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Pentagon Fraud Analysis in Detecting Fraudulent Financial Reporting

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ABSTRACT

The purpose of this study was to analyze the influence of fraud pentagon theory in detecting the fraudulent financial reporting. Fraud pentagon theory is the development of the previous fraud theory of fraud triangle and fraud diamond. This research uses eight variables that are hypothesized to affect fraudulent financial reporting. The population in this study are manufacturing companies basic industrial and chemical sector listed on the Indonesia Stock Exchange (IDX) during the 2017-2019. The sample was determined by purposive sampling technique and obtained a sample of 105 companies. This research uses statistical analysis by regression analysis. The results in this study are financial target, external pressure, institutional ownership, and capability had effect in detecting fraudulent financial reporting. Financial stability, opportunity, rationalization, and arrogance had no effect in detecting fraudulent financial reporting.

INTRODUCTION

Financial reporting is a form of corporate responsibility on financial data and operational activities of a company for users of financial information. Financial reporting can function optimally if it is presented following qualitative elements to stakeholders, which are management, employees, investors, creditors, suppliers, customers, and the government. Financial reporting shows to what extent an effort has been made to improve the company's performance in the previous period and plan all activities that possibly increase the company's value for stakeholders.

The motivation to make financial statements appears well before stakeholders often forces companies to manipulate certain parts, thus resulting in the improper presentation of information. Actions to manipulate financial reports committed by companies are often referred to as fraud and the fraudulent practice of financial reporting is more commonly known as fraudulent financial reporting.

Several theories explain the analytical methods and are used to detect potential fraudulent financial reporting, known as fraud triangle (Cressey 1953), which is then developed into a fraud diamond (Wolfe and Hermanson 2004), and the theory established from the two previous theories is termed as Pentagon fraud (Crowe 2011).

The results of this study represent research that applies Crowe's fraud pentagon theory. It is used since fraud indicators described in Crowe's fraud pentagon theory are far more complete than other similar theories such as the fraud triangle theory and the fraud diamond theory.

The elements in Crowe's fraud pentagon theory consist of five variables or eight indicators. The pressure variable is measured by financial stability, financial target, external pressure, and institutional ownership. The opportunity variable is measured by ineffective monitoring. The rationalization variable is measured by the change in auditor, while the capability variable is measured using change on director, and the arrogance variable is measured by a frequent number of CEO's pictures.

The research object used in this study is the financial statements of manufacturing companies listed on the Indonesia Stock Exchange in the 2017-2019 period. The deliberation of choosing

manufacturing companies is due to a higher potential for fraudulent financial statements in manufacturing sector companies compared to other sectors (Faidah and Suwarti, 2018).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Agency Theory

Agency theory aims to understand and solve problems that arise due to incomplete information when making agreements or contracts (Gudono, 2012: 139). The analysis unit in agency theory is the contract that underlies the relationship between the principal and agent so the focus of the theory is on determining the most efficient contract that establishes the relationship between the principal and agent.

Conflict of interest between the principal and agent prompts agency problems that may affect the quality of reported earnings. Oftentimes, the information reported is according to the actual state of the company or is called asymmetric information. An example of this asymmetric information is fraudulent financial reporting, when the agent does not state that the company is losing money, the agent finds a way to keep the company profitable.

With the information possessed, the agent seizes opportunities for the conditions that occur and intends to gain self-profit and may harm other parties. Agents will try many ways, such as manipulating figures in financial statements, changing information, and presenting improper amounts and disclosures that can mislead readers of financial statements. These opportunities can cause fraudulent financial reporting in a company (Zimbelman, 2014).

Fraud

The Association of Certified Fraud Examiners (ACFE 2019) defines fraud as actions against the law committed deliberately for a specific purpose (manipulate or disclose false reports to other parties) by people from inside or outside the organization for personal or collective gain that may directly or indirectly harm other parties.

Nurharyanto (2002) states that fraud is a white-collar crime, abuse of trust, embezzlement, and irregularities. Due to differences in the

implications of fraud on auditors, it is classified into two levels, employee fraud, and management fraud. Suryandari and Endiana (2016) explain that several general methods are usually used by perpetrators in fraud actions, first is playing the accounting system in which the perpetrators use the accounting system as a means to create the results they want. For instance, is to markup or markdown income as desired. Actors may manipulate the assumptions or methods normally used to calculate depreciation expense, allowance for doubtful debts, allowance for obsolete inventory, and so on. The second is beating the accounting system, in which the fraud actor provides false information (fictitious) into the accounting system to manipulate the results of the reported accounting cycle. The third is going outside the accounting system in which the fraud actor discloses financial statements to his liking. Such financial statements must be adjusted to the operating entity's financial reporting process with additional adjustments to obtain results according to the actor's wishes.

Fraudulent Financial Reporting

The Association of certified fraud examiners (ACFE, 2019) defines fraudulent financial reporting as a deliberate misreport of a company's financial state through deliberate misstatement or omission of amounts or disclosures in financial statements to deceive users of financial statements. Furthermore, (Karyono, 2013: 4) reveals that fraudulent statements include actions committed by company's officials or executives through financial engineering. Financial reporting containing fraud elements can result in a decrease in the integrity of financial information and may lead to wrong decisions by stakeholders.

Karyono (2013: 98) suggests that detection of fraudulent financial reporting can be conducted by comparing the results of the analysis on the report with the previous one. The comparison can also be done on financial data. Fraud in the financial statement disclosure can be detected using: first, vertical analysis, which is a technique used to analyze the relationship between items in the income statement, financial position, or cash flow statement through percentage description. The second is horizontal analysis, which is a technique for analyzing the percentage changes in financial statement items in several reporting periods. The third is ratio analysis, which is a tool for measuring the relationship between item values in the

financial statements. For example, the current ratio, embezzlement, or cash theft can cause a decrease in the calculation of the ratio.

In various studies on fraud, the F-Score is often used to detect financial statement fraud. The F-Score is a fraudulent financial reporting detection model developed using a scaled logistic probability technique (Dechow et al., 2011). Seven ratios contained in the F-Score model include RSST accruals, changes in receivables, changes in inventory, percentages of soft assets, changes in cash sales, changes in return on assets, and issuance, in which the financial statements with an F-value score greater than one should be suspected of committing fraudulent. The changes in cash sales variable has a significant negative relationship and other variables have a positive and significant relationship with fraudulent financial reporting (Dechow et al., 2011).

Pentagon Theory Fraud

Following the time, the fraud theory is also experiencing developments. The latest theory that examines the factors that trigger fraud in detail is the fraud pentagon theory (Crowe's fraud pentagon theory). This theory was put forward by Crowe Howart in 2011. The fraud pentagon theory is an extension of the fraud triangle theory that was previously proposed by Cressey in 1953 and the fraud diamond theory that was suggested by Wolfe and Hermanson in 2004. This theory complements one element of fraud, namely arrogance. Thus, the fraud pentagon consists of five indicators: pressure, opportunity, rationalization, capability, and arrogance; (1) Pressure, the existence of incentives/pressure, or the need to commit fraud. This pressure can be emerged due to various things including lifestyle, economic demands, financial and non-financial issues; (2) Opportunity, a situation that opens up opportunities to allow fraud to occur. Opportunity is the element most likely to be minimized through the application of processes, procedures, and efforts to detect early fraud; (3) Rationalization is one of the important elements of fraud, in which the perpetrator seeks justification for his actions. Attitude or character provokes one or more individuals to rationally commit fraud. Management integrity (attitude) is a major determinant of the quality of financial reports. (4) Capability, fraud will never occur without the person who has the ability to commit one. A

person's position or function in an organization can provide the ability to create or take advantage of opportunities, a person with good ability to recognize opportunities so that fraud tactics are properly conducted and gain maximum benefits (Tuanakotta, 2010); (5) Arrogance, individuals can commit fraud easily because they think or consider themselves superior among others and think that the policy does not apply to them. It is supported by the company's state which has become more developed and complex than before, as well as fraud perpetrators are getting trickier and able to access various company information (Golden et al., 2004).

Financial Stability

Based on the Statement on Auditing Standards (SAS) No. 99 financial stability is a state that describes a company's finances in a stable condition. Therefore, financial stability is often used as a measure of company performance so that it can become the basis for economic decision-making. One indicator that describes the property owned by a company is total assets. Total assets indirectly show the stability of a company. A company is considered large or small depending on the total assets possessed (Nurharyanto, 2002).

Management often comes under pressure to exhibit that the company has been able to manage assets properly so that the profit it generates can be maximized and managers will face pressure when financial stability is threatened. For this reason, management uses financial statements as a tool to cover up inadequate financial stability conditions by committing fraudulent financial reporting.

Financial Target

Robbins & Coulter (2004: 176) define targets as the desired results for individuals, groups, and all financial organizations to be achieved. Every company shall set targets as a measure of the performance to be achieved as well as to assess the success or failure of the work program that has been arranged.

Management is required to constantly show good performance for the company in order to achieve the financial targets that have been preplanned. Financial targets are a risk due to strong pressure on management to achieve financial targets upon management or directors' regulations, including the calculation of bonuses and incentives

received by employees (SAS No. 99). One of the measurements to assess the level of profit obtained by the company for the efforts it incurred is ROA (Return on Assets). Kusumawati et al., 2018 defines ROA as a comparison between net profit after tax and the total assets of an entity.

The emergence of pressure to achieve financial targets to earn bonuses for performance results and maintaining the existence of company performance can lead to the possibility of the influence of pressure on fulfilling financial targets on the fraudulent financial reporting incidence (Vivianita et al., 2018).

External Pressure

External pressure is a condition that forces one's condition due to external influences. An example of a condition that describes external pressure is a significant pressure to obtain the capital needed to maintain competitiveness while still considering the company's financial position (Tuankotta, 2013).

The expectations of external parties on company management certainly bring impact on the company. Creditors, for example, have claims on a portion of the company's flow for interest and principal payments. In funding, creditors will consider the level of risk and expectations concerning assessing the company's ability to pay interest and principal on the loan (Brigham & Houston, 2006: 30).

When a company experiences external pressure from outside the company, it can be identified that the risk of material misstatement is greater due to fraud committed by the company.

External pressure proxied by using the leverage ratio, which is the ratio between total liabilities and total assets, is an excessive pressure felt by management to meet the requirements or expectations of third parties.

Institutional Ownership

Institutional ownership has a good impact on the company, in addition to investing a lot, a majority shareholder also helps to increase the company's operational supervision. It happens because the majority shareholders are easily lured by the practice of financial statement manipulation in making decisions (Priantara, 2013: 12).

Institutional ownership has the ability to control management through an effective monitoring process so as to reduce fraudulent financial reporting. A certain percentage of shares owned by an institution can affect the preparation of financial statements which does not eliminate manipulation according to the interests of the company management.

The bigger the shares owned by the institution, the more likely the company will feel pressured so that it commits fraudulent financial reporting. Institutional ownership is proxied by the ratio of share ownership by institutions, which is the ratio between the total share ownership owned by the institution and the total shares outstanding (Agusputri et al., 2019).

Opportunity

Opportunity is a situation that provides an opportunity for an individual to commit fraud. Fraudulent financial reporting is impossible to happen without opportunities or chances in the right conditions (Tessa, 2016).

Nurharyanto, 2002 suggests six opportunity factors that stimulate an individual to commit fraudulent financial reporting: lack of control in preventing or detecting fraud, inability to assess work quality, failure to discipline fraud perpetrators, lack of supervision of access to information, negligence to anticipate fraud, and lack of an audit trail.

Opportunity arises when the company's internal control system is vulnerable, ineffective supervision, and bad organizational governance. This situation leads to fraudulent financial reporting in a company (Tuanakotta, 2014).

Rationalization

Rationalization is a condition in which each fraudulent action committed is considered a reasonable act or even justified because it is considered to be a common practice by the company (Riandani & Rahmawati, 2019). The justification attitude taken by fraud perpetrators is usually based on several aspects; the perpetrators consider that action taken is something others commonly do, the perpetrators believe that they have done a great service to the company, and the perpetrators think the action has a good purpose to solve the problem (Priantara, 2013).

Rationalization attitude causes the level of fraudulent financial reporting in a company bigger because they consider that the action is normal and acceptable.

Capability

Hay (2013) in Shelton (2014) states that capability is the nature of individuals who conduct fraud which encourages them to look for opportunities and take advantage to commit fraud. This opinion affirms that in addition to environmental factors, behavioral factors are also considered as predictors of fraud. Capability can result in a very severe threat because the actors in the organization are people who have power, have intelligence, and understand the systems within the organization. Perpetrators can commit a white-collar crime. This type of fraud poses a very large and significant threat to the organization.

Wolfe and Hermanson (2004) suggest that fraud cannot happen without those who have the right ability to conduct so. The perpetrators must have a good ability to recognize the opportunities to be able to carry out fraud tactics appropriately and gain maximum benefits. Fraud occurs when there is a change in the board of directors to improve the performance of previous management. Changes in the board of directors may create a stress period, allowing more chances for fraudulent financial reporting. Changes in the board of directors can promote initial performance less optimal because it takes time to adapt.

Arrogance

Arrogance is an attitude of superiority over one's rights and the perception that internal controls or company policies do not apply to an individual. Generally, arrogance attacks those who have an important role in a company and is often found in large companies (Golden et al., 2006).

A company is led by a CEO who is responsible for company performance and is authorized to regulate company policies. It is more likely for a CEO to behave arrogantly to his own will because he perceives that he is in control of the company goals. The high level of arrogance allows fraudulent financial reporting in a company because the CEO is aware that internal control does not apply to him because of the sense of ownership and position in the company. Thus, the level of arrogance in this

study can be identified using the frequent number of CEO's pictures (Zimbelman, 2014).

HYPOTHESIS DEVELOPMENT

Financial Stability in Detecting Fraudulent Financial Reporting

Financial stability in a company can be assessed by the increase in total assets from year to year. If in the current period the company experiences a volatile position, the company is considered unstable. Therefore, the potential for fraudulent financial reporting will be higher. When the total assets owned by the company are abundant, the company is considered capable of providing maximum returns for investors, and vice versa. The low total assets owned will create pressure for management because the company's performance appears to decline, which may narrow the flow of investment funds in the following year. For that reason, the management commits fraudulent financial reporting as a means to cover up the company's unfavorable stability condition.

Research conducted by Tiffani, 2009 and Apriliana & Agustina, 2017 provides empirical evidence that financial stability has an effect in detecting fraudulent financial reporting. Based on this description, the hypothesis developed is:

H1: Financial stability has an effect in detecting fraudulent financial reporting

Financial Target in Detecting Fraudulent Financial Reporting

Financial goals of return on business that will be achieved by the company are often referred to as financial targets. If the financial targets set by the company cannot be achieved as planned, the management will try to cover it up and fraudulent financial reporting is one of the alternatives.

The measurement to assess the profit target obtained by the company for the business expensed is ROA (Return On Assets). The higher the ROA earned by a company, the better the company's performance is, and vice versa. The pressures on the achievement of financial targets experienced by the management to achieve its goals include getting a bonus for performance appraisals and maintaining the existence of company performance. However, efforts to improve performance by seizing higher

goals may lead to the possibility of fraudulent financial reporting misconduct.

Research conducted by Vivianita & Indudewi, 2019 provides empirical evidence that financial targets affect fraudulent financial reporting detection. Based on this description, the hypothesis developed is:

H2: Financial targets have an effect in detecting fraudulent financial reporting

External Pressure in Detecting Fraudulent Financial Reporting

External pressure is a condition in which the company is in a prone position due to a negative atmosphere surrounding the business environment and directly affects the company's financial condition. The high level of pressure from outside the company results in fraudulent financial reporting carried out by the company's management. External pressure is proxied by using the leverage ratio, which is the ratio between total liabilities and total assets.

Saputra and Kesumaningrum's research, 2017 shows empirical evidence that external pressure has an effect in detecting fraudulent financial reporting. Based on this description, the hypothesis developed is:

H3: External Pressure has an effect in detecting fraudulent financial reporting

Institutional Ownership in Detecting Fraudulent Financial Reporting

The existence of institutional ownership in a company will become a pressure for the company because the management has greater responsibility given the responsibility is carried out not only to an individual but also to the institution. This state leads the company to opt for fraudulent financial reporting so that investors continue to invest in the company. Besides, the large amount of share ownership of the institution urges management to do more efforts so as not to lose these investors, such as polishing financial reports through fraudulent financial reporting.

Saputra and Kesumaningrum's research, 2017 shows empirical evidence that the greater the share ownership by the institution, the more likely the company will feel pressured, thus driving the company to carry out fraudulent financial reporting. Based on this description, the hypothesis developed is:

H4: Institutional ownership has an effect in detecting fraudulent financial reporting

Opportunity in Detecting Fraudulent Financial Reporting

Opportunity is a chance that exists due to weak sanctions, the inability to assess the quality of performance, as well as the existence of other conditions that support fraudulent financial reporting in a company. In this research, opportunity is measured by ineffective monitoring which is a condition where there is ineffectiveness of the company's internal control system. The lack of control from the internal company has provoked a separate opportunity for some parties to carry out fraudulent financial reporting. Weak management supervision will lead to fraudulent financial reporting. Supervision is closely related to the board of commissioners. A larger proportion of the board of commissioners can prevent fraud in the company.

Research by Erika and Erni, 2017 results in empirical evidence that the higher the level of the ineffectiveness of the supervision carried out by the board of commissioners, the higher the possibility of the company feeling pressured so it carries out fraudulent financial reporting. Based on this description, the hypothesis developed is:

H5: Opportunity has an effect in detecting fraudulent financial reporting

Rationalization in Detecting Fraudulent Financial Reporting

Rationalization is a behavior or character that inspires an individual to commit misconduct supported by a corporate environment that allows them to do such acts and justifies the dishonest act. In this research, rationalization is measured by the change in auditor. Audit failure in a company can happen due to several factors, one of which is a change of auditors in the company. New auditors do not understand the overall condition of the company so it is easier for management to commit fraud that is not detected by the auditors. Therefore, management will continue to carry out fraudulent financial reporting and considers it a natural behavior because the internal auditor cannot find the fraud.

Research by Fabiolla et al. (2021) shows empirical evidence that the more frequent changes in auditors conducted by the company, the higher

the chance of the company making fraudulent financial reporting. Based on this description, the hypothesis developed is:

H6: Rationalization has an effect in detecting fraudulent financial reporting

Capability in Detecting Fraudulent Financial Reporting

Several things that need to be considered in the capability are the position of the perpetrator, the capacity to understand and exploit the accounting system, weaknesses in the company's internal control, and high self-confidence in which the perpetrators believe that they will not be detected and the ability to collaborate with other people to cover fraudulent financial reporting actions. Capability is proxied by a change of directors. Wolfe and Hermanson (2004) state that changes in the board of directors may cause stress periods and it will get worsened if the new directors take advantage of their capabilities to commit fraud so the more frequent changes of directors, the higher the fraudulent financial reporting rate occurring.

Research by Bayagub and Zulfa, (2018) suggests empirical evidence that the more frequent changes of directors a company, the more likely the company will carry out fraudulent financial reporting. Based on this description, the hypothesis developed is:

H7: Capability has an effect in detecting fraudulent financial reporting

Arrogance in Detecting Fraudulent Financial Reporting

Arrogance is an excessive attitude of individuals to display their rights and pride because they are superior to others. In this study, the arrogance variable is calculated by the frequent number of CEO's pictures, which is the number of CEO photos displayed on the company's annual report. The number of CEO photos displayed in a company's annual report can represent the level of arrogance or superiority that the CEO has so that in order to maintain this position, a CEO does not hesitate to undertake fraudulent financial reporting.

Faidah & Suwarti's research, 2018 states that the more often the CEO's photo is in the company's annual report, the higher the possibility of the company doing fraudulent financial reporting. Based on this description, the hypothesis developed is:

H8: Arrogance has an effect in detecting fraudulent financial reporting

changes in assets uses the following formula: (Skousen et al., 2009):

RESEARCH METHODS

Population and Research Sample

The population in this study were entire manufacturing companies in the basic industry and chemicals listed on the IDX in the 2017-2019 period. The sampling method used purposive sampling with the following criteria: (1) Basic industry and chemical of manufacturing companies listed on the IDX in the 2017-2019 period (2) The company has published complete financial reports consecutively in the 2017-2019 period (3) The company has used rupiah currency in its financial statements (4) The company has presented all the data used to measure the variables under the study.

Based on the main source of financial reports and company annual reports from the Indonesia Stock Exchange (IDX) website, www.idx.co.id and the official websites of each company from 35 manufacturing companies in the basic and chemical industry in the span of three-year research, it was obtained analysis units of 105 companies.

Operational Definition of Variables

The fraudulent financial reporting variable is proxied using the fraud score model as set by Dechow et al. (2009). The F-Score model is the sum of two variables, namely accrual quality and financial performance (Skousen and Twedt 2009), which can be formulated by the equation: F-Score = Accrual Quality + Financial Performance. Accrual quality is symbolized by RSST = Richardson, Sloan, Soliman, and Tuna

$$RSST \text{ Accrual} = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{\text{Average Total Assets}}$$

Financial Performance = Change In Receivable + Change In Inventories + Change In Cash Sales + Change In Earnings.

Financial stability is proxied by the ratio of changes in total assets (achange). The financial condition is deemed healthy if there is a change in the amount of total assets that represent the wealth of the company. It is said so since the management's instinct always desires to disclose growth and increased financial performance. The ratio of

$$ACHANGE = \frac{(\text{Total Assets } (t) - \text{Total Assets } (t-1))}{\text{Total Assets } (t-1)}$$

The financial target is proxied by ROA. Return on assets is a scale of the company's ability to generate returns on assets. It is the task of management to achieve the targets that have been predetermined by the company each year. Skousen et al., 2009. ROA is formulated as follows: Net income after tax/ Total Assets

External pressure is proxied using the leverage ratio. If the company has high leverage, it denotes that the company has a large debt and the credit risk is also high. Skousen et al., 2009 leverage is formulated as: Total Debt/Total Assets.

Institutional ownership is proxied by the ratio of share ownership by institutions. An indication when institutional ownership is in a company, it will become a pressure on the company itself. Skousen et al., 2009 institutional ownership can be measured using: Total Institutional Ownership Share/Total Outstanding Shares.

The opportunity value is referred to the value of ineffective monitoring. This study proxies ineffective monitoring with the ratio of independent commissioners from the comparison between the number of commissioners and the total members of the board of commissioners. Ineffective monitoring is measured using the formula (Skousen et al., 2009): Total Independent Commissioners/Total Board of Commissioners.

This study proxies rationalization with the change in auditor. The measurement uses dummy variables. Capability is proxied by the change of directors with calculation using dummy variables. Arrogance is proxied by the frequent number of CEO's pictures. It can represent the level of arrogance or superiority of the CEO. The frequent number of CEO's pictures is measured by considering the total of CEO's pictures displayed in an annual report.

Data analysis technique

Hypothesis testing used multiple linear regression analysis with the following equation:

Descriptive statistical analysis provides an overview of the variables can be seen in Table 1 below:

$$\text{FFR} = \beta_0 + \beta_1 \text{FS} + \beta_2 \text{FT} + \beta_3 \text{EP} + \beta_4 \text{IO} + \beta_5 \text{OP} + \beta_6 \text{RL} + \beta_7 \text{CB} + \beta_8 \text{AR} + e$$

Information:

FFR	=	<i>Fraudulent Financial Reporting</i>
β_0	=	Constant Regression Coefficient
β_1 - β_8	=	Regression Coefficient of Each Proxy
FS	=	<i>Financial Stability</i>
FT	=	<i>Financial Target</i>
EP	=	<i>External Pressure</i>
IO	=	<i>Institutional Ownership</i>
OP	=	<i>Opportunity</i>
RL	=	<i>Rationalization</i>
CB	=	<i>Capability</i>
AR	=	<i>Arrogance</i>
e	=	Residual (<i>error</i>)

RESULTS AND DISCUSSION

The descriptive statistical analysis presents an overview of the variables as shown in Table 1 below:

Table 1. Descriptive statistics

Variable	N	Mini- mum	Maxi- mum	Mean	Std. Dev.
Fin.Stability	105	-0.38	1.61	0.0930	0.20860
Inst. Ownership	105	0.00	1.00	0.6658	0.31650
Opportunity	105	0.20	0.80	0.3961	0.10155
Rational.	105	0.00	1.00	0.3524	0.48000
Capability	105	0.00	1.00	0.4952	0.50238
Arrogance	105	2.00	11.00	4.9619	2.17027
FFR	105	-2.94	2.80	0.2185	0.70944
Valid N (listwise)	105				

Based on the results of the descriptive analysis in Table 1, it can be interpreted that fraudulent financial reporting obtained a mean score of 0.2185, indicating that fraudulent financial reporting was measured by an F-Score of 21.85%. It shows that the level of fraudulent financial reporting in the basic and chemical industry in the 2017-2019 period was 21.85%.

Financial stability is a condition that indicates that the company's financial state is stable. According to the results of descriptive analysis, it shows that financial stability represented by changes in assets attained a mean score of 0.0930, implying that the average manufacturing company in the basic and chemical industry sector in 2017-2019 had a change in assets of 0.0930. The average relative change of assets compared to the previous year was 9.30%.

Financial target is excessive pressure on management to achieve the financial targets set by the board of directors. The results of the descriptive analysis of the financial targets are proxied with ROA of 0.0371, in other words, the average manufacturing company in the basic and chemical industry sector 2017-2019 had a ROA of 0.0371. Every one rupiah of total assets is targeted to contribute to a profit of 0.0371 after tax.

External pressure is excessive pressure on management to meet the requirements or expectations of third parties. The results of descriptive analysis of external pressure are proxied with leverage of 0.4668, denoting that the average manufacturing company in the basic and chemical industry sector in 2017-2019 was 0.4668. Every one rupiah of assets generated will bear liability of 0.4668.

Institutional ownership expresses a situation in which the finances of institutional shareholders are also influenced by the financial state of the company. The results of the descriptive analysis show a mean score of 0.6658, signifying that the average manufacturing company in the basic and chemical industry sector in 2017-2019 had institutional ownership which is proxied by institutional ownership of 0.6658, or in other words, the total outstanding shares of 66.58% were shares owned by institutions.

Opportunity is a situation that allows moments for fraud to occur. The results of the descriptive analysis show a mean score of 0.3961, meaning that the average manufacturing company in the basic and chemical industry sector in 2017-2019 had the opportunity, which is proxied by independent commissioners of 0.3961. It can be determined that the average ratio of independent board of commissioners was 39.61. % of the total board of commissioners.

Rationalization is a condition in which the perpetrators justify their actions. The results of the descriptive analysis show that the mean score of 0.3524, indicating that they have rationalization, which is proxied by a change of auditors of 0.3524. On average, manufacturing companies in the basic industry and chemical sector in 2017-2019 did not change auditors.

Capability is the ability of the perpetrator to commit fraud. The results of the descriptive analysis show the mean score of capability which is proxied by a change of directors of 0.4952, interpreting that

the average manufacturing company in the basic industry and chemical sector in 2017-2019 did not change directors.

Arrogance is a superiority attitude that an individual assumes that company policies do not apply to him, thus triggering the possibility of fraud. The mean score of arrogance proxied by the total number of CEO's picture displayed in an annual report was 4.9619, meaning that the average CEO's picture displayed in an annual report is five times.

Linear regression statistical test requires classical assumption test. The results of the classical assumption test show that the data has passed the classical assumption test which includes the normality test, heteroscedasticity, multicollinearity, and autocorrelation. The regression equation is a fit model, with F_{count} value of 37.926 with a significant value of 0.000. The coefficient of determination (Adjusted R2) is 0.740.

Table 2
Hypothesis testing

Variabel	Coefficient	T	Sig.
(Constant)	1,312	6,982	0,000
Financial Stability	-0,218	-1,364	0,176
Fianancial Target	1,689	3,477	0,001
External Pressure	-2,507	-15,366	0,000
Institusional Own.	-0,458	-4,423	0,000
Opportunity	0,065	0,205	0,838
Rationalization	-0,038	-0,573	0,568
Capability	0,114	1,642	0,026
Arrogance	0,003	0,188	0,852
F hitung			51,980
R ²			0,812
Adjusted R ²			0,797
Signifikansi F			0,000 ^b

Financial stability has no effect on fraudulent financial reporting

The t-test results indicate that the financial stability variable has no effect on fraudulent financial reporting. It is possible due to a large change in assets that causes the company to get the spotlight from the public, government, investors, and creditors. Also, the information about the company will spread in no time. Appropriate supervision by management and shareholders in asset management, comprehensive application of GCG principles, effective and efficient risk management, and development of company human resources eventually makes financial stability as measured by the ratio of changes in assets does not affect the fraudulent financial reporting of a company.

When the company's condition is unstable or experiencing a decline, managers in the company do not necessarily manipulate financial statements to improve the company's prospects. If the manager does so, it will affect the financial condition of the company in the future. Therefore to avoid big losses in the future, managers will not commit fraudulent financial reporting.

Manufacturing companies in the basic and chemical industry sector in 2017-2019 had changes in relative assets compared to the previous year of 9.30%, the financial stability was unstable. It happened due to several possibilities, such as the development of assets, third-party funds, and increased credit by companies during 2017-2019. Financial stability did not affect fraudulent financial reporting, so financial stability had no effect in detecting fraudulent financial reporting.

The results of this study are consistent with the research conducted by Wahyuni and Budiwitjaksono (2017) and Ulfah et al. (2017) that financial stability has no effect on fraudulent financial reporting.

Financial target has an effect on fraudulent financial reporting

The t-test results show a significance value of 0.001 with a positive coefficient. It indicates that the financial target had an effect in detecting fraudulent financial reporting. The financial target is measured by the ROA ratio, a high ROA value indicates that the company can generate high profits and target a higher profit for the coming period. To obtain a high ROA, the company must have a high financial target. Thus, financial target has an effect in detecting fraudulent financial reporting.

Determination of financial targets by managers must follow the condition of the company from various visible aspects because the determination of targets can create pressure which, as a result, will lead the perpetrator to commit fraud to achieve targets. Too high targets set by company managers tend to create more ambitious managers, thus allowing them to act through various ways to achieve the targets that have been predetermined, such as fraudulent financial reporting. This action has an effect on increasing the possibility of fraudulent financial reporting.

The results of this study are consistent with the research of Setiawati and Baningrum (2018) and

Agusputri and Sofie (2019) that financial target has an effect on fraudulent financial reporting.

External pressure has an effect on fraudulent financial reporting

The t-test results show that external pressure had an effect in detecting fraudulent financial reporting so that the third hypothesis is accepted. External pressure is measured by the leverage ratio. If the company has high leverage, it means that the company is deemed to have large debt and the credit risk is also high. High leverage is associated with a greater likelihood of breaching credit covenants and a higher chance to raise additional capital through loans.

External pressure is excessive pressure on management to meet the requirements or expectations of third parties. When a company experiences external pressure, as consequence, a greater risk of material misstatement can be identified due to fraudulent financial reporting. One of the pressures that company management often experiences is the need for external financing to remain competitive in the market so companies choose to make loans as a source of funding for the company's operations.

If the liability level is high, pressure from external parties may prompt the company's management to experience difficulties in determining the company's. To put it in other words, the greater the debt the company has, the tighter the supervision is exercised by creditors and the higher possibility of fraudulent financial reporting. The results of this study are in line with research conducted by Septriani and Handayani (2018) and Devi et al. (2017) that external pressure has an effect in detecting fraudulent financial reporting.

Institutional ownership affects fraudulent financial reporting

The t-test results show that institutional ownership had an effect on fraudulent financial reporting so that the fourth hypothesis is accepted. The involvement of other parties in determining the direction of the company based on the size of the shares owned by the institution may result in limited development of the company's management performance due to the demands of investors from institutions or institutions, making the possibility of fraudulent financial reporting higher.

Institutional ownership in a company will become a different pressure for the company. It is because the management has a bigger duty since the accountability is carried out not only to an individual but also to an institution or organization.

The greater amount of institutional ownership compared to the individual ownership makes management do a greater effort so as not to lose investors who can support the sustainability of the company. The alternative that can be opted is to polish the financial statements through manipulation. Finally, it can be indicated that the greater the ownership of the institution, the more likely the company feels pressured and commits fraudulent financial reporting. The results of this study share similarities with the research studied by Saputra and Kusumaningrum (2017) that institutional ownership has an effect on fraudulent financial reporting.

Opportunity has no effect on fraudulent financial reporting

The results of the t-test show that the opportunity has an effect in detecting fraudulent financial reporting thus the fifth hypothesis is rejected. Opportunity is departed from the value of ineffective monitoring as measured by the ratio of independent commissioners. It is the ratio between the number of commissioners and the total membership of the board of commissioners.

The independent board of commissioners will increase the level of effectiveness of the board in supervising a company and the implementation of duties and responsibilities independently based on the principles of good corporate governance to prevent fraudulent financial reporting practices.

In this study, the opportunity for fraudulent financial reporting which did not affect might be due to the placement or addition of members of independent commissioners was merely to fulfill the formal provisions of the Indonesia Stock Exchange (IDX) which requires an independent board of commissioners of at least 30% of the total number of commissioners. Meanwhile, the majority shareholders (controlling shareholder) remained to hold an important role in the company so that the number of independent commissioners in the company was not a significant factor. Based on this, it can be determined that the proportion of independent commissioners in a company does not

affect the opportunity level which may increase the likelihood of fraudulent financial reporting.

The results of this study correspond to the research conducted by Bawekes and Simanjuntak (2018) and Nasution et al. (2019) that opportunity has no effect in detecting fraudulent financial reporting.

Rationalization has no effect on fraudulent financial reporting

The results of the t-test show that rationalization had no effect in detecting fraudulent financial reporting making the sixth hypothesis rejected. This variable was tested with the significance of the regression coefficient of change in auditor. Changes in auditors in the company consider the application of regulations issued by the government. However, under certain conditions, the company will change auditors if necessary. Company dissatisfaction can be used as one of the deliberations for changing auditors in a company. The company must expect the maximum performance from the auditors in conducting supervision.

Change in auditors by the company is not to avoid detecting fraudulent financial reporting but the company implements the Republic of Indonesia Government Regulation No. 20 of 2015 article 11 paragraph 1 stating that the provision of audit services on financial statements of an entity by a public accountant is limited to a maximum of five consecutive fiscal years and paragraph 4 stating that public accountants may return their services after not providing services for two consecutive fiscal years.

The existence of other causes that arise such as failure in payments due to high audit fees or disagreements between auditors and the company is a problem that often exists. Nonetheless, it does not directly indicate the potential for fraud. Once the auditor is dismissed or resigns, the auditor may experience difficulties in the first year in detecting fraudulent financial reporting. Such an event can happen if the auditor does not have sufficient experience and knowledge so that it is burdensome to detect the potential for fraud in the company.

Therefore, rationalization, as measured by the change in auditor, cannot be used to detect fraudulent financial reporting. The results of this study are similar to research conducted by Riandani (2019) and Herdiana and Permatasari (2018) that

rationalization has no effect in detecting fraudulent financial reporting.

Capability affects fraudulent financial reporting

The t-test results show a significance value of 0.026 with a positive coefficient, meaning that capability had an effect in detecting fraudulent financial reporting so the seventh hypothesis is accepted. Capability is measured by the presence or absence of director change in the company. Changes in the company's board of directors are an effort by management and shareholders to improve company performance. Shareholders' dissatisfaction with the performance of the board of directors can be the motive behind the change of directors. The appointment of new directors is expected to provide greater benefits for the company.

However, changes in the board of directors in a company are not necessarily because the management and shareholders want to improve the company performance but to transfer responsibility to the new director through the GMS. However, if the changes in the board of directors are not according to the provisions, it will indicate that the company attempts fraudulent financial reporting.

The process of changing the director results in changes in the work environment, thus fraud can be carried out by those who find opportunities and are also supported by opportunities. Besides, changes in the board of directors in a company can be a step taken to get rid of directors who are suspected to find out information about the fraud practices, and changes in directors are deemed to require adaptation time so that initial performance is not optimal. Therefore, it can be determined that a change in the board of directors of a company can affect the capability level which consequently will increase the possibility of fraudulent financial reporting.

The results of this study are consistent with the research of Apriliana and Agustina (2017) and Pardosi et al. (2015) that capability has an effect in detecting fraudulent financial reporting.

Arrogance has no effect on fraudulent financial reporting

The t-test results indicate that arrogance had no effect on the detection of fraudulent financial reporting so that the eighth hypothesis is rejected. This variable is measured by the frequency of the

CEO's picture displayed in the company's annual report. Numerous CEO's pictures signify that he attempts to be recognized by the wider community and it will generate a sense of self-confidence built on the achievements that have been made, life skills, principles, and upheld norms. This study provides empirical evidence that large or small the frequency of CEO's pictures in the company's annual report will not affect in detecting fraudulent financial reporting.

It is concluded so because posting CEO's pictures is a tradition to introduce the structure of the company in annual reports for each period and cannot represent an act of arrogance or superiority of CEO. The more CEOs in the company, the more various ideas are contributed to run the company. If these ideas are mutually beneficial, in general, it will benefit the company. Finally, fraudulent financial reporting in preparing the company's financial statements can be minimized.

Based on this explanation, it can be indicated that the frequent number of company CEO's pictures cannot affect the level of arrogance which will increase the opportunity of fraudulent financial reporting. The results of this study correspond to the research by Nurrohman and Hapsari (2020)

and Faradiza (2018) that arrogance has an effect in detecting fraudulent financial reporting.

CONCLUSION

This study was conducted to examine the effect of financial stability, financial targets, external pressure, institutional ownership, opportunity, rationalization, capability, and arrogance on fraudulent financial reporting. The research results prove that: financial targets, external pressure, institutional ownership, and capability had an effect in detecting fraudulent financial reporting. Financial stability, opportunity, rationalization, and arrogance had no effect in detecting fraudulent financial reporting.

This research still entails limitations, such as only covers one sector of manufacturing companies in the basic industry and chemical sectors listed on the Indonesia Stock Exchange in the span of three years, namely 2017-2019.

Future research is expected to expand the scope of data that becomes the object of the research and increase the sample of the research year so that the results can be more accurate in detecting fraudulent financial reporting.

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