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# Fraud Pentagon and Fraudulent Financial Reporting: Evidence from Manufacturing Companies in Indonesia and Malaysia

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# Abstract:

**Research aims**: This study aims to examine the influence of fraud pentagon concept on fraudulent financial reporting.

**Design/Methodology/Approach**: This study's population was manufacturing companies listed in Indonesia Stock Exchange and Malaysia Stock Exchange. 120 manufacturing companies in Indonesia and 118 manufacturing companies in Malaysia were involved as samples. The data analysis method used in this study is multiple linear regression.

Research findings: The results showed that financial target, financial stability, quality of external auditor, external pressure, and nature of industry variables influenced fraudulent financial reporting. In contrast, personal financial need, ineffective monitoring, change in auditor, change in director, and frequent number of CEO's pictures variables had no effect on fraudulent financial reporting. For Indonesia, it was found that financial target, financial stability, and the quality of external auditor influenced fraudulent financial reporting. While, in Malaysia, the results showed that financial stability, external pressure, and nature of industry variables influenced fraudulent financial reporting in Malaysia.

Theoretical contribution/Originality: These results support the financial target and quality of external auditor hypothesis in Indonesia, financial stability hypothesis in Indonesia and Malaysia, external pressure and nature of industry hypotheses in Malaysia, stating that fraud pentagon factors affect fraudulent financial reporting. It is also proved that there are different levels of fraudulent financial reporting in Indonesia and Malaysia. Indonesia has fraudulent financial reporting cases higher than Malaysia.

Keywords: Pentagon Fraud; Fraudulent Financial Reporting

# Introduction

Financial reporting is a means to account for the activities of managers in front of owners and investors and is a provider of useful information for external and internal parties in terms of decision making. However, the essence of financial statements becomes meaningless when managers solely focus on the numbers listed in it. One of the reasons is because managers want the company's financial statements to seem good and have great quality in the views of owners and investors.

Fraud Pentagon and Fraudulent Financial Reporting: ...

Thus, managers would take whatever action such that the financial statements match their expectations. This motive encourages managers to prepare the financial reports without paying attention to the prevalent principles and standards (Septriani & Handayani, 2018).

Fraudulent financial reporting is a practice of fraud on financial statements committed by managers to manipulate financial statements with an objective to earn personal, group, or other party benefits. According to the Indonesian Association of Certified Fraud Examiners (2016), fraudulent financial reporting ranked third behind corruption and misappropriation of assets. In Malaysia, the survey results showed that incidents of fraudulent financial reporting combined with procurement fraud also occupied third place after misappropriation of assets, corruption, and cybercrime (PricewaterhouseCoopers, 2016). Based on the survey conducted in Indonesia and Malaysia, fraudulent financial reporting is at an urgent level because it is included in the top three fraud cases. This urgency is apparent when a case results in a large amount of loss. Therefore, if fraudulent financial reporting is not detected early, it will generate losses for all stakeholders, especially the users of financial statements. According to Sihombing and Rahardjo (2014), companies that have a great possibility to perpetrate fraudulent financial reporting are companies listed on the stock exchange. The rationale is related to the demand for maximizing profitability in order to attract investors and increase their confidence.

According to the survey of Indonesian Association of Certified Fraud Examiners (2016), there are three big cases of fraud in Indonesia. The first case is corruption with a total of 178 cases and the percentage of 77%. The second fraud case is posited by the cases of misappropriation of assets/organization's wealth with a total of 41 cases and the percentage of 19%. The third rank is occupied by fraudulent financial reporting with a total of 10 cases and the percentage of 4%. Meanwhile, based on the data from a survey result by PricewaterhouseCoopers (2016), there are three big cases of fraud in Malaysia. The first case is the misappropriation of assets with a percentage of 57%. Cases of corruption, bribery, and cybercrime cases occupy the second position with a case percentage of 30%. While in third place, there is fraudulent financial reporting along with cases of procurement fraud with a case percentage of 17%.

Fraudulent financial reporting in every country has different levels depending on the economic situation along with the nature and the characteristics of each individual. Moreover, fraud can also be caused by the weakness of the internal control system at institution or company (Hamdani & Albar, 2016). This research is conducted to study and obtain empirical evidence about what factors affect fraudulent financial reporting reviewed with fraud pentagon theory. The fraud pentagon theory is chosen in this research because the researchers consider the theory is more complete and able to explain factors of people committing fraud. Furthermore, this research also aims to know if there is a difference in the fraud levels between Indonesia and Malaysia. The researchers choose Malaysia to be compared with Indonesia for several reasons. Malaysia and Indonesia are developing countries in Southeast Asia and are still included in one family whose almost the same cultures, characteristics, and behaviors. Based on the ACFE report (2012), it revealed that Indonesia and Malaysia were in the top three in Asia with

Fraud Pentagon and Fraudulent Financial Reporting: ...

the highest sample of fraud cases after China and India. In addition, based on the World Prosperity Index, Indonesia ranked fifth, while Malaysia ranked second in the ASEAN region (Legatum Institute, 2015). With the difference in the prosperity index, it encourages the researchers to compare Indonesia and Malaysia regarding fraud, and whether the high level of prosperity of a country affects its citizens to commit fraud or not. Based on the prosperity level index conducted by the Legatum Institute (2015), when compared to Indonesia, Malaysia had a more stable level of prosperity and economic level and was still above Indonesia. According to this background, Malaysia is considered suitable to be compared with Indonesia in terms of fraudulent practices, and it can be concluded if there is a difference in the level of fraud cases in Indonesia and Malaysia.

This research is a replication of previous research developed by Setiawati and Baningrum (2018), Apriliana and Agustina (2017), and Bawekes et al. (2018). The difference between this research and the previous ones refers to the idea of the present research being a comparative research to compare fraudulent financial reporting between Indonesia and Malaysia.

By conducting this research, it is committed to establishing contributions both theoretically and practically. The theoretical contribution of this research is to offer the development of accounting study, especially in the field of auditing. The results are also supposed to provide additional knowledge about what factors affect fraudulent financial reporting reviewed by using the theory of fraud pentagon. In addition, this research is expected to be utilized as a reference for other research. The practical value of this research will provide a reference for investors in making decisions. Moreover, this research can underlie managers to be more cautious in presenting financial statements to reduce the likelihood of fraudulent financial reporting.

# Literature Review and Hypotheses Development

# **Fraud Pentagon Theory**

Fraud pentagon theory is a developed theory of fraud triangle theory (Cressey, 1953) and fraud diamond theory (Wolfe & Hermanson, 2004). For the first time, the fraud triangle theory was coined by Cressey (1953) explaining that fraud action can occur through three things such as pressure, opportunity, and rationalization. In 2004, Wolfe and Hermanson initiated a new theory about fraud named fraud diamond. The fraud diamond theory explains that the factors affecting someone to commit fraud include 4 things such as pressure, opportunity, rationalization, and capability (Wolfe & Hermanson, 2004). However, a higher level of fraud cases apparently shows that someone committing fraud is not only based on the four factors by Wolfe and Hermanson (2004). Therefore, Howarth et al. (2011) described the previous theories regarding those issues. In his theory, Howarth et al. (2011) added an element of arrogance as a factor that encourages someone to commit fraud. Thus, according to Howarth et al. (2011), the factors consist of five things such as pressure, opportunity, rationalization, ability, and arrogance. These five factors are then called the fraud pentagon theory.

Fraud Pentagon and Fraudulent Financial Reporting: ...

In this study, each element or factor in the fraud pentagon theory were proxied by one or several variables. These variables were represented by different measurements. The element of pressure was proxied by financial targets, financial stability, personal financial needs, and external pressure. The element of opportunity used ineffective monitoring, nature of industry, and quality of external auditor variables as proxies. The element of rationalization was proxied by the change in auditor variable. The capability element was proxied by the change in director variable. Meanwhile, the element of arrogance was measured by using frequent number of CEO's pictures as a proxy.

## **Hypotheses Development**

Financial target is a target in finance set by the management and must be obtained in the period as a form of return on business. According to Skousen et al. (2009), calculating business return can use RoA (Return on Assets). RoA is the profitability ratio used by a company to measure the company's effectiveness in generating profits by utilizing the assets owned. The manager bears a high financial target, thus, he automatically takes huge responsibility to achieve the financial targets that have been set. For that reason, the manager's performance will look good in the eyes of company owner. When the manager is considered incapable to achieve the financial target, he will look for any shortcuts to achieve it by manipulating the financial statements. This is to cover up his poor performance from the owner. Setiawati and Baningrum (2018) managed to find that companies whose high financial targets induce managers' tendency to manipulate financial statements. The results of this study are supported by Putriasih et al. (2016). On the other hand, Sihombing and Rahardjo (2014) failed to find financial targets to influence managers to commit fraud. Based on the explanation and the results of previous research, the researchers proposed the following hypotheses:

 $H_{1a}$ : Financial target positively affects fraudulent financial reporting in Indonesia

 $H_{1b}$ : Financial target positively affects fraudulent financial reporting in Malaysia

Financial stability is a condition explaining that a company's finance is in a stable condition. According to Mulford and Comiskey (2002), a high percentage of change in total assets in a company shows that fraud in financial reporting exists. A high percentage of change in total assets means that the firm has a power to generate revenues. In results, the firm's financial position will be regarded as more robust and stable. However, if the condition of financial stability and profitability worsen, the manager will be under pressure. He will further be taking various ways to make financial stability and profitability improve as well as are in a stable condition. The manager's actions can lead to fraud because he will do everything possible including manipulating the data in the financial statements. The higher the financial stability to be achieved, the higher the possibility of fraudulent financial reporting. Apriliana and Agustina (2017) succeeded in proving that financial stability affects managers to commit fraudulent financial reporting. In addition, studies which have proved that financial stability affects someone to commit fraud include Akbar (2017), Sihombing and Rahardjo (2014), Putriasih et al. (2016), Bawekes et

Fraud Pentagon and Fraudulent Financial Reporting: ...

al. (2018). On the other hand, Yesiariani and Rahayu (2017) did not find any effect of financial stability on fraudulent financial reporting. Based on the description and the results of earlier studies, the researchers formulated the following hypothesis:

 $H_{2a}$ : Financial stability positively affects fraudulent financial reporting in Indonesia

 $H_{2b}$ : Financial stability positively affects fraudulent financial reporting in Malaysia

Personal financial need refers to a condition when the company's finances are related to the company executives' finance described by the proportion of shares ownership. According to SAS Number 99, managers or company executives will get pressure and commit fraudulent financial reporting if their personal finances are threatened due to the influence of company's performance. With the ownership of shares by company insiders, the people concerned feel they have the right to claim on company's income and assets, so this will affect company's financial condition (Yesiariani & Rahayu, 2017). Tiffani and Marfuah (2015) state that the greater the proportion of shares owned by company officials, the greater their power to influence financial statements policies. When company executives ask managers to manipulate financial statements to fulfill personal interests, managers must fulfill those wishes. The more often managers fulfill executive interests, the more likely fraudulent financial reporting will happen. Utama et al. (2018) showed that personal financial needs affect fraudulent financial reporting. On the other hand, Setiawati and Baningrum (2018) stated that personal financial needs had no effect on fraudulent financial reporting. Based on the explanation and the results of the past study, the researchers hypothesized the following:

 $H_{3a}$ : Personal financial need positively affects fraudulent financial reporting in Indonesia

 $H_{3b}$ : Personal financial need positively affects fraudulent financial reporting in Malaysia

External pressure is a condition when manager bears excessive pressure from the external parties. One example where managers are under pressure from external parties is related to financing. To meet the needs of external parties, companies usually owe other parties. In fact, the debt received by the companies will increase their credit risks, which drops the companies' value in the view of investors. To avoid this, managers will manipulate the amount of debts in their financial statements, with the aim to lower their liabilities. According to Skousen et al. (2009), one of the conditions that lead companies to manipulate their financial statements is when companies have to pay off debts because of financing requested by external parties. The higher the value of debt in the financial statements, the higher the possibility of fraudulent financial reporting. Saputra and Kesumaningrum (2017), Tiffani and Marfuah (2015), Utama et al. (2018), and Putriasih et al. (2016) found that external pressures influence managers to commit fraud. In contrast, Bawekes et al. (2018) found that external pressure did not affect fraudulent financial reporting. Based on the explanation and the results of previous studies, the researchers proposed the following hypotheses:

Fraud Pentagon and Fraudulent Financial Reporting: ...

H<sub>4a</sub>: External pressure positively affects fraudulent financial reporting in Indonesia

**H**<sub>4b</sub>: External pressure positively affects fraudulent financial reporting in Malaysia

Ineffective monitoring is a state when the supervision and monitoring established in the company do not run effectively. According to Maghfiroh et al. (2015), companies that have good and effective internal controls and supervisory systems can minimize the opportunities for fraud to take place. Therefore, to oversee the performance of management, a board of commissioners is formed. Their roles are to supervise management performance in making business decisions, ensure the realization of the company's strategy and corporate financial accountability (Hidayah & Saptarini, 2019). With an adequate board of commissioners, it will have an impact on the better level of company's supervision. However, if the number of the board of commissioners is too many or too few, it will cause the supervision run ineffectively. The more ineffective the supervision and monitoring of the company, the higher the possibility of fraudulent financial reporting. Sihombing and Rahardjo (2014) found that ineffective monitoring has a positive effect on fraudulent financial reporting. Their results are also in line with Putriasih et al. (2016). On the other hand, Setiawati and Baningrum (2018) found that ineffective monitoring did not affect fraudulent financial reporting. Based on the description and the results of previous studies, the researchers formulated the following hypotheses:

 $H_{5a}$ : Ineffective monitoring positively affects fraudulent financial reporting in Indonesia

 $H_{5b}$ : Ineffective monitoring positively affects fraudulent financial reporting in Malaysia

Nature of industry is a variable used in the opportunity element in the fraud pentagon theory (Howarth et al., 2011). It explains if the company is in a stable condition within industrial competition. According to Sihombing and Rahardjo (2014), companies aspiring to look good in front of their stakeholders will minimize receivables and maximize cash balances in financial statements. Thus, when the manager has the freedom to subjectively assess, for instance, accounts receivable, he will minimize it in the financial reports. The greater the balance of receivables, the greater the possibility of fraudulent financial reporting. Sihombing and Rahardjo (2014) and Putriasih et al. (2016) found that the nature of industry has a positive effect on fraudulent financial reporting. On the other hand, Yesiariani and Rahayu (2017) did not find any effect of the nature of the industry on fraudulent financial reporting. Based on the explanation and the results of previous studies, the researchers proposed the following hypotheses:

 $H_{6a}$ : Nature of industry positively affects fraudulent financial reporting in Indonesia

 $H_{6b}$ : Nature of industry positively affects fraudulent financial reporting in Malaysia

Fraud Pentagon and Fraudulent Financial Reporting: ...

Quality of external auditor is the variable used to examine the opportunity element in the fraud pentagon theory (Howarth et al., 2011). The quality of external auditors is viewed by how the audit results are reported by the auditor after he has finished carrying out his duties. Thus, to audit financial statements, companies must need external auditors who have sufficient and good skills and expertise in auditing financial statements. External auditors who work for large audit firms "Big Four" will have deeper insight and knowledge. They have more ability to detect fraud compared to external auditors who work for non-Big Four audit firms (Lennox & Pittman, 2010). The better the quality of the public accounting firms, the higher the quality of the auditors' performance. Apriliana and Agustina (2017) revealed that the quality of external auditors has a positive effect on fraudulent financial reporting. On the other hand, Bawekes et al. (2018) showed no influence of the quality of external auditors on fraudulent financial reporting. Based on the explanation and the results of previous studies, the researchers formulated the following hypotheses:

 $H_{7a}$ : Quality of external auditor positively affects fraudulent financial reporting in Indonesia

 $H_{7b}$ : Quality of external auditor positively affects fraudulent financial reporting in Malaysia

The rationalization element in the fraud pentagon theory (Howarth et al., 2011) is represented by the variable of change in auditor. Change in auditor is carried out by the company because it is intended to remove the track record of fraud that was found by the previous auditor. When the auditor finds out that his client is cheating, the manager will perceive that he is starting to be threatened and can endanger the continuance of the company. Therefore, the manager will take action by replacing the previous auditor with a new one. According to Yesiariani and Rahayu (2017), with the change in auditors, the possibility of fraudulent acts will increase. Thus, the more often the company changes auditors, the more likely it is that fraudulent financial reporting will occur. Husmawati et al. (2017), Putriasih et al. (2016), and Siddiq et al. (2015) found that change in auditors have a positive effect on fraudulent financial reporting. In contrast, Setiawati and Baningrum (2018) found that change in auditors had a negative effect on fraudulent financial reporting. Based on the descriptions of the earlier studies, the researchers proposed the following hypothesis:

 $H_{8a}$ : Change in auditor positively affects fraudulent financial reporting in Indonesia

 $H_{8b}$ : Change in auditor positively affects fraudulent financial reporting in Malaysia

The capability element in the fraud pentagon theory (Howarth et al., 2011) is represented by the variable of change in director. Change in director in the company is a form of company effort in improving the performance of the previous directors. By changing the composition of the previous board of directors or by recruiting more insightful and competent directors, it is hoped that the quality of the company can increase (Bawekes

Fraud Pentagon and Fraudulent Financial Reporting: ...

et al., 2018). However, the change in directors does not always have a positive impact. It may be because the company wants to get rid of the directors who know about fraud, hence, the cases of fraud occurring in the company can be covered up. The more often the company changes directors, the greater the possibility of fraudulent financial reporting. Husmawati et al. (2017) and Siddiq et al. (2015) found that change in director have a positive effect on fraudulent financial reporting. On the other hand, Apriliana and Agustina (2017) did not find the effect of change in director on fraudulent financial reporting. Based on the explanation and the results of previous studies, the authors proposed the following hypotheses:

 $H_{9a}$ : Change in director positively affects fraudulent financial reporting in Indonesia

 $\mathbf{H}_{9b}$ : Change in director positively affects fraudulent financial reporting in Malaysia

The element of arrogance is represented by frequent number of CEO's pictures (Howarth et al., 2011). Frequent number of CEO's pictures indicates how often CEO's photos appear or are attached in the annual report. Howarth et al. (2011) explains that the CEO's arrogance is reflected in how many photos of the CEO are shown in the annual report. A CEO who has a lot of photos in the annual report will believe that he is in power, thus, he can influence all policies in the company. If the policy is not profitable for him, then he feels he has the right to refuse and change the policy, including committing fraudulent acts. The more pictures of the CEO listed in the report, the higher the level of CEO arrogance, so the possibility of fraudulent financial reporting is higher. Apriliana and Agustina (2017), Siddiq et al. (2015), and Bawekes et al. (2018) found that the frequent number of CEO's pictures have a positive effect on fraudulent financial reporting. In contrast, Setiawati and Baningrum (2018) did not find the effect of frequent number of CEO's pictures on fraudulent financial reporting. Based on the explanation and the results of previous studies, the hypotheses proposed are as follows:

 $\mathbf{H}_{10a}$ : Frequent number of CEO's pictures positively affects fraudulent financial reporting in Indonesia

 $m{H}_{10b}$ : Frequent number of CEO's pictures positively affects fraudulent financial reporting in Malaysia

Hasnan et al. (2012) discovered that in developing countries such as Malaysia, there are still weak institutions, low awareness of the importance of external audits, and accounting rules that allow flexibility of financial statements that have an impact on fraudulent financial reporting practices. According to a survey by the Association of Certified Fraud Examiners Indonesia (2016), Indonesia is one of the developing countries that has high fraud cases. Malaysia is also a developing country as well as a neighboring country to Indonesia. Indonesia and Malaysia almost have the same nature and characteristics. The similarity of individual traits and characteristics between Indonesia and Malaysia shows that the tendency towards fraudulent financial reporting is also high. However, in terms

Fraud Pentagon and Fraudulent Financial Reporting: ...

of the economy, development, welfare, poverty alleviation to providing employment opportunities, Malaysia has a higher percentage rate than Indonesia. In addition, when viewed based on the world prosperity index, Indonesia ranked fifth, while Malaysia ranked second for the ASEAN region (Legatum Institute, 2015). Inferring from the prosperity level index, Malaysia has a higher ranking than Indonesia. Therefore, by considering these factors, it can be concluded that Malaysia is currently more advanced than Indonesia. The improvements in various aspects should make Malaysia have a lower fraud rate. Based on the logic above, the researchers proposed a hypothesis:

 $H_{11}$ : There is a difference in fraudulent financial reporting between Indonesia and Malaysia

# Research Method

# **Population and Sample**

The population of this study is manufacturing companies listed on the Indonesian Stock Exchange and the Malaysian Stock Exchange in the 2017–2018 period. The sample is the financial statements of Indonesian and Malaysian manufacturing companies in 2017–2018. The data is secondary data sourced from www.idx.co.id, the official website of the Indonesia Stock Exchange; and the website of Malaysian Stock Exchange, www.bursamalaysia.com. The sampling technique is purposive sampling technique with several criteria, including the companies chosen were manufacturing companies listed on the Indonesia Stock Exchange and the Malaysia Stock Exchange in 2017–2018, manufacturing companies that published financial statements in currency of Rupiah (Rp) and Ringgit (RM), manufacturing companies that made profits in 2017–2018, manufacturing companies that presented complete annual financial report data and in accordance with the data required in this study, and companies that did not have unaudited financial statements (audited financial statements).

#### **Operational Definition and Measurement of Variables**

This research consists of one dependent variable and ten independent variables. The dependent variable in question is fraudulent financial reporting. According to the AICPA (2002), fraudulent financial reporting is an act that is intentionally carried out by managers, either in the form of misstatements or obliteration of accounting information, accompanied by the assumption that these actions can change the decisions of stakeholders. The method used to measure fraudulent financial reporting is earnings management using the Jones equation (1991) modified by Dechow et al. (1995). The equation in question is Discretionary Accruals from the Modified Jones Model. The value of discretionary accruals is the difference between total accruals and non-discretionary accruals.

Fraud Pentagon and Fraudulent Financial Reporting: ...

 Table 1 Independent Variables, Operational Definition, and Measurement

Acronym	Definition	Type	Measurement	Data Source	Reference
ROA	Profit targets that must be obtained for the effort accomplished	Independent Variable	Net profit divided by total assets	Annual Financial Report	Bawekes et al. (2018)
ACHANGE	Company's financial condition is stable	Independent Variable	Change in total assets and total assets t-1 divided by total assets t-1	Annual Financial Report	Bawekes et al. (2018)
OSHIP	The company's financial condition is influenced by the company's executive financial condition	Independent Variable	The number of shares of internal parties divided by the total number of ordinary shares circulated	Annual Financial Report	Maghfiroh et al. (2015)
LEV	Excessive company pressure to fulfill the requests of third parties	Independent Variable	Total debts divided by total assets	Annual Financial Report	Annisya et al. (2016)
BDOUT	There is no effective supervisory unit	Independent Variable	The number of independent commissioners divided by the total number of commissioners	Annual Financial Report	Bawekes et al. (2018)
RECEIVABLE	The ideal state of a company in the industry	Independent Variable	The difference between the ratio of receivables and sales t with receivables and sales t-1	Annual Financial Report	Yesiariani and Rahayu (2017)
BIG	The quality of external auditors can influence in detecting fraudulent financial statements	Independent Variable	Dummy variable: code 1 if the company uses the audit services of the Big Four, and code 0 if the company does not use the audit service of the Big Four	Annual Financial Report	Setiawati and Baningrum (2018)
СРА	Changes in auditors carried out by the company	Independent Variable	Dummy variable: code 1 for companies that implement change in auditor and code 0 for companies that do not carry out a change in auditors	Annual Financial Report	Setiawati and Baningrum (2018)

Fraud Pentagon and Fraudulent Financial Reporting: ...

Table 1 Independent Variables, Operational Definition, and Measurement (cont')

Acronym	Definition	Туре	Measurement	Data Source	Reference
DCHANG	Delegation of authority from the former directors to the new directors	Independent Variable	Dummy variable: code 1 for companies that carry out a change in directors and code 0 for companies that do not change directors.	Annual Financial Report	Bawekes et al. (2018)
CEOPIC	The number of CEO's pictures displayed on the company's financial statements	Independent Variable	Number of CEO's pictures (CEOPIC) found in the company's annual report.	Annual Financial Report	Bawekes et al. (2018)
DACCit	assessment method to find out whether the company practices earnings management or not (fraudulent financial reporting)	Dependent Variable		The difference between total accruals and non-discretionary accruals	Yesiariani and Rahayu (2017)

# **Data Analysis Methods**

There were two data analyses performed to evaluate the hypothesis in this study such as multiple regression for hypotheses 1-10 and an independent-sample t-test for hypothesis 11. Before conducting the analysis and hypothesis testing, the data in this study was checked for quality by descriptive test, normality test, autocorrelation test, heteroscedasticity test, and multicollinearity test.

# Result and Discussion

# **Descriptive Statistics**

Table 2 is a descriptive statistics table for each variable of manufacturing companies in Indonesia. The total data of each variable processed was 120 samples of companies. Based on Table 2, the mean values for the variables of financial target, financial stability, personal financial need, external pressure, ineffective monitoring, quality of external auditor, change in auditor, change in director, frequent number of CEO's pictures, and fraudulent financial reporting were greater than median values, thus it can be concluded that those variables of manufacturing companies in Indonesia are high. However, the variable of nature of industry resulted in the mean value below its median. It asserts that the nature of industry in Indonesia's manufacturing firms is classified as low.

Fraud Pentagon and Fraudulent Financial Reporting: ...

Table 2 Descriptive Statistics for Indonesia

Variable	Mean	Median	Std. Deviation	Minimum	Maximum
Financial Target	0.07	0.05	0.07	0.00	0.47
Financial Stability	0.15	0.09	0.25	-0.33	1.61
Personal Financial Need	0.10	0.02	0.18	0.00	0.89
External Pressure	0.42	0.40	0.19	0.09	0.91
Ineffective Monitoring	0.41	0.35	0.12	0.20	0.83
Nature of Industry	-0.01	0.00	0.20	-1.45	1.44
Quality of External Auditor	0.28	0.00	0.45	0	1
Change in Auditor	0.08	0.00	0.28	0	1
Change in Director	0.43	0.00	0.49	0	1
Frequent Number of CEO's Picture	5.44	3.00	5.50	0	30
Fraudulent Financial Reporting	-0.00	-0.01	0.09	-0.22	0.42

N = 120

Table 3 is a descriptive statistical table for each variable of Malaysia's manufacturing companies. The number of data for each variable handled in this study was 118 companies as samples. Based on Table 3, the mean result for the financial target variable, financial stability, personal financial need, nature of industry, quality of external auditor, change in auditor, change in director, frequent number of CEO's pictures, and fraudulent financial reporting was higher than the median, then it can be concluded that these variables in manufacturing companies in Malaysia are high. Meanwhile, the external pressure and ineffective monitoring variables had an average value that is lower than the median value, therefore, the external pressure and ineffective monitoring values in manufacturing businesses in Malaysia are low.

**Table 3** Descriptive Statistics for Malaysia's Manufacture

Variable	Mean	Median	Std. Deviation	Minimum	Maximum
Financial target	0.06	0.05	0.05	0.00	0.40
Financial stability	0.12	0.06	0.21	-0.10	1.42
Personal financial need	0.38	0.07	1.42	0.00	10.79
External pressure	0.37	0.38	0.18	0.04	0.70
Ineffective monitoring	0.83	0.84	0.19	0.33	1.00
Nature of industry	0.00	-0.00	0.09	-0.38	0.45
Quality of external auditor	0.39	0.00	0.50	0	1
Change in auditor	0.02	0.00	0.13	0	1
Change in director	0.46	0.00	0.50	0	1
Frequent number of CEO's picture	3.25	2.00	2.40	1	11
Fraudulent Financial Reporting	0.06	0.05	0.08	-0.24	0.37

N = 118

Fraud Pentagon and Fraudulent Financial Reporting: ...

Based on the classical assumption tests, the sample data of manufacturing companies in Indonesia and Malaysia used in this study were normally distributed and did not encounter autocorrelation, heteroscedasticity, or multicollinearity issues.

Based on the findings of the coefficient of determination test, the value of Adjusted R2 in the sample of Indonesian firms was 0.592. This suggests that 59.2 percent of the independent variables are able to explain the dependent variable. The remaining 40.8 percent is explained by other variables not explored in this study. Meanwhile, the value of Adjusted R2 in the sample of Malaysian companies was 0.430. This suggests that 43 percent of the independent factors can explain the dependent variable. Meanwhile, the remaining 57 percent is estimated by other variables not included within the model.

# **Hypotheses Testing Results**

The hypotheses test in this study was established by using multiple linear regression analysis. The regression results are revealed in the following table.

Table 4 Results of t Test for the Sample of Indonesian and Malaysian Companies

		Indor	nesia	Malaysia			
	В	Sig. t	Description	В	Sig. t	Description	
(Constant)	020	.534		.021	.590		
Financial Target	.310	.029	H <sub>1a</sub> accepted*	.108	.508	H <sub>1b</sub> rejected	
Financial Stability	.045	.037	H <sub>2a</sub> accepted*	.078	.041	H <sub>2b</sub> accepted*	
Personal Financial Needs	042	.357	H <sub>3a</sub> rejected	004	.415	H₃₅ rejected	
External Pressure	.008	.842	H <sub>4a</sub> rejected	.030	.049	H <sub>4b</sub> accepted*	
Ineffective Monitoring	012	.870	H <sub>5a</sub> rejected	.023	.583	H <sub>5b</sub> rejected	
Nature of Industry	008	.839	H <sub>6a</sub> rejected	.381	.000	H <sub>6b</sub> accepted*	
Quality of External Auditor	.058	.003	H <sub>7a</sub> accepted*	001	.968	H <sub>7b</sub> rejected	
Change in Auditor	033	.247	H <sub>8a</sub> rejected	.075	.173	H <sub>8b</sub> rejected	
Change in Director	.007	.650	H <sub>9a</sub> rejected	016	.277	H <sub>9b</sub> rejected	
Frequent Number of CEO's Pictures	.002	.235	H <sub>10a</sub> rejected	001	.767	H <sub>10b</sub> rejected	

Description: \*significant at level α 5%

Based on Table 5, Indonesia and Malaysia had different mean values of fraudulent financial reporting, in which Indonesia had a smaller mean compared to Malaysia. According to Table 6, the difference test t-test applied equal variance assumed with its significant level  $0.000 < \alpha \, 0.05$ , which means there is a difference in the level of fraudulent financial reporting in manufacturing companies in Indonesia and Malaysia.

Table 5 Average Group Test Result

	Country	N	Mean
Fraudulent Financial Reporting (DACCIT)	Indonesia	120	0036540
	Malaysia	118	.0560601

Fraud Pentagon and Fraudulent Financial Reporting: ...

**Table 6** Difference Test Result t-Test (Independent sample t-test)

		Levene's Test for Equality of Variance		t-test for Equality of Means				
		F	Sig.	Т	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
Fraudulent	Equal							
Financial Reporting	variance assumed	0.243	0.623	- 5.361	236	0.000	- 0.0597140	0.0111391
(DACCIT)	Equal variance not assumed			- 5.361	236.000	0.000	0.0597140	0.0111391

# **Financial Target and Fraudulent Financial Reporting**

Based on the hypothesis testing, the variable of financial target exhibited a positive impact on fraudulent financial reporting. Hence, the hypothesis stipulating that financial target positively affects fraudulent financial reporting in Indonesia was accepted. This testing result is in accordance with Setiawati and Baningrum (2018) that found a positive influence of financial target on fraudulent financial reporting. Financial target is proxied by employing RoA (Return on Assets). RoA is a profitability ratio that is able to assess a company's capability in generating profit. When RoA ratio is high, it means the level of investment returns in that company is also high. It is safe to say that a company whose large investment owns substantial assets as well. When the investment returns are high, a company is able to acquire financial targets specified earlier based on the profit gained.

When a manager have set a high financial target but in fact, the firm just receives low profit in the next period, it means the return on investments (assets) of that firm is also low. This illustrates that the company has failed in reaching its financial target. Therefore, if the company fails to realize a financial target that was made before, then the manager can be more ambitious and will be undertaking any work to realize the achievement of the target.

However, the result in Indonesia contradicts the result in Malaysia. The results of research on manufacturing enterprises in Malaysia are in line with Apriliana and Agustina (2017), Bawekes et al. (2018), and Tiffani and Marfuah (2015) who discovered that financial targets do not affect fraudulent financial reporting. This is because the firm, especially the finance manager, perceives RoA value is still reasonable and not difficult to accomplish. Thus, financial managers do not need to commit fraud. Managers assume that company profits can be achieved easily if the company has a developed information system, and capable employees through training. Additionally, the existence of management policies enabling increase in sales such as marketing can make the company accomplish financial targets. Therefore, the calculation of ROA is not the only way to explain whether a firm commits fraudulent financial reporting or not.

Fraud Pentagon and Fraudulent Financial Reporting: ...

# **Financial Stability and Fraudulent Financial Reporting**

Financial stability is the second variable of the pressure element (Howarth et al., 2011) which induced fraudulent financial reporting. The results of hypothesis testing on the financial stability variable demonstrated that financial stability had a positive impact on fraudulent financial reporting in Indonesia and Malaysia. The results of this test are in line with research conducted by Apriliana and Agustina (2017), Akbar (2017), Sihombing and Rahardjo (2014), and Bawekes et al. (2018). Financial stability was examined using the ACHANGE proxy, which is a proxy that incorporates a comparison of changes in assets. The company would be deemed to be stable if it has assets to support and enable it to run optimally. Apriliana and Agustina (2017) revealed that managers will be intimidated if the company they lead faces poor financial stability caused by numerous factors such as economic conditions, industry, and the situation of a currently operating entity. Therefore, to save the state of the company, managers will attempt to find any option to make the company survive and save their honor. Therefore, when investors know that the company is in a stable condition, they will be attracted to invest.

# Personal Financial Need and Fraudulent Financial Reporting

Personal financial need is the third variable in the pressure element (Howarth et al., 2011) that promoted fraudulent financial reporting. Personal financial need did not affect fraudulent financial reporting in Indonesia and Malaysia. Personal financial need in this study used the OSHIP proxy by looking at the presence or absence of share ownership by company insiders. The results of this study are in accordance with the research by Setiawati and Baningrum (2018), Yesiariani and Rahayu (2017), and Maghfiroh et al. (2015) who found that personal financial needs had no effect on fraudulent financial reporting. Personal financial need does not cause fraudulent financial reporting in Indonesia and Malaysia probably since the proportion of shareholders from the management is relatively low, thus showing that there has been an exclusion of share ownership between shareholders as owners and managers as management of the company. With the distinction of share ownership, managers do not have a chance to commit fraud.

# **External Pressure and Fraudulent Financial Reporting**

External pressure is a pressure element in the fraud pentagon theory (Howarth et al., 2011) proxied by leverage, in which the use of borrowed funds was expected to increase the company's assets (investment). In this study, external pressure revealed no effect on fraudulent financial reporting in Indonesia. The results of this test are in line with the research undertaken by Bawekes et al. (2018), Vivianita and Indudewi (2018), Annisya et al. (2016), and Ulfah et al. (2017) who found that external pressure had no effect on fraudulent financial reporting. For Indonesia's case in this study, external pressure does not drive managers to commit fraud because the company's debts are spent for useful and productive things, for example, to improve sales. Thus, the business will be able to repay its liabilities through the sale of these products. When funding sources are distributed and utilized for productive purposes, it will develop vast volumes of products.

Fraud Pentagon and Fraudulent Financial Reporting: ...

The products produced by the company will later be sold and marketed to consumers so that they will generate sales results which later can be used to pay off debts to other parties. Therefore, external pressure is not a pressure for the company's management to carry out fraudulent financial reporting. However, external pressure had a positive impact on fraudulent financial reporting in Malaysia. The results of this test are supported by Lou and Wang (2011), Septriani and Handayani (2018), Tiffani and Marfuah (2015), and Maghfiroh et al. (2015). Companies whose immense external pressure will have a higher tendency to perpetrate fraudulent financial reporting. Lou and Wang (2011) claimed that if a corporation was under high external pressure, the risk of material misstatement was also high, either intentional or not. To handle these errors, the company will strive for ways to disguise the mistakes. In addition, when the company bears considerable pressure, especially from external parties, the company will look for ways to meet their expectations and needs. Companies that can satisfy the expectations will have a positive image from the perspective of external parties and shareholders.

# **Ineffective Monitoring and Fraudulent Financial Reporting**

Ineffective monitoring is included into variables explaining the opportunity element in the fraud pentagon theory (Howarth et al., 2011). Ineffective monitoring was proxied by BDOUT, which involved a comparison of the number of independent commissioners to the total number of commissioners. Based on the tests performed, ineffective monitoring had no influence on fraudulent financial reporting in Indonesia and Malaysia. The results obtained are in accordance with the studies conducted by Husmawati et al. (2017), Maghfiroh et al. (2015), Setiawati and Baningrum (2018), Sihombing and Rahardjo (2014), and Ulfah et al. (2017) which found that ineffective monitoring had no effect on fraudulent financial reporting. With the presence of an independent board of commissioners, the company should be able to monitor and evaluate how the company is operating. However, in practice, the appointment of an independent board of commissioners in a corporation that should aim as a controller is merely a formality to comply with corporate requirements and does not play a role in avoiding fraud. According to Maghfiroh et al. (2015), the establishment of the board of commissioners is undertaken solely to satisfy the company's official necessities and was not meant to actualize Good Governance Company (GGC). Thus, the appointment of the board of commissioners cannot be used as a benchmark if supervision on the company's performance is effective. It cannot ensure whether the company commits fraud or not.

# **Nature of Industry and Fraudulent Financial Reporting**

Nature of industry is the second variable that explaines the opportunity element in the fraud pentagon theory (Howarth et al., 2011). Nature of industry was proxied by Receivables, i.e. the ratio of the difference between the company's receivables in year t and t-1 with the company's receivables in year t. The results of this study indicated that the nature of the industry had no impact on fraudulent financial reporting in Indonesia. This statement is in line with the research conducted by Akbar (2017), Husmawati et al. (2017), Setiawati and Baningrum (2018), Tiffani and Marfuah (2015), and Yesiariani and Rahayu (2017) who found the nature of industry did not affect fraudulent financial

Fraud Pentagon and Fraudulent Financial Reporting: ...

reporting. The average of changes in the company's receivables from the previous year has no effect on the company's cash turnover. The number of receivables owned by the company does not reduce the company's cash used to support operational activities, so the ratio of changes in accounts receivable to the company does not affect and does not encourage managers to commit fraudulent financial reporting (Yesiariani & Rahayu, 2017). This study found that manufacturing companies in Indonesia during the year of observation were in good condition, so they did not cause managers to commit fraudulent financial reporting. However, the results of Indonesia's case in this study were in contrast to manufacturing companies in Malaysia proving the nature of industry had a positive effect on fraudulent financial reporting. The results of this study are in line with research by Annisya et al. (2016), Putriasih et al. (2016), and Sihombing and Rahardjo (2014). Companies with less cash and more receivables indicate their cash management system is not working well. The limited amount of cash can encourage management to manipulate financial statements (Sihombing & Rahardjo, 2014). If the amount of cash is reduced, the possibility of fraudulent financial reporting will be even greater because the company will minimize the number of receivables and maximize cash, with the aim of attracting investors.

# **Quality of External Auditor and Fraudulent Financial Reporting**

Quality of external auditor is the third variable that describes the opportunity element in the theory of fraud pentagon (Howarth et al., 2011). It was measured using a dummy variable with a condition that companies using the Big Four audit services would be signed as 1, while those who did not employ the Big Four audit services were given 0. In this study, the quality of external auditors had a positive effect on fraudulent financial reporting in Indonesia. The results are in conformity with the research conducted by Apriliana and Agustina (2017). The quality of external auditors has a positive influence on fraudulent financial reporting since the Big Four public accounting firms, which consist of Deloitte, PwC, EY, and KPMG, are acknowledged to have higher capabilities and experience in detecting all fraud. Auditors who work at the Big Four are also believed to be more independent and able to avoid conflicts of interest. Thus, the usage of qualified auditors will improve audit findings and will be capable of giving higher quality audit results than non-Big Four. Conversely, the quality of external auditors at companies in Malaysia did not affect fraudulent financial reporting. The results are in line with Setiawati and Baningrum (2018), Bawekes et al. (2018), Ulfah et al. (2017), and Vivianita and Indudewi (2018) who found the quality of external auditors did not affect fraudulent financial reporting. Auditors who work in the Big Four and non-Big Four have the same responsibility, including conducting audits of financial statements based on the same standards, which are auditing standards. Thus, in this respect, the quality, especially the public accounting firms where the auditor works, cannot be used as a reference to judge the performance of the auditor in carrying out his duties. The quality of the auditor can be evaluated from how the auditor can exhibit findings that indicate the incidence of fraud by referring to audit standards, and how the auditor is able to preserve his independence in charge of the work. Fraudulent financial reporting committed by the company is not based on whether or not the external auditor audits the financial

Fraud Pentagon and Fraudulent Financial Reporting: ...

statements, but is based on the ethics, morality, and personality of the firm's members, especially managers (Vivianita & Indudewi, 2018).

# **Change in Auditor and Fraudulent Financial Reporting**

The rationalization element in the fraud pentagon theory (Howarth et al., 2011) was explained by the change in auditor variable. This variable was proxied by a dummy variable with the provision that if the company changed auditors it would be assigned code 1, while those that did not change auditors were signed as 0. Based on the results of hypothesis testing, the change in auditor had no influence on fraudulent financial reporting in both Indonesia and Malaysia. The results of this study are in line with studies by Setiawati and Baningrum (2018), Sihombing and Rahardjo (2014), Tiffani and Marfuah (2015), Vivianita and Indudewi (2018), and Yesiariani and Rahayu (2017) which established that change in auditor did not affect fraudulent financial reporting. According to Vivianita and Indudewi (2018), fraud occurs because there is an opportunity and motivation for managers to serve their own goals, regardless of whether the external auditor is replaced or not. Auditor turnover cannot be used as a standard to detect whether a corporation commits fraud or not. This is because several factors cause companies to change auditors, one of which is the issuance of Government Regulation of the Republic of Indonesia Number 20 of 2015 Article 11 Paragraph 1 which explains that the provision of audit services on financial statements to an entity by a Public Accountant is limited to a maximum of 5 (five) consecutive financial years. With the change of auditors, it is also feasible if the firm wants the performance to increase after replacing the new auditor.

# **Change in Director and Fraudulent Financial Reporting**

The capability element in the fraud pentagon theory (Howarth et al., 2011) was explained by the change in director variable. The change in auditor variable was proxied by a dummy variable with the provision that if the firm changed directors, it would be coded 1, while those who did not change directors were coded 0. In this study, change in director demonstrated the results had no effect on fraudulent financial reporting in Indonesia and Malaysia. The results of this test confirm with earlier studies by Apriliana and Agustina (2017), Bawekes et al. (2018), Setiawati and Baningrum (2018), Sihombing and Rahardjo (2014), and Yesiariani and Rahayu (2017) which revealed that change in director had no influence on fraudulent financial reporting. Based on prior research, the turnover or change in the board of directors in the corporation mentioned in the annual report might occur due to the transfer of authority and the results of the GMS (general meeting of shareholders). In addition, another reason why it cannot reflect fraud in the sample companies is due to the fact that former director has passed away or the director's incumbency has ended so that a change in director is necessary. The change in director carried out by the firm occurs because the company's major stakeholders demand an improvement in performance, which is done by appointing directors who are more competent than the previous directors (Yesiariani & Rahayu, 2017).

Fraud Pentagon and Fraudulent Financial Reporting: ...

# Frequent Number of CEO's Pictures and Fraudulent Financial Reporting

The element of competence in the fraud pentagon theory (Howarth et al., 2011) was explained by the frequent number of CEO's pictures variable. This variable was proxied by how many times the CEO's images appear in the company's annual financial statements. Based on the findings of hypothesis testing, the frequent number of CEO's pictures variable could not reflect any influence on fraudulent financial reporting in Indonesia and Malaysia. The number of images inserted in the annual financial reports cannot be used as an indicator to ascertain whether the company is practicing fraudulent financial reporting. The images attached in the financial statements serve to provide information as well as introduce to the public, particularly for stakeholders, who the CEO(s) of the company is(are). Additionally, the pictures also aim to illustrate how much responsibility the CEO has in each series of activities and in directing the organization. The results of this study are corroborated by Setiawati and Baningrum (2018) which revealed the frequent number of CEO's pictures had no effect on fraudulent financial reporting. The more CEO photos indicate the firm has many CEOs, which means the company will get a bunch of ideas to run the company. If these ideas are advantageous for the company, fraud will not arise (Setiawati & Baningrum, 2018).

# The Difference between Fraud in Indonesia and Malaysia

Based on the results of the different t-test, Indonesia and Malaysia had differences regarding fraudulent financial reporting. The difference in the level of fraud between Indonesia and Malaysia is due to their economic background, the nature of individuals that are dissatisfied and always feel inadequate, as well as the awareness and compliance of civilians, specifically individual companies, to the applicable law. Low awareness and compliance with the law will encourage individuals to conduct activities against the law to benefit themselves or their groups. In addition, the urge of economic needs and the nature of being dissatisfied and always feeling inadequate would push individuals to try all necessary to meet their needs, for both personal and collective benefits.

# Conclusion

Based on the results of testing and data analysis on Indonesian and Malaysian manufacturing companies, it could be concluded that financial targets had a positive impact on fraudulent financial reporting in Indonesia, but there was no effect in Malaysia. Financial stability had a positive effect on fraudulent financial reporting in Indonesia and Malaysia. Personal financial need had no influence on fraudulent financial reporting in Indonesia and Malaysia. External pressure had no impact on fraudulent financial reporting in Indonesia but had a positive impact in Malaysia. Ineffective monitoring did not affect fraudulent financial reporting in Indonesia and Malaysia. Nature of industry had no influence on fraudulent financial reporting in Indonesia but had a positive effect in Malaysia. Quality of external auditor had a positive influence but no effect was detected on fraudulent financial reporting in Malaysia. Change in auditor had no influence on fraudulent financial reporting in Indonesia and Malaysia. Change in director did not

Fraud Pentagon and Fraudulent Financial Reporting: ...

influence fraudulent financial reporting in Indonesia and Malaysia. Frequent number of CEO's pictures had no effect on fraudulent financial reporting in Indonesia and Malaysia. There are differences in the level of fraudulent financial reporting in manufacturing companies between Indonesia and Malaysia.

In conducting this research, the authors were faced with limitations. It was to measure the element of opportunity (quality of external auditor), element of rationalization (change in auditor), capability (change in director), and element of arrogance (frequent number of CEO's pictures) that still employed dummy variables.

Based on the results of this study, there are several suggestions that researchers can recommend, and can be considered for further research. For instance, replacing the dummy on the variables of quality of external auditor, change in auditor, and change in director to alternative measuring instruments. For further research, samples of companies listed on the stock exchange from ASEAN countries can be used. It will be possible to employ different measures of the dependent variable. For further researchers, it is hoped that they can do research on the analysis of fraud pentagon using financial reports in the public sector, especially government agencies.

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