Detecting Indications of Financial Statement Fraud: a Hexagon Fraud Theory Approach

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Abstract

This study emphasizes on examining the fraud hexagon theory referring to signs of fraud of financial statements, which employs all manufacturing companies listed in the IDX (Indonesia Stock Exchange). However, total selected sample are 153 of the manufacturing industry. The companies are categorized into indicated and not indicated committing fraud in the 2010-2018 period by applying the Beneish M-Score. The findings demonstrated that financial stability, the financial targets, the external pressures, the nature of industry, and CEO duality can be applied to predict fraud of financial statements. Meanwhile, personal financial needs, ineffective monitoring, quality of external auditors, auditor turnover, director turnover, and marginal costs cannot indicate occurrence of the fraud of financial statement. The findings conclude that pressure, ego, and opportunity significantly affect the financial statement fraud. Future research are suggested to consider different proxies for fraudulent financial statements; hence, the accuracy of the proxies can be compared with this study. Moreover, adding other proxies of conspiracy such as bonuses received by managers will be beneficial.

Keywords: Beneish M-score; Financial statement fraud; Hexagon fraud theory

INTRODUCTION

A survey by ACFE from 2014-2018 found that Financial Statement Fraud (FSF) increased from 9% in 2014, 9.6% in 2016, and 10% in 2018 (ACFE, 2014, 2016, 2018). This shows the weakness of fraud control in the company. One way to control fraud can be done by preventing fraud in the company (Wilhelm, 2004). Many theories elaborate the fraud of financial statements, such as fraud triangle, fraud diamond, or fraud pentagon (Akbar, 2017; Annisy, Lindrianasari, & Asmaranti, 2016; Husmawati, Septiani, Rosita, & Handayani, 2017; Lou & Wang, 2011; Nanda, Salmiah, & Mulyana, 2019; Ozcelik, 2020; Quraini & Rimawati, 2018; Rukmana, 2018; Setiawati & Baningrum, 2018; Siddiq, Achyani, & Zulfikar, 2017; Sukirman & Sari, 2013; Ulfa, Nuraina, & Wirjaya, 2017). The novelty of this study is applying the hexagon fraud theory as analytical framework (Vousinas, 2019). The hexagon fraud theory was appointed as a research topic because there has been no empirical testing of this theory in Indonesia, so researchers are interested in researching the hexagon fraud theory.
The theory underlying fraud began when the white-collar crime theory was proposed by (Sutherland, 1940). Then Cressey (1950) developed the fraud triangle theory, which consists of opportunities, pressures, and rationalizations. Developing the fraud triangle theory become the fraud diamond theory by considering a person's capability factor in committing fraud. In addition, the pressure factor in the fraud triangle theory later was developed by Kranacher et al. (2011) into rat theory, namely Money, Ideology, Coercion, and Ego. Crowe (2011) developed a new theory, which is known as the fraud pentagon theory consisting of opportunity, pressure, arrogance, competence, and rationalization. Then in 2019, it developed again from the fraud triangle, diamond fraud, MICE, and pentagon fraud to a hexagon fraud consisting of pressure, capability, collusion, opportunity, ego, and rationalization (Vousinas, 2019). This model is regarded better because there is a collusion factor that plays a major role. Factors that lead to financial fraud commitments (Vousinas, 2019).

The Pressure is measured using financial targets (ROA), external pressure (LEV), financial stability (CHANGE), and personal financial needs (OSHIP) (Skousen, Smith, & Wright, 2009). The financial target is the condition of the company in determining the profit target. Return on assets usually used as an indicator of efficiency of assets usage (Skousen et al., 2009); so that return on assets fit as a proxy of the financial budget. Financial targets are a form of company performance with ROA indicators that affect financial statement fraud. Akbar (2017); Aprillia et al. (2015); Herdiana & Sari (2018); Huang et al. (2017); Nanda et al. (2019); Renaghanis et al. (2019); Setiawati & Baningrum (2018); Taherinia & Talebi (2019) urged that financial targets affect occurrence of the fraud of financial statements.

The external pressure is a tension to management to satisfy the third parties’ expectations (Skousen et al., 2009). The external pressure can be represented by the leverage ratio, i.e. total liabilities to total assets. The external pressure (LEV) positively affects tendency of financial statement fraud (Quraini & Rimawati, 2018; Tiffani & Marfuah, 2015; Wicaksana & Suryandari, 2019).

The financial stability represents a stable company condition (Statement of Auditing Standards No. 99). Stable company finances can be measured from its financial condition through the value of sales, profits, and company assets (Siddiq & Achyani, 2017). On the other hand, an unstable situation causes pressure on management due to less than optimal performance in managing the company's resources effectively and efficiently. A company tries to provide information to increase the company's prospects by manipulating information related to company assets so that financial stability is projected by changes in the company's total assets (CHANGE). Aprillia et al. (2015); Prasmualida (2016); Hasmawati et al. (2017); Herdiana & Sari (2018); Susanti (2018); Rahmatika et al. (2019); Taherinia & Talebi (2019) stated that financial stability affects tendency of financial statement fraud.

The personal financial needs represent influence of the financial condition of company's executive towards the financial condition of the company (Skousen et al., 2009). The ownership of shares by the executive of a company instigates claims on the income and assets of the company. The ratio of share ownership by executives is directly proportional to fraud in financial statements so that if the ratio of share ownership by executive’s increases, the percentage of fraud in financial statements also increases. This shows that personal financial needs are projected by the share ownership ratio (OSHIP).
(Skousen et al., 2009). The personal financial needs have a significant impact to the fraud of financial statements (Basuki & Yulia, 2016).

The opportunity is measured by ineffective monitoring (BDOUT), external auditor quality (BIG), and industry nature (NATUR) (Skousen et al., 2009). BDOUT is an ineffective supervisory proxy which is represented by the proportion of independent commissioners compared to total number of board commissioners (Siddiq & Achyani, 2017). Ineffective supervision occurs because the oversight department do not work effectively to monitor the operational activities. The absence of a supervisory department or the ineffectiveness of the department’s performance can lead to financial statement fraud (Nanda et al., 2019; Salim, Siswanto, Wijaya, & Angela, 2021).

The audit quality is the probability of auditors detecting and reporting audited results (Siddiq & Achyani, 2017). The quality of external auditors might affect detection of fraud of financial statements; so external auditors who have adequate skills and abilities are needed to audit financial statements. The quality is opted by the use of external audit services which are members of the BIG 4 public accountants (Deloitte, Ernest & Young, PWC, KPMG) and non-BIG 4 public accounting firms. Audit quality significantly affect the detection of fraud of financial statements (Apriliana & Agustina, 2017; Husmawati et al., 2017).

The nature of industry is considered as an ideal condition of a company, which can be measured by the total value of account receivables in the financial statements (Setiawati & Baningrum, 2018). Certain accounts in the financial statements whose balance can be determined based on the estimated value are bad debts and sales accounts. The nature of the industry can be measured by comparing receivables with sales (Setiawati & Baningrum, 2018). The nature of industry affects to the fraud of financial statements (Akbar, 2017; Ayem & Astuti, 2019).

Proxy of rationalization is auditor changing (CPA) (Skousen et al., 2009). According to SAS No. 99, the change of auditors in the company can be an indication of fraud (Skousen, Smith, & Wright, 2009). Experienced auditors are more optimal in detecting the possibility of fraud committed by the company's management. The possibility of fraud increases when there is a change of auditors (Yesiarani & Rahayu, 2016). Changes in auditors in companies might suggest fraudulent of financial statement (Harman & Bernawati, 2020).

The capability is measured by changes of directors (CHANGE) (Annisya et al., 2016; Ozcelik, 2020; Rukmana, 2018). Capability shows the ability to control the company (Wolfe & Hermanson, 2004). Generally, the change of directors is carried out to enhance performance of board of directors through changing the configuration of member of the board of directors with the new and more competent directors. However, the changes of directors may indicate certain interests that impact to the fraud of financial statements. Hence, the change of directors might indicate the fraud of financial statement (Akbar, 2017; Husmawati et al., 2017).

Ego is measured by CEO duality (CEODUAL) (Setiawati & Baningrum, 2018). Ego is a desire to strengthen power (Wolfe & Hermanson, 2004). Ego can be projected with CEO duality which can lead to abuse of executive power (Chen et al., 2016). Hashim & Devi (2008) found that CEO duality has an impact on corporate earnings management, so fraud can be detected by the presence of CEO duality in the company (Akbar, 2017).
Collusion is measured using the marginal cost (MC) (Fonseca & Normann, 2008; Phillips et al., 2011). Collusion is a conspiracy between parties with a certain agreement for malicious purposes so that it can harm third parties (Vousinas, 2019). The collusion that occurs in the company is an indication of fraud in financial statement. Proxy for collusion is marginal cost, namely the change in costs that occurs as a result of changes in production. Marginal cost can be observed from the Cost of Goods Sold (COGS) in the company's profit/loss statements. The marginal costs that are the same per production or have slight differences and do not change every year might indicate collusion (Fonseca & Normann, 2008; Phillips et al., 2011). The collusion that occurs between companies can be observed from the act of equalizing the price of products to be sold which affects to the tendency of fraud of financial statements.

Research on the hexagon fraud theory developed by Vousinas (2019) has not been empirically researched but is only limited to theory. Therefore, this study is intended to examine the hexagon fraud theory empirically. Furthermore, this study hopes that the collusion factor as measured by MC can be as an indication of fraud of financial statement.

The contributions of this study are, first, provides evidence of collusion in explaining indications of Financial Statement Fraud. Second, that collusion can be measured in financial statements. Third, it can influence auditor decision-making in conducting fraud detection of financial statements and reduce the auditors' inability or biased spiciness (Lin et al., 2003) and assist auditors in conducting audits, especially in detecting indications of financial report fraud. Fourth, it is beneficial for investors in decision making by knowing the signs of fraud in financial statements, so it is expected that investors are more careful in making investments (Persons, 1995).

**RESEARCH METHOD**

This study analyzes all manufacturing companies that were listed on the IDX. Then, the sample was carefully chosen with purposive sampling by applying several criteria of companies indicated committing fraud. On the other side, the selected companies were not indicated to commit fraud in 2010-2018. The data was attained from website of the IDX (Indonesia Stock Exchange).

The dependent variable is a company that is indicated to commit fraud and is not indicated to commit fraud by employing the Beneish M-Score model (Beneish, 1999). The Beneish M-Score cannot detect 100% fraud, but it provides an overview with higher scores that tend to occur fraud. The Beneish M-Score is formulated as follows:

\[
M - 'Score = -4.84' + 0.920' * DSRI + 0.528' * GMI + 0.404' * AQI + 0.892' \\
* SGI + 0.115' * DEPI - 0.172' * SGAI + 4.679' * TATA - 0.327' \\
* LVGI
\]

Description:
- DSRI’ : Sales Index’
- GMI’ : Gross Margin Index’
- AQI’ : Asset Quality Index’
- SGI’ : Sales Growth Index’
- DEPI’ : Depreciation Index’
- SGAI’ : Sales and General’Administration_Expenses Index’
Independent variables of this study is the fraud hexagon, i.e. stimulus, opportunity, rationalization, capability, ego, and conspiracy. Proxies of stimulus are financial stability, financial target, personal financial needs, and external pressure. The financial stability is represented by the ratio of changes in total assets (ACHANGE). ACHANGE is calculated with total assets (t) minus total assets (t-1) divided by total assets (t-1) (Skousen et al., 2009). Furthermore, the financial target is the profit target desired by the shareholders. A popular financial target proxy is Return on Assets (ROA). ROA is calculated using the formula profit after tax divided by total assets (Akbar, 2017; Aprillia et al., 2015; Huang et al., 2017; Setiawati & Baningrum, 2018; Herdiana & Sari, 2018; Nanda et al., 2019; Rengganis et al., 2019; Taherinia & Talebi, 2019). The personal financial needs are the state of the shares owned by the executive of company affect the company's performance. Meanwhile, the personal financial needs are calculated by directors' shares divided by outstanding shares (Skousen et al., 2009). In addition, the external pressure is the pressure caused by outside parties to the company, such as debt. Hence, it is represented by leverage, which is calculated by ratio of total debt to total assets (Skousen et al., 2009).

Proxies of opportunity are ineffective monitoring, nature of the industry, and quality of external auditor. Respectively, the ineffective monitoring is the ability of independent commissioners to monitor. Ineffective monitoring is formulated with composition of total independent commissioner to the total members of board of commissioners (Skousen et al., 2009). The quality of external auditors is perceived as quality of a Public Accountant Firm (KAP) referring to the list of KAP BIG4. The quality of external auditors is represented by dummy variables, code 1 (one) if using BIG 4 KAP audit services, and code 0 (zero) if not using BIG 4 KAP. The nature of Industry is the composition of receivables to total sales. The nature of industry is formulated by this year's receivables (t) is divided by this year's sales (t) minus the proportion of the receivables prior year (t-1) to the prior year's sales (t-1) (Skousen et al., 2009).

Rationalization can arise when the auditor changes. Auditor change is one of the obligations of every company. Changes in auditors that are too frequent can signify that there are indications of audit failure and litigation. Changes in auditors measured using dummy variables, code 1 (one) represents companies Replacing auditors, while code 0 (zero) denotes companies that do not replace its auditors (Skousen et al., 2009).

Proxy of capability is the change of director. Capability can be seen when a new director enters the company. A dummy variable measures change in directors. Code 1 represents companies changing their directors, while code 0 when a company do not change their directors during the research period (Annisya et al., 2016; Ozcelik, 2020; Rukmana, 2018).

Ego is the selfishness of a director. One of the signs of ego is when the director has two positions in one company, the director who has two positions will easily commit financial statement fraud. So, ego is measured by dummy variables, code 1 for companies with CEOs having more than one position and code 0 for companies with CEOss who have only one position in the company (Akbar, 2017).
Collusion is a collaborative work among companies. Collusion is proxied by marginal cost. Marginal cost can signify whether the company is colluding or not (Fonseca & Norman, 2008; Phillips et al., 2011). Marginal costs in this study can be seen from the change of Cost of Goods Sold (COGS) in the profit/loss statement. Therefore, the marginal cost formula is COGS this year divided by COGS the previous year.

This study statistically is analyzed with multiple regression analysis by applying the SPSS 23. The analysis started with descriptive statistical tests, classic assumption tests, simultaneous tests, and partial tests (Ghozali, 2011). The analysis emphasizes on the impact of financial stability, the external pressure, the personal financial needs, the financial target, the quality of external auditor, the ineffective monitoring, the nature of industry, the CEO duality, change in auditor, marginal cost, and change in director towards Financial Statement Fraud in 153 companies, indicated fraud (fraud company) and the company is not indicated to commit fraud (non-fraud companies) in the period 2010-2018. Here is the model of logistic regression in this study:

\[ MSCORE = \beta_0 + \beta_1 ACHANGE + \beta_2 ROA + \beta_3 OSHIP + \beta_4 LEV + \beta_5 BDOUT + \beta_6 BIG \\
+ \beta_7 NATUR + \beta_8 CPA + \beta_9 DCHANGE + \beta_10 CEODual + \beta_11 MC + \varepsilon \]

RESULTS AND DISCUSSION

This research sample, after the sample matching process, obtained 153 companies, which is indicated to commit fraud (fraud companies) and companies are not indicated to commit fraud (non-fraud companies) in the period 2010-2018. The following table 1 explains the descriptive statistical tests:

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>MSCORE</td>
</tr>
<tr>
<td>Financial Target (ROA)</td>
</tr>
<tr>
<td>External Pressure (LEV)</td>
</tr>
<tr>
<td>Financial Stability (ACHANGE)</td>
</tr>
<tr>
<td>Personal Financial Needs (OSHIP)</td>
</tr>
<tr>
<td>Ineffective Monitoring (BDOUT)</td>
</tr>
<tr>
<td>Quality of External Auditor (BIG)</td>
</tr>
<tr>
<td>Nature of Industry (NATUR)</td>
</tr>
<tr>
<td>Change in Auditor (CPA)</td>
</tr>
<tr>
<td>Change in Director (DCHANGE)</td>
</tr>
<tr>
<td>CEO Duality (CEO Dual)</td>
</tr>
<tr>
<td>Marginal Cost (MC)</td>
</tr>
</tbody>
</table>

Source: Secondary data processed

Table 2 shows the results of simultaneous tests. Based on simultaneous tests of variables CHANGE, ROA, OSHIP, LEV, BDOUT, BIG, NATUR, CPA, CHANGE,
CEODUAL, and MC, significantly affect SCORE with a significance level 0.000 < 0.05, and the F-value is 4.108.

Table 2. Simultaneous Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.461</td>
<td>11</td>
<td>0.860</td>
<td>4.108</td>
<td>0.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>29.103</td>
<td>139</td>
<td>0.209</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>38.564</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Secondary data processed

Table 3. Partial Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Q</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Target (ROA)</td>
<td>1.712</td>
<td>0.089**</td>
<td>Accepted</td>
</tr>
<tr>
<td>External Pressure (LEV)</td>
<td>3.226</td>
<td>0.002*</td>
<td>Accepted</td>
</tr>
<tr>
<td>Financial Stability (CHANGE)</td>
<td>-4.143</td>
<td>0.000*</td>
<td>Accepted</td>
</tr>
<tr>
<td>Personal Financial Needs (OSHIP)</td>
<td>-0.768</td>
<td>0.444</td>
<td>Rejected</td>
</tr>
<tr>
<td>Ineffective Monitoring (BDOUT)</td>
<td>-0.536</td>
<td>0.593</td>
<td>Rejected</td>
</tr>
<tr>
<td>Quality of External Auditor (BIG)</td>
<td>-1.106</td>
<td>0.271</td>
<td>Rejected</td>
</tr>
<tr>
<td>Nature of Industry (NATUR)</td>
<td>-4.076</td>
<td>0.000*</td>
<td>Accepted</td>
</tr>
<tr>
<td>Change in Auditor (CPA)</td>
<td>-0.129</td>
<td>0.898</td>
<td>Rejected</td>
</tr>
<tr>
<td>Change in Director (DCHANGE)</td>
<td>0.298</td>
<td>0.766</td>
<td>Rejected</td>
</tr>
<tr>
<td>CEO Duality (CEODUAL)</td>
<td>1.835</td>
<td>0.069**</td>
<td>Accepted</td>
</tr>
<tr>
<td>Marginal Cost (MC)</td>
<td>0.130</td>
<td>0.897</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Description: * < 0.05 and ** < 0.1
Source: Secondary data processed

Financial Stability and Fraud of Financial Statements

The financial stability is assessed with the CHANGE variable. Based on the CHANGE signification statistics of 0.000 < 0.05 with a t-count of -4.143, which implies that the CHANGE significantly affect to the fraud of financial statements. It indicates that the lower CHANGE will increase tendency of fraud of financial statement. This research proves that the CHANGE variable might indicate occurrence of financial statement fraud, and H1 is accepted.

Financial stability can cause pressure for the company, thus causing management always to strive to maintain financial stability in any way. Although the company is in an unstable state, management will continue to maintain financial stability by manipulating its financial statements. This happens because the company wants to display information
about improving the company's prospects. Hence, the investors are still interested in investing in the company. This finding is in agreement with the prior research showing that financial stability can be an indication of Financial Statement Fraud (Aprillia et al., 2015; Prasmaulida, 2016; Husmawati et al., 2017; Herdiana & Sari, 2018; Susanti, 2018; Rahmatika et al., 2019; Taherinia & Talebi, 2019).

**Financial Target and Fraud of Financial Statements**
Financial targets are assessed with ROA. Based on the results of ROA signification statistics of 0.089 < 0.1 with a t-count of 1.712. The financial target significantly affects the tendency of fraud of financial statements. The higher the ratio of ROA indicates the higher possibility of the fraud of financial statements. Therefore, this finding demonstrates that ROA might be used to indicate fraud of financial statement and H2 is accepted. In the company's activities, the company will set the target that it wants to achieve. For example, the target can be the level of profit that the company wants to achieve. However, if the target is higher than its ability, it will cause pressure to reach the target. In achieving the target, management will do anything to meet the target by conducting fraud of financial statements. Therefore, this finding is in accordance with Akbar (2017); Aprillia et al. (2015); Herdiana & Sari (2018); Huang et al. (2017); Nanda et al. (2019); Rengganis et al. (2019); Setiawati & Baningrum (2018); Taherinia & Talebi (2019) study which states that ROA might indicate fraud of financial statement.

**Personal Financial Need and Fraud of Financial Statements**
The personal financial needs are assessed with OSHIP. Based on OSHIP signification statistics of 0.444 > 0.05. This research proves that OSHIP cannot indicate Financial Statement Fraud, and H3 is rejected.

A low shareholding in the company may indicate a clear separation between shareholders and manager of the company, which causes managers do not have sufficient capacity to conduct financial statement fraud (Yesiariani & Rahayu, 2016). This study is not in line with which states that OSHIP can indicate Financial Statement Fraud. This finding is in agreement with previous studies stating that OSHIP cannot indicate financial statement fraud (Quraini & Rimawati, 2018).

**External Pressure and Fraud of Financial Statements**
External pressure is assessed with LEV. Based on the results of lev signification statistics of 0.002 < 0.05. This research proves that LEV might indicate financial statement fraud and H4 is accepted. This research is consistent with Quraini & Rimawati (2018); Tiffani & Marfuah (2015); Wicaksana & Suryandari (2019) finding that LEV can indicate fraud of the financial statements.

**Ineffective Monitoring and Fraud of Financial Statements**
Ineffective monitoring is assessed with BDOUT. Based on BDOUT signification statistics of 0.593 > 0.05. This research proves that BDOUT cannot be used as an indication of fraud of financial statement, and H5 is rejected. The occurrence of fraud can be abated with establishing a sensible monitoring. Existence of the independent board of commissioners is expected to supervise operation of the company objectively and independently from the intervention, and preventing managers to commit financial statement fraud. The finding is
contrast with prior studies that found BDOUT might indicate fraud of financial statements (Husmawati et al., 2017).

**Quality of External Auditor and Fraud of Financial Statements**

The quality of external auditors is assessed with BIG. Based on big signification statistics of $0.271 > 0.05$. This research proves that BIG cannot be used to indicate that Financial Statement Fraud and H6 are rejected. The role from external auditors, both KAP BIG-4 and KAP Non-BIG-4 have the same role in conducting audits of financial statements also determine errors that cause financial statements containing material misstatements based on the standards of accountants generally applicable. So that the quality of external auditor does not significantly affect to the tendency of fraud of financial statements. Therefore, the finding contradicts with Akbar's study (2017), Ulfah et al. (2017), Utami & Pusparini (2019). However, it is in line with several studies that found BIG cannot indicate the tendency of fraud of financial statement.

**Nature of Industry and Fraud of Financial Statements**

The nature of industry is assessed with NATUR. Based on natural signification statistics of $0.000 < 0.05$. This research proves that NATUR might indicate fraud of financial statement and H7 is accepted. This finding is in line with Akbar (2017); Ayem & Astuti (2019) stating that NATUR can be an indication of fraud of financial statement.

**Change in Auditor and Fraud of Financial Statements**

The change of auditor is assessed with CPA. Based on CPA signification statistics of $0.898 > 0.05$. This research proves that CPA cannot be used as indication of financial statement fraud, and H8 is rejected. A company changed its auditors is not because of want to eliminate of examination of financial statements by the prior auditors, but the company requires to comply with the Regulation of Government of Republic of Indonesia number 20 of 2015 article 11 paragraph 1 suggesting that an audit services on financial statements by a Public Accountant is restricted up to a maximum of 5 (five) years of consecutive financial years (Yesiariani & Rahayu, 2016). Another possibility is that the company changed its auditors because the auditor cannot meet the performance of the former external auditors. Therefore, this study is not in line with which states that CPA can indicate financial statement fraud. Otherwise, the finding supports prior studies that found CPA cannot indicate fraud of financial statement (Quraini & Rimawati, 2018).

**Change of directors and Fraud of Financial Statements**

Change of directors is rated with CHANGE. Based on the results of CHANGE signification statistics of $0.766 > 0.05$. This research proves that CHANGE cannot be used to indicate fraud of financial statement, and H9 is rejected. The main reason a company to change its directors is not to cover-up fraud that is committed by the former directors. Instead, the change because its wants an improvement on performance. This study is not in accordance with Akbar (2017); Husmawati et al. (2017); Siddiq & Achyani (2017); Syahputra (2019); Triyanto (2019); Ulfah et al. (2017); Utami & Pusparini (2019) which found that CHANGE might indicate occurrence of fraud of financial statement. However,
this finding corroborates previous studies that CHANGE cannot indicate fraud of financial statement fraud.

**CEO duality and Fraud of Financial Statements**
CEO duality is assessed with CEODUAL. Based on CEODUAL signification statistics of 0.069 < 0.1. This research proves that CEODUAL might indicate fraud of financial statement and H10 is accepted. This finding is in accordance with prior studies which states that CEODUAL can be an indication of financial statement fraud (Akbar, 2017).

**Marginal Cost and Fraud of Financial Statements**
Marginal cost is assessed with MC. Based on mc signification statistics of 0.897 < 0.05. This research proves that MC might indicate financial statement fraud, and H11 is rejected. The company has done the perfect competition in competing. Perfect competition keeps collusion between companies from happening. So the collusion that is proxied with marginal costs can not be an indication of collusion. The finding of this study iscontradict with finding of Vousinas (2019). However, these results prove that collusion cannot yet be one of the indications of financial statement fraud. The study also failed to establish marginal costs as a proxy for collusion (Fonseca & Normann, 2008; Phillips et al., 2011).

**CONCLUSION**
The findings of this study suggest that 'Financial Stability, Financial Target, and External Pressure as proxies of stimulus can explain the tendency of fraud of financial statements. In addition, the Nature of Industry as one of the proxies of opportunity and CEO duality as a proxy of ego can also explain indications of fraud of financial statements. Moreover, this research provides evidence that Personal Financial Needs as one of the proxies of stimulus, Change in Director as capability proxy, Marginal Cost as a proxy of collusion, Ineffective Monitoring and Quality of External Auditor as a proxy of opportunity and C Change in Auditor as a proxy of rationalization cannot be an indication of fraud of financial statements. However, this study failed to prove collusion as an explanation of the existence of indications of Fraud of Financial Statements in the fraud hexagon theory. The limitation of this research is that it needs more research on proxy assessment for collusion. The research's advice is to include new variables such as Z-SCORE, assessing collision could also use bonuses received by managers. Hopefully, future research can use other fraud detection methods to be compared with the Beneish M-Score model.

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**REFERENCES**
ACFE. (2018). Global Study on Occupational Fraud and Abuse 2018. Association of...
Certified Fraud Examiners, 10, 80.


Lin, J.W., Hwang, M.I., Becker, J.D., 2003. A fuzzy neural network to assess the risk of


