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Abstract - This study aims to analyze the fraud pentagon theory and financial distress for detecting fraudulent financial reporting in banking companies in Indonesia listed on the Stock Exchange in 2012-2017. The sampling technique used purposive sampling with the sample of 30 companies. The hypothesis testing was done by testing multiple linear regression models which were processed using SPSS 15.0. The result shows that quality of external auditor has a positive effect on fraudulent financial reporting, change in auditor has a negative effect on fraudulent financial reporting, director change has a positive effect on fraudulent financial reporting, frequent number of CEO picture has a positive effect on fraudulent financial reporting, and financial distress has a positive effect on fraudulent financial reporting. The other variables which are financial stability and external pressure have no effect on fraudulent financial reporting.

Keywords: Fraud Pentagon Theory, Financial Distress, Fraudulent Financial Reporting

I. INTRODUCTION

The important role of financial statements as a basis for decision-making for its user triggers companies to make their financial report as attractive as possible. The drive to always look good by various parties encourages companies to manipulate certain parts, to finally present information that is not in accordance with the company's real conditions. Information presented in financial statements that have been manipulated will provide wrong basis for decision-making. This certainly can cause losses to the users that affect the company not only financially, but also to the company’s reputation; reducing the company's ability to maintain business continuity and even result in bankruptcy (Priantara, 2013).

Fraud in some accounting literatures is described in three major parts. Tuanakotta (2012) explains more about occupational fraud by describing it in the form of fraud tree which has three branches, namely, fraudulent financial statements, asset misappropriation and, corruption. Among 3 kinds of frauds, fraudulent financial reporting has the biggest median loss with a median loss of $975,000 (Association of Certified Fraud Examiners (ACFE), 2016). Thus, prevention and detection of fraud are absolutely necessary for minimizing the impact of fraud.

This study aims to investigate and provide further explanation of whether fraud indicators in Crowe fraud pentagon theory (2011) consisting of Pressure, Opportunity, Rationalization, Competence, Arrogance can help to detect the tendency of fraudulent financial reporting to arise. In this study we added financial distress variables by reason of fraud that are more likely to be found in companies facing bankruptcy (Platt & Platt, 2002). This research not only contributes to the literature on the topic of fraud financial reporting but also serves as a way for investor to analyze whether or not a company commits fraud.

II. HYPOTHESIS DEVELOPMENT

Financial stability’s effect on detecting fraudulent financial reporting

In fraud pentagon theory developed by Crowe (2011), one of the important factors that can trigger fraudulent financial reporting is pressure. Pressure can be explained by proxies which can be used to measure fraudulent financial reporting such as financial stability, external pressure, financial targets, and personal financial needs (Skousen, Smith, & Wright, 2008b). Financial stability is used to be the proxy in this research because it is widely used by previous researches in the same field.

The unstable condition of a company will create pressure for the management because the company’s performance will lower in the public eye. Thus, when financial stability and company profitability are threatened, managers will be more motivated to commit fraud by manipulating their financial report. This is supported by the results of research by Tessa & Harto (2016) and Apriliana & Agustina (2017) who stated that financial stability has a
negative influence on fraudulent financial reporting, hence the following hypothesis:

\[ H_1 = \text{Financial stability has a negative effect on detecting fraudulent financial reporting} \]

External pressure’s effect on detecting fraudulent financial reporting

External pressure is the part of pressure element in the fraud pentagon theory developed by Crowe (2011). The company's need for external financing sources is one of the pressures often faced by management, this is because companies have demands to remain competitive in the market so that the need for funding sources is one of the important things. The existence of external funding sources will encourage the existence of programs including research and development for companies (Skousen et al., 2008).

Skousen et al., (2008) argue that the source of external pressure, one of which, is the company's ability to pay debts or meet debt requirements. When a company has large debts and has a greater risk of loss, it is likely that there is a potential for doing fraud in reporting because companies need to have high profits to convince creditors that they can pay their debt. The management will also be depressed by high credit risk along with high leverage ratio of the company. Because, it will be increasingly difficult for the company to obtain additional loans, for fear that the company cannot afford to pay off its debts. Researches conducted by Siombing (2014), Tessa & Harto (2016), and Listyawatini (2016) concluded that the higher the leverage, the greater the possibility of violating credit agreements through fraudulent financial reporting. This leads us to formulate our second hypothesis.

\[ H_2 = \text{External auditor quality has a positive effect on detecting fraudulent financial reporting} \]

External auditor quality’s effect on detecting fraudulent financial reporting

Opportunity in pentagon fraud theory is an element which is one of the factors to find out fraud in financial statements (Crowe, 2011). Opportunity means that fraud occurs when there is an opportunity. Based on SAS No. 99, opportunity is divided into three conditions, namely the nature of industry, effective monitoring, and organizational structure. This study used the third condition which is ineffective monitoring. Ineffective monitoring is proxied by external auditor quality, measured by whether the company uses a Big 4 or non-Big 4 public accounting firm.

The selection of auditing firm plays an important role in relation to the quality of audits. The financial statements audited by Big 4 auditing firms have qualities that can be categorized as reliable compared to non-Big 4 auditing firms (Raenaldi, 2015). It is because auditors who are members of the Big 4 have high reputation, so that Big 4 auditors will try to maintain market share, public trust, and reputation by providing protection to the public (Sanjaya, 2017). Rini & Achmad (2012), Raenaldi (2015), and Apriliana & Agustina (2017) studies show the results that the quality of external auditors has a negative relationship with fraudulent financial statements. Thus, our third hypothesis can be formulated as follows:

\[ H_3 = \text{External auditor quality has a negative effect on detecting fraudulent financial reporting} \]

Changes in auditor’s effect on detecting fraudulent financial reporting

Rationalization in fraud pentagon theory is one element that can encourage fraud in the company's financial statements (Crowe, 2011). Rationalization means an attitude of justification for a crime committed by himself (Shelton, 2014). This element is an impressive reason to justify fraud and consider fraud as something that is justified and reasonable to do. Rationalization can further be measured by change in auditors (Skousen et al., 2008b).

Changes in auditors can be considered as a maneuver to remove any trace of fraud (fraud trail) identified by the previous auditor (Hanum, 2014). If an external auditor is replaced, it is possible for the new auditor to not deeply know about the company, so that fraud that is committed by the management can be covered up more. It shows that when a company changes its external auditor, the auditor is trying to cover up fraudulent financial reporting. Rachmawati (2014), Husmawati, Septiani, Rosita, & Handayani (2017), and Ulfah, Nuraini, & Wijaya (2017) found that change in auditors had a positive effect on fraud in financial statements, hence the following hypothesis:

\[ H_4 = \text{Changes in auditor have a positive effect on detecting fraudulent financial reporting} \]

Changes in director’s effect on detecting fraudulent financial reporting

Fraud can arise due to the ability of an individual who plays an important role in the company to commit fraud. Individual capability is a personal nature and ability that has an important role, where fraud can occur with the support of the presence of three other elements (Wolfe & Hermanson, 2004). Capability means how much power and capacity of a person to commit fraud. There are several components of capability, including: Position/Function, Brains, Confidence/Ego, Coercion Skills, Effective Lying, and Immunity to Stress. In previous studies related to capability, the research conducted by Abdullahi, Mansor, & Nuhu (2015), suggested that there was a significant positive relationship with the existence of a capability to commit fraud. In this study, we will use the change of the board of directors as a proxy for capability/competence.

Changes in the board of directors are generally loaded with political content and the interests of certain parties that can trigger the emergence of conflict of interest. Wolfe & Hermanson (2004) explained that changes in the board of directors can lead to stress periods within the company that will impact the opportunities for committing fraud. Pardosí’s research (2015), Putriash (2016), and Husmawati et al. (2017) provide results that director change has a positive effect on fraudulent financial statements. Hence, our fifth hypothesis can be formulated as follows:
Advances in Economics, Business and Management Research, volume 102

62

$H_5 = \text{Changes in director have a positive effect on detecting fraudulent financial reporting}$

Frequent number of CEO’s picture’s effect on detecting fraudulent financial reporting

Based on fraud pentagon theory, the arrogance level of CEO can be a factor that triggers the likelihood of fraudulent financial reporting. Photos and information related to the track record of CEO displayed in the annual report can present the level of arrogance and superiority that the CEO has (Simon, 2015). The higher the level of arrogance, the higher the likelihood of fraud, because the CEO feels that he has the status and position that he thinks is crucial and important in the company, so that any rules and internal controls will not apply to him. The researches of Tessa & Harto (2016), Apriliana & Agustina (2017) and found that frequent number of CEO’s picture has a positive effect on the detection of fraudulent financial statements. Based on that, we propose our hypothesis:

$H_6 = \text{Frequent number of CEO’s picture has a positive effect on detecting fraudulent financial reporting}$

Financial distress’ effect on detecting fraudulent financial reporting

Financial distress is a condition where the company's operational cash is unable to pay off existing debts and it can trigger the manager or finance department to repair or even manipulate the company's financial reporting (Yudhanti, 2015). This is in line with agency theory proposed by Jensen & Meckling (1976) which states that the agent as the investment fund manager and the party responsible for the sustainability of the company will always try to display the best conditions of the company so that the principal keeps investing their funds into the company that is.

Managers of companies in distress tend to commit fraud to cover up adverse performance. They are more likely to indulge in improper revenue recognition and manipulation of expenses, liabilities and accounts receivable (Deloitte Forensic Center, 2008). Researches of Hsiao & Lin (2010) and Prihanthini & Sari (2013) show that financial distress has a positive significant influence on fraud in financial reporting. Thus, our final hypothesis is as follows:

$H_7 = \text{Financial distress has a positive effect on detecting fraudulent financial reporting}$

III. RESEARCH METHOD

This study uses fraudulent financial reporting as dependent variable which is proxied by discretionary accruals by calculating total accruals (TA) and nondiscretionary accruals (NDA) (Husmawati et al., 2017). Modified Jones Model was chosen to be the proper model for calculating DA from banking companies. The operational definition of variables can be seen in the table below:

### Table 1. Operational Definition of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraudulent Financial Reporting (DA)</td>
<td>DA = TA-NDA</td>
</tr>
<tr>
<td>Financial Stability (ACHANGE)</td>
<td>$ACHANGE = \frac{(Total\ Assets_t - Total\ Assets_{t-1})}{Total\ Assets_{t-1}}$</td>
</tr>
<tr>
<td>External Pressure (LEV)</td>
<td>$Lev = \frac{Total\ Liabilities}{Total\ Assets}$</td>
</tr>
<tr>
<td>External Auditor Quality (BIG)</td>
<td>Dummy variable, if there is a change of Public Accounting Firm during the period of 2012-2017 it is given code 1, 0 otherwise</td>
</tr>
<tr>
<td>Changes in Auditor (CPA)</td>
<td>Dummy variable, if there is a change of directors during the period of 2012-2017 it is given code 1, 0 otherwise</td>
</tr>
<tr>
<td>Changes in Director (DCHANGE)</td>
<td>Dummy variable, if there is a change of director during the period of 2012-2017 it is given code 1, 0 otherwise</td>
</tr>
<tr>
<td>Frequent Number of CEO’s Picture (CEOPIC)</td>
<td>Total picture of CEO in the annual report</td>
</tr>
<tr>
<td>Financial Distress (FD)</td>
<td>Altman Z-Score Modified Jones Model</td>
</tr>
</tbody>
</table>

Population and Sample

The population in this study is all banking companies listed on the Indonesia Stock Exchange (BEI) in 2012-2017. The sample was chosen using purposive sampling technique with criteria as follows:

1. Banking companies which went public and listed on the Indonesia Stock Exchange (BEI) in 2012-2017
2. Companies publishing audited annual report w in the period of 2012-2017
3. The data that are needed for the research are available in publication during the period of 2012-2017
Analysis Method

Multiple regression analysis was used as a method for testing the hypotheses. The regression equation can be seen below:

$$\text{FFR} = \beta_0 + \beta_1 \text{ACHANGE} + \beta_2 \text{LEV} + \beta_3 \text{BIG} + \beta_4 \text{CPA} + \beta_5 \text{DCHANGE} + \beta_6 \text{CEOPIC} + \beta_7 \text{FD}$$

With:
- FFR : Fraudulent Financial Reporting
- $\beta_0$ : Constants
- ACHANGE : The ratio of change in total assets
- LEV : The ratio of total liabilities to total assets
- BIG : Quality of external auditor
- CPA : Changes in auditor
- DCHANGE : Changes in director
- CEOPIC: Number of CEO’s picture
- FD : Financial distress

IV. RESULT AND DISCUSSION

Based on multiple linear regression testing with SPSS 15 the coefficient of determination or adjusted $R^2$ is 0.496 or 49.6%. It means that all variables in the model explained 49.6% of the factors were involved to carry out fraud in the financial reporting. Hypotheses test result is shown in the table below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-count</th>
<th>t-table</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHANGE</td>
<td>-1.082</td>
<td>1.9799</td>
<td>0.272</td>
</tr>
<tr>
<td>LEV</td>
<td>1.732</td>
<td>1.9799</td>
<td>0.350</td>
</tr>
<tr>
<td>BIG</td>
<td>0.818</td>
<td>1.9799</td>
<td>0.003</td>
</tr>
<tr>
<td>CPA</td>
<td>-0.901</td>
<td>1.9799</td>
<td>0.001</td>
</tr>
<tr>
<td>DCHANGE</td>
<td>1.634</td>
<td>1.9799</td>
<td>0.000</td>
</tr>
<tr>
<td>CEOPIC</td>
<td>0.025</td>
<td>1.9799</td>
<td>0.013</td>
</tr>
<tr>
<td>FD</td>
<td>1.514</td>
<td>1.9799</td>
<td>0.000</td>
</tr>
</tbody>
</table>

*significant level of 0.05

Source: SPSS 15 data processing

Financial stability’s effect on detecting fraudulent financial reporting

Based on the results of the hypothesis testing, it was found that the significance value is 0.272 where the value is greater than 0.05. It means that hypothesis 1 is rejected or financial stability has no effect on fraudulent financial reporting. Company management does not just manipulate its financial statements when the company experiences poor financial stability. The manipulation will make it more difficult for the company in the future because the company will be facing more difficult situation when they want to obtain investment funds from internal and external parties (Skousen et al., 2008). In addition, hypothesis 1 in this study is not supported because the financial stabilities of its sample companies are in a stable financial condition. In that conditions, management does not have a pressure to commit fraud. This result is supported by Yulia & Basuki (2016), Oktarigusta (2017), and Ulfah et al. (2017).

External pressure’s effect on detecting fraudulent financial reporting

Based on the t test that has been carried out, the significance value of 0.350 is obtained where the value is greater than $\alpha$ 0.05 or 0.350 > 0.05 so $H_2$ is rejected. Therefore, external pressure does not affect fraudulent financial reporting. Hypothesis 2 is not supported in this study because the measurement of bank success is seen from the amount of deposits, demand deposits, and deposits originating from the community or commonly referred to as third party funds (DPK). Supported by an increase in assets, bank will still be able to repay its debts. This study is consistent with the results of Amara, Amar, & Jarboui (2013), Yulia & Basuki (2016), and Saputra & Kesumaningrum (2015).

External auditor quality’s effect on detecting fraudulent financial reporting

The significance value for the third hypothesis is 0.003, the value is smaller than 0.05 or 0.003 > $\alpha$ 0.05 with a positive coefficient. This shows that the use of Big 4 auditing firms will increase the tendency for the management to commit fraud. This result contradicts the hypothesis that was built in this study. The reason that can explain this result is that fraud that occurs is not entirely detectable by companies using Big 4 auditing firm. The audit conducted by Big 4 auditing firms does not always guarantee higher audit quality. This is evidenced by the fact that popular cases of fraud in accounting as in the cases of ENRON, British Telecom, and Farmastis Ligand, Inc. all involved Big 4 auditing firms as their external auditor.

Changes in auditor’s effect on detecting fraudulent financial reporting

The result of the t test obtained a significance value of 0.001 where the value is lower than 0.005 or 0.001 < 0.005 with a negative regression coefficient. This result contradicts the hypothesis that was built in this study. Long-term working relationship between external auditor and company allows the risk of excessive familiarity to arise which will affect the independence of an external auditor. Under that condition, external auditor and the client are vulnerable to face conflict of interest which can reduce audit quality. The longer the audit engagement, the auditor will be more familiar with its client which causes auditor to overtrust the client. This result is consistent with Nadia (2015).
Changes in director’s effect on detecting fraudulent financial reporting

The significance value of this variable is 0.000. The value is lower than 0.05 or 0.000 < 0.05 with a positive regression coefficient, based on that H0 is accepted. It means that director change has a significant positive effect on fraudulent financial reporting. When there is a change of directors, the new directors will need time to adapt or in other words experience a stress period. The stress period will make initial performance not optimal. So that the more often a company changes its directors, the more often a stress period will occur which will make it easier for the management to do financial report manipulation. This result is consistent with Pardosi (2015), Putriasih (2016), and Husmawati et al. (2017).

Frequent number of CEO’s picture’s effect on detecting fraudulent financial reporting

The hypothesis testing obtained a significance value of 0.013 where the value is smaller than 0.05 with a positive regression coefficient. It means that H0 is accepted or it can be concluded that the frequent number of CEO’s picture has a positive effect on fraudulent financial reporting. The frequency of appearance of CEO’s picture in an annual report can illustrate the level of arrogance and superiority of the CEO. High level of arrogance and superiority makes the CEO feels that internal control is no longer valid because the CEO has a status and position which he thinks is important in the company. This argument is reinforced by the theory put forward by Crowe (2011) where the arrogance element as one of the fraud risk factors as measured by the appearance of CEO photos can be used to analyze the occurrence of financial report manipulation. This result is supported by Tessa & Harto (2016), Apriliana & Agustina (2017), and Devy dkk (2017).

Financial distress’ effect on detecting fraudulent financial reporting

The result of the t test shows a significance value of 0.000 with a positive regression coefficient. The value is lower than the significance level of 0.05, thus H0 is accepted. It can be concluded that financial distress has a positive effect on fraudulent financial reporting. When a company experiences financial distress, managers tend to manipulate their financial statements in order to continue to provide a good signal by displaying short-term profit performance that always increases despite the fact that the condition of the company is in trouble. This result is consistent with Hsiao & Lin (2010), Prihandini & Sari (2013), and Nugroho (2015).

V. CONCLUSION

The results show that the quality of external auditor, changes in auditor, changes in director, frequent number of CEO’s picture, and financial distress have effects in explaining the likelihood of fraudulent financial reporting through earnings management. However, this study does not prove the effects of financial stability and external pressure in detecting fraudulent financial reporting.

This study is subject to certain limitations:

1. The population in this study is only limited to one type of company, so it cannot be generalized to all types of companies.
2. This study only uses secondary data by analyzing the company’s annual report so that it cannot deeply know about the presence or absence of fraud.
3. Researchers only use data from banking companies listed on the Stock Exchange in 2012-2017 so that this study cannot provide long-term predictions.

REFERENCES


