MEASURING THE LEVEL OF FRAUD ON FINANCIAL STATEMENTS: MODEL OF FRAUD TRIANGLE
(Case Studies on Companies Listed on the Indonesia Stock Exchange in 2014-2018)

Ramdany¹, Resty Harmenawati², Samukri³

¹, ², ³ STIE Muhammadiyah Jakarta, ramdany2012@gmail.com, restyharmena@gmail.com, samukriakuntan@yahoo.co.id

ABSTRACT
This study aims to measure the level of fraudulent financial statements with the fraud triangle model. The independent variables are pressure, opportunity, rationalization, and the dependent variable is fraudulent financial statements. The population in this study is companies listed on the Indonesia Stock Exchange (IDX) in 2014-2018 with a sample of 100 companies. Data analysis techniques using multiple linear regression. The results show that the pressure with proxies the financial stability and financial target and the opportunity with proxy the nature of industry has significant effect on the financial statement fraud. Meanwhile, the opportunity with proxies the ineffective monitoring and rationalization have not significant effect on the financial statement fraudulent.

Keywords: Pressure, Opportunity, Rationalization, Fraudulent Financial Statement

Naskah diterima: 22-03-2021 Naskah dipublikasikan: 31-03-2021

INTRODUCTION
Fraud is one of type crime (Holtfreter, 2005; Karyono, 2013). Fraud is an act to gain profit through misuse of assets, manipulation of financial statements and corruption (Wells, 2017). Fraud is white collar crime that uses intelligence (Albrecht et al., 2012). Fraud by manipulating financial reports have a lower intensity than fraud of asset misuse and corruption, but they have significant loss impact (ACFE, 2018).
Several cases of fraud that occurred in Indonesia resulted in considerable losses to stakeholders of company. Kimia Farma in 2001 by marking up net profit from Rp 99 to 132 billion (Bisnis=tempo.co, 2003). Tiga Pilar Sejahtera Food Tbk in 2017 by inflating funds on accounts receivable, supplies, fixed assets and income with a loss of IDR 5.23 trillion (cnbcindonesia.com, 2019). Manipulation of financial reporting also occur in the world. Enron in collaboration with Arthur Andersen firm manipulated financial statements in 2001 by presenting a fictitious profit of $ 586 million (Tunggal, 2009). The case of manipulation of financial statement British Telecom in 2017 by inflating income through contract extensions and fictitious transactions unit’s business (wartaekonomi.co.id, 2017).

Financial statement manipulation is a deliberate act by manipulating the company’s economic transactions (Johnstone et al., 2014). Engineered economic transactions are included in the elements of the financial statements. Financial statements performance of company higher than the real with financial window dressing. Financial statement a good appearance which requires taking certain actions that enhance financial results. Financial window dressing is illegal action. Stakeholders and the company will suffer material losses from their actions.

According to Cressey (1953) there are three elements that cause of fraud are pressure, opportunity and the rationalization. The concept is known as the fraud triangle theory. Fraud that is caused by due to pressure on needs or economic pressure or lifestyle so that increasing unbalance income and expenditure. Fraud that is caused by opportunity generally occurs with the abuse of power or deliberate abuse of power and fraudulent act. Fraud is caused by rationalization due to deviations between rationality of thinking and negative actions are considered legal.

The American Institute Certified Public Accountant (AICPA, 2002) published Statement of Auditing Standard No.99 (SAS No.99) which is based on the fraud triangle theory as a solution in the procedure for detecting financial statement fraud. Based on SAS No.99, there are four pressure conditions that encourage fraud, namely financial stability, financial targets, personal financial need and external pressure. Then SAS No.99 explains that fraud caused by an opportunity occurs because of ineffective monitoring, nature of industry and organizational structure. Studied conducted by Skousen et al. (2009), Husmawati et al. (2017), Bawekes et al (2018), Syahria et al (2019), Handoko and Natasya (2019) show that pressure has an effected on fraudulent financial statements and form of

**Source:** Association of Certified Fraud Examiner (ACFE), 2018 (Data processed)

**Chart 1:**
Number of Cases and Losses Due to Fraud

| Percentage of Cases | Average Loss |
|---------------------|--------------|
| Misuse of Assets    | $114,000     |
| Corruption          | $250,000     |
| Financial Statement Manipulation | $800,000 |

http://ejournal.stiemj.ac.id/index.php/ekobis
a threat financial stability. While research conducted by Yulianti et al (2019), Rengganis et al (2019) and Wailan’An et al (2019) pressure with a proxy financial stability has no effect on fraudulent financial statements.

The results of studied by Akbar (2017), Surjaatmaja (2018), Setiawati and Baningrum (2018), Sunardi and Amin (2018) show that pressure has an effect on fraudulent financial statements due to financial targets. In contrast of the study by Skousen et al (2009), Indarto and Ghozali (2016) and Aviantara (2019) which show that pressure has no effect on fraudulent financial statements on proxy financial targets. Studied by Putriasih et al (2016), Rukmana (2018) and Yendrawati et al (2019) show that the opportunity on proxies of nature of industry has an effect on fraudulent financial statements. In contrast studied by Annisya et al (2016), Akbar (2017) and Putra (2019) which show that the opportunity on proxy nature of industry has no effect on fraudulent financial statements.

Studied conducted by Rukmana (2018), Syahputra and Erlina (2019) show that opportunity on ineffective monitoring proxy has affects on financial statement fraud. In the contrast studied by Yesiariani and Rahayu (2017), Wahyuni at al (2017), Setiawati and Baningrum (2018) which show that opportunities on ineffective monitoring proxy have no effect on fraudulent financial statements. Furthermore, studied by Husmavati et al (2017), Wahyuni et al (2017), Premananda et al (2019) and Syahria et al (2019) show that rationalization has an effect on fraudulent financial statements. Meanwhile studied by Lou and Wang (2009), Santoso and Surenggono (2018), Septriyani and Handayani (2018) shows that rationalization has no effect on fraudulent financial statements.

Based on the explanation and inconsistencies in the results of previous studied, this study explorer about measuring the level of fraud on financial statements with the model fraud triangle theory. Data from companies listed on the Indonesia Stock Exchange (BEI) in year 2014 - 2018. The result of studied will enhance of accounting knowledge to increase the quality of corporate financial statements.

**LITERATURE REVIEW**

**AGENCY THEORY**

Agency theories describe the relationship between shareholders (principle) and management (agent) (Jensen and Meckling, 1976). Agency theory focuses on determining efficient contracts as the basis for the relationship between principal and agent. The optimal work contract must be able to balance between the principal and the agent. An efficient contract has two important factors:

- Principals and agents must have symmetrical or the equal information to avoid unfair information and unbalance benefit
- Principal ensures appropriate compensation to the agent.

In fact, asymmetrical information always occurs in the company. Management (agent) dominates information rather than the principal (Yushita, 2010). This condition can produce some problems so that efficiencies contract more difficult to achieve. The relationship between agent and principal is always based on asymmetry information. Asymmetry information is an opportunity for agents to act fraud on financial statements. Fraud on financial statement do with window dressing or manipulated figure on the financial report. Performance of company appears optimal rather than actual. This action
can be detrimental to the principal. Utilizing company assets out of contract and engineering company performance part of a fraud on management activities.

**FRAUD**

Fraud has various meanings which in essence are crimes by using intelligence with benefit for personal or group. Fraud is generally committed by a person or organization (Albrecht, 2012). Fraud is a crime that uses manipulation to get profit to a group or individual (Well, 2017). The action of fraud has four elements:
1. False statement to describes the subject.
2. The perpetrator well knows the error in the disclosed statement.
3. Victims have confidence in the false statements disclosed.
4. Damage and loss to victims

Fraud is an act through deliberate misuse and use of any resources for personal gain (ACFE, 2018). ACFE classifies fraud into three-part:
1. Asset Misappropriation
   Misuse of assets is a form of fraud that is easiest to detect because of its tangible or measurable nature.
2. Corruption
   Corruption is an act of fraud committed by employees to abusing authority or manipulate business transactions to get gain direct or indirect.
3. Financial Statement Fraud
   Fraudulent financial statements are deliberate misstatements and omissions to cover the actual financial condition by inflating assets, recording false income, or undervalue expense reports.

**FINANCIAL STATEMENT FRAUD**

Fraud in financial statements is defined as an intentional material misstatement of financial reporting (Center for Audit Quality (CAQ), 2010). Financial statement fraud is a deliberate act by manipulating the company asset and business transactions for personal gain or company interest. Johnstone et al (2014) state that fraudulent financial statements are not only carried out for personal gain but also to cover poor financial conditions in the company. Fraud of financial reporting often carried out in three ways:
1. Manipulation, falsification, or alteration of accounting records and supporting documents.
2. Misstating or omitting transactions and other important information.
3. Misapplication of accounting principles.

**FRAUD TRIANGLE**

The theory of the fraud triangle was first proposed by Cressy (1953). The theory of the fraud triangle based on the results of interviews with 200 people jailed for embezzlement of funds. Cressy believed that fraud had 3 elements:
1. Pressure
   The pressure is a condition that occurs within an organization or in an individual's life (Vona, 2008). Pressure from incentives or motivation will create conditions to motivate the perpetrators of fraud to commit theft, usually, the motivation is financial needs (Singleton, 2010).
2. Opportunity
Fraud will occur if there is an opportunity (Johnstone, 2014). Lack of control will produce the opportunity to act a crime. The fraudsters stated that their action exposed will be low if control of management not enough strong.

3. Rationalization
Rationalization is one element that is difficult to indicate because it relates to individual ethics. The perpetrator view that fraud committed as a rational action and does not violate ethics (Vona, 2008).

**Figure 2.**
Fraud Triangle

*Source: Fraud Auditing and Forensic Accounting 4th Edition, 2010 (processed data)*

**STATEMENT ON AUDITING STANDARDS NUMBER 99 (SAS NO.99)**
AICPA published SAS No.99 in 2002 as guidelines, the concept and requirements for auditors to detect fraud (Skousen, 2009). SAS No. 99 session 31 notes that fraud is difficult to detect. The auditors must be able to identify conditions of pressure that produce fraud and conditions that increase the opportunity for fraud either rationalization. SAS No.99 also explains some of the conditions that can increase of fraud risk.

**HYPOTHESIS**
Financial stability is one condition in a financial company without any distress (Handoko, 2019). According to SAS No.99, financial stability will be threatened due to economic, industrial, and company operational. The management strives to improve performance despite under pressure. Management tries to deal with the various pressures that exist in the company. This pressure aims to keep the company's performance increasing. Sometimes the actual management performance under expectation forms the predetermined plan. Management in overcome these pressures with positive and negative actions. Negative action by committing fraud on financial statements one of the ways management action to fulfill performance targets.

The greater the total assets the greater potential for financial statement fraud (Skousen et al, 2009). These results are in line with studies conducted by Bawekes et al (2018), Husmawati et al (2017), Handoko (2019) which show that the ratio of changes in total assets has a positive effect on fraudulent financial statements.

Based on the above description, the following hypothesis can be formulated:
**Ha1: Financial stability has a positive effect on fraudulent financial statements**
The financial targets are pressure conditions given by directors or shareholders to fulfill the current obligations and long-term obligations (Indarto and Ghozali, 2016). Pressure conditions were taken by management to push any action. Management tries to fulfill its financial obligations. However, sometimes the ability to fulfill these obligations cannot be fulfilled immediately. Sometimes management uses a shortcut way like financial statement manipulation to report fake company performance.

The return of assets (ROA) can be used as financial targets for companies in the next period (Skousen et al, 2009). Companies with high yields and increasing ROA at each period would increase share prices and attract investors. ROA will differentiate between companies to do fraud and it does not (Summers and Sweeney, 1998). Studies conducted by Akbar (2017), Surjaatmaja (2018), Sunardi and Amin (2018) show that financial targets using ROA have a positive effect on fraudulent financial statements. The higher the ROA targeted by management, the more potential management to manipulate financial statements. Based on the description above, the following hypothesis can be formulated:

**Hₐ2 : Financial targets has a positive effect on fraudulent financial statements**

The nature of the industry is an ideal condition for an organization (Husmawati et al, 2017). The nature of the industry is a condition that is influenced by subjective estimation by management (SAS No.99). Studied by Wailan’An et al (2019) said that every risk that arises in companies operating with a lot of estimates and considerations usually depends on inventory estimates. Research conducted by Putriasisih et al. (2016), Rukmana (2018), and Yendravati et al (2019) show that the nature of industry calculated using inventory (INVENTORY) has a positive effect on fraudulent financial statements. The high ratio of inventory to financial reports increases the potential for financial statement fraud. Based on the description above, the following hypothesis can be formulated:

**Hₐ3 : Nature of industry has a positive effect on fraudulent financial statements**

Ineffective monitoring is a condition where the company has weak and ineffective supervision from the commissioners or internal control body. Weak supervision will provide opportunities for management to commit fraud. Skousen (2004) explains that independent commissioners function will carry out supervision and minimize fraud against financial statements. Studies by Rukmana (2018), Syahputra, and Erlina (2019) show that effective monitoring proxied by the proportion of the number of independent commissioners has a positive effect on fraudulent financial statements. The smaller the ratio of the independent board of commissioners, the less effective the supervision of company performance and the higher the fraudulent manipulation of financial statements by management. Based on the description above, the following hypothesis can be formulated:

**Hₐ4 : Ineffective monitoring has a positive effect on fraudulent financial statements**

Rationalization is an individual ethic that rationalizes fraud and overrides the needs of others to achieve its goals. The perpetrator of fraud has the view that fraud committed is a rational actor and does not violate ethics (Vona, 2008: 7). Management do manipulates financial statements will change auditors' opinions to minimize the disclosure of the manipulation (Lou and Wang, 2009). Based on Government Regulation Number 20 of 2015 article 11 paragraph 1, it is clear that each company is only allowed to use audit services for its financial statements by the same public accountant for a maximum of 5 consecutive financial years.
Research conducted by Wahyuni and Budiwitjaksono (2017), Premananda et al (2019), and Syahria et al (2019) show that rationalization proxied by a change of auditor has a positive effect on fraudulent financial statements.

Based on the description above, the following hypothesis can be formulated:

**Ha5 : Rationalization has a positive effect on fraudulent financial statements**

**FRAMEWORK**

---

**DEPENDENT VARIABLE**

Financial report fraud is measured using the Beneish M-Score by calculating eight financial ratios which are then formulated into the Beneish M-Score formula. The company will be indicated to have committed fraudulent financial statements if the results of the M-Score calculation show a value of $M > -2.22$. Companies indicated to have committed fraud were given a score of 1 while companies that had no indication of committing fraud were given a score of 0.

\[
M - Score = -4.84 + 0.920 \text{DSRI} + 0.528 \text{GMI} + 0.404 \text{AQI} + 0.892 \text{SGI} \\
+ 0.115 \text{DEPI} - 0.172 \text{SGA} - 0.327 \text{LVGI} + 4.679 \text{TATA}
\]
Table 1.
Financial Ratio to measure Beneish M-Score

| No. | Financial Ratio                                      | Formula |
|-----|------------------------------------------------------|---------|
| 1   | Days Sales in Receivable Index (DSRI)                | DSRI = \frac{\text{Receivables}_t / \text{Sales}_t}{\text{Receivables}_{t-1} / \text{Sales}_{t-1}} |
| 2   | GrossMargin Index (GMI)                              | GMI = \frac{\text{Sales}_{t-1} - \text{Cost of good sold}_{t-1} / \text{Sales}_{t-1}}{\text{Sales}_t - \text{Cost of good sold}_t / \text{Sales}_t} |
| 3   | Asset Quality Index (AQI)                            | GMI = \frac{\text{Sales}_{t-1} - \text{Cost of good sold}_{t-1} / \text{Sales}_{t-1}}{\text{Sales}_t - \text{Cost of good sold}_t / \text{Sales}_t} |
| 4   | Sales Growth Index (SGI)                             | SGI = \frac{\text{Sales}_t}{\text{Sales}_{t-1}} |
| 5   | Depreciation Index (DEPI)                            | DEPI = \frac{\text{Depreciation}_{t-1}}{(\text{Depreciation}_{t-1} + \text{PPE}_{t-1})} / \frac{\text{Depreciation}_t}{(\text{Depreciation}_t + \text{PPE}_t)} |
| 6   | Sales General and Administrative Expenses Index (SGAI) | SGAI = \frac{\text{SG&A expense}_t / \text{Sales}_t}{\text{SG&A expense}_{t-1} / \text{Sales}_{t-1}} |
| 7   | Leverage Index (LVGI)                                | LVGI = \frac{(\text{Long term debt}_t + \text{Current liabilities}_t)}{(\text{Long term debt}_{t-1} + \text{Current liabilities}_{t-1})} / \frac{\text{Total assets}_t}{\text{Total assets}_{t-1}} |
| 8   | Total Accruals to Total Assets (TATA)                | TATA = \frac{\text{Net income from continuing operation} - \text{Cash flow}}{\text{Total assets}} |

Source: Beneish, 1999

INDEPENDENT VARIABLE
The independent variables in this research are elements contained in the fraud triangle, namely pressure proxied by financial stability and financial targets, opportunities proxied by nature of the industry, and ineffective monitoring and rationalization.

Table 2.
Independent Variable Measurement

| Variable           | Proxies                        | Indicator                                      |
|--------------------|--------------------------------|-----------------------------------------------|
| Pressure           | Financial Stability            | \text{ACHANGE} = \frac{\text{Total Assets}_t - \text{Total Assets}_{t-1}}{\text{Total Assets}_{t-1}} |
|                    | Financial Target               | \text{ROA} = \frac{\text{Profit After Tax}}{\text{Total Assets}} |

http://ejournal.stiemj.ac.id/index.php/ekobis
### POPULATION AND SAMPLE

This is study causality. The population used in this study were 619 companies listed on the Indonesia Stock Exchange in the 2014-2018 period. Determination of a sample from the population using the Slovin technique (Sugiyono, 2011)

\[
n = \frac{619}{1 + 619(0,1)^2} = \frac{619}{7,19} = 86.09
\]

(adjusted to 100 companies)

The sampling method used was purposive sampling. The sample selection criteria in this study are:

1. The sample companies are random companies listed on the Indonesia Stock Exchange during the year 2014-2018.
2. Companies that use the rupiah currency (IDR)
3. The company has data related to this research such as certain accounts to be used in calculations related to the dependent variable and independent variable proxies.

Based on the Slovin technique and sample selection criteria we got the sample from 100 companies in the data observed from the year 2014 to 2018. The multiple linear regression equation in this study is as follows:

\[
\text{Fraud} = \alpha + \beta_1 \text{CHANGE} + \beta_2 \text{ROA} + \beta_3 \text{INVENTORY} + \beta_4 \text{BDOUT} + \beta_5 \text{CPA} + e
\]

Where,

- \( \text{Fraud} \) : Financial Statement Fraud
- \( \alpha \) : Constanta
RESULTS AND DISCUSSIONS

Descriptive Statistical Analysis

| Variable          | Minimum | Maximum | Mean  | Deviation Standart |
|-------------------|---------|---------|-------|-------------------|
| Fraud             | 0       | 1       | 0.316 | 0.46538           |
| ACHANGE           | -0.85454| 8.85024 | 0.13394| 0.52275           |
| ROA               | -1.46526| 3.77815 | 0.03518| 0.20973           |
| INVENTORY         | -3.81401| 89.54767| 0.19139| 4.02708           |
| BDOUT             | 0.23529 | 1       | 0.40412| 0.09328           |
| CPA               | 0       | 1       | 0.378 | 0.48537           |

Source: Data processed (2020)

The variable of financial statement fraud is calculated by using the Beneish M-Score with the use of a dummy variable, namely the value of 1 for companies with indications of fraud and 0 for companies that have no indication of fraud, so the lowest (minimum) value is 0 and the highest value (maximum) is 1. Average value -The average (mean) is 0.316 and the standard deviation is 0.46538.

The pressure variable with financial stability as a proxy is calculated using ACHANGE (ratio of changes to total assets) which has the lowest (minimum) value of -0.85454 at PT. Panasia Indo Resources Tbk in 2018 and the highest value (maximum) of 8.85024 at PT. Bumi Teknokultura Unggul Tbk in 2016, the average value (mean) is 0.13394 and the standard deviation is 0.52275.

The pressure variable with financial targets is calculated using ROA (return on assets ratio) which has the lowest (minimum) value of -1.46526 at PT. Leyand International Tbk in 2018 and the highest value (maximum) of 3.77815 at PT. Alakasa Industrindo Tbk in 2016, the average value (mean) is 0.03518 and the standard deviation is 0.20973.

The pressure variable with financial targets is calculated using ROA (return on assets ratio) which has the lowest (minimum) value of -1.46526 at PT. Leyand International Tbk in 2018 and the highest value (maximum) of 3.77815 at PT. Alakasa Industrindo Tbk in 2016, the average value (mean) is 0.03518 and the standard deviation is 0.20973.

The opportunity variable with the nature of industry proxy calculated using INVENTORY (the ratio of changes in inventory) has the lowest (minimum) value of -3.81401 at PT. Sentul City Tbk in 2015 and the highest value (maximum) of 89.54767 at PT. Jakarta Kyoei Steel Works Tbk in 2018, the average value (mean) is 0.19139 and the standard deviation is 4.02708.
The opportunity variable proxied by ineffective monitoring is calculated using BDOUT (ratio of the proportion of independent commissioners) which has the lowest (minimum) value of 0.23529 at PT. Metropolitan Kentjana Tbk in 2017 and the highest value (maximum) of 1 at PT. Dharma Samudera Fishing Industry in 2016, the average value (mean) is 0.40412 and the standard deviation is 0.09328.

The rationalization variable is calculated using CPA (auditor change) using a dummy variable, namely the value of 1 for companies that have changed auditors and the value of 0 for companies that do not change auditors, so the lowest value (minimum) is 0 and the highest value (maximum) is 1. The average value (mean) was 0.378 and the standard deviation was 0.48537.

Table 4. Common Effect Weight Model Regression Results

| Variable | Coefficient | Std.Error | t-Statistic | Prob. |
|----------|-------------|-----------|-------------|-------|
| C        | 0.157656    | 0.079889  | 1.973427    | 0.0490|
| ACHANGE  | 0.246321    | 0.041188  | 5.980394    | 0.0000|
| ROA      | 0.215807    | 0.087557  | 2.464762    | 0.0140|
| INVENTORY| 0.010910    | 0.005225  | 2.087980    | 0.0373|
| BDOUT    | 0.030823    | 0.189887  | 0.162321    | 0.8711|
| CPA      | 0.010289    | 0.035840  | 0.287080    | 0.7742|

Source: Eviews, data processed (2020)

Based on the results of the t-test, financial stability has a t count of 5.980394 with a significance level of 0.0000. This shows that t count is greater than t table (5.980394 > 1.66123) with a significance value (0.0000 < 0.05), so H0 is rejected, and Ha is accepted, which means that financial stability has a significant positive effect on financial statement fraud. The results of this study support the research conducted by Skousen et al. (2009), Husmawati et al. (2017), Handoko and Natasya (2019), and Syahputra and Erlina (2019). The results of this study indicate that the greater the ratio of changes in total assets, the higher the potential for financial statement fraud. The managers face pressure to commit fraudulent financial statements when financial conditions are unstable, which will reduce the company’s performance and hinder the flow of future company investment funds. This pressure will encourage management to do fraudulent financial statements to create the company’s performance to appear optimum.

Financial targets have a P-value of 2.464762 with a significance level of 0.0140. This shows that t count is greater than t table (2.464762 > 1.66123) with a significance value (0.0140 < 0.05), then H0 is rejected, and Ha is accepted, which means that financial targets have a significant positive effect on financial statement fraud. The results of this study support the research conducted by Putriasih et al. (2016), Akbar (2017), Surjaatmaja (2018), Sunardi and Amin (2018). The results of this study, the higher the ROA that is charged to management, the potential level of the company do financial reporting fraud will increase. Financial targets that achieved by the company put pressure on management to get its performance have been determined by the company. Fraudulent financial statements taking by management will make the company appear in accordance with predetermined financial targets.

Nature of industry has a P-value of 2.087980 with a significance level of 0.0373. This shows that P-value is greater than t table (2.087980 > 1.66123) with a significance value (0.0373 < 0.05), then H0
is rejected, and Ha is accepted, which means that the nature of the industry has a significant positive effect on financial statement fraud. The results of this study support the research conducted by Putriasih et al. (2016), Rukmana (2018), and Yendrawati et al. (2019). The results of this study explain that the higher the inventory value, the potential for management to do fraud. Management does the windows dressing with an Inventory account that has a significant value in the statement of financial position. In addition, inventory is an asset that is easily cashed and prone to theft.

Ineffective monitoring has a P-value of 0.162321 with a significance level of 0.8711. The P-value is smaller than T-table (0.162321 <1.66123) with a significance value (0.8711 > 0.05), then H0 is accepted, and Ha is rejected, which means that effective monitoring has no effect on fraudulent financial statements. The results of this study support research conducted by Yesiariani and Rahayu (2017), Wahyuni and Budwijaksono (2017), and Bawekes et al. (2018). The results of this study that the value of ineffective monitoring will not affect the occurrence of fraudulent financial statements or that a large number of independent boards of commissioners cannot prevent financial statement fraud. The appointment of an independent board of commissioners by the company is only a formality to comply with regulations from the IDX and fulfill good corporate governance (Bawekes et al., 2018).

Rationalization has a P-value of 0.287080 with a significance level of 0.7742. This indicates that the P-value is smaller than T-table (0.287080 <1.66123) with a significance value (0.7742 > 0.05), then H0 is accepted, and Ha is rejected, which means that rationalization has no effect on fraudulent financial statements. The results of this study support research conducted by Lou and Wang (2009), Santoso and Surenggono (2018), and Septriyani and Handayani (2018). The results of this study that the value of auditor turnover will not affect the fraud of financial statements. The company changes auditors not to minimize the disclosure of manipulation by the old auditors, but to fill in Government Regulation Number 20 of 2015 article 11 paragraph 1.

Based on the test results shown in table 4, it can be concluded that the multiple linear regression equation in this study is as follows:

\[
\text{Fraud} = 0.157656 + 0.246321 \text{ACHANGE} + 0.215807 \text{ROA} + 0.010910 \text{INVENTORY} + 0.030823 \text{BDOUT} + 0.010289 \text{CPA} + e
\]

Where:
- **Fraud**: Fraudulent financial statements
- **ACHANGE**: Ratio of changes in total assets (financial stability)
- **ROA**: Return on Assets (financial targets)
- **INVENTORY**: The ratio of changes in inventory (nature of industry)
- **BDOUT**: The ratio of the proportion of independent commissioners (ineffective monitoring)
- **CPA**: Substitution of auditors (rationalization)
- **E**: Error

Result of the multiple linear regression equation it can be explained as follows:
- A constant value of 0.157656 indicates that if all independent variables are zero (0) the financial statement fraud is 0.157656.

http://ejournal.stiemj.ac.id/index.php/ekobis
ACHANGE coefficient of 0.246321 means if ACHANGE has increased by 1% fraudulent financial statements will increase by 0.246321. The meaning that there is a positive correlation between ACHANGE and fraudulent financial statements.

ROA coefficient of 0.215807 if ROA has increased by 1% fraudulent financial statements will increase by 0.215807. The meaning that there is a positive correlation between ROA and fraudulent financial statements.

The INVENTORY coefficient of 0.010910 while INVENTORY has increased by 1% fraudulent financial statements will increase by 0.010910. The meaning that there is a positive correlation between INVENTORY and fraudulent financial statements.

BDOUT coefficient of 0.030823 if BDOUT has increased by 1% fraudulent financial statements will increase by 0.030823. The meaning that there is a positive correlation between BDOUT and fraudulent financial statements.

The CPA coefficient is 0.010289 if CPA has increased by 1% fraudulent financial statements will increase by 0.010289. The meaning that there is a positive correlation between CPA and fraudulent financial statements or there is a positive correlation.

CONCLUSION

The pressure variable with financial stability as a proxy calculated using ACHANGE has a significant positive effect on fraudulent financial statements. The results of the study support the first hypothesis which states that financial stability has a positive effect on fraudulent financial statements.

The pressure variable with the financial target’s proxy calculated using ROA has a significant positive effect on fraudulent financial statements. The results of this study support the second hypothesis which states that financial targets have a positive effect on fraudulent financial statements.

The opportunity variable with the nature of industry proxy calculated using INVENTORY has a significant positive effect on fraudulent financial statements. The results of this study support the third hypothesis which states that the nature of the industry has a positive effect on fraudulent financial statements.

The opportunity variable with ineffective monitoring proxies calculated using BDOUT has no effect on fraudulent financial statements. The results of this study do not support the fourth hypothesis which effective monitoring has a positive effect on fraudulent financial statements. The rationalization variable with the proxy of change of auditor has no effect on fraudulent financial statements. The results of this study do not support the fifth hypothesis.

SUGGESTION

Further study is expected to add other variables that affect financial statement fraud. Increase the time span of observations in order to obtain more significant results. It is expected to use other proxies in measuring financial statement fraud to get better results. Add a number of sample companies more suggested for generalization of result study and use a 5% error rate to get the results are more accurate.
REFERENCES
ACFE. 2018. “Global Study on Occupational Fraud and Abuse.” Report to the Nation’s 10:80.

AICPA. 2002. Consideration of Fraud in a Financial Statement Audit (SAS) No.99. New York: AICPA.

Akbar, Taufiq. 2017. “The Determination of Fraudulent Financial Reporting Causes by Using Pentagon Theory on Manufacturing Companies in Indonesia.” International Journal of Business, Economics and Law 14(5):106–13.

Albrecht, W. Steve, Chad O. Albrecht, Conan C. Albrecht, dan Mark F. Zimbelman. 2012. Fraud Examination. 4th ed. Mason: South-Western, Cengage Learning.

Annisya, Mafiana, Lindrianasari, & Yuztitya Asmaranti. 2016. “Pendeteksian Kecurangan Laporan Keuangan Menggunakan Fraud Diamond.” Jurnal Bisnis dan Ekonomi (JBE) 23(1):72–89.

Aviantara, Ryan. 2019. “The BIG 4 Role in Moderating the Detection of Fraud Pentagon Against Fraudulent Financial Reports (Study on Indonesian Public Sector Government Companies).” International Journal of Sciences: Basic and Applied Research (IJSBAR) 48(2307–4531):94–107.

Bawekes, Helda F., Aaron MA Simanjuntak, dan Sylvia Christina Daat. 2018. “Pengujian Teori Fraud Pentagon Terhadap Fraudulent Financial Reporting (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 2011-2015).” Jurnal Akuntansi & Keuangan Daerah 13(1):114–34.

Beneish, Messod D. 1999. “The Detection of Earnings Manipulation.” Financial Analysts Journal 55(5):24–36.

Center for Audit Quality. 2010. “Deterring and Detecting Financial Reporting Fraud: A Platform for Action.” Washington DC.

Cressey, D. R. (1953). Other people's money; a study of the social psychology of embezzlement. Glencoe: Free Press.

Handoko, Bambang Leo, & Natasya. 2019. “Fraud Diamond Model for Fraudulent Financial Statement Detection.” International Journal of Recent Technology and Engineering 8(3):6865–72.

Holtfreter, K. (2005). Is occupational fraud “typical” white-collar crime? A comparison of individual and organizational characteristics. Journal of Criminal Justice, 33(4), 353-365.

Husmawati, Pera, Yossi Septiani, Irdia Rosita, & Desi Handayani. 2017. “Fraud Pentagon Analysis in Assessing the Likelihood of Fraudulent Financial Statement (Study on Manufacturing Firms Listed in Bursa Efek Indonesia Period 2013-2016).” International Conference of Applied Science on Engineering, Business, Linguistics and Information Technology (ICO-ASCNITech) (October):45–51.

Indarto, Stefani Lily, & Imam Ghozali. 2016. “Fraud Diamond: Detection Analysis on The Fraudulent Financial Reporting.” Risk Governance and Control: Financial Markets and Institutions 6(4Continued1):116–23.

http://ejournal.stiem.ac.id/index.php/ekobis
Jensen, Michael C., & William H. Meckling. 1976. “Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure.” Journal of Financial Economics 3(4):305–60.

Johnstone, Karla M., Audrey A. Gramling, & Larry E. Rittenberg. 2014. Auditing: A Risk-Based Approach to Conducting a Quality Audit. Mason: South-Western, Cengage Learning.

Karyono. 2013. Forensic Fraud. Yogyakarta: CV. Andi.

Lou, Yung-I., & Ming-Long Wang. 2009. “Fraud Risk Factor of The Fraud Triangle Assessing the Likelihood of Fraudulent Financial Reporting.” Journal of Business & Economics Research (JBER) 7(2):61–78.

Peraturan Pemerintah Nomor 20 tahun 2015. 2015. “Peraturan Pemerintah Nomor 20 Tahun 2015 Tentang Praktik Akuntan Publik.” 1–23.

Premananda, Ni Luh Putu Uttari, I. Ketut Budiartiha, Herkulanius Bambang Suprasto, dan I. Dewa Nyoman Badera. 2019. “Fraud Diamond Analysis in Detecting Fraudulent Financial Reporting (Study on Indonesian Capital Market).” International Journal of Sciences: Basic and Applied Research 47(2):84–95.

Priantara, Diaz. 2017. “Ketika Skandal Fraud Akuntansi Menerpa British Telecom dan PwC.” Warta Ekonomi Online. Diambil 20 Februari 2020 (https://www.wartaekonomi.co.id/read145257/ketika-skandal-fraud-akuntansi-menerpa-british-telecom-dan-pwc).

Putra, Wahyu Manuhara. 2019. “Analysis of Financial Fraud Using the Fraud Diamond Model with Corporate Governance as The Moderating Variable.” 102(Icaf):163–69.

Putriasih, Ketut, Ni Nyoman Trisna Herawati, dan Made Arie Wahyuni. 2016. “Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud: Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2013 – 2015.” e-JournalSI Ak Universitas Pendidikan Ganesha 6(3).

Rengganis, RR. Maria Yulia Dwi, Maria Mediatrix Ratu Sari, I. G. A. . Budiasih, I. Gde Ary Wirajaya, dan Herkulanius Bambang Suprasto. 2019. “The fraud diamond: element in detecting financial statement of fraud.” International research journal of management, IT and social sciences 6(3):1–10.

Rukmana, Heru Satria. 2018. “Pentagon Fraud Affect on Financial Statement Fraud and Firm Value.” South East Asia Journal of Contemporary Business 16(5):118–22.

Santoso, Nanda Trio, & Surenghono. 2018. “Predicting Financial Statement Fraud with Fraud Diamond Model of Manufacturing Companies Listed in Indonesia.” State-of-the-Art Theories and Empirical Evidence 151–63.

Septriyani, Yossi, & Desi Handayani. 2018. “Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon.” Jurnal Akuntansi, Keuangan dan Bisnis 11(1):11–23.

Setiawati, Erma, & Ratih Mar Baningrum. 2018. “Deteksi Fraudulent Financial Reporting Menggunakan Analisis Fraud Pentagon : Studi Kasus pada Perusahaan Manufaktur yang Listed di BEI Tahun 2014-2016.” Riset Akuntansi dan Keuangan Indonesia 3(2):91–106.
Singleton, Tommie, & Aaron J. Singleton. 2010. Fraud Auditing and Forensic Accounting. 4th ed. John Wiley & Sons, Inc.

Skousen, Christopher J. 2004. “An Empirical Investigation of the Relevance and Predictive Ability of the SAS 99 Fraud Risk Factors.”

Skousen, Christopher J., Kevin R. Smith, & Charlotte J. Wright. 2009. “Detecting and Predicting Financial Statement Fraud: The Effectiveness of the Fraud Triangle and SAS No. 99.” SSRN Electronic Journal (99).

Sugiyono, Prof. 2011. “Metode Penelitian Kuantitatif, Kualitatif dan R&D.” Alpabeta, Bandung.

Summers, Scott L., & John T. Sweeney. 1998. “Fraudulently Misstated Financial Statements and Insider Trading: An Empirical Analysis.” The Accounting Review 73(1):131–46.

Sunardi, Sunardi, & M. Nuryatno Amin. 2018. “Fraud Detection of Financial Statement by Using Fraud Diamond Perspective.” International Journal of Development and Sustainability 7(3):878–91.

Surjaatmaja, L. 2018. “Detecting Fraudulent Financial Statement Using Fraud Triangle: Capability as Moderating Variable.” KnE Social Sciences 3(10):945–56.

Syahputra, Edi, & Erlina. 2019. “Analysis of The Effect of Diamond Fraud in Detecting Financial Statement Fraud: Empirical Study in Manufacturing Companies Listed in Indonesia Stock Exchange (IDX) 2010 – 2017.” International Journal of Public Budgeting Accounting and Finance 2(1):1–10.

Syahria, Rizqa, Fariyana Kusumawati, & Adi Darmawan Ervanto. 2019. “Detecting Financial Statement Fraud Using Fraud Diamond (A Study on Banking Companies Listed On the Indonesia Stock Exchange Period 2012-2016).” Asia Pacific Fraud Journal 4(2).

Syahrul, Yura. 2003. “Bapepam: Kasus Kimia Farma Merupakan Tindak Pidana.” bisnis.tempo.co. Diambil 15 Februari 2020 (https://bisnis.tempo.co/read/33339/bapepam-kasus-kimia-farma-merupakan-tindak-pidana).

Tunggal, Amin Widjaja. 2009. Professional Ethics & Fraud Examination. Jakarta: Harvarindo.

Vona, Leonard W. 2008. Fraud Risk Assessment: Building a Fraud Audit Program. Hoboken: John Wiley & Sons, Inc.

Wahyuni, Wahyuni, & Gideon Setyo Budiwitjaksono. 2017. “Fraud Triangle Sebagai Pendeteksi Kecurangan Laporan Keuangan.” Jurnal Akuntansi 21(1):47–61.

Wailan ‘An, Evi Juita, Erlina, & Erwin Abu Bakar. 2019. “Effect of Fraud Diamond on Fraud Financial Statement Detection with Audit Committee as Moderation Variables in Manufacturing
Companies Listed in Indonesia Stock Exchange in The Period of 2015-2017.” International Journal of Public Budgeting, Accounting and Finance 2(2):1–12.

Wareza, Monica. 2019. “Tiga Pilar dan Drama Penggelembungan Dana.” CNBC Indonesia. Diambil 20 Februari 2020 (https://www.cnbcindonesia.com/market/20190329075353-17-63576/tiga-pilar-dan-drama-penggelembungan-dana).

Wells, Joseph T. 2017. Corporate Fraud Handbook. Hoboken, NJ, USA: John Wiley & Sons, Inc.

Yendrawati, Reni, Huda Aulia, & Hendi Yogi Prabowo. 2019. “Detecting the Likelihood of Fraudulent Financial Reporting: an Analysis of Fraud Diamond.” Asia-Pacific Management Accounting Journal 14(1):43–68.

Yesiariani, Merissa, & Isti Rahayu. 2017. “Deteksi Financial Statement Fraud: Pengujian dengan Fraud Diamond.” Jurnal Akuntansi & Auditing Indonesia 21(1):49–60.

Yushita, Amanita Novi. 2010. “Earnings Management Dalam Hubungan Keagenan.” Jurnal Pendidikan Akuntansi Indonesia 8(1):53–62.