Detection of Fraudulent Financial Statement; Can Perspective of Fraud Diamond Theory be applied to Property, Real Estate, and Building Construction Companies in Indonesia?

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Detection of Fraudulent Financial Statement; Can Perspective of Fraud Diamond Theory be applied to Property, Real Estate, and Building Construction Companies in Indonesia?

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***Abstract*—The increasing number of cases related to accounting scandals in the world has caused various parties to assume that management has commited fraudulent financial statement. Detection of fraudulent financial statements must be carried out so it can be prevented fraud and the possibility of a scandal is prolonged. The research examines the effects of pentagon fraud theory (pressure, opportunity, rationalization, competence and arrogance toward fraudulent financial statement: The property, real estate and building construction companies listed on Indonesia Stock Exchange (IDX) in 2014-2018 periods The data used were the secondary data based on the purposive sampling method, the number of companies were 29 companies with 5 years observation. Based on logistic regression analysis, pressure has an impact on fraudulent financial statements on the significant value of 0.045. Opportunity has no impact on fraudulent financial statements on the significant value of 0.077. Rationalization has no impact on fraudulent financial statements on the significant value of 0.291. Competence has no impact on fraudulent financial statements on the significant value of 0.107. Arrogance has an impact on fraudulent financial statements on the significant value of 0.001.**

Keywords—Fraud Pentagon, Fraudulent Financial Statement.

I. Introduction

Financial statements are an important instrument in a company that is used as a corporate communication tool to its users. Financial statements contain records of accounting information for a period. Companies can reflect the condition financial and existence of their performance through financial statements. (Fahmi, 2010: 152).

Guide to Financial Accounting Standards (PSAK) No. 1 describes the financial goals, information about the company's financial position, company performance and changes in the company's financial position during the accounting period Information in financial statements is useful for various interested parties. Those interested parties can come from within or outside the company. Parties from inside the company such as company owners, management and company employees. While parties from outside the company such as investors, creditors, government and society (Soemarso, 2009: 5).

The presentation of financial statements must be presented accurately and relevant. Accurate and relevant financial reports can be used by users as a tool in decision making. However, in reality the presentation of financial statements sometimes does not guarantee that the information in the financial statements is submitted in the actual circumstances. However, in reality the presentation of financial statements sometimes does not guarantee that the information in the financial statements is conveyed in its true condition. The encouragement or motivation to always look good by various parties often causes companies to make fraudulent financial statements or fraudulent financial statements (Sihombing and Shiddiq, 2014).

One form of fraudulent financial statement that is widely used is earnings management. Earning management is often regarded as a rational and fair act in principle, because management uses the accrual basis of preparing financial statements. Besides earning management can cause a company's financial statements look better (Sihombing and Shiddiq, 2014).

Phenomenon related to fraudulent financial statements in companies property, real estate and building construction. There were cases of financial report manipulation in one of the state-owned enterprises in Indonesia engaged in construction, PT. Waskita Karya (Persero),Tbk in 2009. In the 2008 financial statements there was manipulation by recording the excess presentation in the financial statements. The company recorded all values in the contract amounting to Rp. 1 trillion as revenue and acknowledged that all projects had been completed. However, the actual situation is that the company has just completed a project of Rp. 300 billion for three months. This is done in order to get the impression that the company is experiencing profits. For this case, the Ministry of BUMN requested PT. Waskita Karya to correct corporate profits in 2008 (Rahadiana, 2009).

From Mexico in 2009 - 2011, Desarrolladora Homex SAB de CV is proven to have committed fraud by recognizing the fake sale of 100,000 housing units. The Securities and Exchange Commission (SEC) found evidence that the building considered to be sold had not yet been built. This case resulted in the suspension of temporary stock trading activities and Homex was prohibited from selling new shares in the United States for five years (Priantara, 2017).

Based on the two cases above, fraud can occur domestically and abroad. The financial title statement was deliberately carried out by management by engineering the material value of the financial statements. This Fraudulent financial statement is carried out because of encouragement and motivation so that financial statements look good and can attract the attention of investors and potential investors. In

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addition, companies that have good financial statements will increase the share price of the company.

The increasing number of cases related to accounting scandals in the world has caused various parties to assume that management has committed fraudulent financial statements. Detection of fraudulent financial statements must be carried out so it can be prevented fraud and the possibility of a scandal is prolonged.

Based on the description above, the researcher is interested in conducting research on the Effect of Fraud Pentagon (Pressure, Opportunity, Rationalization, Competence, and Arrogance) on the Detection of Fraudulent Financial Statements in Companies Property, Real Estate and Building Construction Listed on the Indonesia Stock Exchange in 2014-2018.

II. LITERATURE REVIEW

Agency Theory (Agency Theory)

The concept of agency theory according to Jensen and Meckling (1976) is a theory that explains the agency relationship (agency relationship) and the problems that arise from the relationship. This agency relationship is a contract between two or more parties. In this connection, one party is called an agent and the other party is called the principal. The shareholders are called principals. While the management is called an agent. The principal wants a high return on his investment, while the agent wants high compensation. This causes a conflict of interest or conflict of interest, namely the management acts for personal interests without considering the interests of the shareholders. From this conflict of interest there will arise selfishness from management and then the management will conduct fraudulent financial statements (Tesaa and Puji, 2016).

Eisenhardt (1989) argue that theory of agency is based on some assumptions. First, assumptions about human nature. This assumption emphasizes that humans always prioritize self-interest, always try to avoid risk-aversion, and humans are considered to have limited rationality (bounded rationality). Second, assumptions about organization, in this assumption is that the organization is considered to be always in conflict between goals stakeholders, information asymmetric (asymmetric information) between principal and agent, and efficiency as a criterion of effectiveness. Third, assuming the information is that information is a commodity that can be traded (information as a purchasable commodity).

Fraud

Fraud is a deliberate mistake made by management or company employees. Fraud is done to trick or trick other parties with the aim of gaining personal and group benefits and is detrimental to others (ACFE, 2014). Based on The Association of Certified Fraud Examiners (ACFE) (2014), fraud is divided into three types, namely asset misappropriation or misuse of assets, fraudulent financial statements fraudulent financial statements and corruption or corruption.

Fraud triangle theory is the first one capable of explaining the elements that cause fraud. This theory is presented by Cressey in 1953. The fraud triangle elements consist of pressure, opportunity, and rationalization. Fraud triangle concept is re-introduced by Wells (2011). Hunton et al. (2004) argue that fraud is a result of the three elements which play their own roles, namely opportunity, incentive or pressure, and rationalization. Later on, he explains that opportunity exists when the internal control is inadequate or when collusion exists, allowing the perpetrators to avoid any control. Incentive or pressure, on the other hand, is what causes someone to commit deception.

Albrecht and Zimmerman (2012), fraud are combination of the following, pressure, opportunity, and rationalization. Somehow, fraud is happen because of immediate financial need or fraud gets larger and larger as confidence in the fraud gets higher and higher. But, people committed fraud because of pressure anyone, low of internal control, and have the profile of other honest people.

Pentagon Theory

Fraud pentagon theory is the most recent theory and as a complement to fraud triangle theory and fraud diamond theory. An updated theory which covers the fraud triggering factors is fraud pentagon theory (Crowe's fraud pentagon theory). Crowe (2011) presented that fraud pentagon theory is an extended version of fraud triangle theory by Cressey in 1953. This theory adds two more elements fraud namely competence and arrogance. The competence described in this fraud pentagon theory bears the same meaning as capability previously explained. Wolfe and Hermanson (2004) described that competence/capability means an employee's capability to ignore internal control, develop a concealment strategy, and control the social situation for his/her own personal benefits. Meanwhile, arrogance is the superiority attitude for having certain rights and the feeling that the company's internal control or policy are not applicable to oneself. Fraud will never exist if the regulators can apply the rules well. Here is the concept of fraud pentagon theory.

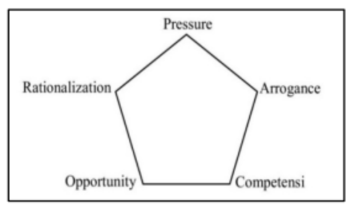

Figure1.Fraud Pentagon
Source: Fraud pentagon theory by Crowe (2011)

Pressure

Pressure is the motivation of individuals namely employees to do and hide fraud because of good pressure because financial and non-financial factors. Albrecht and Zimbelman (2012) devided pressure into four main groups. Those are financial pressure, vices, work related pressure, and other pressure. Financial factors arise because of the desire to improve lifestyle, greed or economic demands because of the high standard of living. While non-financial factors arise because of work-related pressures, such as injustice between employees, frustration at work, and actions to cover up poor performance.

Opportunity

Opportunity is a condition that will provide an opportunity for individuals to commit fraud because of their weak controls. Six majors factors that increase opportunity are lack of controls, inability to judge performance quality, failure to discipline fraudsters, lack of access to information, ignorance, apathy, an incapacity, and lack of audit trail. According to Aprillia (2017), there are opportunities because the perpetrators believe that their actions will not be detected.

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Opportunities usually occur in companies that have weak internal control systems, inadequate management oversight, weak sanctions and unclear procedures.

Rationalization

Rationalization is the existence of thoughts that can make a person to justify his actions even though these actions are wrong. According to Aprillia (2017), perpetrators who commit fraud will look for rational reasons to justify their actions. Rationalization is an attitude justification for fraudulent acts has been done. Fraud is done based on one's rationalization that the act was not an act violation (Crowe, 2011)

Competence

Competence is the ability of employees to commit fraud. According to Aprillia (2017), fraud thesis carried out by employees by penetrating internal control within the company, developing embezzlement strategies and being able to exercise control over social situations that can benefit themselves by influencing others to cooperate with them. Crowe (2011) described that competence in fraud is employee skills to ignore internal controls, develop an concealment strategy, and observe the social conditions for fulfilling his personal interests.

Arrogance

Crowe (2011) explain that arrogance is the superiority of the right to own and feel that internal control and the company policy does not apply for her. Arrogance is the nature of the lack of conscience which is a trait of superiority or arrogant and have high confidence that they are convinced that internal controls did not apply to him. According to Aprillia (2018) this arrogant nature arises because of the belief that he is able to commit fraud and there is no control over him, so the perpetrator will think that he is free to commit fraud without fear of any sanctions that befall him.

Financial Statement

Financial Statement are reports designed for decision makers consisting of balance sheets, income statements and cash flow statements (Soemarso, 2009: 34). Financial statements are the end result of an accounting process that is needed for internal and external parties that require financial information. From these financial statements economic decisions will be taken (Priatna, 2010: 31). From a management point of view, financial statements are a medium for them to communicate the financial performance of the company they manage to interested parties. Whereas if viewed from a user perspective, financial statements are expected to be used to make rational decisions in sound business practices (Fahmi, 2010: 166).

Fraudulent Financial Statement

Fraudulent financial statements is intentional or omissions in financial reporting. This deliberation is done by presenting financial statements that are not in accordance with generally accepted accounting principles (Rahmayuni, 2018). Fraud of financial statements is carried out by making misstatements to fool the users of financial statements and do it intentionally (Aprillia, 2018). Fraud of financial statements by management by making material misstatements in financial statements that can harm investors and creditors (Yesiariani and Isti, 2017). Crowe (2011) described that fraudulent financial statement is intentionality in making mistakes and mistakes in making financial statements with presentation that is not in principle generally accepted accounting. Fraudregarding the abuse of assets (assets misappropriation), corruption, and financial statement fraud.

Earning Management

According Rahmayuni (2018), there are two definitions of earnings management. In a narrow sense, earnings management as the behavior of managers in determining the amount of profit by playing games with components of discretionary accruals. Whereas in the broadest sense, earnings management is the behavior of managers to increase or reduce company profits reported at this time that occur in a unit where the manager is responsible, without increasing or decreasing the long-term economic profitability of the unit.

Earning management is one speculation made by a person managers to achieve a specific goal by applying the policies accounting as a form of decision (Scott, 2006).

III. FRAMEWORK

The influence of pressure on the detection of fraudulent financial statements.

Pressure is measured using financial stability. Financial stability explains that managers are faced with the pressure to commit financial report fraud when financial stability and / or profitability is threatened by the state of the economy, industry, or the situation of the operating entity (Rahmayuni, 2018). The total assets owned by the company can be an attraction for interested parties, such as investors, creditors and shareholders. When a company has a large total assets, it is considered capable of providing return maximumfor investors. But on the contrary, when the company's total assets decrease or even negative, investors, creditors and shareholders become uninterested in the company (Tessa and Puji, 2016).

This was supported by researchers Sihombing and Shiddiq (2014), Aprilia (2017), Rahmayuni (2018), and Aprillia (2018). Research by Skousen et.al (2009) shows the result that the greater the rate of change total assets of a company then there possible fraudulent action on the financial statements.

H1: Pressure affects the detection of fraudulent financial statements.

The influence of opportunity on the detection of fraudulent financial statements.

Opportunity is measured using ineffective monitoring. Fraud occurs because of supervision or monitoring weak so as to provide an opportunity for managers to commit fraud with earnings management. The ineffectiveness of the company's internal supervision system is caused by the dominance of management by one person or small group, lack of control, ineffective supervision of the board of directors and audit committee in the process of preparing financial statements (Sihombing and Shiddiq, 2014).

This is supported by research conducted by Diany and Ratmono (2014). Opportunity exists when the internal control is inadequate or when collusion exists, allowing the perpetrators to avoid any control. Incentive or pressure, on the other hand, is what causes someone to commit deception. Pressure can include almost everything including medical bill, expensive lifestyle, and addiction problem.

H2: Opportunity influences the detection of fraudulent financial statements.

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The effect of rationalization on the detection of fraudulent financial statements.

Rationalization can be measured using change in auditors. Auditor change in can be used as a way to reduce the possibility of detecting fraudulent financial statements by auditors. Companies tend to change their independent auditors when the company wants to hide things that are not fair with auditor quality that is lower than before (Aprillia, 2018).

This is supported by research conducted by Hanum (in Yesiariani and Isti, 2017), and Aprillia (2018).

H3: Rationalization affects the detection of fraudulent financial statements. While rationalization could attract an individual to commit a fraud, the individual himself/herself should have the appropriate capability to identify an opportunity in order for him/her to launch a fraud tactic appropriately and gain the maximum benefits.

Effect of competence on the detection of fraudulent financial statements.

Wolfe and Hermanson (2004) argue that competence / capability is qualitative fraud risk factor and is a development of the theory of fraud triangle and fraud diamond. Capability is the ability of the individual within companies to provide opportunities commit fraud. Wolfe and Hermanson (2004) explain that change in directors as a form of conflict of interest. Competence can be measured by using change in director. The position of someone in a company will provide the ability to take advantage of opportunities to commit fraud. (Aprilla, 2018).

The change in director also indicates that there is a political interest to replace the previous board of directors. While on the other hand, change in director is considered to be able to reduce the effectiveness of performance because to adapt to the culture of the new directors requires considerable time (Tessa and Puji, 2016). This is supported by research conducted by Aprilla (2018).

H4: Competence influences the detection of fraudulent financial statements.

The effect of arrogance on the detection of fraudulent financial statements

Arrogance is measured using the frequent number of CEO's picture. Frequent number of CEO picture is the number of CEO photos posted on the company's annual report. If in the company's annual report there are many photos of the CEO, then the CEO has the desire to be known to the public. This indicates that the CEO is arrogant or arrogant. (Aprilia, 2017). A high level of arrogance can lead to fraud because the CEO feels that internal controls will not apply to him because of his status and position (Tesaa and Puji, 2016).

This is supported by research conducted by Tesaa and Puji (2016), and Aprillia (2018).A CEO tends to be more public about his power and career in the company. It's done because they don't want to lose their status or position that is within the scope corporate management (or don't think so considered). Arrogance can trigger financial statement fraud with how to use and utilize it authority. Internal control any system cannot limit action and the behavior of a CEO because of power owned. The explanation is supported by the research of Simon et al (2015)

H5: Arrogance influences the detection of fraudulent financial statements

Based on the explanation that has been described, the framework in the form of a research paradigm is as follows:

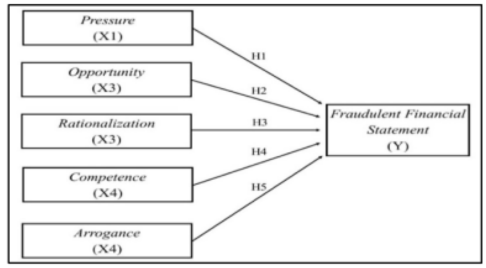

Figure 2 Theoretical Framework

IV. RESEARCH METHODS

This research is a quantitative descriptive study. Quantitative descriptive is research that attempts to explain the variables by collecting data to be processed to see the effect of these variables. This study uses a sample of companies' property, real estate and building construction listed on the Indonesia Stock Exchange (IDX) in 2014-2018. The population is 48 companies.

The sampling method used is purposive sampling method, which is sampling based on considerations and criteria. The sampling criteria in this study were companies property, real estate and building construction listed on the Indonesia Stock Exchange (IDX) during the 2014-2018 period, presenting annual reports on the company's website or IDX website during the 2014-2018 period, having a closing year of 31 December, not being delisted on the IDX during the 2014-2018 period, presenting financial statements in Rupiah, and having complete data relating to research variables for the period 2014-2018.

Based on predetermined criteria, there are only 29 companies that fulfill sample selection criteria with an observation period of 5 years, so that the total observations are 145.

Operational Variables

Fraudulent Financial Statement

Fraudulent financial statements are measured by proxies earning management . Earning management is calculated using the Beneish M-Score model. Beneish M-Score is measured using eight financial ratios to indicate whether a company has an indication to commit fraud in financial statements (Herviana, 2017). The eight financial ratios are as follows:

Table 1. Financial Ratios for Measuring Beneish M-Score

No	Rasio Keuangan	Rumus
1	Days Sales in Receivables Index (DSRI)	$\frac{Net\ receivables_t\ /Sales_t}{Net\ receivables_{t-1}\ /\ Sales_{t-1}}$
2	Gross Margin Index (GMI)	$\frac{Sales_{t-1} - COGS_{t-1}\ /Sales_{t-1}}{Sales_t - COGS_t\ /Sales_t}$
3	Asset Quality Index (AQI)	$\frac{(TA_t - (CA_t + PPE_t\ )/TA_t\ )}{(TA_{t-1} - (CA_{t-1} + PPE_{t-1}\ )/TA_{t-1}\ )}$
4	Sales Growth Index (SGI)	$\frac{Sales_t}{Sales_{t-1}}$
5	Depreciation Index (DEPI)	$\frac{\left(\frac{Depreciation_{t-1}}{Depreciation_{t-1} + PPE_{t-1}}\right)}{\left(\frac{Depreciation_t}{Depreciation_t + PPE_t}\right)}$
6	Sales General and Administrative Expenses Index (SGAI)	$\frac{\left(\frac{SG\&A\ Expense_t}{Sales_t}\right)}{\left(\frac{SG\&A\ Expense_{t-1}}{Sales_{t-1}}\right)}$
7	Leverage Index (LVGI)	$\frac{\left(\frac{Current\ liabilities_t + Long\ term\ debt_t}{Total\ assets_t}\right)}{\left(\frac{Current\ liabilities_{t-1} + Long\ term\ debt_{t-1}}{Total\ assets_{t-1}}\right)}$
8	Total Accruals to Total Assets (TATA)	$\frac{Net\ income\ from\ continuing\ operations_t - Cash\ flow\ oper}{Total\ assets_t}$

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Source: Aprillia, 2017

After calculating the eight financial ratios, then put into the Beneish M-Score formula, as follows:

$$\text{M-Score} = -4.84 + 0.920\ \text{DSRI} + 0.528\ \text{GMI} + 0.404\ \text{AQI} + 0.892\ \text{SGI} + 0.115\ \text{DEPI} - 0.172\ \text{SGAI} - 0.327\ \text{LVGI} + 4{,}697\ \text{TATA}$$

This study uses avariable dummy which is categorized into two, namely if the company indicated a fraudulent financial statement is worth "1", while the company that is not indicated by a fraudulent financial statement is "0" . If the Beneish M-Score> -2.22 is categorized as a company that performs fraudulent financial statements, a score of 1 is used and if the value of Beneish M-Score <-2.22, it is categorized as a company that does not commit fraudulent financial statements, so a score of 0 (Herviana, 2010).

Pressure

Pressure is measured using financial stability, with the following formula:

$$\text{ACHANGE} = \frac{\text{total assets}_t - \text{total assets}_{t-1}}{\text{total assets}}$$

Opportunity

Opportunity measured using ineffective monitoring, with the following formula:

$$\text{BDOUT} = \frac{\text{total commissioner independent}}{\text{total commissioner}}$$

Rationalization

Rationalization measured by using change in auditor. Change in auditor or PACPA is measured by using a dummyvariable where 1 = for companies that experience auditor turnover and 0 = for companies that do not experience auditor turnover.

Competence

Competence is measured by change in director. Change in director or DCHANGE is measured by using a dummy variable, where 1 = for companies that experience a change of directors and 0 = for companies that do not experience a change of directors.

Arrogance

Arrogance is measured by frequent number of CEO's picture. Frequent number of CEO's pictureis the number of CEO photos posted on the company's annual report

V. RESULTS AND DISCUSSION

Descriptive Statistics Analysis

Table 2. Descriptive Statistics Test Results Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
FFS	145	.00	1.00	.6414	.48126
PRESSURE	145	-.44	.76	.0939	.13303
OPPORTUNITY	145	.00	.67	.3926	.11320
RATIONALIZATION	145	.00	1.00	.1172	.32282
COMPETENCE	145	.00	3.00	.4690	.54077
ARROGANCE	145	.00	4.00	2.2897	1.06012
Valid N (listwise)	145				

Source: Secondary data processed (2018)

Test of Research Model

Dependent variable (Y) has categorical type or two choices namely fraud 1 and not fraud 0. This information can be seen in the identification table data as follows:

Table 3. Identification of Data

Original Value	Internal Value
NO	0
YES	1

Source: Secondary data processed (2018)

In this study, the amount of data used is 145 annual reports or N = 145. The completeness of the data processed in this study can be seen in thetable case processing summary, as follows:

Table 4. Data Processed

Unweighted Cases[a]		N	Percent
Selected Cases	Included in Analysis	145	100.0
	Missing Cases	0	.0
	Total	145	100.0
Unselected Cases		0	.0
Total		145	100.0

a. If weight is in effect, see classification table for the total number of cases.

Source: Secondary data processed (2018)

Assessing the Feasibility of the Regression Model

Feasibility of the regression model is assessed using the Hosmer and Lemeshow's Goodness and Fit Test.

Table 5. Feasibility of theRegression Model
Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	5.189	8	.737

Source: Secondary data processed (2018)

The output of SPSS (in table 5) shows that thevalue is Chi-square 5.189 with a significance (p) of 0.737. Based on these results, with a significance value greater than 0.05 (p> 0.05), it can be concluded that the model is able to predict the value of observations or the model is said to be fit with data and models acceptable so that this model can be used for further analysis.

Test Assessing the Overall Model

Table 6. Test Results Assessing the Overall Model (Block number 0: Beginning Block)
Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	189.268	.566
	2	189.260	.581
	3	189.260	.581

Source: Secondary data processed (2018)

Table 6 shows the value of -2LogL in block number = 0 of 189,260. Then the value -2LogL block number = 1 is shown in table 7 below:

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Table 7. Test Results of the Entire Model (Block Number = 1)
Iteration History[a,b,c,d]

Iteration		-2 Log likelihood	Coefficients					
			Constant	X1	X2	X3	X4	X5
Step 1	1	170.263	.414	2.453	2.339	-.512	.426	-.496
	2	168.847	.524	3.391	2.942	-.633	.558	-.653
	3	168.825	.544	3.531	3.017	-.644	.575	-.676
	4	168.825	.544	3.533	3.018	-.644	.575	-.676
	5	168.825	.544	3.533	3.018	-.644	.575	-.676

a. Method: Enter
b. Constant is included in the model.
c. Initial -2 Log Likelihood: 189.260
d. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

In table 4.8 -2LogL value in entering the block number = 1 afterlives independent variables namely pressure, opportunity, rationalization, competence and arrogance to be 170,263. -2LogL value in block number = 0 is 189,260. And the value -2LogL block number = 1 is 168,825. This means that the value of -2LogL has decreased by 20,435. This decrease in the value of - 2LLL indicates that the regression model is better or the model hypothesized to fit with the data of

The Determination Coefficient Test

Magnitude of the coefficient of determination in the logistic regression model is indicated by the value of Nagelkerke R Square.

Table 8 Determination Coefficient Test
Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	168.825[a]	.131	.180

Source: Secondary data processed (2018)

Based on the results of SPSS output in table 8, it can be seen that the value of Nagelkerke R Square is 0.180. This means that the variability of the dependent variable can be explained by the independent variable of 18.0%. While the remainder of 82.0% is explained by other factors not examined in this study such as financial targets, external pressure, nature of industry, return on assets, audit report, total accrual ratio, and others.

Classification Matrix

The classificationmatrix shows the predictive power of the regression model to predict the possibility of fraudulent financial statements in a company.

Table 9. Classification Table[a]

Observed			Predicted		
			FFS		Percentage Correct
			TIDAK	IYA	
Step 1	FFS	NO	19	33	36.5
		YES	13	80	86.0
	Overall Percentage				68.3

a. The cut value is .500
Source: Secondary data processed (2018)

Table 9 shows the predictive power of the regression model to predict the probability of the model prediction rate of 68.3% where 36.5% is not fraud and 86% of fraud has been predicted by the model. This means the predictive ability of the model withvariables pressure, opportunity, rationalization, competence and arrogance can statistically predict 86%.

Predictive strength of the regression model to predict the possibility of fraudulent financial statements by 86%. This shows that by using this regression model, there are 125 annual reports (86%) predicted to commit fraudulent financial statements from a total of 145 annual reports. The prediction strength of the company model that was declared not to commit fraud was 36.5%. This means that with the regression model used there are 53 annual reports (36.5%) out of a total of 145 annual reports. So that overall classification is 68.3%.

Simultaneous Test

Simultaneous tests were assessed using the Omnibus Test of Model Coefficient

Table 10. SimultaneousTest Results
Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	20.435	5	.001
	Block	20.435	5	.001
	Model	20.435	5	.001

Source: Secondary data processed (2018)

Table 10 shows the Omnibus Test of Model Coefficients with a Chi-square value of 20.435 and a degree of freedom of 5. Significant values of 0.001 more small than $\alpha = 0.05$, then Ho is rejected or H1 is accepted. This means that the variables pressure, opportunity, rationalization, competence and arrogance together have a significant effect on the fraudulent financial statement.

Hypothesis Test

Logistic Regression Analysis

Table 11. Logistic Regression Coefficient Test Results
Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	X1	3.533	1.763	4.017	1	.045	34.234
	X2	3.018	1.705	3.135	1	.077	20.460
	X3	-.644	.610	1.117	1	.291	.525
	X4	.575	.357	2.591	1	.107	1.778
	X5	-.676	.211	10.237	1	.001	.509
	Constant	.544	.867	.394	1	.530	1.723

a. Variable(s) entered on step 1: X1, X2, X3, X4, X5.
Source: Secondary data processed (2018)

Regression models formed based on estimated values of parameters in variables in the equations are as follows:

$$
\begin{aligned}
Ln = \left(\frac{FFS}{1-FFS}\right) = {} & 0{,}544 \; + \; 3{,}533\, pressure \\
& + 3{,}018\, opportunity \\
& - 0{,}644\, rationalization \\
& + 0{,}575\, competence \\
& - 0.676\, arrogance
\end{aligned}
$$

Logistic regression test results on variables *pressure* with indicators of *financial stability* or asset change ratio have a significance of 0.045 smaller than $\alpha = 0.05$. The resulting beta coefficient is 3,533. This shows that the H1 hypothesis is

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accepted. The results of this study support the research conducted by Aprilla (2018), Aprilia (2017), Tessa and Puji (2016), Rahmayuni (2018), Sihombing and Siddiq (2014), and Hanum (2014). However, it does not support the research conducted by Sunardi (2018), Yesiariani and Isti (2017), and Rachmania (2017) who concluded that *pressure* has no effect on *fraudulent financial statements*. Assets can be used to see the condition of a company's financial stability. This is because assets represent the wealth owned by the company. The unstable condition of the company is caused by management being unable to manage company assets. This causes changes in total assets that are too high or low for a certain period. The unstable financial condition was a pressure for management to commit *fraudulent financial statements* (Septriani and Handayani, 2018).

This situation is in accordance with the agency theory which states that the agent must be responsible for the principal. When the company's condition is unstable, the management is in a depressed situation because it has a poor performance and is unable to maximize the assets owned, causing changes in assets that are unstable and not in line with the expectations of shareholders. This will cause pressure on the management, thus encouraging management to commit *fraudulent financial statements* so that their financial conditions look stable (Zelin, 2018).

The logistic regression test results on variables *opportunity* with indicators *ineffective monitoring* or the ratio of independent board of commissioners have a significance of 0.077 greater than α = 0.05. The resulting beta coefficient is 3.018. This shows that the H2 hypothesis is not accepted. The results of this study support the research conducted by Aprilla (2018), Aprillia (2017), Sunardi (2018), Tessa and Puji (2016), Yesiariani and Isti(2017) Rachmania (2017), and (2014), and Hanum (2014). However, it does not support Diany and Ratmono's research (2014).

The existence of an independent board of commissioners can provide assurance that the supervision of the company will be increasingly independent and objective and far from the intervention of certain parties. However, if there is intervention in the independent board of commissioners, then the objective is not to supervise the independent board of commissioners. This means that the number or number of independent commissioners in a company is not a significant factor in increasing operational oversight of the company (Zelin, 2018).

The placement or addition of independent commissioners is only done to fulfill the formal requirements of the IDX which requires an independent board of commissioners of at least 30% of the number of commissioners in the company (Herviana, 2017).

The results of the logistic regression test on thevariable *rationalization* with theindicator *change in auditor* or auditor change have a significance of 0.291 greater than α = 0.05. The resulting beta coefficient value is -0,644. This shows that the H3 hypothesis is not accepted. The results of this study support the research conducted by Tessa and Puji (2016), Sunardi (2018), and Sihombing and Siddiq (2014). However, it does not support the research conducted by Aprilia (2018), Rahmayuni (2018), Yesiariani and Isti (2017) and Hanum (2014).

Auditor change is carried out by the company to comply with Government Regulation of the Republic of Indonesia No. 20 of 2015 concerning the Practice of Public Accountants article 11 paragraph 1 concerning the provision of audit services for financial statements of a company by public accountants is limited to a maximum of five consecutive years (Yesiariani and Isti, 2017). Changes in auditors can also occur because the company is not satisfied with the performance previous auditors, because good companies will use truly independent and objective public accountants in conducting audits (Sihombing and Siddiq, 2014).

The results of logistic regression tests on the competence variable with theindicator *change in director* or changes in directors have a significance of 0.107 greater than α = 0.05. The resulting beta coefficient is 0.575. This shows that the H4 hypothesis is not accepted. The results of this study support the research conducted by Tessa and Puji (2016), Rahmayuni (2018), Yesiariani and Isti (2017), and Sihombing and Siddiq (2014). However, it does not support the research conducted by Aprilla (2018).

Companies that make changes to directors are not a way to get rid of directors who are considered aware of *fraud* or to cover up *fraudulent financial statements.* However, the change of directors is due to the expiration of the term of office of the board of directors or the existence of directors who resign so that the company needs to recruit new directors (Rahmayuni, 2018). Change of directors is also done because the company wants a performance improvement by replacing the old directors. Change of directors is long because new directors are considered more competent and can work optimally (Setiawati and Baningrum, 2018).

The logistic regression test results on variables *arrogance* with indicators of *frequent number of CEO's picture* or the number of CEO photos displayed in the annual report have a significance of 0.001 smaller than α = 0.05. The resulting beta coefficient is -0,676. This shows that the H5 hypothesis is accepted. The results of this study support the research conducted by Aprilla (2018), Tessa and Puji (2016) and Bawekes (2018), however, do not support the research conducted by Aprillia (2017).

The more number of CEO photos posted in the annual report can indicate the high level of arrogance of the company's CEO. A high level of arrogance can lead to *fraudulent financial statements* because with the nature of the arrogance and superiority of the CEO, the CEO feels that any internal control does not apply to him (Herviana, 2017). A CEO who has the nature of arrogance is also likely to do whatever it takes to maintain his position and position (Bawekes, 2018).

VI. CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results of the testing and discussion described in the previous section, it can be concluded that *pressure* and *arrogance* have an effect on the detection of *fraudulent financial statements* on company's *property, real estate and building construction* listed on the Indonesia Stock Exchange in 2014-2018. Whereas *opportunity, rationalization* and *competence* have no effect on the detection of *fraudulent financial statements* on companies *property, real estate and building construction* listed on the Indonesia Stock Exchange in 2014-2018.

Suggestions

Research on *fraud* in the future is expected to be able to provide more quality research results by considering the

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following suggestions: It is expected that the company always displays the actual total assets in the financial statements, so that *pressure* can always be used to detect *fraudulent financial statements*. It is expected that the independent board of commissioners of the company can increase the effectiveness in overseeing the company to be able to detect *fraudulent financial statements*. It is expected that the company explains the reasons for changing its external auditor. It is expected that the company explains the reason for changing its directors. It is expected that the company will always display CEO photos in the annual report so that it can be seen whether the company is conducting *fraudulent financial statements*.

Future studies are expected to add measurements to the independent variables, because the value of *Nagelkerke R Square* from the logistic regression equation is 18% and the remaining 82%, so there are still many factors that are thought to affect the *fraudulent financial statement*. Measurements from *pentagon fraud* that can use *financial targets, external pressure, nature of industry*, *return on assets,* institutional share ownership, audit opinion, capital turnover, *total accrual ratio* so that the scope of the research variable becomes wider. And using other proxies of the dependent variables, namely F-Score, Jones Model, etc.

References

ACFE.,2014. Report To The Nations On Occupational Fraud And Abuse. Online. Global Fraud Study: http://www.acfe.com/rttn/docs/2014-report-to-nations.pdf. (13 Desember 2018)

Albrecht, W. Steve; Albrecht,Chad O; Albrecht, Conan C dan Zimbelman, Mark F. 2012. *Fraud Examination*. USA: South-Western.

Aprilia. 2017. "Analisis Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Menggunakan Beneish Model Pada Perusahaan Yang Menerapkan Aseac Corporate Governance Scorecard". *Jurnal Aset (Akuntansi dan Riset)*. Vol. 9 No. 1. Desember 2017 hal: 101-132.

Aprilla, VR 2018. "Pengaruh Financial Stability, External Pressure, Ineffective Monitoring, Change in Auditor, Change in Director dan Frequent Number of CEO Picture Terhadap Financial Statement Fraud Dalam Perspektif Fraud Pentagon (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di BEI tahun 2011-2011)". *JOM FEB*. Vol. 1 No. 1. Juni 2018 hal: 1-15.

Bawekes, H. F. 2018. Pengujian Teori Fraud Pentagon Terhadap Fraudulent Fianncial Reporting (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 2011-2015). *Jurnal Akuntansi & Keuangan Daerah*, 13, (1), 114-124.

Cressey, D. R. (1953). "Other People's Money". Montclair, NJ: Patterson Smith, pp.1- 300.

Crowe, Horwarth. 2011. The Mind Behind The Fraudsters Crime: Key Behavioral ad Eviromental Element. Crowe Horwarth International. USA

Diany, & Ratmono. 2014. "Determinan Kecurangan Laporan Keuangan: Pengujian Teori Fraud Triangle". *Diponegoro Journal of Accounting*. Vol. 2 No. 3. April 2014 hal:1-9.

Eisenhardt, Kathleem. M. (1989). "Agency Theory: An Assesment and Review". Academy of management Review, 14, hal 57-74

Fahmi, Irham. 2010. Manajemen Kinerja Teori dan Aplikasi. Bandung: Penerbit Alfabeta Bandung.

Hanum, & Sudrajat. 2014. "Analisis Faktor-Faktor Yang Mempengaruhi Fraudulent Financial Statement Dengan Perspektif Fraud Triangle (Studi Empiris Pada Perusahaan Sektor Property, Real Estate and Building Coonstruction Tahun 2008-2012". *Jurnal Akuntansi dan Keuangan*. Vol. 19 No.2. Desember 2014 hal: 165-187.

Herviana, Ema. 2017. Fraudulent Financial Reporting: Pengujian Teori Fraud Pentagon Pada Badan Usaha Milik Negara (BUMN) yang Terdaftar di Bursa Efek Indonesia Periode 2012-2016. *Skripsi*. FEB Universitas Islam Negeri Syarif Hidayatullah. Jakarta.

Zelin, Cintia. 2018. Analisis Fraud Pentagon Dalam Mendeteksi Kecurangan Laporan Keuangan Dengan Menggunakan Fraud Score Model. Essay. FE Universitas Islam Indonesia. Yogyakarta. 21 No. 2. Juni 2017 hal: 49-60.

Hunton, J. E., R. Libby, and C. L. Mazza. 2006. Financial reporting transparency and earnings management (retracted). The Accounting Review 81 (1): 135–157. https://doi.org/10.2308/accr.2006.81.1.135.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

Priantara, Diaz. 2017. *Fraud Auditing & Investigation.* Bogor: Mitra Wacana Media.

Priatna, dkk. 2010. *Akuntansi Keuangan I*. Bogor: Penerbit Ghalia Indonesia.

Rachmania, A. 2017. "Analisis Pengaruh Fraud Triangle Terhadap Kecurangan Laporan Keuangan Pada Perusahaan Makanan dan Minuman Yang Terdaftar di Bursa Efek Indonesia Periode 2013-2015". *Jurnal Online Mahasiswa Bidang Akuntansi,* Vol. 2 No. 2. April 2017 hal: 1-19.

Rahardiana, R. 2009, 29 Maret. Salah Cantumkan Laba, Waskita Karya Harus Perbaiki Laporan. Tempo.co. Online. Halaman 1. http://bisnistempo.co/read/167075/salah-cantumkan-laba- waskita-karya-harus-perbaiki-laporan (10 Februari 2019).

Rahmayuni, S. 2018. "Analisis Pengaruh Fraud Diamond Terhadap Kecurangan Laporan Keuangan (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di BEI tahun 2013-2016". *Ejournal unp*, Vol. 6 No. 01. Desember 2018 hal: 1-20.

Scott, William R, 2006."Financial Accounting Theory". Fourth Toronto: Prentice Hall International Inc. Scott, W. R. 2009. "Financial Accounting Theory. Fifth Edition". Pearson Prentice Hall: Toronto.

Septriani, Y., & Handayani, D. 2018. "Mendeteksi Kecurangan Laporan Keuangan Dengan Analisis Fraud Pentagon". *Jurnal Akuntansi, Keuangan Dan Bisnis*. Vol. 11 No. 1. Mei 2018 hal: 11- 25.

Setiawati, E., & Baningrum, RM 2018. "Deteksi Fraudulent Financial Reporting Menggunakan Analisis Fraud Pentagon Studi Kasus Pada Perusahaan Manufaktur Yang Listed di BEI Tahun 2014-2016". *Riset Akuntansi dan Keuangan Indonesia*. Vol 3 No 2. Desember 2018 hal: 91- 106.

Sihombing, K., & Siddiiq, Rahardjo. N 2014. "Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud: Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI) Tahun 2010-2012'. *Diponegoro Journal of Accounting,* Vol. 03 No. 02. 2014 hal: 1-12.

Simon, Jon, AhmarKhair A.H., and Mohamed Yusof K, 2015. Fraudulent Financial Reporting: An Application Of Fraud Models To Malaysian Public Listed Companies.

Skousen, S., & Wright. 2009. "Detecting And Predicting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99". Corporate and Firm Performance Advances in Financial Economic, Vol. 13. Oktober 2009 hal: 53-81.

Soemarso. 2009. *Akuntansi Suatu Pengantar*. Jakarta: Salemba Empat.

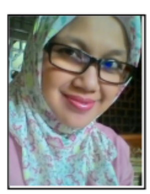
Sunardi, S., & Amin, N. 2018. "Fraud Detection Of Financial Statement by Using Fraud Diamond Perspective". *International Journal of Deveopment and Sustainabiliy*, Vol. 7 No. 03. Desember 2018. hal: 878-891.

Tessa, C., & Puji, Harto. 2016. "Fraudulent Financial Reporting: Pengujian Teori Fraud Pentagon Pada Sektor Keuangan dan Perbankan di Indonesia". *Simposium National Akuntansi XIX*. Juni 2016 hal: 1-21.

Wells, J.T. (2011). *"Corporate Fraud Handbook"*. University of California Widyaningdyah

Wolfe, & Hermanson. 2004. The Fraud Diamond: Considering The Four Elements Of Fraud. The CPA Journal, Vol. 74 No. 12.pp 38-42.

Yesiariani, M., & Isti, Rahayu. 2017. Deteksi Financial Statement Fraud: Pengujian Dengan Fraud Diamond. *Jurnal Akuntansi dan Auditing*, Vol.



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