance (Arogancy) (X5)**

The proxy used for arrogance is the frequency of the number of CEO images assessed by the total information the CEO has on the company which shows biographies, achievements, photos, and other information that is often described in the company's annual report (Wiranti et al., 2022).

#### **Fraud Confirmation (X6)**

The proxy for this variable is that the more it is reported in various platforms, related to the company's condition, the number of frequencies will be recorded. Of course, there will be a lot of subjectivity from researchers to determine the number of frequencies that will be used in the calculation.

#### **Data Collection Method**

The method used in this research is the documentation method. Documentation is compiled by searching, collecting and studying secondary data from annual reports and annual financial reports of mining sector companies for the 2018-2021 period contained on the official IDX website, namely [www.idx.co.id](http://www.idx.co.id). The analysis method used is logistic regression.

## RESULT AND DISCUSSION

### Statistics Descriptif

Table 1  
Descriptive Statistics

|                    | N         | Minimum      | Maximum     | Mean          |                | Std. Deviation |
|--------------------|-----------|--------------|-------------|---------------|----------------|----------------|
|                    | Statistic | Statistic    | Statistic   | Statistic     | Std. Error     | Statistic      |
| ROA                | 76        | -.0798       | 1.4334      | .102174       | .0268413       | .23399         |
| BDOUT              | 76        | .2000        | .7500       | .448130       | .0132014       | .11508         |
| TA                 | 76        | -66240103123 | 39742394981 | -233074894.00 | 1045081886.646 | 9110812663.2   |
| CAPABILITY         | 76        | 0            | 1           | .42           | .057           | .4             |
| AROGANCY           | 76        | 8            | 29          | 14.61         | .748           | 6.5            |
| FFS                | 76        | 0            | 1           | .03           | .018           | .1             |
| KF                 | 76        | .00          | 9.00        | 2.6316        | .27520         | 2.399          |
| Valid N (listwise) | 76        |              |             |               |                |                |

The descriptive statistical analysis of the table above is described:

1. Variable Y (FFS) financial reporting fraud has a min value of 0, a max value of 1, a mean value of 0.03 and a standard deviation of 0.161, indicating that the data intersection is relatively small, because the standard deviation is smaller than the mean.
2. The pressure variable (ROA) has a min value of -.0798, a max value of 1.4334, a mean value of 0.102174 and a standard deviation of 0.2339971, indicating that the data intersection is relatively large, because the standard deviation is greater than the mean.
3. The opportunity variable (BDOUT) has a min value of 0.2000, a max value of 0.7500, a mean value of 0.448130 and a standard deviation value of 0.1150867, indicating that the data intersection is relatively large, because the standard deviation is greater than the mean.
4. The rationalization variable (TA) has a min value of -662401, a max value of 397423, a mean value of -233074 and a standard deviation of 911081, indicating that the data intersection is relatively large, because the standard deviation is greater than the mean.
5. The ability variable has a min value of 0, max 1, a mean value of 0, 42 and a standard deviation of 0, 497, indicating that the data intersection is relatively small, because the standard deviation is smaller than the mean.
6. The arrogance variable has a min value of 8, max 29, a mean value of 14.61 and a standard deviation of 6.522 indicating that the data intersection is relatively small, because the standard deviation is smaller than the mean.
7. The KF variable has a min value of 0, max 9, a mean value of 2.6316 and a standard deviation of 0.27520, indicating that the data intersection is relatively small, because the standard deviation is smaller than the mean.

## Assessing Model Fit

Table 2  
Iteration History<sup>a,b,c</sup>

| Iteration | -2 Log likelihood | Coefficients |
|-----------|-------------------|--------------|
|           |                   | Constant     |
| 1         | 28,870            | -1,895       |
| 2         | 20,110            | -2,813       |
| 3         | 18,608            | -3,381       |
| 4         | 18,498            | -3,588       |
| 5         | 18,497            | -3,611       |
| 6         | 18,497            | -3,611       |

Table 2 shows that the value of -2LogL for the constant model alone or at block number = 0 is 18.497. Then in table 4.4 below will show the value of -2LogL for the constant and variable models / block number = 1.

Based on table 4.3 shows that the -2LogL value for the constant and variable models or at block number = 1 is 18.497. In table 4.4, -2LogL shows a decrease in value compared to the -2LogL value in table 4.3. The -2LogL value in table 4.3 shows 18.497 while the -2LogL value in table 4.4 is 16.856, which can be concluded that there has been a decrease of 1.641. The decrease in the -2LogL value indicates that the regression model by including all independent variables is better or in other words the hypothesized model is fit with the data.

### Hosmer and Lemeshow's Goodness of Fit Test

Table 3

| Step | Chi-square | df | Sig. |
|------|------------|----|------|
| 1    | 2.536      | 8  | .960 |

Source: SPSS Data Processing Results (2022)

The table above displays the chi-square value in the Hosmer and Lemeshow goodness fit statistics of 2,536 with a significance level of 0.960 whose value is > 0.05. Based on the above results, because the significance value is > 0.05, it can be concluded that the model is successful in projecting the observation value or it can be said that the model is accepted because it is consistent with the observation data.

### Determinant Coefficient (Nagelkerke R Square)

Table 4  
Model Summary

| Step | -2 Log likelihood   | Cox & Snell R Square | Nagelkerke R Square |
|------|---------------------|----------------------|---------------------|
| 1    | 13.359 <sup>a</sup> | .065                 | .303                |

Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

Source: SPSS Data Processing Results (2022)

The table above shows that the Nagelkerke R square value is 0.303. With this it can be interpreted that the independent variables, namely pressure, opportunity, rationalization, ability, and arrogance can detect the dependent variable of financial reporting fraud by 30.3%. while 95.7% of the detection of fraudulent financial reporting is interpreted by other variables outside the research model.

### Classification Matrix

Table 5  
Classification Tablea,b

|        | Observed            | Predicted       |                 |                   |
|--------|---------------------|-----------------|-----------------|-------------------|
|        |                     | FFS             |                 | percentageCorrect |
|        |                     | M score < -22,2 | M score > -2,22 |                   |
| Step 0 | FFS M score < -22,2 | 74              | 0               | 100.0             |
|        | FFS M score > -2,22 | 2               | 0               | .0                |
|        | Overall Percentage  |                 |                 | 97.4              |

- Constant is included in the model.
- The cut value is ,500

Source: SPSS Data Processing Results (2022)

Based on Table 4.7, it can be explained that the prediction accuracy of the regression model is 97.4%. This is explained by 100% not doing manipulation, while 0% do manipulation. Based on these results, it can be concluded that the model's ability to predict in the presence of independent variables is 0%.

### Hypothesis Test

Table 6  
Variables in the Equation

|                     | B          | S.E.    | Wald     | df   | Sig. | Exp(B) | 95% C.I. for EXP(B) |           |
|---------------------|------------|---------|----------|------|------|--------|---------------------|-----------|
|                     |            |         |          |      |      |        | Lower               | Upper     |
| Step 1 <sup>a</sup> | ROA        | -.891   | 4.241    | .044 | 1    | .834   | .410                | 1669.30   |
|                     | BDOU       | -3.975  | 8.790    | .204 | 1    | .651   | .019                | 570436.30 |
|                     | TA         | .000    | .000     | .763 | 1    | .382   | 1.000               | 1.000     |
|                     | CAPABILITY | -90.077 | 2987.370 | .001 | 1    | .976   | .000                | .000      |

Variable(s) entered on step 1: ROA, BDOU, TA, CAPABILITY, AROGANCY, Kf.

Source: SPSS Data Processing Results (2022)

### The Effect of Pressure on Fraudulent Financial Statement

In table 7, it is found that the pressure variable proxied by financial targets shows a sig value of 0.834 where the sig value is greater than 0.05 ( $0.834 > 0.05$ ), so that H1 is rejected, which means that pressure has no significant effect on fraudulent financial statements. The findings of this research are not supported by agency theory because according to agency theory, if the company's targeted ROA is high, fraud in financial



statements will be low because it is considered capable of generating high profits. Compared to companies with low ROA values, fraud will be high.

#### **The Effect of Opportunity on Fraudulent Financial Statement**

In table 7, it is found that partially the opportunity variable proxied by ineffective monitoring (BDOUT) shows a sig value of 0.651 where the sig value is greater than 0.05 ( $0.651 > 0.05$ ), so that H2 is rejected, which means that opportunities do not have a significant effect on fraudulent financial statements. Based on hypothesis testing, it proves that the effectiveness of supervision has no influence on fraudulent financial statements. This finding rejects the hypothesis that the greater the number of independent commissioners, the less fraudulent financial statements. This can occur because the determination of independent commissioners is carried out in accordance with applicable regulations, so that in enforcing good corporate governance it is less effective.

#### **The Effect of Rationalization on Fraudulent Financial Statement**

In table 7, it is found that partially the rationalization variable shows a sig value of 0.382 where the sig value is greater than 0.05 ( $0.382 > 0.05$ ), so that H3 is rejected, which means that rationalization has no significant effect on fraudulent financial statements.

#### **The Effect of Ability on Fraudulent Financial Statement**

In table 7, it is found that partially the ability variable shows a sig value of 0.976 where the sig value is greater than 0.05 ( $0.976 > 0.05$ ), so that H4 is rejected, which means that ability has no significant effect on fraudulent financial statements. The change of directors in pharmaceutical companies listed on the IDX has no significant effect on fraudulent financial statements. This happens because the improvement in company performance is not to cover up fraud. Changes in the composition of the board of directors are generally made during the general meeting of shareholders and explained in the company's annual report. Therefore, the ability measured using the change of directors is not a significant factor in determining fraudulent financial statements.

#### **The Effect of Arrogance on Fraudulent Financial Statement**

In table 7, it is found that the arrogance variable shows a sig value of 0.714 where the sig is greater than 0.05 ( $0.714 > 0.05$ ), so H5 is rejected, which means that arrogance has no significant effect on fraudulent financial statements. The findings of this research are not supported by agency theory because according to agency theory if the greater the arrogance, the smaller the fraud will be, whereas if the arrogance is small, the fraud will be greater. It can be interpreted that if this research is successful when the element fraud pentagon or variable X5 (Arrogance) can have a significant effect on fraudulent financial statements. These results are supported by Wiranti et al's research (2022) which found that arrogance had no effect on. The results of this research contradict the results of research that shows arrogance has an effect on fraudulent financial statements as a result of research by Siddiq et al (2017).

#### **Effect of Fraud Confirmation on Fraudulent Financial Statement**

In table 7, it is found that the Fraud Confirmation variable shows a sig value of 0.242 where the sig is greater than 0.05 ( $0.242 > 0.05$ ), H6 is rejected, which means that

arrogance has an effect on fraudulent financial statements. The findings of this research are not supported by agency theory.

## **CONCLUSION**

- a. Pressure (Pressure) has no significant effect on fraudulent financial statements.
- b. Opportunity does not have a significant effect on fraudulent financial statements.
- c. Rationalization (Rationalization) has no significant effect on fraudulent financial statements.
- d. Capability does not have a significant effect on fraudulent financial statements.
- e. Arrogance (Arogancy) has no significant effect on fraudulent financial statements.
- f. The coefficient of determination (KF) has no significant effect on fraudulent financial statements.

## **Limitations of Research**

- a. This research only uses 1 pharmaceutical company as a research sample.
- b. The proxies for the independent variables used in this research are financial targets, ineffective monitoring, total accruals, change of director, frequent number of CEO's pictures, besides that there are still many other proxies in measuring fraud pentagons.
- c. This research only uses independent variables and dependent variables.

## **Suggestions**

- a. Further research is recommended to use other sector company categories as research objects. So that the results can be used as a comparison and can be used as a further reference.
- b. Future research is expected to replace or add other proxies in measuring the fraud pentagon element in order to obtain more empirical results.
- c. For further research, it can add a longer period of years to get significant results for mining sector companies.
- d. Future research can include moderating variables. Thus, research on financial statement fraud will continue to be an important consideration for the world of investigative auditing.

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