



ABSTRACT

The most visible measure of a company's health is its financial reports. This critical function may motivate management to engage in fraudulent activities to impress that the company is constantly in good shape and profitable. As a result, the information is distorted and potentially jeopardizes investment decisions. Therefore, it is crucial to find a way to detect that deviant behavior. This research aims to fulfill this requirement. Using the period of 2017-2019 as the sample timeframe, the authors pay attention to the IDX30 version companies listed on the IDX. Financial statement fraud, financial stability, financial targets, industry type, poor supervision, auditor turnover, change of directors, and the frequency of appearance of CEO images are the variables under investigation. The secondary data from 48 units of analysis were analyzed using logistic regression. Financial stability and industry structure have a significant effect on financial statement fraud. Other variables under investigation have little effect.

Keywords:

Fraudulent financial report, agency theory, fraud triangle, fraud diamond, fraud pentagon, Beneish M score

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Research Article

Does Fraud Pentagon cause financial report manipulation?

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INTRODUCTION

The current business environment continues to develop. There are more competitors in the industry. They are competing to polish themselves to get substantial capital from investors. The company's financial statements are a mainstay in this motivation because they have a selling value to investors. This incentive is also one of the reasons why businesses commit fraud, particularly in the form of false financial reporting. The goal is to provide the impression that the company's finances are always in good shape and lucrative. The practice is defined by Arens et al. (2014:298) as an intentional misstatement or omission of numbers or disclosures with the goal to deceive users. The issue is that falsifying financial accounts is now seen as commonplace or even justified.

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The practice of fraudulent financial statements is a serious problem and cannot be justified. This action is not in accordance with the characteristics of good financial statements that of course require accurate data. Based on IAI (2016), stated in the Conceptual Framework for Financial Reporting, financial statements must have the following characteristics. The information presented in the financial statements is not misleading and bound by fake contents. They must describe the true condition, from which which the users can see the true company profile. Financial statements must be meaningful as they are the presentation of transactions. The activities listed in them must also be based on the true occurrences. Neutrality means that the financial statements are not used for the benefit of certain parties but for any interested party.

Fraudulent acts are also inconsistent with the objectives of the financial statements as stated in PSAK No. 1, which determines that the financial statements should provide valid information company's financial states. Such information is beneficial for the users in making economic decisions. In short, this practice violates the purpose of providing benefits to any stakeholder. In contradiction, that practice harms many parties, especially investors who have invested in companies for returns.

LITERATURE REVIEW

Agency Theory

The conflict of interest between the principle, i.e. the owner or shareholder, and the agent, i.e. management, is explained by agency theory. According to Jensen and Meckling (1976:308), agency theory is a contract in which the principle delegated his decision-making responsibility to the agent. For the principle, the agent provides a variety of services. Principals are those who give funds or funding to help agents run their businesses. The agent is in charge of managing or carrying out the principal's mission. An employment contract is essential in this arrangement to govern each party's rights and obligations.

This agency theory departs from the conflict of interest, which is related to the three basic of the human assumption proposed by Eisenhardt (1989: 59), namely: humans are generally self-interested (self-interest), limited thinking power about the perception of the future (bounded rationality), and the desire to avoid risk (risk aversion). Differences in interests lead to information asymmetry, where agents as internal parties of the company that manages and runs the company have more complete information and a clearer picture of the company's future developments. On the other hand, the principal relies on the information provided by the agent, so that if the information provided by the agent to the principal is not complete that leads to the asimmetry information.

To reduce this agency problem, agency costs arise. Jensen & Meckling (1976:308) describe agency costs into three, including: costs incurred and borne by the principal to supervise, measure, and control the behavior of agents' behavior (monitoring costs), costs incurred and borne by agents to provide guarantees. that the agent acts in accordance with the interests of the principal (bonding costs), as well as costs that represent the losses

experienced by the principal or the reduced prosperity of the principal as a result of the difference in decisions between the agent and the principal (residual loss).

To reduce agency costs and the risk of information asymmetry and conflict of interest, a control tool is needed, namely audited financial statements. As is known, principals rely on financial statement information as a means of agent transparency and accountability. For this reason, the principal needs to obtain extensive disclosure, which reduces the information asymmetry between the agent and the principal.

Stakeholders Theory

According to stakeholder theory, a firm must not only act for its own advantage, but also for the benefit of its stakeholders. Shareholders aren't the only ones who have a stake in the company. Belkaoui (2003:216) defines stakeholders as shareholders, employees, customers, suppliers, lenders, government, and society. The significance of the information provided in financial statements can be explained as follows.

Financial statements are used as material for consideration in making economic decisions by shareholders, especially aspects related to returns. Financial statements are also taken into consideration by suppliers and lenders. Good financial reports will give them confidence. Thus, the company can get additional capital to run business activities. Financial reports are also a measure of the company's sustainability for employees. Furthermore, the financial statements are also the basis for tax determination by the government.

Freeman et al (1984:9) describe stakeholder theory as value creation, trade, and ways of managing businesses effectively to create as much value as possible. Donaldson & Preston (1995:68) agree with stakeholder analysts that all people or groups with interests can participate in a company for profit. There is no priority for certain parties.

Fraudulent Financial Reporting

The purposeful production of incorrect or misleading (biased) financial statements is referred to as financial statement fraud. According to Generally Accepted Auditing Standards (GAAS), accounting fraud is defined as a purposeful conduct by one or more individuals, including management, those tasked with governance, employees, or third parties, that results in financial statement misstatements. The financial statements that are being audited.

Financial statement fraud, according to Arens et al. (2014:298), is defined as an intentional misstatement or omission of numbers or disclosures with the goal of fooling users. "Misstatements originating from dishonest financial reporting," according to AICPA SAS No. 99 (2002:1722).

The elements of fraud according to Priantara (2013:6) include:

1. False or misleading statements.
2. It is an act that violates the rules, standards, provisions, and laws.
3. Misappropriation or abuse of position and position for personal gain.
4. Covering the past or present.
5. Material facts are supported by objective evidence and in accordance with the law.

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6. Deliberate or reckless actions that are intentional and do not constitute negligence.
7. There are parties who are harmed and there are parties who get profits or benefits illegally in the form of money, property or other economic benefits.

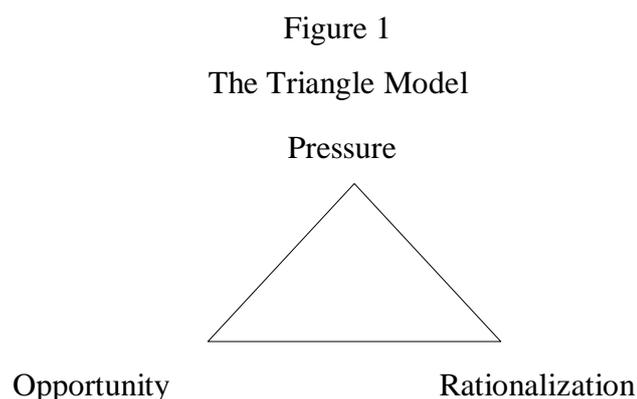
The AICPA (2019:172) outlines financial statement fraud techniques that are often carried out, including:

1. Making up fake journal entries, typically near the close of an accounting period, to manipulate results or for other reasons
2. Incorrectly adjusting assumptions and modifying valuations when estimating account balances.
3. Eliminate, advance, or postpone the recognition of events and transactions that happened within the reporting period in the financial statements.
4. Remove, hide, or state any disclosures that do not comply with the appropriate financial reporting framework or disclosures that are required for a fair presentation.
5. Withholding information that could have an impact on the figures in the financial statements
6. Conduct sophisticated transactions that are structured to represent the entity's financial situation or performance.
7. Records and terms relating to large and exceptional transactions have been updated.

Fraud Theory Development

Fraud Triangle

Cressey (1953) was the first to propose the Fraud Triangle model as a method for detecting fraud (Figure 1). When financial statement fraud happens, this model describes three elements: pressure, opportunity, and justification.



Arens (2014: 299) defines pressure as a circumstance in which management or other personnel have incentives or are under pressure to commit fraud. Financial stability and financial targets are proxy pressure variables. According to Arens (2014: 299), an opportunity is a condition that allows management or staff to conduct fraud. Variable proxy of opportunity, namely the nature of the industry and ineffective supervision. Rationalization, based on the AICPA (2002:1751) following SAS No. 99

is an attitude that justifies financial reporting that contains fraud. The proxy variable for rationalization is auditor turnover.

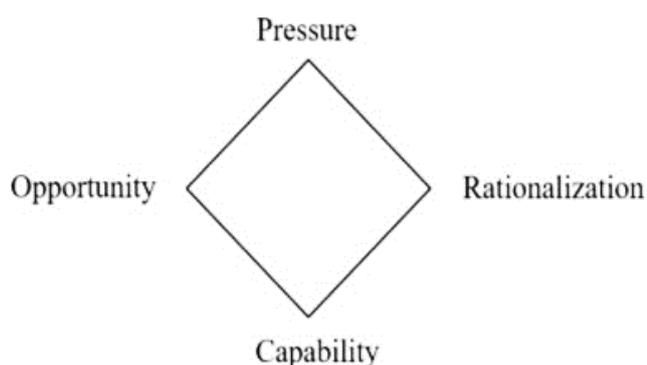
According to Howarth (2012:32), such behavior is related to feelings of superiority in authority or rights, which lead to the assumption that internal control is not intended for him. The proxy variable for arrogance is the frequency with which the CEO image appears. Horwath (2011) in Yusof (2016: 49) suggests that there are five elements of arrogance based on the CEO's perspective, namely:

- a. Big ego – CEO looks more like a celebrity than a businessman.
- b. They consider internal control does not apply to him.
- c. Has pressing properties.
- d. Have an authoritarian leadership style.
- e. Have a fear of losing a position or position.

Fraud Diamond

The fraud theory proposed by Cressey (1953) was further developed by Wolfe and Hermanson (2004) with a theoretical model named Fraud Diamond. This model contains four elements, three of which are elements in the fraud triangle. The added element is the capability element (Figure 2).

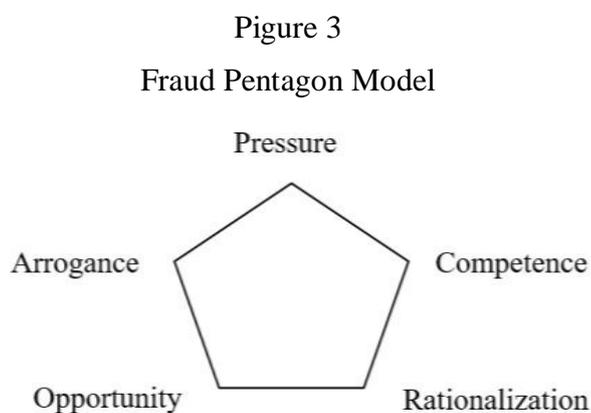
Figure 2
Fraud Diamond



Capability is a person's skills or strengths to understand his abilities and the situation he faces and take advantage of it. The addition of the ability element by Wolfe and Hermanson (2004:1) is based on the argument that opportunity gives someone access to commit fraud. Pressure and rationalization also provide encouragement and interest to commit fraud. However, fraudulent acts will not occur if there is no ability to recognize opportunities and take advantage of them. The proxy for the ability variable, for example, is the change of directors.

Fraud Pentagon

The fraud detection theory was refined again in 2011 by Crowe Horwath with a theoretical model called the fraud pentagon. This model consists of five elements, three of which are elements that have been proposed by Cressey in the fraud triangle and two additional elements, namely competence and arrogance.



According to Horwath (2012: 32), arrogance is superiority behavior due to the authority or rights possessed, which gives rise to the assumption that internal control is not intended for him. The proxy variable for arrogance is the frequency with which CEO photos appear. Horwath (2011) suggests five elements of arrogance from the CEO's perspective, they are:

- a. Big ego – CEO looks more like a celebrity than a businessman.
- b. They consider internal control does not apply to him.
- c. Has the characteristics of a depressing behavior.
- d. Have an authoritarian leadership style.
- e. Have a fear of losing position or status.

Beneish M-Score

Beneish (1999:24) developed a model to capture the financial statement distortions induced by manipulation or the conditions that drive corporations to manipulate. The findings reveal that the possibility of manipulation has a systematic link with numerous financial statement characteristics. Companies that engage in profit manipulators, according to Beneish et al (2013: 76), usually have the following characteristics: rapid growth, deteriorating company fundamentals (as evidenced by a decline in asset quality, decreased profit margins, and increased leverage), and aggressive accounting practices (eg receivables growing faster than sales, revenue inflation, accrual inflation, and reduced depreciation expense). The Beneish M-Score model creates an index based on eight financial statement ratios to get a score that indicates whether or not a company is profitable. The Beneish M-Score algorithm generates a score based on eight financial statement ratios, which is used to evaluate the existence or absence of fraud.

Hypotheses

The Effect of Financial Stability

Managers are forced to commit to dishonest behavior when a company's financial stability is challenged by industry and economic conditions and the the operational situation as the SAS no. 99 stated. Loebbecke et al. (1989) describe that when a firm's financial statements are below the industry norm, management tends to distort financial accounts to make it look better so that the company can be lifted. When a company's financial condition is above the industry average, financial statement fraud continues to show that the company's financial situation is stable.

Companies that have stable financial conditions are attractive to investors, especially when making decisions to invest in companies. Therefore, financial stability really needs to be maintained by the company. This need puts pressure on managers to keep the company's financial stability. As a result, when a company's finances are in trouble, management is more likely to falsify financial statements.

In his research, Skousen et al. (2009) found that financial stability can significantly detect fraud. The same finding was also reported by Annisya et al. (2016), Ultimate (2018), Bawekes et al. (2018), Apriliana and Agustina (2017). The hypotheses regarding these findings are:

H1: Financial stability influences financial statement fraud positively.

The Effect of Financial Targets

Financial pressure is defined by the AICPA (2002: 1750) as "excessive pressure to accomplish financial targets expected by directors or management with the goal of receiving incentives from profits earned," based on SAS No. 99. Target finance relates to agency theory which deals with the relationship between agents and principals. The agent is responsible for managing the resources entrusted by the principal as best as possible. From this relationship, agents expect to receive incentives or bonuses for the results of their performance. Principals expect to get a high return.

To understand the expectations of both parties, we need the results that show the company's good performance, i.e., the achievement of predetermined financial targets. This need can encourage management to commit fraud when in reality, company performance does not match or is less than the target. Usually they cheat earnings management. Setiawati & Baningrum (2018) conducted research that proved this. Pamungkas (2018) discovered that financial aims had a strong favorable effect on financial statements that were fake. The more the pressure on financial targets, the more likely it is that financial statements will be falsified.

H2: Financial targets influence fraudulent financial statements positive

The Effect of Industry Nature

The ideal state of a company in an industry in, which it operates, the nature of the industry. According to Skousen et al. (2009:62), certain accounts in the financial statements, such as obsolete inventory and bad debts, can be decided by the company based on subjective evaluations and estimation. Managers can take advantage of this situation to conduct fraud by manipulating these accounts. The nature of the industry, according to Pasaribu and Kharisma (2018) and Pamungkas (2018), influence financial statement falsification substantially.

H3: The nature of the industry influence fraudulent financial statements positively.

The Effect of Ineffective Supervision

Weak supervision is characterized by a lack or weakness of internal control in the company, which ultimately provides an opportunity for fraud perpetrators to carry out their actions. Inadequate supervision is caused by the dominant power of a small group or persons accompanied by low compensation control, financial reporting ineffective supervision, and internal control by those responsible with governance, according to the AICPA (2002:1751).

Skousen et al. (2009) and Puspita and Yasa (2018) found that ineffective supervision can indicate financial statement fraud. The findings are reinforced by Agustina and Pratomo (2019) who find that ineffective supervision is positively related to financial statement falsification. Thus, the ineffectiveness of supervision opens higher possibility of fraudulent financial statements, as formalized as follows:

H4: Financial statement fraud is influence positively by ineffective supervision

The Effect of Auditor Replacement

The auditor usually has access to information about a company's financial statement falsification. The auditor is aware of that wrong practice and the danger of substantial misrepresentation posed by fraudulent financial statements (AICPA, (2002:1751). The corporation can replace the auditor based on this assumption to limit the likelihood of falsification discovery by the old auditor and to delete the falsification trail. Auditor turnover, according to Puspita and Yasa (2018), can forecast financial statement falsification. Auditor replacement, according to Putriasih et al. (2016), has a beneficial influence on financial statement falsification. As a result, the higher the rationale for auditor turnover, the more likely it is that financial statements will be falsified.

H5: The auditor replacement influence of financial statement fraud positively.

The Effect of Change of Directors

The company's ability to manage stress is demonstrated by the change of directors. A change of directors can produce a stressful period, resulting in subpar initial performance as the organization adjusts to the new culture (Wolfe and Hermanson (2004),

The change of directors also suggests that there are political motivations to falsify financial statements. Several research (including Ghozali et al., 2018; Puspita & Yasa, 2018; Bayagub et al., 2019) indicatedna significant impact of board of directors change

on accounting or financial statement falsification. As a result, as indicated in the following hypothesis, the greater the freedom to change directors, the higher the risk of financial statements falsification.

H6: Fraudulent financial is influence positively by the change of directors

The Effect of CEO Photo Appearing Frequency

Photos posted on their annual report reflects the CEO a sense of pride in his important position and status. Such photos can give the CEO a feeling of being a celebrity, not a businessman. The more photos the CEO has, the higher the arrogance he has and the feeling of wanting to be seen, seen and known by many people.

The introduction of status to the public gives a big responsibility, where the CEO wants to be known with good achievements, one of which is indicated by the financial statements. This arrogance and big ego creates a conflict of interest that results in the abuse of position and position for personal gain, in accordance with the element of falsification (Priantara, 2013: 6). There is also a link between this deviant practice and the fear of losing status and position, thus leading to a neglect of internal control (Howart, 2011). The frequency of the presence of CEO images has a substantial effect on financial statement falsification (Puspita & Yasa, 2018; Apriliana & Agustina, 2017; Bawekes et al, 2018). As a result, the more the hubris, as measured by the frequency with which the CEO's portrait appears, the greater the risk of falsified financial accounts.

H7: Financial statement fraud is influence positively the number of CEO photos published in the company's annual report.

RESEARCH METHODS

Research Object

The IDX30 version of the corporation listed on the IDX for the 2017-2019 timeframe is the subject of this study. IDX30 is a stock market index of 30 stocks price with high liquidity and market size, as well as strong company fundamentals. The company's annual reports, published in their official website and the Indonesia Stock Exchange's (IDX) website are the sources of information.

Research variable

Dependent Variable

Financial statement falsification is the study's dependent variable. The Manipulation Score model uses the Beneish' (1999) M-Score model to proxy the measurement, which consists of eight ratios, namely:

1. Days Sales in Receivable Index (DSRI)

The DSRI is a ratio functions to measure the number of sales days in receivables in the current year (t) against previous year (t-1). DSRI measurement formula, as follows:

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$$DSRI = \frac{\text{Receivables (t) / Sales (t)}}{\text{Receivables (t-1) / Sales (t-1)}}$$

2. Gross Margin Index (GMI)

The GMI is a measurement of the ratio of the previous year's gross margin (t-1) divided by current year's gross margin (t). It uses the following formula:

$$GMI = \frac{(\text{Sales (t-1)} - \text{COGS (t-1)}) / \text{Sales (t-1)}}{(\text{Sales (t)} - \text{COGS (t)}) / \text{Sales (t)}}$$

3. Asset Quality Index (AQI)

The AQI is a ratio that compares: the ratio of current assets plus non-current assets owned by companies other than property, plant and equipment (PPE) per total divided by assets against the same ratio the previous year. The formula is:

$$AQI = \frac{[1 - \text{Current assets (t)} + \text{PPE (t)}] / \text{Total assets (t)}}{[1 - \text{Current assets (t-1)} + \text{PPE (t-1)}] / \text{Total assets (t-1)}}$$

4. Sales Growth Index (SGI)

The SGI represents sales in the current year (t) divided by sales in the previous year (t-1), as stated as follows:

$$SGI = \frac{\text{Sales (t)}}{\text{Sales (t-1)}}$$

5. Depreciation Index (DEPI)

The DEPI expressed as a generated from comparing the depreciation to fixed assets before depreciation in a year (t) and the previous year (t-1). The formula is:

$$DEPI = \frac{\text{Depreciation (t-1)} / (\text{Depreciation (t-1)} + \text{PPE (t-1)})}{\text{Depreciation (t)} / (\text{Depreciation (t)} + \text{PPE (t)})}$$

6. Sales and General Administrative Expense Index (SGAI)

It is a ratio that compare selling, general and administrative expenses to sales in the current year (t) with the previous year (t-1), as stated as follows:

$$SGAI = \frac{\text{SGAI (t)} / \text{Sales (t)}}{\text{SGAI (t-1)} / \text{Sales (t-1)}}$$

7. Leverage Index (LGVI)

The LGVI is generated by comparing current year's (t) ratio of total debt to total assets and the same ration of previous year (t-1) to assess the company's debt level. The LVGI use the formula:

$$LVGI = \frac{(\text{Long term debt (t) + Current liabilities (t)}) / \text{Total assets (t)}}{(\text{Long term debt (t-1) + Current liabilities(t-1)}) / \text{total assets (t-1)}}$$

8. Total Accruals to Total Assets (TATA)

Is a ratio that explains accounting profits that are not derived from cash gains obtained using formula:

$$TATA = \frac{\text{Net operating profit (t) - Cash flows from operating (t)}}{\text{Total assets (t)}}$$

The eight indexes were reprocessed with a mathematical model to obtain the Beneish M-Score value. The trick is to enter the calculated value of each index into the Benish formula (1999:29), as follows:

$$\text{Beneish M-Score} = -4,840 + 0,920 \text{ DSRI} + 0,528 \text{ GMI} + 0,404 \text{ AQI} + 0,892 \text{ SGI} + 0,115 \text{ DEPI} - 0,172 \text{ SGAI} - 0,327 \text{ LVGI} + 4,679 \text{ TATA}$$

The total value of the Beneish M-Score that is larger than the cut off number of -2.22, indicating that the corporation has committed financial statement falsification. Symbolization of Beneish M value is as follows:

1 = The indication of fraudulent financial statements is obvious.

0 = The indication of fraudulent financial statements is not obvious.

Independent Variable

In this study, researchers used 7 independent variables, namely financial stability

1. Financial Stability

Continuously changes in total assets reflects a company's financial health. The asset changes ratio over two years is used to calculate this variable. Investors' returns are influenced by total assets. A large amount of total assets is considered to provide a high return for investors, while a decreased or negative total asset is considered an unprofitable investment due to unstable company finances.

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

2. Return on Assets

Financial targets are stated by Return on Assets. This ratio indicates the company's ability to earn profits from used assets. It reflects company's operating performance. It is widely

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utilized as an indication of how efficiently assets are held. In addition, this ration is also often used to measure the performance of managers, including the determination of bonuses, wage increases, and other incentives.

$$ROA = \frac{\text{Laba bersih setelah pajak}}{\text{Total aset}}$$

3. Effectivitness of Supervision

Independent commissioners are perceived to act netral. Their proportion from the whole commissioners is usually used to measure the effectiveness of supervision. The basic idea is, that the lower is their proportion, the less effective the supervision, and vice versa.

$$BDOUT = \frac{\text{Number of independent commissioners}}{\text{Number of commissioners}}$$

4. Nature of the Industry

The nature of the industry is expresses as the accounts receivable ratio. With this ratio can be known the level of the company's receivables. A high level of receivables indicates an unfavorable cash turnover. Meanwhile, the disproportionate proportion of receivables to sales indicates an act of manipulation of vulnerable accounts, which aims to produce better financial reports related to assets.

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

5. Change of Auditor

Auditor turnover during the observation year, namely 2017-2019, was measured using a dummy as folows:

1 = The company changes its independent auditor.

0 = The company did not change its independent auditor.

6. The changes of director

The changes director during the observation year, 2017-2019, were measured using a dummy as follows:

1: The company canges its director

0: The company did not change its director

7. The frequency of CEO Photo Appearance

The frequency of photo appearances is stated as follows:

CEOPIC = Number of CEO photos displayed in the company's annual report for the 2017-2019 period.

Data collection technique

This study used secondary data collected through observations of Indonesian stock exchange publications and company websites. The data include:

1. The annual report data of the IDX30 version of companies listed on the Indonesia Stock Exchange (IDX) consecutively during the observation, namely 2017-2019. The source of the data is the Indonesia Stock Exchange (IDX) and company official websites.
2. The company's annual report data, which includes the dependent variables, namely: sales, cost of goods sold, receivables, current assets, fixed assets, depreciation expense, general and administrative expenses, current liabilities, long-term liabilities, operating profit and operating cash flow. The data needed regarding the independent variables are: total assets, total debt, net profit after tax, the size of commissioners, the size of independent commissioners, accounts receivable, sales, Public Accounting Firm (KAP) auditing, information on directors replacement, and the number photos of the CEO uploaded in a company annual report.

Sampling technique

The sampling technique is non-probability, where the data is taken by purposively. This means that population members have no equal opportunities be selected as samples. The unit of analysis is taken through judgment based on certain objectives or characteristics (Table 1).

Table 1
Judgment Considerations

Information	Number of Analysis Units
Company version IDX30	30
The company's complete financial report is not available on the Indonesia Stock Exchange website or the company's official website	-
The company is listed in IDX30 but not for 3 consecutive years according to the 2017-2019 observation period, in the sense that the company is delisted or has just entered the IDX30 list in the middle of the observation period.	10
Does not have the completeness of variables needed in research	4
The company produces a loss-making financial report	-
Number of samples per year	16
Number of samples during the 2017-2019 observation period (number of samples per year x length of observation period (3 years))	48

Data Analysis Technic

The data is processed and analyzed using the SPSS 20 program.

Descriptive Statistics

Descriptive statistics are based on the mean, variance, standard deviation, minimum, maximum, total, kurtosis, range, and skewness.

Data Pooling

The coefficient similarity test is purposed to determine whether the combination of research data (pooling) for three years (2017-2019) between time series and cross sectional data can be carried out. This test is conducted to find out whether there are differences in the intercept, slope, or both of the regression equations. If there is a difference in intercept, slope, or both in the regression equations, then the data cannot be pooled but must be examined cross-sectionally. Meanwhile, if there is no difference in intercept, slope, or both in the regression equations, then data pooling can be done. The coefficient similarity test was carried out with the help of a year dummy, provided that if the significance value and all dummy variables were greater than 0.05 then data polling could be carried out.

Logistics Regression

This study use logistic regression with a non-metric (category) dependent variable and metric and non-metric independent factors. The technique for doing the analysis is outlined below.

1. Overall model fit test

This test was done to see if the regression model that was utilized suited the data or not. Comparing a model with simply constants to a complete model with independent variables can be used to test. If the value of $-2 \log$ likelihood (block 0) is bigger than the chi-square table ($df = n-1$), reject H_0 , which indicates that the model (using constants only) does not match the data. If the chi-square table ($df = n-k-1$) is smaller than the value of $-2 \log$ likelihood (block 1), H_0 is not rejected, and the model with the independent variable fits the data.

The following test compares the value of $-2 \log$ likelihood at the start (block 0) with the value of $-2 \log$ likelihood at the conclusion (block 1). (block 1). The regression model is good and the variables used fit the data if the value of $-2 \log$ likelihood (block 0) decreases to the value of $-2 \log$ likelihood (block 1)

2. Coefficient of Determination

The R Square of Nagelkerke is used to determine how well a set of independent factors can explain the dependent variable. In Ghozali (2016:329), Nagelkerke R Square, it is shown that the Cox and Snell R Square coefficients are modified to ensure that the value varies from 0 to 1. The Nagelkerke R Square value is used to conduct this test. The variability of the dependent variable that can be explained by the variability of the independent variable is limited as it approaches 0, whereas the variability of the

dependent variable that can be explained by the variability of the independent variable is good as the Nagelkerke R Square value approaches 1. That is, the independent variable gives nearly all of the data required to predict the dependent variable.

3. Hosmer and Lemeshow Test

This test, according to Ghozali (2016: 329), tries to determine whether empirical data fits the model, in the sense that there is no discrepancy between the model and the data, indicating that the model is fit. The importance value is used to make the decision (sig.). The decision does not reject H_0 since the sig. value is bigger than $\alpha = 0.05$, and the model is approved because the model can forecast the value of the observation.

4. 2x2 Classification Table

The right and wrong estimated values are calculated using the 2X2 categorization table. The predictive power of the regression model in terms of the potential of falsified financial statements by IDX30 companies listed on the IDX in the 2017-2019 timeframe can be seen in the classification table.

5. Testing Regression Coefficients and Formation Of Regression Models

The logistic regression model is:

$$\text{Ln} \frac{\text{Fraud}}{1 - \text{Fraud}} = \beta_0 + \beta_1 \text{ACHANGE} + \beta_2 \text{ROA} + \beta_3 \text{RECEIVABLE} + \beta_4 \text{BDOUT} + \beta_5 \text{AUDCHANGE} + \beta_6 \text{DCHANGE} + \beta_7 \text{CEOPIC} + \varepsilon$$

Where,

β_0 : Constant.

β_i : Regression coefficient of i^{th} variable.

FRAUD : Financial statement falsification, with dummy variables: code 1 (there is the indication of fraudulent action) and code 0 (no the indication fraudulent action).

ACHANGE : Asset growth

ROA : Ratio of net profit after tax to total assets.

RECEIVABLE : Ratio of receivables divided by total sales in year t less $t-1$.

BDOUT : The portion of independent commissioners from the whole members of the board of commissioners.

AUDCHANGE : Change of auditor followed by change of independent auditors with a dummy variable, code 1 (There is a change of independent auditors) and code 0 (There is no change of independent auditors).

DCHANGE : Change of directors is stated as dummy variable: code 1 (there is the change of directors) and code 0 (there is no change of directors)

CEOPIC : Number of photos of the CEO shown in the annual report.

ε : Residual error.

Hypothesis Testing

Model Significance Test

The test is conducted by comparing the model without independent variables with the model with added independent variables. Decision making is based on the comparison of the significance value (sig) with $\alpha \geq 0.05$. H_0 cannot be rejected if $\text{sig} \geq \alpha$, and the independent variable as a whole cannot alter the dependent variable. If the model's significance value (sig) is less than 0.05 (α), the hypothesis is rejected, and at least one of the independent variables coefficient is significant.

Coefficient Significance Test

The purpose of this test is to see if the coefficients of each independent variable are correct. The significant value (sig) is compared to $\alpha = 0.05$ to make decisions. If $\alpha = 0.05$, accept reject H_0 and the independent variable has no effect on the dependent variable. If the significance value (sig) is less than 0.05 (α), the hypothesis is rejected, indicating that the independent variable coefficient is significant.

RESULT AND DISCUSSION

The descriptive ratio-scaled variables were separated from the nominal-scaled variables that are proxied by dummy.

Tabel 2
The Description of Ration-Scaled Variables

	N	Minimum	Maximum	Mean	Std. Deviation
ACHANGE	48	-0,0792	0,5937	0,101015	0,1408909
ROA	48	0,0084	0,4659	0,125823	0,1064221
RECEIVABLE	48	-0,1964	0,247	-0,001942	0,0504578
BDOUT	48	0,25	0,8	0,421498	0,1246863
CEOPIC	48	1	15	5,75	3,028
Valid N (listwise)	48				

Table 3
The Discription of Dummy Variables
FFR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	28	58,3	58,3	58,3
	Yes	20	41,7	41,7	100
	Total	48	100	100	
AUDCHANGE					
Valid	No	45	93,8	93,8	93,8
	Yes	3	6,3	6,3	100
	Total	48	100	100	
DCHANGE					
Valid	No	11	22,9	22,9	22,9
	Yes	37	77,1	77,1	100
	Total	48	100	100	

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	Yes	3	6,3	6,3	100
	Total	48	100	100	
DCHANGE					
Valid	No	11	22,9	22,9	22,9
	Yes	37	77,1	77,1	100
	Total	48	100	100	

In 2017, PT Gas Negara Tbk had the lowest level of financial stability, as measured by an asset change ratio (ACHANGE) of -0.0792. As shown in Table 2, the maximum value of ACHANGE in 2017 was 0.5937, which was owned by PT Waskita Karya Tbk. The ratio of changes in assets, which represents the level of financial stability, is 10.10 percent, according to the mean of 0.101015. 0.1410 is the standard deviation. The data distribution is diverse, uneven, and there is a large difference between one data and another when the standard deviation is greater than the mean.

The smallest value of the return on assets ratio (ROA), which is a proxy for financial targets, is 0.0084, which was discovered at PT Waskita Karya Tbk in 2019. In 2018, PT Unilever Indonesia Tbk held the highest value of 0.4659. 0.1258 is the average. As a result, the company's profit potential is 12.58 percent. The standard deviation of 0.1064, which is less than the mean, indicating that there is little variety in the data.

The industry's nature, which utilizes the change in receivables ratio (RECEIVABLE) as a proxy, reveals that the lowest value is -0.1964, which was discovered in PT Waskita Karya Tbk in 2017, and the highest value is 0.247, which was discovered in PT Waskita Karya Tbk in 2019. The standard deviation is 0.0504578, while the mean is -0.001942. The mean value exceeds the low data variation mean.

The following is a description of the fourth independent variable, ineffective supervision, which is measured by the proportion of independent commissioners to total commissioners (BDOUT). In 2018, PT. Adaro Energy Tbk held the lowest value of 0.25, while PT. Unilever Indonesia Tbk held the highest value of 0.80. The average value is 0.421498, which means that the proportion of independent commissioners among all

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commissioners is 42.15 percent. 0.12468 is the standard deviation value. Because it is less than the mean, and the mean is less than the mean, the data variation is low.

The fifth independent variable, namely auditor change (AUDCHANGE) can be described as flows. As many of 45 units of analysis or 93.8% of made no change of auditors. The remaining (3 units of analysis or 6.3%) changed auditors. Change of directors (DCHANGE) was carried out by 11 units of analysis (22.9%). The rest (37 units of analysis or 77.10%), did not do. The sixth independent variable (DCHANGE), known as director change, conducted by 37 units of analysis (77.10%). The rest (11 units of analysis or 22.09%) did not change directors. The rest (37 units of analysis or 77.10%) changed directors.

Financial statement fraud (FFR) was practiced by 28 units of analysis (58.3%), the remaining 20 units of analysis (41.7%) were not indicated to have fraudulent financial statements.

Pooling Data

The coefficient similarity test shows that all dummy variables have a significance value above alpha 0.05. The decision was to reject Ho. This means that there is no difference in the coefficient of the variable based on data per year.

Logistic Regression Model

The study found the following equation:

$$\text{Ln} \frac{\text{Fraud}}{1-\text{Fraud}} = -1,264 + 10,892.\text{ACHANGE} + 5,760.\text{ROA} + 32,934.\text{RECEIVABLE} + 2,193.\text{BDOUT} + 22,902.\text{AUDCHANGE} - 1,421.\text{DCHANGE} - 0,176.\text{CEOPIC} + \varepsilon$$

Model Fit

Model fit is tested using Chi-square that tests whether the distribution of observed data are different or the same. If the distribution is different, it means there is no contingency between observed data and predicted data and vice versa. The tested statistical hypotheses are:

Ho=There is no contingency between observed data and predicted data.

Ha: There is contingency between observed data and predicted data.

As shown in the Table 5, Chi-square value for the model=25.057 and degree of freedom (df)=7. With sig. value of 0.001, the decision is reject Ho. Therefore, there is the contingency of observed data and predicted data as stated in the Ha. Therefore, the model is fit.

Tabel 4
Data Poling Result

Model	Sig.
1 (Constant)	0,108
ACHANGE	0,924
ROA	0,197
RECEIVABLE	0,176
BDOUT	0,423
AUDCHANGE	0,161
DCHANGE	0,225
CEOPIC	0,568
D1	0,389
D2	0,135
D1.ACHANGE	0,553
D1.ROA	0,869
D1.RECEIVABLE	0,293
D1.BDOUT	0,499
D1.AUDCHANGE	0,308
D1.DCHANGE	0,476
D1.CEOPIC	0,539
D2.ACHANGE	0,489
D2.ROA	0,258
D2.RECEIVABLE	0,300
D2.BDOUT	0,234
D2.AUDCHANGE	0,206
D2.DCHANGE	0,215
D2.CEOPIC	0,734

Table 5
F Test Result

		Chi-square	Df	Sig.
Step 1	Step	25,057	7	,001
	Block	25,057	7	,001
	Model	25,057	7	,001

Coefficient Significancy

As displayed in Table 6, we can see that, there are two variable found to influence financial statement manipulation, namely ratio of net profit after tax to total assets (ACHANGE) and ratio of receivables divided by total sales in year t less t-1 (RECEIVEBLE). The rest are not significant.

Coefficient of Determination

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Nagelkerke R square is 0.457. It means that the capability of the model to explain dependent variable is 45.7%. If we root this number, we get a value of 0.67. This value states that the collective correlation between the independent variables with the dependent variables, another way to see the efficacy of independent variable, is somewhat high.

Tabel 6
Coefficient Test Results Summary

		B	Sig 2tailed	Sig 1tailed	Decision
Step 1a	ACHANGE	10,892	0,051	0,0255	Reject Ho
	ROA	5,76	0,214	0,1070	Not reject Ho
	RECEIVABLE	32,934	0,097	0,0485	Reject Ho
	BDOU	2,193	0,561	0,2805	Not reject Ho
	AUDCHANGE	22,902	0,999	0,4995	Not reject Ho
	DCHANGE	-1,421	0,147	0,0735	Not reject Ho
	CEOPIC	-0,176	0,267	0,1335	Not reject Ho
	Constant	-1,264	0,486		

The Effectiveness of the Model

How good is the model to predict observed data? Table 7 show that the model can make accurate prediction for 23 out of 28 unit of analysis that made no financial manipulation (82.10%). For company that make financial manipulation, the capability of the model to make accurate prediction is 75.00%. Therefore, the average effectiveness of the model is 79.20%.

A model that can predict more than half of the category of observed data can be said as effective (Hair et al., 2016). Therefore, our model is effective.

Table 7
The Comparison of Observed Data and Predicted Data

Observed		Predicted		
		FFR		Percentage Correct
		No	Yes	
Step 1	FFR No	23	5	82,1
	FFR Yes	5	15	75,0
Overall Percentage				79,2

DISCUSSION

The Effect of Financial Stability

This research reveals financial stability has a substantial impact on financial statements that are reported dishonestly. Annisya et al (2016), Apriliana and Agustina (2017), Bawekes et al (2018), and Pamungkas et al (2018) have all found similar results (2018). Managers will be pressured to conduct financial statement falsification if the company's financial stability is endangered by economic conditions, industry, and the situation of

the operational entity, according to SAS no.99 in Skousen et al (2009:59), which is a study of the theory of fraud.

These findings are also pertinent to the agency hypothesis, which claims that attractive financial statements are required by management as agents in order to influence the principal's actions. Manipulation of financial statements is driven by this desire.

The Effect of Financial Targets

This study shows that financial targets have no effect on fraudulent financial statements. These results are in line with and support the research of Apriliana and Agustina (2017) and Puspita and Yasa (2018). When a company cheats on profitability, investors view the company as having a good performance and the company's stock price will also be higher. However, this increase has an impact on high dividend payments which is certainly detrimental to the company. In addition, the option to purchase shares to be given to management and employees also reduces the occurrence of fraudulent acts.

The Influence of the Nature of the Industry

This study finds that the nature of the industry has a positive effect on financial statement falsification. These results are in line with Pasaribu and Kharisma (2018), Pamungkas (2018) and Loebbecke et al. (1989). In this study, fraud involved accounts receivable. This account is indeed prone to fraud because the assessment is based on estimates and subjective judgments. The value of receivables also affects the cash value. If receivables are high, then cash is decreased and cash turnover is not good. Therefore, when cash flow is not good, companies often cover it up by manipulating accounts receivable.

Effect of Ineffective Supervision

This study finds that ineffective supervision has no effect on financial statement fraud, as also found by Pasaribu and Kharisma (2018) and Pamungkas (2018). Often the independent commissioner who acts as a control function on management actions is not optimal. The existence of the board of commissioners is only to meet the requirements of good corporate governance regulations. The supervisory function is also not optimal as long as there is intervention on the independent board of commissioners. Thus, the large number of independent commissioners does not guarantee more effective oversight.

The Effect of Auditor Changes

Auditor turnover had no influence on financial statement fraud in this study. Apriliana and Agustina (2017) and Bayagub et al. (2017) found comparable results (2019). The change in independent auditors could be due to the company's unhappiness with the previous independent auditor's performance, or it could be due to the company's compliance with Government Regulation No. 20 of 2015, article 11 paragraph 1 regarding the Practice of Public Accountants. The supply of audit services on historical financial statements by a Public Accountant to an entity is limited to a maximum of 5 consecutive financial years, according to this rule. As a result, audit firm turnover isn't necessarily linked to signs of financial statement fraud.

The Effect of Change of Directors

The change of directors has little influence on misleading financial statements, according to this study. The findings of this study agree with Annisya et al. (2016) and Quraini & Rimawati (2018). The new board of directors is meant to improve on the previous board of directors' performance. Changes in the board of directors can also be motivated by the desire to acquire more competent personnel considering their very important role in the struggle to achieve organizational goals more effectively and efficiently. So, the change of directors is not caused by the desire to manipulate financial statements.

In the study, the authors found that the frequency of displaying CEO photos had no effect on fraudulent financial statements. These results are in line with Pamungkas (2018) and Bayagub et al (2019).

The Effect of CEO Photo Appearing Frequency

The authors found that the CEO Photo Appearing Frequency effect on Financial Statement Fraud is not significant, as also found by Pamungkas (2018) dan Bayagub et al (2019). Annual reports are not a strong medium for elevating CEO status because of their formal nature. Actually, for that purpose, the CEO can also use other more appropriate media.

In addition, the presence of the CEO's photo in the annual report is part of the company's compliance with government regulations that say so, not a representation of the CEO's arrogance. In terms of motivation, displaying CEO photos at the company's annual can also be used to describe the activities that have been carried out, programs that have been carried out or awards that have been received by the company during the year. In short, the appearance of the CEO's photo is not to create status, but as an indication that the company has been operating well.

CONCLUSION

The nature of the industry, as well as financial stability, have a positive impact on the falsification of financial statements. Financial targets, insufficient oversight, changes of auditors, changes of directors, and the appearance of CEO photographs on published fake financial statements are all unsupported by evidence.

In this study, the author still uses samples from various industries. The next researcher can focus on particular industry. We believe that company behavior company behavior differs from industry to industry.

It is also recommended that other researchers use a longer observation period so that the results are more accurate. Other independent variables that can be considered are: external pressure, personal financial needs, and quality of external auditors.

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