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FRAUD HEXAGON THEORY AND FRAUDULENT FINANCIAL STATEMENT IN IT INDUSTRY IN ASEAN

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ABSTRACT

This study aims to determine what factors influence fraudulent financial statements. Factor analysis of financial statement fraud uses fraud hexagon theory with financial target and external pressure variables to represent pressure, director change and CEO's education factors to represent capability, effective monitoring, and whistleblowing system factors to represent opportunity factors, total accrual ratio to represent rationalization, CEO's duality to represent ego and audit fees to represent collusion. Financial statement fraud is detected using the F-Score Model. The research sample is comapanies engaged in the information technology industry which is listed on S&P Capital IQ in the 2019-2021. Data was collected by purposive sampling method. The data processing method uses the Panel Data Regression Analysis with Fixed Effect Model (FEM). The results of the study show that financial targets have a positive effect on fraudulent financial reporting. Then, external pressure, rationalization and collusion have a negative effect on fraudulent financial statements. Meanwhile, director change, CEO's education, effective monitoring, whistleblowing system, and ego does not influence fraudulent financial statements. This research can be used as a reference for shareholders to prevent factors that can cause fraudulent financial reporting.

KEYWORDS: Fraudulent Financial Statement; Fraud Hexagon Theory; F-Score Model; Information Technology.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui faktor apa saja yang mempengaruhi kecurangan laporan keuangan. Analisis faktor kecurangan laporan keuangan

menggunakan teori fraud hexagon dengan variabel target keuangan dan tekanan eksternal untuk merepresentasikan tekanan, faktor pergantian direktur dan pendidikan CEO untuk merepresentasikan faktor kapabilitas, pengawasan efektif, dan sistem whistleblowing untuk merepresentasikan faktor peluang, rasio akrual total untuk merepresentasikan rasionalisasi, Dualitas CEO untuk mewakili ego dan biaya audit untuk mewakili kolusi. Kecurangan laporan keuangan dideteksi menggunakan F-Score Model. Sampel penelitian adalah perusahaan yang bergerak di industri teknologi informasi yang terdaftar di S&P Capital IQ tahun 2019-2021. Pengumpulan data dilakukan dengan metode purposive sampling. Metode pengolahan data menggunakan Analisis Regresi Data Panel dengan Fixed Effect Model (FEM). Hasil penelitian menunjukkan bahwa financial target berpengaruh positif terhadap fraudulent financial reporting. Kemudian, tekanan eksternal, rasionalisasi dan kolusi berpengaruh negatif terhadap kecurangan laporan keuangan. Sedangkan pergantian direktur, pendidikan CEO, pengawasan yang efektif, sistem whistleblowing, dan ego tidak berpengaruh terhadap kecurangan laporan keuangan. Penelitian ini dapat dijadikan acuan bagi pemegang saham untuk mencegah faktor-faktor yang dapat menyebabkan kecurangan pelaporan keuangan.

KATA KUNCI : Fraud Laporan Keuangan; Model F-Score; Teknologi Informasi; Teori Fraud Hexagon.

INTRODUCTION

Lastanti et al. (2022) argues that financial reports are a manifestation of management's responsibility to stakeholders, especially shareholders. Weygandt et al. (2017) also emphasized that the purpose of making financial reports is to share financial information that is useful in decision making related to purchases, sales, equity instruments, and even debt. Decisions made based on the financial statements presented will affect the sustainability of the company going forward, therefore a financial report must be presented in a reasonable condition and in accordance with the actual situation or performance of the company.

Riley & Kranacher (2019) defines fraud as an act of deliberate deception, whether carried out individually or in groups, which causes harm to the victim to generate profit for the perpetrator. The ACFE (Association of Certified Fraud Examiners) in its 2022 Report to The Nation said that financial statement fraud had the smallest percentage of occurrences, only 9% of the total fraud cases surveyed, but resulted in the greatest loss compared to other types of fraud with the median value of losses $593,000.

One of the biggest fraudulent financial statements that has become a legend is the Enron case. At that time, Enron was called "One of the Most Admired and Innovative Companies in the World" because of the creative programs it carried out. Until it was finally revealed that all this time, the company had been inflating its income, hiding debt, and hiding the huge

losses suffered by the subsidiary company of the company. This case caused a loss of approximately USD 50 billion.

The form of this fraudulent financial statement can also be seen from the case of a domestic company PT. Garuda Indonesia, which broke up in 2019. Garuda recorded receivables from PT. Mahata Aero Technology as full revenue in its 2018 financial statements, even though the agreement or contract has not been completed and even no payment has been made at all by Mahata. This recording eventually resulted in a financial report that presented a profit of USD 809.85 thousand in 2018 even though in 2017 it experienced a very large loss of USD 216.5 million.

From the cases described above and the ACFE report, we can see that financial statement fraud is a crucial problem for companies. This is a factor that explains the importance of examining the causes of fraudulent financial reporting. With the hope, later fraudulent financial statements can be prevented by the company. This is the main reason for the author to carry out this research.

This topic has been studied several times by other researchers with various variables to represent the factors in the Fraud Hexagon Theory. In this study, the authors combined several variables from several previous studies which, according to the authors, were rarely used in previous studies. The researcher uses research from Anggono et al. (2021) as the main reference and develops the research by adding new proxies and different models of calculating financial statement fraud from the research. Different from Anggono et al. (2021), the measurement of financial statement fraud using the F-Score Model is supported by research from Aviantara (2021), Sagala & Siagian (2021) and Wicaksono & Suryandari (2021) that said the F-Score Model provides more accurate results regarding errors that are intentionally made by management to mislead the readers.

The first factor is that pressure in this study is represented by two proxies, namely financial targets, and external pressures according to the research of Anggono et al. (2021). The second factor is opportunity represented by effective monitoring and whistleblowing system according to research by Anggono et al. (2021) and Aviantara (2021). The third factor is capability represented by the change director and CEO's education. This is supported by Kusumosari & Solikhah (2021) and Wicaksono & Suryandari (2021). The fourth factor, namely rationalization, is represented by the value of the ratio of accruals to total assets of the company. Lastanti et al. (2022) and Kusumosari & Solikhah (2021) used this proxy in their research. The fifth factor is ego represented by CEO duality. CEO duality is the same as research from Anggono et al. (2021). The last factor is collusion represented by audit fees in accordance with Aviantara (2021) research.

Novelty of this research is the research object itself. In addition, previous research has only focused on the manufacturing industry, BUMN, mining and real estate as well as consumer companies, especially food and beverages. Therefore, the authors decided to focus on one of the industries that is widely discussed and will develop a lot in the future, namely the technology and information industry. Then, previous studies on this topic also focused on companies within Indonesia. The author decided to update the object of research on companies in ASEAN countries.

Jensen & Meckling (1976) stated that agency theory is a contract or cooperation between two parties where one party gives authority to the other party (agent). The goal of shareholders is to maximize the profit for them by maximize the company's value. Shareholders as owners who use management (agents) and provide authority to run the company, with the hope that management can run the company optimally to increase the company's value. On the other

hand, the main goal of management is to increase the company's profits to get paid or rewarded enough for their work. This can lead to a conflict of interest which is quite dangerous for the sustainability of the company.

The Association of Certified Fraud Examiners (2022) explains that fraud is any activity that uses 'fraud' to gain profit. A person is said to commit fraud if he knows that a misstatement has occurred but hides the facts and encourages the victim to make decisions or actions that are detrimental to the victim. Financial report fraud results in the issued financial reports no longer in accordance with the company's real situation or are no longer credible. This can result in inappropriate decision making by company officials for the future of the company.

Vousinas (2019) refers to the factors that cause fraud in the Fraud Hexagon Theory as "The S.C.C.O.R.E Fraud Model" as shown in the following figure

The stimulus/pressure referred to in this case is pressure on management to meet company targets or maintain the company's financial stability. Capability or competency in question is the ability or nature of a person to commit fraud. Opportunity talks about the opportunity that someone gets from his position or position in the company to commit fraud. Rationalization talks about how a fraud perpetrator thinks that he has not made a mistake and considers the behavior he is doing is correct and with clear reasons. Stotland (1977) in Vousinas (2019) argues ego as one of the main factor where the practice of fraud is the desire to excel, to dominate, and to be amazed by others. Collusion is an agreement carried out between two or more individuals with the aim of committing a crime to take advantage or rights from a third party (Vousinas, 2019).

Figure 1. Fraud Hexagon Theory

Source: Vousinas (2019)

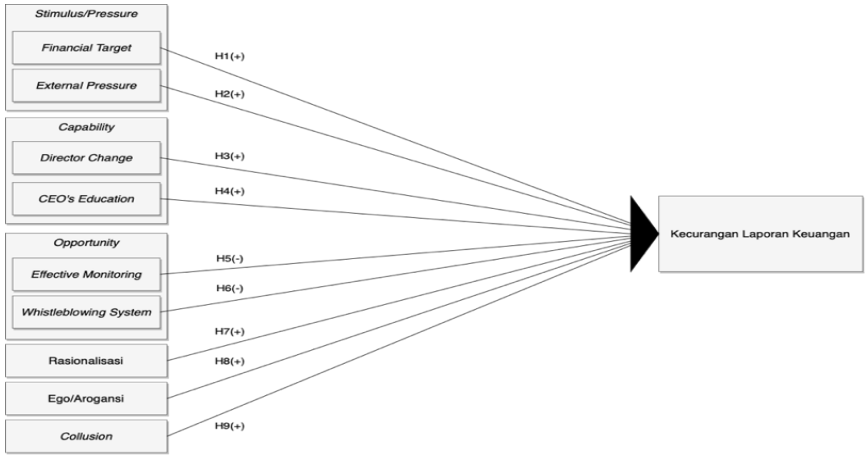

Figure 2. Conceptual Framework

Source: Developed by the Author based on Fraud Hexagon Theory (2022)

Financial targets are targets that are jointly set by the company to be achieved in one period. In line with agency theory, management is expected to meet this financial target. The target set by this company could be a pressure for management, especially if the company's sales conditions during that period were not going well. Management who are pressured to meet this target during bad company conditions can be compelled to commit fraudulent financial statements.

Anggono et al. (2021), Sagala & Siagian (2021), and Kusumosari & Solikhah (2021) stated that financial targets have an influence on financial statement fraud. Wicaksono & Suryandari (2021) also explain that financial targets positively affect financial statement fraud.

H1: *Financial Target has a positive effect on Financial Statement Fraud*

External Pressure is a form of pressure given by external parties related to the company, for example related to debt problems (Anggono et al., 2021). This pressure can arise either when the company is just starting to borrow money or when the debt has been borrowed to give the impression and guarantee that the company's condition is healthy and adequate to pay off the debt later. This can make management slumped and compelled to manipulate financial statements so that they appear to be in good condition and not in accordance with reality.

Anggono et al. (2021) explain that external pressure affects financial statement fraud. If you look at the results of the hypothesis test, it can be said that the effect is positive. Imtikhani (2021) and Wicaksono & Suryandari (2021) also state that external pressure has a positive influence on financial statement fraud.

H2: *External Pressure has a positive effect on Fraudulent Financial Statements*

Director change is one of the activities carried out by the company in the hope of getting a new director who is more competent and capable in carrying out his duties. However, changes in directors that are too often carried out can be suspected because it can indicate fraud in the leadership of the previous director. The new director can also be said to not have sufficient knowledge about the company that can trigger a high level of fraud because there will be pressure from shareholders to meet their expectations.

Aviantara (2021) and Alfarago & Mabrur (2022) state that director change affects financial reporting fraud. If you look at the direction from the results of the hypothesis test, Aviantara (2021)'s research produced a positive effect, while Alfarago & Mabrur (2022)'s research produced a negative effect.

H3: *Director Change has a positive effect on Fraudulent Financial Statements*

Shareholders want the company to be led by knowledgeable management. A CEO's education reflects his knowledge and ability to understand business processes and record the company's financial statements. But this can be a double-edged sword for the company. The higher the education level of a CEO, the higher his understanding of the company, and the higher the possibility that he will plan fraud from that understanding. Research conducted by Aviantara (2021) and Kusumosari & Solikhah (2021) explains that director change does not influence fraudulent financial statements.

H4: *CEO's Education has a positive effect on Fraudulent Financial Statements*

One of the reasons for fraudulent financial reporting is the lack of effective oversight, so that effective monitoring affects financial reports. The more ineffective the supervision carried out by the company on management, the greater the opportunity for fraudulent financial statements. Conversely, the more effective the supervision, the smaller the opportunity for fraudulent financial reporting.

Research from Lastanti et al. (2022) and Kusumosari & Solikhah (2021) explain that ineffective monitoring has an influence on fraudulent financial reports. Specifically, Lastanti et al. (2022) revealed that the influence exerted was a positive influence. Then effective monitoring has a negative effect.

H5: *Effective Monitoring has a negative effect on Fraudulent Financial Statements*

Whistleblowing system is one of the company's ways to prevent and overcome fraud, where various parties from various levels within the company can report acts of fraud if they personally witness the incident. With this whistleblowing, it is hoped that all parties in the company will be reluctant or afraid to carry out fraud. So, it can be said that with the existence of a whistleblowing system, the opportunity for fraud to be carried out is decreasing.

One study that was found to use a whistleblowing system, namely research from Aviantara (2021) revealed that the whistleblowing system influenced financial statement fraud.

H6: *Whistleblowing System has a negative effect on Fraudulent Financial Statements*

Rationalization is based on the thoughts of the perpetrators of fraud. One part of the financial statements that is recorded with a decision from management is the accrual value. The accrual value will be recorded as accrual if management assesses it as such. Therefore, management decisions are important in this regard. In this condition, management's judgment can emerge, which value can be said to be accrued and not. Management may say it is an accrual to increase the value of the company and beautify the financial statements because they think it is true.

Research conducted by Kusumosari & Solikhah (2021) explains that rationalization affect financial statement fraud. On the other hand, in the research of Lastanti et al. (2022), the results of the study explain that the rationalization represented by this accrual value has no effect on fraudulent financial statements.

H7: *Rationalization has a positive effect on Financial Statement Fraud*

The ego factor in this study will be represented by CEO duality. CEO duality is a condition where the CEO occupies two or more positions in one company. Having a position in two positions is a form of ego form from the CEO to maximize the power he has in the company. This dual position will result in the CEO feeling the most powerful and violating the company's policies that have been set to do something that benefits him.

Research conducted by Anggono et al. (2021) and Kusumosari & Solikhah (2021) explains that CEO duality has an influence on financial statement fraud. In contrast, research from Imtikhani (2021) explains that CEO duality has an influence on financial statement fraud.

H8: *Ego has a positive effect on Fraudulent Financial Statements*

Collusion factor in this study will be represented by the variable audit fee or audit fee. High audit fees are of course advantageous for external auditors. This advantage, of course, can encourage the auditor to maintain a good relationship with the client or company by providing an unqualified opinion. This can lead to reciprocal relationships and cooperation between auditors and company leaders in concealing fraudulent financial statements carried out by the company's top management.

Research using this proxy is also in line with research from Aviantara (2021) which states that collusion represented by audit fees has an influence on financial statement fraud.

H9: *Collusion has a positive effect on Fraudulent Financial Statements.*

METHOD

This research is quantitative research. The data collection technique carried out by the researcher is the secondary document study method in the form of annual reports and financial reports published by companies both in S&P Capital IQ Pro and on their respective company websites.

The sample selection was carried out by purposive sampling technique. The following are the characteristics used in selecting the sample

a) Information technology industry companies listed on S&P Capital IQ in 2019 – 2021

b) Companies operating in countries in ASEAN (Association of Southeast Asian Nations)

c) Companies that publish annual reports in 2019 – 2021

d) Companies that publish financial reports in 2019 – 2021

e) Companies that meet the criteria of researchers outside of the criteria mentioned here.

The sample selection resulted in 228 samples from 99 companies consisting of 26 Singaporean, 20 Thailand, 45 Malaysian, 6 Indonesian, 1 Vietnamese and 1 Philippine companies. The author chose research data for 2019-2021 because that period was a time when there was a change from normal economic conditions to critical economic conditions due to the pandemic. From this, we can see how the fraud hexagon influences fraudulent financial statements during this changing economic condition.

The research model used in this study is a fixed effect model (FEM) with the panel data regression analysis which involves one dependent variable, nine independent variables and four control variables. Data processing in this study was executed using the STATA 16 application. The following research model is used:

$$FFS = \alpha + \beta_1 FT_{i,t} + \beta_2 EP_{i,t} + \beta_3 DC_{i,t} + \beta_4 CE_{i,t} + \beta_5 EM_{i,t} + \beta_6 WS_{i,t} + \beta_7 RAS_{i,t} + \beta_8 EGO_{i,t} + \beta_9 COL_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} CF_{i,t} + \beta_{12} SG_{i,t} + \beta_{13} LIQ_{i,t} + \varepsilon_{i,t}$$

The following also mentions how to measure the variables used in this study

Type Variable	Name of Variable	Measurement
Dependent	Fraduluent Financial Statement (FFS)	F-Score = Accrual Quality + Financial Performance (Wicaksono & Suryandari, 2021)
Independent	Financial Target (FT)	$ROA = \frac{Net\ Income}{Total\ Assets}$ (Skousen et al., 2008)
	External Pressure (EP)	$DAR = \frac{Total\ Debt}{Total\ Assets}$ (Skousen et al., 2008)
	Director Change (DC)	*Dummy*: 1 if the company changes directors in that year, 0 otherwise (Wolfe & Hermanson, 2004)
	CEO's Education (CE)	*Dummy*: 1 if the company has the CEO with a doctoral educational background (S3), 0 otherwise (Aviantara, 2021)
	Effective Monitoring (EM)	$BDOUT = \frac{Number\ of\ Independent\ Commisioners}{Total\ Board\ Commisioners}$ (Wolfe & Hermanson, 2004)
	Whistleblowing System (WS)	*Dummy*: 1 If the company has and implements a *whistleblowing system policy* , 0 otherwise (Aviantara, 2021)
	Rationalisation (RAS)	$TACC = \frac{Total\ Accrual}{Total\ Assets}$ (Skousen et al., 2008)
	Ego (EGO)	*Dummy*: 1 If the company has two or more position in the company, 0 otherwise (Anggono et al., 2021)
	Collusion (COL)	$Audit\ Fee = \ln(audit\ fee\ reported)$ (Aviantara, 2021)
Control	Company Size (UP)	$Size = \ln(total\ assets)$ (Putra & Wiratmaja, 2019)
	Cash Flow (CF)	$Operating\ Cash\ Flow\ Ratio = \frac{Operating\ Cash\ Flow}{Total\ Assets}$ (Sa'diyah & Suhartini, 2022)
	Sales Growth (SG)	$Sales\ Growth = \frac{Sales_t - Sales_{t-1}}{Sales_{t-1}}$ (Januari & Suardikha, 2019)
	Liquidity (LIQ)	$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$ (Oktrima, 2017)

Source: Processed by the author (2022)

Table 1. Operational Variables

RESULTS AND DISCUSSION

Description of Research Data

Table 2. Research Data Selection

Criteria	Amount
Companies engaged in Information Technology in ASEAN countries listed on S&P Capital IQ 2019-2021	175
(-) Companies that do not publish annual reports along with financial reports for 2019-2021 in full	(32)
The number of sample companies	143
The number of years of observation (3 tahun)	429
(-) Data that a DAR value = 0	(23)
(-) Data with ROA $value \leq 0$	(158)
(-) Data Outliers	(20)
The number of data samples	228

Source: Processed by the author (2022)

Descriptive Statistics Test

Table 3. Descriptive Statistical Test

	Obs	*Mean*	*Std. Deviation*	*Minimum*	*Maximum*
FFS	228	0.624447	0.450902	-0.745621	1.985068
FT	228	0.073701	0.112543	0.000233	1.544404
EP	228	0.150109	0.135549	0.000260	0.626108
DC	228	0.381579	0.486843	0.000000	1.000000
CE	228	0.096491	0.295913	0.000000	1.000000
IM	228	0.639440	0.254193	0.000000	1.000000
WS	228	0.921053	0.270250	0.000000	1.000000
RAS	228	0.015340	0.209685	-0.495812	1.580430
EGO	228	0.372807	0.484615	0.000000	1.000000
COL	228	10.613857	1.227116	7.832014	13.253278
SIZE	228	11.686579	1.259379	8.430760	14.807436
CF	228	0.093726	0.199169	-0.272783	1.867048
SG	228	0.109922	0.472628	-0.900147	4.418931
LIQ	228	2.629788	1.627929	0.354392	7.906625
Valid N	228				

Source: Processed by the author using STATA 16 (2022)

Correlation Analysis

Correlations
Pearson Correlation

	FFS	FT	EP	DC	CE	IM	WS	RAS	EGO	COL	SIZE	CF	SG	LIQ
FFS	1													
FT	.243* .000	1												
EP	-.535 .000	-.182* .006	1											
DC	.049 .463	-.050 .449	-.021 .753	1										
CE	-.153 .021	-.093 .160	.023 .732	-.043 .522	1									
IM	.256 .000	.185* .005	-.251* .000	-.038 .568	-.199* .003	1								
WS	.090 .174	.004 .952	-.209* .002	.029 .662	-.014 .828	.123* .063	1							
RAS	-.103 .122	.314 .000	.037 .575	.022 .744	.050 .449	-.023 .733	.075 .258	1						
EGO	.053 .423	-.072 .281	-.074 .265	-.008 .903	.270* .000	.000 .999	.091 .170	-.072 .201	1					
COL	-.318* .000	-.049 .459	.141* .033	-.058 .385	.252* .000	-.329* .000	-.087 .190	.025 .705	.145* .028	1				
SIZE	-.285 .000	-.143* .031	.234* .000	.057 .393	.161* .015	-.229 .000	-.039 .554	-.013 .841	.047 .480	.513* .000	1			

Correlations
Pearson Correlation

	FFS	FT	EP	DC	CE	IM	WS	RAS	EGO	COL	SIZE	CF	SG	LIC
CF	-.072 .282	.006 .093	.054 .420	.011 .864	-.116* .080		-.058 .381	-.073 .270	-.131* .048	-.141* .034	-.088 .187	1		
SG	.259 .000	-.030 .653	.083 .210	.035 .597	-.074 .267	-.075 .258	-.140* .035	-.122* .066	.020 .766	-.157* .018	-.031 .647	.088 .187	1	
LIC	.469 .000	.143 .031	-.533 .000	-.061 .075	-.118 .075	.407* .000	.142* .032	-.108 .103	.040 .545	-.275* .000	-.319* .000	.005 .941	-.027 .680	1

Table 4. Pairwise Correlation Test

Source: Processed by the author using STATA 16 (2022)

From the results of the Pearson correlation test above, especially the Sig. value, several variables such as FT, EP, EC, EM, WS, RAS, COL have a relationship or correlation with the independent variable, namely FFS. While variables such as DC and Ego have no relationship with FFS.

Also, there is no relationship between the independent variables that attract each other or influence each other strongly because the Pearson correlation number does not exceed the value of 0.85.

Model Selection Test

Panel data testing requires three types of testing (Chow Test, Hausman Test, and Lagrange Multiplier) to decide on the proper research model and is in line with the existing data.

Chow Test

The Chow test presented in Table 5 show p-value 0.0091 which is less than 0.05, which means that this research is more suitable for using Fixed Effect Model than Common Effect Model.

F test that all u_i	F (99,116)	Prob > F
0	1.58	0.0091

Table 5. Chow Test

Source: Processed by the author using STATA 16 (2022)

Hausman Test

Hausman test presented in Tabe 6, shows p-value 0.0000 which is less than 0.05, which means that this research is more suitable for using Fixed Effect Model than Random Effect Model.

Lagrange Multiplier

Lagrange Multiplier test presented in table 7 shows p-value 0.1109 where the value is more than 0.05 which means that this research is more suitable to use the Common Effect Model than the Random Effect Model.

According to the results of these three types of model selection tests, concluded that the most suitable research model is the Fixed Effect Model.

Classical Assumption Test

Multicollinearity Test

From the results of the multicollinearity test presented in table 8 it can be said that in this study there is no multicollinearity problem because all 1/VIF values are worth more than 0.1 and all VIF values are below 10. Therefore, this study is stated to have no multicollinearity problem.

Table 6. Hausman Test

F test that all u_i	F (99,116)	Prob > F
0	1.58	0.0091

Source: Processed by the author using STATA 16 (2022)

Table 7. Lagrange Multiplier Test

Chibar2(01)	F (99,116)	Prob > F
1.49	0.0091	0.0091

Source: Processed by the author using STATA 16 (2022)

Table 8. Multicollinearity Test

	1/VIF	*VIF*
FT	.816	1.225
EP	.668	1.498
DC	.970	1.031
CE	.843	1.186
IM	.738	1.355
WS	.909	1.100
RAS	.840	1.190
EGO	.877	1.141
COL	.616	1.624
SIZE	.679	1.474
CF	.946	1.057
SG	.910	1.099
LIQ	.598	1.672
Mean VIF	1.28	

Source: Processed by the author using STATA 16 (2022)

Normality test

From the p-plot in Figure 3, we can see that the data points are located around the diagonal line but at the top are slightly away from the line. The histogram also doesn't show a perfect bell curve. So, from the results of the graphical analysis carried out it can be said that the data is not normally distributed.

The results presented in table 9, described that some of the variable's p-value are worth less than 0.05 (p-value <0.05). Therefore, it can be stated that there is a normality problem. This issue will be acknowledged as a limitation of the study.

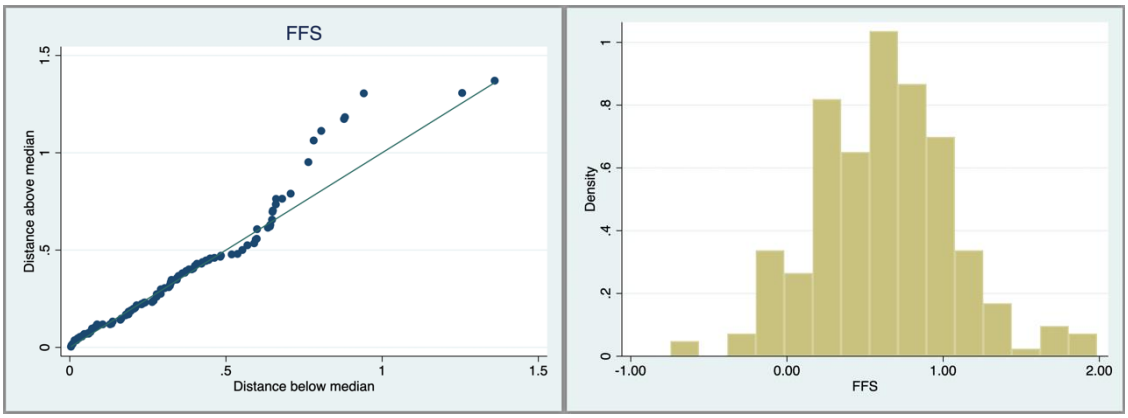

Figure 3. P-Plot and Histogram of Regression Standardized Residual

Source: Processed by the author using STATA 16 (2022)

	Obs	*W*	*V*	z	*Prob>z*
FFS	228	0.98921	1.804	1.367	0.08583
FT	228	0.38949	102.122	10.714	0.00000
EP	228	0.89050	18.317	6.735	0.00000
DC	228	0.99581	0.701	-0.824	0.79514
CE	228	0.92617	12.350	5.822	0.00000
IM	228	0.96182	6.386	4.294	0.00001
WS	228	0.91076	14.928	6.261	0.00000
RAS	228	0.79833	33.734	8.149	0.00000
EGO	228	0.99529	0.788	-0.551	0.70932
COL	228	0.97902	3.510	2.908	0.00182
SIZE	228	0.99091	1.520	0.970	0.16610
CF	228	0.56524	72.724	9.928	0.00000
SG	228	0.53545	77.707	10.082	0.00000
LIQ	228	0.86204	23.078	7.270	0.00000
Valid N	228				

Table 9. Shapiro-Wilk W

Source: Processed by the author using STATA 16 (2022)

Heteroscedasticity Tests

From the results of the analysis of the scatterplot graph, the points are quite scattered, but some are clustered. This indicates a symptom of a heteroscedasticity problem.

From the test results presented in table 10, p-value is less than 0.05 (p-value < 0.05). Therefore, this study has heteroscedasticity problems.

Autocorrelation Test

Based on table 11, the Woolridge test results yield a value of 0.2971 which is more than 0.05 (p-value > 0.05). Therefore, this study has no autocorrelation problems.

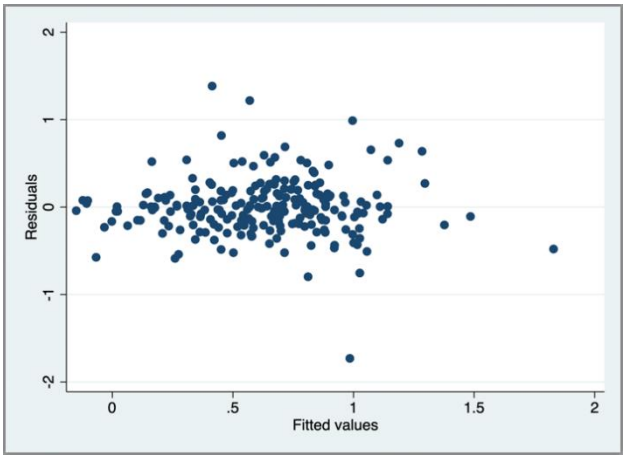

Figure 4. Heteroscedasticity Test

Source: Processed by the author using STATA 16 (2022)

H0	Variables	Chi2(1)	Prob > chi2
Constant variance	Fitted values of FFS	10.80	0.0010

Table 10. Breusch Pagan Test

Source: Processed by the author using STATA 16 (2022)

H0	F (1,50)	Prob > chi2
No first-order autocorrelation	1.110	0.2971

Table 11. Woolridge Test

Source: Processed by the author using STATA 16 (2022)

Determination Coefficient Test (R2)

Table 10 shows that the R Square value of this study is 41.56% which means all independent variables and control variables in this research, can explain changes in financial statement fraud as the dependent variable of 41.56%.

F Statistic Test

From the table above we can see that the significance value of the f test results is 0.0000, so the research model is declared valid at $\alpha = 1\%$. This means that the independent and control variables in this study are jointly able to explain changes in the dependent variable.

Table 12. Determination Coefficient Test

Within	Between	Overall
0.4156	0.0001	0.0161

Source: Processed by the author using STATA 16 (2022)

Table 13. F Statistical Test

F (12,116)	Prob > F
6.87	0.0000

Source: Processed by the author using STATA 16 (2022)

Table 14. Hypothesis Testing

FFS	**C**oef.	**Std. Error**	**t**	P> | t |	**[96% Conf. Interval]**		**Keputusan**
FT	2.1522	.3292	6.54	0.000	1.5001	2.8043	H1 Accepted
EP	-.9832	.5050	1.95	0.054	-1.9834	.0171	H2 Rejected
DC	.0161	.0683	0.24	0.814	-.1191	.1513	H3 Rejected
CE	-.5608	.3765	1.49	0.139	-1.3066	.1850	H4 Accepted
IM	-.4565	.3635	1.26	0.212	-1.1765	.2634	H5 Rejected
WS	.2071	.1555	1.33	0.186	-.1009	.5151	H6 Rejected
RAS	-.3390	.1469	2.31	0.023	-.6301	-.0480	H7 Rejected
EGO			Omitted				H8 Rejected
COL	.1873	.1225	1.53	0.129	-.0553	.4299	H9 Accepted
SIZE	2409	.1923	1.25	0.213	-.1400	.6218	-
CF	.1424	.3420	0.42	0.678	-.5350	.8197	-
SG	.2929	.0823	3.56	0.001	.1298	.4559	-
LIQ	.0702	.0457	1.54	0.127	-.0203	.1606	-
_cons	-4.2657	2.2071	1.93	0.056	-8.6371	.1057	-

Source: Processed by the author using STATA 16 (2022)

Hypothesis testing

Financial Target produces p-value 0.000/2 to 0.000 or 0.0%. This means that Financial Target has a significant effect (at α = 1%) on Financial Statement Fraud. The coefficient results also produce a positive 2.152155 that in line with the hypothesis. Therefore, Hypothesis 1 is ACCEPTED.

External pressure produces p-value 0.054 / 2 to 0.0027 or 0.0%. This means that external pressure has a significant effect (at α = 1%) on Financial Statement Fraud. However, the coefficient produces a negative 0.9831 which is not in line with the hypothesis. Therefore, Hypothesis 2 is REJECTED.

Director change resulted in p-value 0.814 / 2 to 0.407 or 40.7%. This significance value does not meet the 1%, 5% or 10% significance requirements. This means that director change has no effect on Financial Statement Fraud. Then Hypothesis 3 is REJECTED.

CEO's education produces p-value 0,139 / 2 to 0.0695 or 6.95%. This means that CEO's Education has a significant effect (at α = 10%) on Financial Statement Fraud. The coefficient produces a positive 0,0161 that is in line with the hypothesis. Therefore, Hypothesis 4 is ACCEPTED.

Effective monitoring produces p-value 0,212 / 2 to 0,106 or 10.6%. This significance value does not fulfill any of the significance requirements. This means that effective monitoring has no effect on fraudulent financial statements. Therefore, Hypothesis 5 is REJECTED.

The whistleblowing system produces p-value 0,186 / 2 to 0.093 or 9.3%. This means that whistleblowing system has a significant effect (at α = 10%) on Financial Statement Fraud. However, the coefficient produces a positive 0.2071 which is not in line with the hypothesis. Therefore, Hypothesis 6 is REJECTED.

Rationalization produces p-value 0.023 / 2 to 0.0115 or 1.15%. This means that whistleblowing system has a significant effect (at α = 5%) on Financial Statement Fraud. However, the coefficient produces a negative -0.3390 which is not in line with the hypothesis. Therefore, Hypothesis 6 is REJECTED.

Ego omitted from the variables because it doesn't have correlation with Financial Statement Fraud. Then Hypothesis 8 is REJECTED.

Collusion produces p-value 0.0129 / 2 to 0.0645 or 6.45%. This significance value meets the 10% significance requirement. This means that collusion has a significant effect (at α = 10%) on Financial Statement Fraud. The coefficient produces a positive 0.1973 that is in line with the hypothesis. Therefore, Hypothesis 9 is ACCEPTED.

The Effect of Financial Targets on Fraudulent Financial Statements

The results of the hypothesis test previously presented, Financial Target (FT) which in this case represents pressure, has a positive effect on fraudulent financial statements. It means that the higher the pressure in the form of financial targets, the higher the risk of fraudulent financial statements. It is important to determine the financial target value correctly because financial targets can be a factor causing Financial Statement Fraud. The financial targets set up must be in accordance with management's abilities, not too high and also not too low so management does not feel pressured by the existing targets. The target should not be based

on the highest historical profit value but also the average profit value that can be achieved by management. This study is in line with the results of research by Wicaksono & Suryandari (2021) and Alfarago & Mabrur (2022) where financial targets also have a positive effect on fraudulent financial reports.

The Effect of External Pressure on Fraudulent Financial Statements

External pressure, which represents the pressure in the fraud hexagon theory, is proven to have a negative effect in this study, which means that the higher the pressure from creditors and investors, the lower the risk of fraudulent financial reporting at the company.

This is also possible because the value of debt in this industry is on average only 15% of total assets based on descriptive statistics. This debt value shows how this industry does not use debt too much as a form of funding so that pressure from creditors does not burden management. Conversely, pressure from creditors encourages management to be completely open and honest about the company's financial condition. These results contradict the results of studies by Imtikhani (2021), Wicaksono & Suryandari (2021), Alfarago & Mabrur (2022), and Achmad et al. (2022).

The Effect of Director Change on Fraudulent Financial Statements

The results of research concludes that Director Change which represents capability has no effect on financial statement fraud. Replacement of directors does not affect the occurrence of fraudulent financial statements at all. This means that most companies change directors to improve company performance with the capability of the director. The new director who leads also uses his ability not to commit financial statement fraud but to improve his financial performance. The results of this study are in line with research from Imtikhani (2021), Anggono et al. (2021), Sagala & Siagian (2021), Handoko (2021), and Achmad et al. (2022).

The Effect of CEO's Education on Fraudulent Financial Statements

The results of the study show that CEO's Education has a positive effect on fraudulent financial statements. The higher the education level of a CEO, the higher the possibility of financial statement fraud. This means that a CEO can use his knowledge and understanding of business and finance that he has learned to commit fraudulent financial reports for the company he leads. Shareholders must be careful in choosing a CEO to lead the company. The chosen leader is not only highly educated but also has an honest character so that he can lead the company well. The results of this study are in line with research from Aviantara (2021), Kusumosari & Solikhah (2021) and Wicaksono & Suryandari (2021).

The Effect of Effective Monitoring on Fraudulent Financial Statements

The results of the hypothesis test show that Effective monitoring which represents opportunity does not affect fraudulent financial statements. This means that no matter how many independent members of the board of commissioners in a company do not influence the practice of fraudulent financial reporting in that company. Financial statement fraud can occur even though all members of the board of commissioners are independent. Whether or not the oversight of the board of commissioners is effective does not cover management's opportunity to commit fraudulent financial reporting. The results of this study are in line with the results of research from Imtikhani (2021) and Wicaksono & Suryandari (2021).

The Effect of Whistleblowing System on Fraudulent Financial Statements

The results of the hypothesis test show that the whistleblowing system does not influence fraudulent financial statements. This means that the existence of a policy and implementation of a whistleblowing system in a company does not guarantee that the company is safe from fraudulent financial statements. Financial statement fraud can still occur even with the existence of a whistleblowing system. The whistleblowing system which represents the opportunity factor in this study does not have any effect on fraudulent financial statements. The results of this study contradict the results of research conducted by Aviantara (2021). The results of this study are different from the results of research by Kusumosari & Solikhah (2021) and Lastanti et al. (2022).

The Effect of Rationalization on Fraudulent Financial Statements

The results of the hypothesis test show that rationalization has a negative effect on fraudulent financial reporting where this result is contrary to the hypothesis made. It means that the higher accrual value of a company, the lower risk of fraudulent financial statements. A large company's total accrual value is not an indication of fraudulent financial statements but rather a sign that the company records financial statements correctly in accordance with good record-keeping rules. The large accrual value could be because the company's accrual value is quite large. The results of this study also provide an understanding that management's rational judgment or thinking regarding the recording of financial statements is indeed correct in accordance with existing rules without any purpose of committing fraudulent financial statements. The results of this study contradict with the research by Kusumosari & Solikhah (2021). But in line with research by Lastanti et al. (2022).

The Effect of Ego on Fraudulent Financial Statements

The results of the hypothesis test show that ego does not affect fraudulent financial statements. A CEO who occupies more than one position in a company may not control the company but improve company performance and improve work efficiency within the company. Because having a CEO in several positions facilitates the communication of a division with top management so that the work process becomes faster and easier.

When viewed from a broader perspective, leaders who have high egos do not necessarily commit financial statement fraud. It could be that with that high ego he carries out his work honestly and correctly so that he can occupy the leadership position longer. The results of this study are in line with research from Imtikhani (2021), Wicaksono & Suryandari (2021) and Dewi & Anisykurlillah (2021).

The Effect of Collusion on Fraudulent Financial Statements

The results of the study show that collusion represented by audit fees has a positive effect on fraudulent financial statements. It means that the higher the audit fee, the higher the risk of fraudulent financial statements. The high value of the audit fee can reflect the possibility of fraudulent financial reporting. This means that there is a high possibility that management cooperates with external auditors to commit and hide fraudulent financial statements. High audit fees are a form of reciprocity between the auditor and management. Auditors benefit from high audit fees and management can carry out fraudulent financial statements without anyone knowing. The results of this study are in line with research by Aviantara (2021).

CONCLUSION

Based on the results of the entire series of studies carried out, the researcher can conclude that the pressure factor represented by the financial target has a positive effect on financial statement fraud. The pressure factor which is represented by external pressure, rationalization factor and collusion factor has a negative effect on financial statement fraud. The capability factor represented by the change director, the capability factor represented by the CEO's education, the opportunity factor represented by effective monitoring, the opportunity factor represented by the whistleblowing system, and the ego factor had no effect on fraudulent financial statements.

This research is expected to be useful for further researchers who will research on this topic and may also be useful as a reference for shareholders who give responsibility to management to stay away from the factors studied above that can increase the risk of fraudulent financial statements.

This research also has some limitations. This study did not meet several criteria for classical assumption test including normality test, heteroscedasticity test and autocorrelation test. This study involves data from companies operating in ASEAN countries without considering the different policies of each country.

Further researchers are advised to add more independent variables that can represent the Fraud Hexagon Theory factors, specifically rationalization, ego, and collusion factors. Further researchers are also expected to find new ways of measuring the existing variables that can measure these variables more accurately.

This study proves that the relationship between the dependent and independent variables that have been supported theoretically are not necessarily based on real data. These variables could have no influence or even have the opposite direction to the existing theory. This can be a consideration for future researchers. This research is also expected to be useful as a reference source to help future researchers who will also do research about this topic.

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