Fraud Pentagon Analysis in Detecting Fraudulent Financial Reporting

(Study on Indonesian Capital Market)

Made Yessi Puspitha[a], Gerianta Wirawan Yasa[b]

[a,b]*Faculty of Economic and Business, Udayana University, Bali, Indonesia*
[a]*Email: yessipuspitha15@gmail.com*
[b]*Email: geri_wirasa@unud.ac.id*

Abstract

This study aims to detect the occurrence of fraud by using fraud pentagon analysis. Fraud is a deliberate accounting error with the purpose of misleading users of financial statements. Fraud pentagon theory developed by Crowe Howart in 2011 covers financial stability, external pressure, personal financial needs, financial targets, nature of industry, ineffective monitoring, organizational structures, auditor switching, change of director, and frequent number of CEO's picture. This study uses secondary data. The populations in this study were all non-financial companies that were sanctioned due to violations of regulations VIII.G.7 and IX.E.2 during 2012-2016. The research sample was determined using the purposive sampling method. The data analysis technique used is logistic regression analysis. The test results prove that external pressure, ineffective monitoring, auditor switching, change of director, and frequent number of CEO's picture can predict fraudulent financial reporting. Meanwhile, financial stability, personal financial needs, financial targets, nature of industry, and organizational structures cannot predict fraudulent financial reporting.

Keywords: Fraud pentagon; fraudulent financial reporting; non-financial company.

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* Corresponding author.

1. Introduction

Financial statements are one source of information and important facilities used by company managers in the decision-making process. The characteristics of financial report quality according to the Statement of Financial Accounting Standards No. 1 in 2017 that is understandable, relevant, comparable and reliable. The information is said to be reliable if it is free from misleading, material errors, and can be relied upon as an honest agreement that should be presented. Statement of Auditing Standards (SAS) No. 99 (2002) distinguishes between two types of misstatements, namely errors and fraud. Errors refer to accounting errors made accidentally caused by miscalculations, incorrect measurements, wrong estimates and incorrect interpretations of accounting standards. The second category, fraud refers to accounting errors that are done intentionally with the aim of misleading.

The fraud cases occur from year to year. The legendary case was the case of Enron who manipulated financial statements to cause the revocation of KAP's Arthur Andersen permit. Cases of fraud also occur in Indonesia. According to data from the Association of Certified Fraud Examiners (ACFE) in the Asia Pacific in 2016, Indonesia got the second rank in the highest number of fraud cases. This will cause losses to the company and investors. The business activities of public companies in Indonesia are regulated by a special institution called the Financial Services Authority (OJK). The indication of the company committing fraud is based on the Capital Market Law Number KEP-347 / BL / 2012 concerning the latest regulations Number VIII.G.7 about the presentation and disclosure of issuers or public companies financial statements and regulations Number IX.E.2 in accordance with the Decree of the Chairman of Bapepam-LK KEP-614 / BL / 2011 about material transactions and changes in main business activities.

Accounting fraud can occur due to information asymmetry. Information asymmetry is a condition in which agents have more information about a company than principals so managers tend to try to manipulate reported company performance [12].Information asymmetry arises because of the agency relationship between agents and principals [12].

The agency theory assumptions are based on three assumptions, namely: 1) human assumptions that are grouped into three: self-interest, bounded rationality and risk aversion. 2) Organizational assumptions that are grouped into three: conflict as the goal between participants, efficiency as an effectiveness criterion, and information asymmetry between principals and agents. 3) Information assumptions are assumptions that state that information is a commodity that can be purchased [5]. Differences in interests between principals and agents will cause agency conflicts within the company [12]. The problem of information asymmetry is the basis of any problem of conflict of interest and consequently increases the risk of fraud. Managers have an obligation to convey information in accordance with the actual condition of the company to shareholders, but sometimes the information submitted is not in accordance with the actual situation. So, fraud can occur because it is armed with more information about the company [9].

Some experts have found a study on fraud detection. The Fraud Triangle Theory was put forward by Cressey in 1953. Fraud could occur due to pressure, opportunity, and rationalization [3]. Then in 2004 Wolfe and Hermanson developed diamond fraud which was a refinement of the fraud triangle discovered by Cressey in

1953 by considering the fourth element, capability [28]. The condition of the company is now growing and complex compared to the past, and fraud perpetrators are now smarter and able to access various company information. The most recent study on fraud detection is the Fraud pentagon theory discovered by Crowe Howarth in 2011 which is an improvement of the fraud triangle theory developed by Cressey in 1953. This theory examines fraud more deeply by adding two elements namely competence and arrogance. Thus, the elements found in pentagon fraud are pressure, opportunity, rationalization, competence, and arrogance [9].

Fraud can occur if someone has pressure. Pressure can occur because the financial stability of a company is influenced by economic conditions, industry or operating conditions of the company [23]. The Fraud Triangle theory explains that management as an agent can experience pressure when operating growth is not as good as the competitor's performance or industry average. Companies that have large enough assets are considered capable of providing maximum returns to investors. Management will experience pressure when total assets decline. For this condition, management carried out fraudulent financial reporting. The percentage change in total assets indicates fraudulent financial reporting, because of the high percentage change in total assets as a way of showing stronger corporate earnings and financial position [11]. The study of Loebbecke and his colleagues [14] and Bell and his colleagues [2] found that when companies that experience industrial growth are below average, management may be able to commit fraudulent financial reporting to improve company prospects [22].

H1: Financial Stability can predict fraudulent financial reporting.

Pressure can occur because of external pressure to meet the expectations of third parties where companies need debt financing so that companies remain competitive [23]. The Fraud Triangle Theory states that excessive pressure from external parties on management can lead to fraudulent financial reporting risks [3]. External pressure can be proxied by the leverage ratio. Companies that have a high leverage ratio mean that the company has a large amount of debt and high credit risk. The higher the credit risk, the greater the level of concern for creditors to provide loans to companies. Therefore, this is one of the things that has become a concern for the company and allows it to become one of the causes in the emergence of fraudulent financial reporting [7].

H2: External Pressure can predict fraudulent financial reporting.

Pressure can occur because personal financial needs are threatened by company performance that can be caused by management compensation such as bonuses or stock options [23]. Agency relations cause an assumption of self-interest which is human nature to prioritize self-interest [5]. Triangel Fraud Theory states that pressure can occur because of the need for executives acting as company owners [3]. The more the insider ownership of the company depends on its personal financial needs on the company's wealth, the more likely the level of fraudulent financial reporting practices will be. Fraud is carried out by management with a dual role as executor and owner by making certain company performance achievements to obtain high dividends and stock returns [27].

H3: Personal Financial Need can predict fraudulent financial reporting.

The Fraud Triangle Theory states that pressure can occur due to unrealistic targeting of income and profits from the principal [3]. There is excessive pressure on management to meet predetermined financial targets including sales incentive targets or profitability [23]. Return on Assets are often used to measure the performance of managers and in determining bonuses, and wage increases [22]. Management always strives to present the best performance of the company because it does not want to be considered inadequate in managing the company, so management conducts fraudulent financial reporting so that it is deemed able to achieve the set financial targets. Pressure arises when the financial target cannot be reached. Low ROA causes management to commit fraudulent financial reporting.

H4: Financial Target can predict fraudulent financial reporting.

Fraud can occur because weak control provides an opportunity for someone to commit fraud. The opportunity to commit fraud can be in the form of the nature of industry that providing an opportunity to commit fraud in terms of accounting complexity and estimates that involve subjective considerations [23]. The Fraud triangle theory explains the opportunity to commit fraudulent financial reporting which can be caused by the complexity of accounting rules and the unreliability of information systems [3]. The risk of misstatement can occur on accounts receivable. The subjective valuation is done to determine the number of uncollectible accounts. Managers have the authority to list the value of bad debts [24] . This provides an opportunity for managers to commit fraud. A good company will suppress and minimize the number of the company's receivables and increase the company's cash income flow [10]. The high value of receivables to sales in the company shows that accounts receivable are assets that have a higher risk of manipulation [4]. Companies that have a high ratio of receivables to sales can be a sign that managers are doing fraudulent financial reporting so that receivables appear smaller.

H5: Nature of Industry can predict fraudulent financial reporting.

Weak internal control and ineffective supervision can be an opportunity to commit fraudulent financial reporting [23]. Triagle Theory Fraud explains that opportunity can occur because of weak internal control and supervision [3]. The proportion of independent audit committees negatively affected fraudulent financial reporting. Effective supervision will reduce fraudulent financial reporting [22]. Audit committees that work effectively can reduce fraud that occurs in the company [1]. A large number of audit committees will reduce fraud cases. The larger size of the audit committee will be able to improve the audit committee's oversight function of management. A large audit committee will provide access to greater resources and managerial talent, thus providing more effective oversight. The size of the audit committee can reduce earnings management actions carried out by managers within a company [13].

 H6: Monitoring Ineffective can predict fraudulent financial reporting.

The Fraud Triangle Theory explains that opportunity can occur because of the ease of accessing illegal information and the complexity of organizational structures [3]. Opportunities derived from organizational structures are related to the complexity and instability of the company in controlling the interests of the

company [23]. Multi-position directors provide opportunities to compare management policies and practices, provide new insights on how companies use other approaches in their business [8]. Company organizational structure with directors who have the complexity of positions in other companies will minimize the occurrence of fraudulent financial reporting. The trust obtained by directors to hold positions in other companies makes him more competent in managing the company, especially eradicating fraud [27].

H7: Organizational Structure can predict fraudulent financial reporting.

Humans who have the nature of bounded rationality which means the limitations of rationality [5]. The Fraud Triangle Theory explains rationalization can occur because the perpetrator seeks justification for his actions [3]. Rationalization is an attitude that justifies fraud behavior. Rationalization by those responsible for governance, management, and employees, enables them to engage or justify fraudulent financial reporting that cannot be observed by auditors [23]. Factors that cause the existence of fraudulent financial statements originating from rationalization relate to the existence of an unfavorable relationship between management and auditors, as well as a management failure in managing company finances, as well as earnings management behaviors that exist within the company. When a public accounting firm in a company made a change, it could be used as a measure of the existence of rationalization [22]. The auditor switching was conducted as an effort to eliminate traces of fraud discovered by previous auditors. This causes companies to tend to replace their auditors to cover fraud within the company.

H8: Auditor switching can predict fraudulent financial reporting

Fraud Diamond Theory explains that fraud can occur because of the ability of individuals who are able to realize fraud [27]. Competence is the ability of employees to ignore internal controls, develop concealment strategies, and control social situations for their personal interests [9]. The change of directors is indicated to be able to describe the ability to carry out high-stress tolerance [7]. Wolfe and Hermanson (2004) state that a person's position or function in an organization can provide the ability to make or take advantage of fraudulent opportunities. Ability as one of the fraud risk factors underlying the occurrence of fraud. Change of director can indicate fraud [27]. Therefore, the change of director is used as a proxy for capabilities that can predict the occurrence of fraudulent financial reporting [21].

H9: Change of director can predict fraudulent financial reporting.

Fraud Pentagon Theory explains arrogance is an attitude of superiority over rights owned and feels that internal control or company policy does not apply to him [9]. There is an assumption that states that human beings have a character that prioritizes personal interests [5].The number of CEO photos in the company's annual report could be an important proxy for measuring arrogance [29].

The number of CEO photos displayed in a company's annual report can represent the level of arrogance or superiority that the CEO has [7]. Arrogance can be indicated by the CEO's desire to show everyone the status and position they have in a company [9].

H10: Frequent number of CEO's picture can predict fraudulent financial reporting.

2.   Methodology

This research was conducted at non-financial industrial companies listed on the Indonesia Stock Exchange which provided audited financial reports by accessing the official website of the Indonesia Stock Exchange through www.web.idx.id. This research was conducted on companies that violated regulations VIII.G.7 and regulation number IX.E.2 which were stated from 2012 to 2016. The years of observation were carried out from 2011 to 2015 with consideration of fraud committed by the company before published that the company has carried out this reduction. The populations in this study are non-financial companies listed on the Indonesia Stock Exchange for the period 2012-2016. The sample was chosen based on the non-probability method with a purposive sampling technique. The data analysis used in this study is logistic regression analysis. The logistic regression model used in this study is shown in the equation as follows.

$$ln\frac{FFR}{1-FFR} = \alpha + \beta_1\,FS + \beta_2\,EP + \beta_3\,PFN + \beta_4\,FT + \beta_5\,NI + \beta_6\,IM + \beta_7\,OS + \beta_8\,AS + \beta_9\,DC + \beta_{10}FNOP + \varepsilon$$

Description:

FFR   = Fraudulent Financial Reporting

FS   = Financial Stability

EP   = External Pressure

PFN   = Personal Financial Need

FT   = Financial Target

NI   = Nature of Industry

IM   = Ineffective Monitoring

OS   =Organizational Structure

AS   = Auditor switching

DC   = Change of Director

FNOP   = Frequent Number Of CEO's Picture

ε = Error

The dependent variable in this study is fraudulent financial reporting which is measured using a dummy variable. Companies that commit fraudulent financial statements are number 1 and companies that do not fraudulent financial statements are number 0. The independent variables in this study are financial stability, external pressure, personal financial needs, financial targets, nature of industry, ineffective monitoring, organizational structure, auditor switching, change of director, and frequent number of CEO's picture. Financial stability is measured using asset growth [22].

External pressure is measured using leverage [15]. Personal financial need is measured using insider ownership [22]. Financial targets are measured using return on assets [22]. Nature of industry is measured using changes in accounts receivable [22].

Effective monitoring is measured using the percentage of independent audit committees [22]. Organizational structures are measured using multiple-position percentages [8]. The auditor switching is measured using a dummy variable. Number 1 is given if the company makes voluntary auditor changes. Number 0 if the company does not voluntarily make auditor changes [15].

Change of director is measured using a dummy variable. Number 1 shows the change of company directors. The number 0 indicates the absence of company directors' departure [7].

The frequent number of CEO's picture is measured using the number of CEO photos [7].

3. Research Result

3.1 Overview Of Research

The researcher used the year before the company was identified as committing fraud on regulations VIII.G.7 and IX.E.2. Sanctioned companies due to violating regulations VIII.G.7 and IX.E.2 were identified in 2012-2016. So, the year of observation used by researchers is in 2011-2015. The population of companies that commit fraud is shown in Table 1.

Table 1: Total Population Research Fraud Firm

No	Criteria	Amount
1.	Non-financial companies listed on the IDX in 2012 to 2016	440
2.	Companies that are not subject to sanctions as a result of violating regulations VIII.G.7 and IX.E.2	(384)
3.	The number of company populations subject to sanctions resulting from violating regulations VIII.G.7 and IX.E.2 in 2012-2016	56

The researcher also uses a sample of companies that do not commit fraudulent reporting as a control firm. Fraud companies are paired with non-fraud companies in the same sector. The results of the company's sample

selection are presented in Table 2.

Table 2: Results of Company Sample Selection

No	Information	2011	2012	2013	2014	2015
1	The company is subject to sanctions as a result of violating regulations VIII.G.7 and IX.E.2	23	11	12	6	4
2	Companies in the non-financial sector and delisted during the period 2011-2015	(8)	(2)	(1)	(3)	(0)
3	Research Related Data Not Available	(3)	(0)	(0)	(0)	(0)
4	The company publishes financial statements in a foreign currency	(1)	(4)	(0)	(1)	(1)
5	Number of Samples of Companies Who Perform Fraud	11	5	11	2	3
6	Number of Samples of Companies That Are Not Fraud	29	35	29	38	37

The number of observations in this study is presented in Table 3.

Table 3: Number of Research Observations

No	Information	Amount
1.	The company is subject to sanctions as a result of violating regulations VIII.G.7 and IX.E.2	32
2.	Companies that are not subject to sanctions as a result of violating regulations VIII.G.7 and IX.E.2	168
3.	Number of Observations	200

3.2   *Descriptive Statistics*

Descriptive statistics provide general variables in the study that are intended in mean, standard deviation, maximum, and minimum. Descriptive statistical test results are shown in Table 4 as follows.

Based on Table 4, it can be explained as follows: The average FS value of non-financial sector companies is 5.00. Observation of the growth value of company assets shows that more sample companies have a low growth ratio of company assets because the average value approaches the minimum value of -0.94. The average EP value for non-financial sector companies is 0.48. Observation of company leverage values shows that more sample companies have a fairly high leverage ratio because the average value approaches the maximum value of

2.99. The average PFN value for non-financial companies is 0.04. Observation of insider ownership values shows that more sample companies have a low insider ownership ratio because the average value approaches the minimum value of 0.00. The average value of FT in non-financial companies is 0.96. Observation of ROA value shows that more sample companies have a low ROA ratio because the average value approaches the minimum value of -0.75. The average value of NOI in non-financial companies is 0.30. Observation of the value of the ratio of changes in accounts receivable shows that more sample companies have a low ratio of changes in accounts receivable because the average value approaches the minimum value of -4.97.

Table 4: Result of Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Standard Deviation
FS	200	-0,94	953,25	5,00	67,39
EP	200	0,01	2,99	0,48	0,32
PFN	200	0,00	0,70	0,04	0,13
FT	200	-0,75	9,55	0,96	0,69
NOI	200	-4,97	23,29	0,30	1,88
IM	200	0,00	1,00	0,63	0,33
OS	200	0,00	1,00	0,33	0,30
AS	200	0,00	1,00	0,25	0,43
DC	200	0,00	1,00	0,39	0,48
FNOP	200	0,00	14,00	1,72	1,61

The average value of IM in non-financial companies is 0.63. Observation of the value of the independent audit committee shows that more sample companies have independent audit committees within the company because the average value approaches the maximum value of 1.00. The average OS value for non-financial companies is 0.33. Multi-position value observations indicate that more sample companies have a lower multi-position because the average value approaches the minimum value of 0.00. The average AS value for non-financial companies is 0.25. Observation of auditor switching values shows that more sample companies do not conduct auditor switching than companies that conduct auditor switching because the average value approaches the minimum value of 0.00. The average DC value in non-financial companies is 0.39. Observation of auditor turnover indicates that more sample companies do not make changes to directors than companies that make changes to directors because the average value approaches the minimum value of 0.00. The average value of the FNOP in non-financial companies is 1.7200. Observation of the number of CEO photos shows that fewer sample companies show photos of CEOs because the average value approaches the minimum value of 0.00.

3.3   *Assessing Model Feasibility*

The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodness of Fit Test The

results of the model feasibility test can be seen in Table 5.

Table 5: Assessing Model Feasibility

Chi-square	Df	Sig.
5,752	8	0,675

Based on Table 5 can be seen the test results show a significant probability of 0.675 greater than 0.05, it can be concluded that the model is able to predict the value of its observations or it can be said that the model can be accepted because it matches the observational data.

3.4 Overall Model Fit

This test is done by comparing the value between -2 Log Likelihood (-2LL) at the beginning (Block Number = 0), with the value of -2 Log Likelihood (-2LL) at the end (Block Number = 1). The results of the overall model evaluation can be seen in Table 6.

Table 6: Overall Model Fit

Block Number = 0	Block Number = 1
-2 Log Likelihood	-2 Log Likelihood
175,868	104,749

Based on Table 6 can be seen the results of the Overall Model Fit, the value of -2LL Block Number = 0> the value of -2LL Block Number = 1 is 175.868> 104.749. This shows a good regression model or in other words, the model hypothesized is fit with the data.

3.5 Multicolinearity Test

This test uses a correlation matrix between independent variables to see the magnitude of the correlation between independent variables. Multicollinearity Test Results can be seen in Table 7.

Based on Table 7 it can be seen that there is no correlation coefficient value between variables greater than 0.8. So it can be concluded that there are no symptoms of multicollinearity between independent variables

3.6 The Coefficient of Determination (Nagelkerke R Square)

The magnitude of the coefficient of determination in the logistic regression model is indicated by the value of Nagelkerke R Square. The results of the Nagelkerke R Square values can be seen in Table 8.

Table 7: Multicolinearity Test

Description	Costanta	FS	EP	PFN	FT	NOI	IM	OS	AS	DC	FNOP
Costanta	1,000	0,050	-0,445	-0,417	-0,109	-0,301	-0,387	-0,076	-0,261	-0,356	-0,338
FS	0,050	1,000	-0,035	-0,001	0,010	-0,012	-0,058	-0,018	-0,110	-0,046	-0,060
EP	-0,445	-0,035	1,000	0,184	0,136	0,148	-0,145	-0,293	0,024	-0,039	0,232
PFN	-0,417	-0,001	0,184	1,000	0,029	0,144	0,021	-0,009	0,133	0,189	0,134
FT	-0,109	0,010	0,136	0,029	1,000	-0,178	-0,029	-0,043	0,106	0,053	-0,037
NOI	-0,301	-0,012	0,148	0,144	-0,178	1,000	0,093	-0,020	-0,050	-0,050	0,348
IM	-0,387	-0,058	-0,145	0,021	-0,029	0,093	1,000	-0,101	-0,099	0,013	-0,152
OS	-0,076	-0,018	-0,293	-0,009	-0,043	-0,020	-0,101	1,000	0,096	0,020	-0,224
AS	-0,261	-0,110	0,024	0,133	0,106	-0,050	-0,099	0,096	1,000	-0,083	0,092
DC	-0,356	-0,046	-0,039	0,189	0,053	-0,050	0,013	0,020	-0,083	1,000	-0,158
FNOP	-0,338	-0,060	0,232	0,134	-0,037	0,348	-0,152	-0,224	0,092	-0,158	1,000

Table 8: The Coefficient of Determination (*Nagelkerke R Square*)

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
104,749	0,299	0,512

Based on Table 8 can be seen the value of Nagelkerke R Square is equal to 0.512, which means that the variability of the dependent variable that can be explained by the independent variable is 51.2 percent, while the remaining 49.8 percent is influenced by other variables outside the research model.

3.7   Classification Tables

The classification table displays the predictive power of the regression model to predict the probability of the occurrence of fraudulent financial reporting by the company. The Classification table is presented in Table 9.

Based on Table 9 shows that out of 168 observations of companies that were not fraudulent, there were 161 companies that were predicted not fraud and 7 companies predicted by fraud. Of the 32 observations of fraudulent companies, there are 15 companies that are predicted not to be fraudulent and 17 fraudulent companies. The strength of the regression model to predict the likelihood of a company doing fraudulent financial reporting is 89 percent.

Table 9: Classificcation Tables

Observation		Prediction		
		FFR		Presentation
		Non-Fraud	Fraud	
	Non-Fraud	161	7	95,8
	(168)			
FFR	Fraud	15	17	53,1
	(32)			
Overall Presentage				89,0

3.8 *Logistic Regression*

A logistic regression model can be formed by looking at the value of parameter estimates in the variable in the equation. The results of the test model can be seen in Table 10.

Tabel 10: Hypothesis Testing Results

Variabel	B	StandarError	Significance
FS	0,194	0,201	0,333
EP	2,034	0,713	0,004[*]
PFN	2,701	1,456	0,063
FT	0,029	0,469	0,951
NOI	0,261	0,241	0,280
IM	-3,180	1,029	0,002[*]
OS	-1,305	1,027	0,204
AS	1,737	0,539	0,001[*]
DC	1,095	0,548	0,046[*]
FNOP	0,399	0,142	0,005[*]

[*]Significance ≤ 0.05

Based on the results of hypothesis testing, there are five accepted hypotheses, namely external pressure, ineffective monitoring, auditor switching, change of director, and the frequent number of CEO's picture able to predict fraudulent financial reporting. Meanwhile, there are five rejected hypotheses, namely financial stability, personal financial needs, financial targets, nature of industry, and organizational structure. Financial stability is

not able to predict fraudulent financial reporting.

4.   Discussion

External pressure can predict fraudulent financial reporting. Management experiencing external pressure causes a greater risk of fraud [15]. This study is in accordance with Maghfiroh and his colleagues [16], Tifani and Marfuah [25], and Faradiza and Suyanto [6], which state greater leverage will have a greater risk of violating credit agreements and lower ability to obtain credit loans.

Ineffective monitoring can predict fraudulent financial reporting. A negative value on beta coefficient which is -3,180 shows that the number of independent audit committees will be able to predict that the company does not commit fraud. Audit committees that work effectively can reduce fraud that occurs in the company [1].A large number of independent audit committees will reduce fraud cases. This research is in accordance with Kusumaningtyas [13], Marsha and Ghozali [17] who stated that audit committees can reduce management manipulative actions because of the internal supervision of the company's audit committee.

Auditor switching can predict fraudulent financial reporting. Excessive pressure from management shows its dominance in dealing with auditors, especially the selection or sustainability of audit personnel assigned to the audit engagement. Termination of the audit engagement (auditor switching) limits access to information and the auditor's understanding of management behavior, to eliminate traces of fraud committed by fraud firms. This research is in line with the research of Lou and Wang [15], Nauval [18], Rachmawati and Marsono [20], Faradiza and Suyanto [6]which state that auditor switching is based on fraudulent financial reporting. Voluntary auditor turnover can indicate the company is committing fraud. This auditor change causes the new auditor not to know the fraudulent actions taken by the company.

Change of director can predict fraudulent financial reporting. The change of directors is indicated to be able to describe the ability to carry out high-stress tolerance [7]. A person's position or function in an organization can provide the ability to make or take advantage of fraudulent opportunities [28]. Ability as one of the fraud risk factors underlying the occurrence of fraud [28]. This study is in accordance with Faradiza and Suyanto [6] which state that changes in directors are a condition for the creation of factors driving fraud in the company. A person in an authority position has a greater influence on a particular situation.

The frequent number of CEO's picture can predict fraudulent financial reporting. The number of CEO photos displayed in a company's annual report can represent the level of arrogance or superiority that the CEO has [7]. Arrogance can be indicated by the CEO's desire to show everyone the status and position they have in a company [9]. CEOs in companies can describe the main characters in the company. This research is in line with the research of Harto [9] and Yusof [29] which states that the number of CEO photos can show the arrogance of a company leader.

Financial stability cannot predict fraudulent financial reporting. When there is a decline in total assets, the management does not automatically commit fraud by increasing the prospect of the company when the financial condition is unstable or decreases because it will worsen financial conditions in the future [26]. One factor that

affects financial stability is the business environment. The growth of company asset observations based on descriptive statistics shows a low average value of 5.00. Similar competitor companies both have low financial stability. This does not make management under pressure for fear that the flow of funds from investors will diminish so financial stability cannot predict fraudulent financial reporting. This study is in accordance with the study of Maghfiroh and his colleagues [16], Oktarigusta [19] which states that financial stability has no effect on financial statement fraud.

Personal financial needs cannot predict fraudulent financial reporting. The number of insider shares is not a pressure to commit fraudulent financial reporting. Insider stock ownership cannot influence management policy in expressing company performance because seen from descriptive statistics shows a low average of 0.04. A low percentage indicates that the person in the company is a minority shareholder. Minority shareholders lack control of the company The low share held by management results in management not feeling that they have ownership of the company because not all benefits can be enjoyed by management. This study is in accordance with Maghfiroh and his colleagues [16], Tiffani and Marfuah [25]who stated that the low ownership of insiders does not affect fraud because low share ownership causes managers not to have sufficient ability to commit fraud.

Financial targets cannot predict fraudulent financial reporting. The pressure faced by management to meet profitability is not the basis for fraudulent financial reporting of fraud firms and not fraud in this study has a low average value of 0.96. ROA is used as an indicator of the ability of company assets to generate profits. Investors can use this ratio as a tool to evaluate the value of a company's shares. If the management of the company cheats profitability, investors will see that the company has a good performance that causes high stock prices. High stock prices will result in high dividend payments so management chooses to be conservative to avoid the risk of excessive dividend payments. This study is in accordance with Skousen and his colleagues [22], Rachmawati and Marsono [20], Tiffani and Marfuah [25], Oktarigusta [19] which states that financial targets have no effect on fraud.

Nature of industry cannot predict fraudulent financial reporting. Companies are given the freedom to choose the accounting method used. However, management did not immediately take advantage of this opportunity to conduct fraudulent financial reporting. The existence of regulations VIII.G.7 Bapepam LK in the section "use of valuations, estimates, and assumptions by management" has regulated disclosures about the number of reserves and impairment of receivables. Regulation of the Financial Services Authority Number 29 of 2014 Article 31 and Article 32 also regulates the amount of allowance and write-offs that may be made by companies. The existence of several rules on vulnerable accounts that are manipulated causes the management to not be free to commit fraud. This research is in accordance with research by Tiffani and Marfuah [25], Faradiza and Suyanto [6], Oktarigusta [19] which states that the nature of industry has no effect on fraud.

The organizational structure cannot predict fraudulent financial reporting. The multi-position in this research is not an opportunity to commit fraud. The results of the descriptive statistical tests show that the average of directors who have multi-positions is low at 0.33. Multilingualism is not the only one that can describe a director having more information or knowledge of the fraud. Regulation of the Financial Services Authority

Number 33 of 2014 article 4 paragraph 1 has set the initial conditions for becoming a director. A director must have good character, morals, and integrity, possess the knowledge and/or expertise in the field needed by public companies. This means that public companies have obeyed the rules set by the Financial Services Authority. The company directors have enough knowledge, expertise, and experience in their fields so that they are not influential in predicting fraudulent financial reporting.

5.   Conclusion And Implication

The conclusions from this study are external pressure, ineffective monitoring, auditor switching, change of director, and frequent number of CEO's picture can predict fraudulent financial reporting. Meanwhile, financial stability, personal financial needs, financial targets, nature of industry, and organizational structures cannot predict fraudulent financial reporting.

This study was successful in proving that pressure with external pressure indicators, opportunities with ineffective monitoring indicators, rationalization with auditor switching indicators, competence with the indicator of change of director, and arrogance with a frequent number of CEO's picture indicators were able to predict fraudulent financial reporting. Thus, the auditor can use the Pentagon fraud analysis model in assessing the fraud risk of a company so that the auditor can predict possible misstatements due to fraud.

However, this study failed to prove that pressure with financial stability, personal financial need, and financial targets indicators; opportunity with the indicator of nature of industry, and organizational structure cannot predict fraudulent financial reporting. Future studies can use other proxies such as asset turnover ratio to measure financial stability. Asset turnover ratio measures the efficiency of a company in using its assets to generate sales. Return on Equity can be used to measure financial targets. Inventory change ratio can be used to measure the nature of industry because, in addition to accounts receivable, inventory often uses estimates from company management.

References

[1]   Beasly, M., Dana J. V.., and Terry.(2010). Fraudulent Financial Reporting. Avaible From: URL: http://www.coso.org/documents/COSOFRAUDSTUDY2010_001.pdf

[2]   Bell,TB., Sykoeny S., and Willingham J. (1991). Assessing The Likelihood of Fraudulent Financial Reporting: A Cascaded Logit Approach. New Jersey.

[3]   Cressy, D. (1953). Other People's Money: A Study In The Social Physhology Of Embezzlement. IL: Free Press.

[4]   Dalnial, Hawariah, Amrizah Kamaluddin, Zuraidah Mohd Sanusi, and Khairun Syafiza Khairuddin. (2014). "Detecting Fraudulent Financial Reporting through Financial Statement Analysis." Journal of Advanced Management Science 2(1):17–22.

[5]   Eisenhardt, Kathleen M. (1989). "Agency Theory : An Assessment and Review Linked References Are Available on JSTOR for This Article : Agency Theory : An Assessment and Review." Academy of Management 14(1):57–74.

[6] Faradiza, Sekar Anom and Suyanto. (2017). "Fraud Diamond: Pendeteksi Kecurangan Laporan Keuangan." Seminar Nasional Riset Terapan 2017 196–201.

[7] Harto, Chyntia Tessa &. Puji. (2016). "Pengujian Teori Fraud Pentagon Pada Sektor Keuangan Dan Perbankan Di Indonesia." Simposium Nasional Akuntansi 1–21.

[8] Hasnan.S., Rashidah A.R., Sakthi M. (2013). "Management Motive, Weak Governance, Earnings Management, and Fraudulent Financial Reporting: Malaysian Evidence." Journal Of International Accounting Research 12(1):1–27.

[9] Horwarth, Crowe. (2011). Putting The Freud in Fraud: Why The Fraud Is No Longer Enough. IN Howarth, Crowe.

[10] Husmawati, Pera, Yossi Septriani, Irda Rosita, and Desi Handayani. (2017). "Fraud Pentagon Analysis in Assessing the Likelihood of Fraudulent Financial Statement (Study on Manufacturing Firms Listed in Bursa Efek Indonesia Period 2013-2016)." International Conference of Applied Science on Engineering, Business, Linguistics and Information Technology (ICo-ASCNITech) (October):13–15.

[11] Indiriani, Poppy and Titan Terzaghi. (2017). "Fraud Diamond Dalam Mendeteksi Kecurangan Laporan Keuangan." I-Finance 3(2):161–72.

[12] Jensen, Michael C. and William H. Meckling. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." Journal of Financial Economics 3(4):305–60.

[13] Kusumaningtyas, Metta. (2014). "Pengaruh Ukuran Komite Audit Dan Kepemilikan Institusional Terhadap Manajemen Laba." Prestasi 13(1):82–96.

[14] Loebbecke, J., Eining M., and Willingham J. (1989). "Auditor's Experience With Material Irregularities:Frequency, Nature, and Detestability." Auditing: A Journal Of Practice and Theory 9(1).

[15] Lou, Yung-i and Ming-long Wang. (2009). "Fraud Risk Factor Of The Fraud Triangle Assessing The Likelihood Of Fraudulent Financial Reporting." Journal of Business & Economics Research 7(2):61–78.

[16] Maghfiroh and dkk. (2015). "Analisis Pengaruh Financial Stability , Personal Financial Need , External Pressure , Dan Ineffective Monitoring Pada Financial Statement Fraud Dalam Perspektif Fraud." Jurnal Ekonomi Dan Bisnis 16(1):51–66.

[17] Marsha, Felicia and Imam Ghozali. (2017). "Pengaruh Ukuran Komite Audit, Audit Eksternal, Jumlah Rapat Komite Audit, Jumlah Rapat Dewan Komisaris, Dan Kepemilikan Institusional Terhadap Manajemen Laba (Studi Empiris Perusahaan Manufaktur Yang Terdaftar Di BEI." Diponegoro Journal of Economics 6(2):1–13.

[18] Nauval, Muhammad. (2014). "Analisis Faktor-Faktor Yang Berpengaruh Terhadap Kecenderungan Financial Statement Fraud Dalam Perspektif Fraud Triangle." DiponegoroJournal Of Accounting.

[19] Oktarigusta, Lutfiana. (2017). "Analisis Fraud Diamond Untuk Mendeteksi Terjadinya Financial Staement Fraud Di Perusahaan (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di BEI Tahun 2012-2015)." Jurnal Ekonomi Manajemen Sumber Daya 19(2):93–108.

[20] Rachmawati, Kurnia Kusuma and Marsono. (2014). "Pengaruh Faktor - Faktor Dalam Perspektif Fraud Triangle Terhadap Fraudulent Financial Reporting (Studi Kasus Pada Erusahaan Berdasarkan Sanksi Dari Bapepam Periode 2008-2012)." Diponegoro Journal of Accounting 3(2):1–14.

[21] Sihombing, Kennedy Samuel and Shiddiq Nur Rahardjo. (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 03(02):1–12.

[22] Skousen, C.J., Smith, K.R and Wright, C. .(2009). "Detecting and Predicting Financial Statement Fraud: The Effectiveness Of TheFraud Triangle And SAS No.99." Corporate and Firm Performance Advances in Financial Economics 13:53–81.

[23] Statement of Auditing Standards (SAS) No.99 Tahun 2002

[24] Summers, S., and Sweeny J. (1998). "Fraudulently Missateted Financial Statements and Insider Trading: An Empirical Analysis." The Accounting Review 73 (1):131–46.

[25] Tiffani, Laila and Marfuah. (2015). "Deteksi Financial Statement Fraud Dengan Analisis Fraud Triangle Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia." Jaai 19 No. 2(Desember):112–25.

[26] Ulfah, Maria, Elva Nuraina, and Anggita Langgeng Wijaya. (2017). "Pengaruh Fraud Pentagon Dalam Mendeteksi Fraudulent Financial Reporting (Studi Emiris Pada Perbankan Di Indonesia Yang Terdaftar Di BEI)." Forum Ilmiah Pendidikan Akuntansi 5 No.1(Oktober):399–417.

[27] Utama, I. Gusti Putu Oka Surya, I. Wayan Ramantha, and I. Dewa Nyoman Badera. (2018). "Analisis Faktor-Faktor Dalam Perspektif Fraud Triangle Sebagai Prediktor Fraudulent Financial Reporting." E-Jurnal Ekonomi Dan Bisnis Universitas Udayana 1:251–78.

[28] Wolfe, David T. and Dana R. Hermanson. (2004). "The Fraud Diamond : Considering the Four Elements of Fraud." CPA Journal 74(12):38–42.

[29] Yusof, M., Khair, A and Simon, J. (2015). "Fraudulent Financial Reporting: An Application Of Fraud Models to Malaysian Public Listed Companies." The Macrotheme Review: A MultidisciplinaryJournal Of Global Macro Trends 126–125.