Fraud Detection of Financial Statements through the Fraud Hexagon Approach in Indonesian SOEs

Ade Citra [a*]**, Lindrianasari** [aφ]**, Usep Syaipudin** [aφ]**, Fitra Dharma** [aφ]
and Mega Metalia [aφ]

[a] *Faculty of Economics and Business, University of Lampung, Lampung, Indonesia.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Review Article

ABSTRACT

Aims: This study aims to detect fraudulent financial statements through the Fraud Hexagon approach in Indonesian SOEs period 2011-2019
Study Design: This study applied the quantiative descriptive method.
Place and Duration of Study: Financial Services Authority, Period 2011-2019
Methodology: This data used in this research is secondary data based on the companies' financial statement. The population used are SOEs companies in Indonesian during the year 2011 – 2019 and the sampe are 4 banks. Thetechnique of data analysis applied is regession data panel.
Results: According to the results shows that external pressure, nature of industry, effective monitoring, financial target, capability, personal financial need, rationalization, ego, and also collusion give no influence toward the fraud of financial statement. The variable financial stability gives negative influence toward the fraud of financial statements.
Conclusion: Of the 10 hypotheses and 2 control variables (Size and Firm Age) proposed, it was found that there was 1 variable that had a negative effect on report fraud. financial statements and others have no influence toward the financial statements.

Keywords: Financial stability; personal financial need; external pressure; financial target; capability; nature of industry; effective monitoring; rationalization; ego; collusion.

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[φ] *Senior Lecturer;*
*Corresponding author: E-mail: adecitra1981@gmail.com;*

1. INTRODUCTION

Financial statements are claimed as a form of corporate responsibility to stakeholders which include internal parties and external parties to inform the company's financial performance for a certain period [1]. Decision making made by the company's stakeholders is based on information about the effectiveness scale of the company's performance derived from the financial statements [2]. The importance of the information staed in the financial statements is the reason for management to display the financial statements always in the best condition with the aim of increasing the company's value and maintaining the reputation [1]. This can encourage management to commit fraud, one of the fraudulent acts committed is by manipulating the company's financial statements.

At the moment of issuance of financial report or statements, companies want the condition of their companies to always look good in the eyes of users of financial statements, so that companies can face increasing business competition. The importance of information in financial statements can help encouraging the management to make it presented always good which in turn creates the risk of fraudulent practices [3].

The way that can be done by management is in a dishonest and irrelevant way by manipulating the material values in the financial statements. This of course will harm many parties and can have a bad impact on the company itself. The stakeholders (shareholders) expect the company to have better performance from year to year, while the management wants a large reward from the results of managing the company's activities. This is nearly similar with the theory of agency proposed by Jensen & Meckling [4] where management and shareholders have different interests. The agent, in this case the management, has more information and wider access to internal conditions than the principal. This causes agents to easily hide information that is considered unnecessary by the principal which encourages fraud.

According to the survey result conducted by ACFE Indonesia Chapter of 239 respondents, it reveals that practice of fraud commonly happened in Indonesia is a kind of corruption that shows a percentage of 64.4% and answered by 154 respondents. The next type of fraud is Misuse of State and also Company Assets/Wealth for 28.9% or answered by 69 respondents, while Financial Report Fraud is 6.7% by 16 respondents. But it is different with the 2018 Report to The Nations that has stated if the biggest fraud found, that is asset abuse reach up to 89% and then Corruption 38% and also Fraud 10%. One of the differences in the study is shown by the publications frequency of corruption cases in Indonesia as displayed by the Commission of Corruption Eradication (KPK) in recapitulating investigations into corruption crimes which increased from 2004 to 2018.
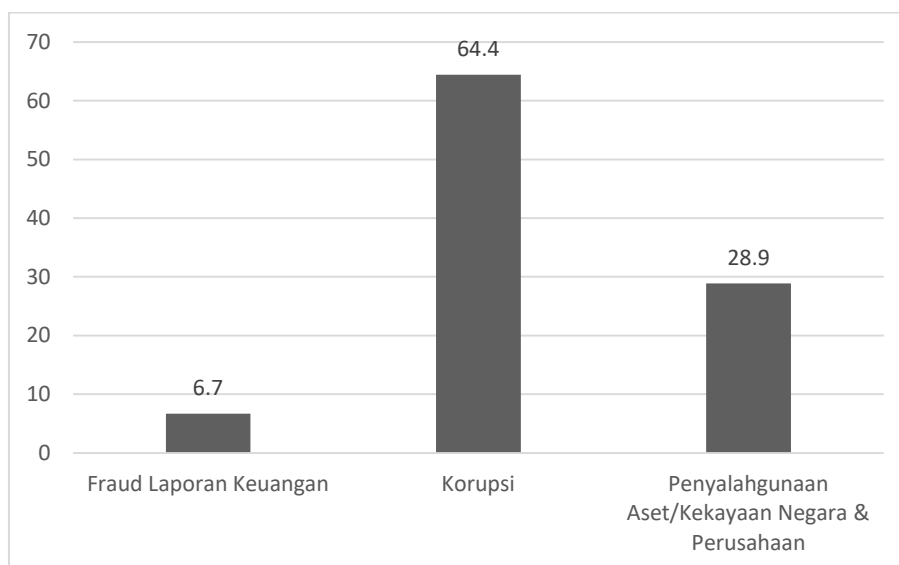
Fig. 1. Fraud di Indonesia
Source: ACFE, 2020

Table 1. Value of Losses Due to Fraud in Indonesia

Loss Value	Corruption	Financial Report Fraud	Misuse of State and Company Assets
IDR ≤ 10.000.000	48,1%	67,4%	63,6%
IDR 10.000.000 – 50.000.000	4,2%	2,9%	3,3%
IDR 50.000.000 – 100.000.000	8,4%	5,4%	8,8%
IDR 100.000.000 – 500.000.000	11,7%	6,7%	9,6%
IDR 500.000.000 – 1.000.000.000	10,9%	6,7%	2,9%
IDR 1.000.000.000 – 5.000.000.000	5,9%	3,8%	3,8%
IDR 5.000.000.000 – 10.000.000.000	5,4%	2,1%	3,4%
IDR ≥ 10.000.000.000	5,4%	5,0%	4,6%

Source: ACFE, 2020

According to the data, Fig. 1 shows that the biggest loss due to fraud comes from acts of corruption. This indicates that various fraud cases that often occur in Indonesia, corruption is the biggest contributor to losses. Fraud in the form of corruption is the most for losses below Rp. 10 million. Interestingly, both fraud in the form of corruption, financial statement fraud and asset misappropriation, the majority of cases were under Rp. 10 million, but the most incidents. On the other hand, there are the fewest incidents in corruption cases but the biggest loss is above Rp. 10 billion.

Auditing Standards (SA) section 316 describes the financial statements of fraudulent as a amount misstatement or also disclosures of the financial reports on purpose to help deceiving the users and there are arise of non-conformance in the entire material respects and commonly accepted by the principles of accounting. This fraud is able to be understood by, firstly, the practice of manipulation, the falsification and accounting alteration of records or helping to make documents of data sources for the financial statements presentation. Second, the practice of misrepresentation such as intentional omission of significant events, transactions or information. Third, the intentional misapplication of accounting principles related to the number of classifications, as well as the method of disclosure. Manipulation of financial statements is often done by management as a short-term solution, namely earnings management which aims to maintain investor confidence in the company's performance [5].

There is a theory which has been used to help detect the practice of fraud by theory of triangle by Cressey (1953). This theory proposed by Cressey uses several components, namely pressure, rationalization, and opportunity to detect the fraudulent. The theory in fraud detection by Cressey was later developed by Wolfe and Hermanson [6] who stated that the fraud triangle is able to be added by adding one component, called capability, and is claimed to be the theory of fraud diamond. The improvement of fraudapri diamond theory was further carried out by Howarth [7] adding a component of arrogance in the detection of fraud in financial reports, the theory developed by Howarth [7] by adding a component of arrogance in the detection of financial statement fraud, the theory developed known as the pentagon theory.The theory of fraud detection of financial statements was last developed by Vousinas [8] known as the fraud hexagon theory by adding one more component of collusion. The fraud hexagon theory is used as the basis for research to detect fraud practice of financial statements. Researchers use the fraud hexagon theory because the fraud hexagon theory is a development of the fraud diamond, fraud triangle, and also fraud pentagon theories. The fraud hexagon theory includes all that is in the previous theories with the addition of a collusion component. For this reason, this study shows that using the fraud hexagon in financial statements so that it can be used as a reference for managerial policies to be more aware of the emergence of fraudulent financial statements.

Several research has previously been conducted about financial statement fraud and revealed many showed different results, one of them was done by Lestari & Henny [9] to determine the influence of the pentagon fraud toward the financial statements fraudulent in companies of banking. The variables are the CEO education, ineffective supervision, auditor turnover, financial targets, the frequency of CEO photos, and the financial stability. The results reveal that stability of finance and supervision ineffectiveness influence financial statement fraud, and the turnover of auditor, CEO education, financial

target, and picture frequency of CEO do not influence financial statement fraud.

Hypothesis:

H₁: Financial stability gives a positive influence toward fraudulent financial statements.

H₂: Personal financial need gives a positive influence toward the fraudulent financial statements.

H₃: External pressure gives a positive influence toward the fraudulent financial statements.

H₄: Financial targets gives a positive influence toward the fraudulent financial statements.

H₅: Capability gives a positive influence toward the fraudulent financial statements.

H₆: Nature of industry gives a positive influence toward fraudulent financial statements.

H₇: Effective monitoring gives a positive influence toward the fraudulent financial statements.

H₈: Rationalization gives a positive influence toward the fraudulent financial statements.

H₉: Arrogance gives a positive influence toward the fraudulent financial statements.

H₁₀: Collusion gives a positive influence toward the fraudulent financial statements.

2. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 Concept Framework

Financial Stability is claimed as a situation in which indicates the situation of finance from a company becomes stable. Economic conditions can affect the financial stability of a company. Based on SAS No. The financial stability and profitability of the company influence the company's management to help them commit fraud by doing manipulation toward the company's financial statements. Beasley et al. (1999) states that one of the efforts to manipulate finances is asset growth, due to this, the changes ratio in total assets is known as a measurement of a company's stability of financial condition. It indicates that if the company's condition is in a period of growth gets lower than the the average

of the industry, this tend to help encouraging the management of a company to behave fraudulently towards financial statements intended to make improving the company's performance Personal Financial needs Mukaromah & Budiwitjaksono [10] explain that a pressure will encourage someone to commit fraud.

Pressure is known to be able to cover things for example the lifestyle, demands of economics, etc., and also financial and non-financial stuff. In accordance with research conducted by Siswantoro [11] shows the results that personal financial need influences fraud financial statements. The existence of share ownership by people in the company causes the person concerned to feel he has the right in claiming the assets and income and then it will influence the financial situation. So that the share ownership owned by the executive is becoming higher, the financial individual needs is getting higher too so that it emerges the potential for fraud to be done.

External pressure: Aprilia [2] explained that the pressure from external parties tends to make the management seek the loans from other parties, and it makes the company able to help compete competitively. Management will put more effort to earn the loans and will show the best and perfect reports of financial statements and make the company's performance is assessed as good. This explanation is in line with Siswantoro [11] stating that external pressure influences the fraud of financial statements.

Financial target: company is claimed to have such a good performance by its profits achievement and it will encourage the management to do commiting the fraudulent acts. According to Skousen et al., [12] perusahaan mungkin akan berusaha melakukan manipulasi profit dalam upaya pemenuhan indikator atau prediksi dari pihak-pihak analis misalnya dalam hal laba yang diperoleh pada tahun sebelumnya. Keadaan ini disebabkan perusahaan berupaya meraih kinerja terbaik, manajemen diharuskan memperlihatkan kinerja yang mumpuni dan optimal serta mampu memperoleh target finansial yang dituju.

Capability: Capability shows how big capacity and power owned by someone to commit practice of fraud. Wolfe & Hermanson [6], explained that the change of directors can be a form of different purposes and interest of the company. Changes in the BoD can also be

driving to emerge the fraud of financial statement, due to the influence of various changes in the efforts of management to help improving the performance of previous directors by restructure or recruit new directors who can have excellent performance and abilities than the previous ones.

Nature of industry: is known as the ideal condition of working company. There are several accounts in the financial report in which the balance can be defined by the company according to the estimate, for example bad debts and also accounts of obsolete inventory. Because the balance amount can be defined by the company, the company is more free to make changes to the balance without raising suspicion.

Effective monitoring: is claimed to be such a condition which the company get the effective and optimal supervisory unit in purpose to help monitoring the performance of the company's management. Research result Pitaloka & Majidah (2019) shows that effective monitoring gives an influence on fraud of financial statement, specifically when the management tends to make such improper actions by doing exploitation the company's weaknesses of the system of internal control.

Rationalization: is known as a statement of justification which management can assume if the fraud has happened. The statement tends to emerge due to the reason of management who never let any parties know the action they do so they make justification of the manipulation done. This action is usually done on purpose to make them stay safe and not be given a penalty [2]. The auditor takes such an important job to oversee the financial statements, and the auditor's statement is able to become the basis to help assessing the financial statements. Therefore, when the company tends to change the auditors, it also can be claimed as a way to help eliminating the fraud potential from the previous one [13].

Arrogance is claimed to be greed or superiority actions and attitude from those who are sure that internal control is never individually applied. According to Larum et al., [13]. The images of CEO can be seen in the annual report and it reflects the arrogance level of superiority of the CEO. It is inline with Larum et al. [13], revealed that the more photos of the CEO in a report shows a high level of arrogance that the CEO has for the company.

Vousinas [8], Collusion can be defined as a compact or deceptive deal done by two or many people, that one party takes action toward another for purposes, such as to defraud a third party of the rights they have. The hexagon model of fraud is used to develop this fraud model to make such better fraud indications, collusion takes a great role in emerging fraud

2.2 Literature

2.2.1 Fraud

According to Aprilia [2] fraud can be defined as a deliberate act to deceive or lie, a dishonest or trick which was conducted on purpose to eliminating rights of legal, property, money of others either du to kind of fatal action or the impact given. Fraud is a general way and it contains variety meanings created by human ingenuity, perpetrated by one individual, to reach an advantage over others by misrepresentation.

2.2.2 Fraud hexagon theory

The latest theory about fraud is the theory of fraud hexagon by Georgios L. Vousinas (2017) in the writing entitled Advancing theory of fraud: The S.C.O.R.E. Model. This theory is developed by the previous one, called the fraud triangle theory by Cressey Donald (1953), the theory of fraud diamond by Wolfe & Hermanson [6], and also the fraud pentagon theory by Jonathan Marks (2011). Fraud hexagon are discussing about several components, which are the stimulus, the capability, the collusion, the opportunity, the rationalization and also the ego. The components becomes the result of the development from he fraud diamond,fraud triangle, and also theory of fraud pentagon in adding the collusion as the component.

2.2.3 Theoritical review

Agency theory defines the correlation of the shareholders (principals) and company management (agents). This theory was first proposed by Jensen & Meckling [4] explains that the agency relationship arises when they make option in choosing the agent in the form of a contract and gives authority to work based on the principals' interests and purposes. The agent as the party given the contract must be responsible for all work and authority to the principal.

3. RESEARCH METHOD

3.1 Population and Research Sample

The study population are the entire state-owned companies registered on IDX during the year 2010-2020. The method of sampling is using the purposive sampling. The criteria in taking research samples are: 1). State-owned banking companies that have been listed on the Indonesia Stock Exchange from 2010 to 2020. 2). The company has published annual financial reports on the company's website or the Indonesia Stock Exchange website since the year 2010 to 2020. 3). Completely available data relating to research variables.

3.2 Data Collection Technique

Sources of data used is secondary data. The data used by researchers is the financial statements of companies of state-owned types that registerd on IDX during the year 2010 to 2019 through the company's official website and the IDX website.

3.3 Analysis Method

The analytical technique applied is the panel data method and uses the support of Microsoft Excel 2013 analysis tools, and E-Views 10.

3.4 Panel Data Regression Method

According to Baltagi [14] panel data is known as mixed form between the time series and cross section data method. Time series data is done by arranging data based on their time order, for example daily data, monthly data, quarterly or even yearly data. The definition of cross section data is the process of collecting data together from some areas, individuals or companies. This data is named as panel data and it used three approaches contained of Fixed Effect, Common Effect and also Random Effect. The approach used in this research is Fixed Effect with Chow test to select panel data regression.

Table 2. Measurement of variabel

Financial Stability (FSP)	$FSP = \dfrac{Total\ Assets_{(t)} - Total\ Assets_{(t-1)}}{Total\ Assets_{(t)}}$
Personal Financial Need (PFNP)	$FNP = \dfrac{number\ of\ managerial\ shares}{number\ of\ shares}$
External Pressure (EPP)	$EPP = \dfrac{Total\ Liability}{Total\ Assets}$
Financial Target (FTP)	$FTP = \dfrac{Net\ Profit}{Total\ Assets}$
Capability (CAP)	Code 1, If There Is a Change Of Directors Code 0, If There Is no Change Of Directors
Naturel of Industry (NOI)	$NOI = \dfrac{Receivable}{Sales} - \dfrac{Receivable_{(t-1)}}{Sales_{(t)}}$
Effective monitoring (EMO)	$EMO = \dfrac{Number\ of\ independent\ commissioners}{Number\ of\ commissioners}$
Rationalization (RAZ)	Code 1, If There Is a Change Of KAP Code 0, If There Is no Change Of KAP
Ego /Arrogance (EGO)	The Number Of CEO Images Included In The Annual Report
Collusion (KOL)	Code 1, If There Is Cooperation With The Government Code 0, If There Is no Cooperation With The Government

3.5 Analysis Stage

3.5.1 Panel data regression estimation method

Estimated use of panel data generally uses one of three calculation methods, namely the Pooled Least Square (PLS) method, the Fixed Effect (FEM) method, and the Random Effect (REM) method. In this study using the FEM method:

3.5.2 Fixed Effect Method (FEM)

This approach assumes that the intercept between the cross sections is different but the slope remains the same. The panel data estimation technique using the FEM method uses a dummy variable (dummy variable) which has a value of 0 for no effect and 1 for variables that have an influence. The dummy function is to capture the difference between the intercepts. This modeling is better known as the Least Square Dummy Variables (LSDV) technique. The LSDV equation can be written.

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2i}t + \beta_3 D_{1it} + \beta_4 D_{4it} + \beta_n D_{nit} + \varepsilon_{it}$$

whereas:

β_0 = The intercept coefficient which is a scalar
$\beta_1, \beta_2 .....\beta_n$ = Slope coefficient or slope
Y_{it} = The dependent variable for the i-th individual and the t-time unit
X_{1it}, X_{2it} ...X_{nit} = The i-th individual independent variable and the t-time unit
D_1, D_2...D_n = 1 for the influential cross section and 0 for
 cross-section that has no effect.

With the selection of the Chow Test. The Chow test is a test that is carried out to select the best approach model between common effects and fixed effects by looking at the value of the statistical F distribution. If the probability value of the statistical F distribution is more than the specified significance level, the model used is the common effect and if the probability value of the statistical F distribution is less than the significance level, the model used is the fixed effect approach.

3.6 Classic Assumption Test

3.6.1 Normality test

Normality test is conducted to test whether in the regression model, the dependent and independent variables have a normal distribution or not. The deviation of the normality assumption will have a smaller effect if the number of samples is enlarged. One way to test the normality assumption is by using the Jarque-Berra method. The value of the J-B statistic is based on chi-squares. The residual is said to have a normal distribution if Jarque Bera > chi-squares, and/or probability (p-value) >= 5%.

3.6.2 Multicollinearity test

The multicollinearity test is to test whether in the regression model there is a correlation between the independent variables. If there is a correlation, it is called a multicollinearity problem. The existence of multicollinearity still produces a BLUE estimator, but causes a model to have a large variance. According to Baltagi [14], the detection of multicollinearity in this study is by testing the correlation coefficient (γ) between independent variables. With the rule of thumb, if the correlation coefficient > 0.85, it can be concluded that there is a multicollinearity problem in the model used. Vice versa, if the rule of thumb, if the correlation coefficient < 0.85, it can be concluded that there is a multicollinearity problem in the model used. However, detection using this method requires caution. Multicollinearity problems usually arise in time series data where the correlation between independent variables is quite high. This high correlation occurs because the two data contain the same trend element, namely data up and down simultaneously.

3.6.3 Heteroscedasticity test

Heteroscedasticity is a deviation from the assumption of similarity of variance (homoscedasticity) which is not constant, that is, the error variance is the same for each fixed combination of X1, X2, …, Xp. If this assumption is not met, then the OLS assumption is no longer BLUE (Best Linear Unbiased Estimator). The existence of this heteroscedasticity can be stated as follows:

$$E(e_i) = \sigma^2 \ i = 1,2,..n$$

For the heteroscedasticity test in this study using the Sketergram Method. The fastest way to test the heteroscedasticity problem is to detect the residual pattern through a graph. If the residuals have the same variance (homoscedasticity) or the data does not form a pattern. Conversely, if the residual has heteroscedasticity, then this residual will form a certain pattern.

3.6.4 Autocorrelation test

The autocorrelation test is related to the influence of the observer or data in a variable that is related to each other. The magnitude of the value of a data can be influenced or related to other data (or previous data). For example, in the case of time series data, this year's investment data is highly dependent on the previous year's investment data. This condition is called autocorrelation. Regression classically requires that variables should not exhibit autocorrelation. If there is an autocorrelation symptom, then the regression model will be bad because it will produce illogical parameters and beyond common sense. There are several ways to detect autocorrelation symptoms, namely the Durbin Watson test (DW Test), the Langrage Multiplier test (LM Test), the Q statistical test, and the run test.

3.6.5 Statistical hypothesis testing

The parameters to be estimated can be seen based on statistical assessments, which include the individual parameter significance test (t-test), simultaneous parameter significance test (F-Test) at = 5%.

3.6.6 Partial test (t-test)

The t test is used to see the significance of the effect of each independent variable on the dependent variable at = 5% with the assumption that other variables are considered constant. In this case, the value will be between t-count and t-table.

- If the value of t-count > the value of t-table, then H0 is rejected and Ha accepts, which means that the independent variable has an influence on the dependent variable.
- If the t-count value < t-table value, then H0 is accepted and Ha is rejected, which means that the independent variable has no effect on the dependent variable.

3.6.7 F statistic test

The overall significance test was carried out through the f statistical test (simultaneous significance test). F test is used to test the significance of the model. The F test can be explained by using analysis of variance (ANOVA). To test whether the regression coefficients 1 and 2 together or as a whole have an effect on the dependent variable at = 5%, the F test procedure can be explained as follows:

- Comparing F-count

a. If F-count > F-table, then H0 is rejected and Ha is accepted, which means that the independent variable simultaneously affects the dependent variable.
b. If F-count < F-table, then H0 is accepted and Ha is rejected, which means that the independent variable simultaneously has no effect on the dependent variable.

4. RESULTS AND DISCUSSION

4.1 Results

4.1.1 Classical assumption test

4.1.1.1 Normality test

According to Table 3, the normality test indicates that the value of tolerance 0.0985 < 0.0,05. It is seen that data used in this study is normal.

Table 3. Performance normality test results

Standardized Residual	
Probability	Conclusion
0,0985	Normal

4.1.1.2 Multicollinearity test

Looking from the Table 4, the multicollinearity test result indicates that the value of koeficient > 0,80. It is known that there is not found any multicollinearity of the variables.

4.1.1.3 Heteroscedasticity test

This test is carried out using the eview version 10 program which will obtain a probability value and will be compared with the level of significance (alpha). The provisions in providing a conclusion whether or not Heteroscedasticity occurs is the Glejser Test and an absolute value will be obtained. The value of Financial Stability (X1) is 0.1098, Personal Financial need (X2) is 0.3217, External Pressure (X3) is 0.4159, Financial Target (X4) is 0.0519, Capability (X5) is 0.6040 , Nature of Industry (X6) of 0.2547, Effective Monitoring (X7) of 0.4869, Rationalization (X8) of 0.0900, Ego (X9) of 0.5321, Collusion (X10) of 0.2511, size (Control) is 0.5725, and FirmAge (control) is 0.5912. If the probability value of the independent variable value is more than = 5%, it is stated that there is not found any heteroscedasticity.

Table 4. Performance multicollinearity test results

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12
X1	1,000	0,037	0,413	0,055	-0,186	-0,105	0,007	0,091	-0,317	-0,041	-0,396	0,095
X2	0,037	1,000	0,131	-0,030	-0,572	0,056	-0,252	-0,000	0,133	0,015	-0,314	-0,187
X3	0,413	0,131	1,000	0,026	-0,216	0,049	-0,001	0,069	-0,245	-0,077	-0,595	0,200
X4	0,055	-0,030	0,026	1,000	-0,168	-0,359	0,269	-0,154	0,239	-0,060	0,538	0,380
X5	-0,186	-0,572	-0,216	-0,168	1,000	-0,068	-0,052	-0,005	0,106	-0,039	0,338	-0,032
X6	-0,105	0,056	0,049	-0,359	-0,068	1,000	-0,304	-0,171	-0,031	-0,034	-0,273	-0,186
X7	0,007	-0,252	-0,001	0,269	-0,052	-0,304	1,000	0,171	0,049	-0,079	0,241	0,081
X8	0,091	-0,000	0,069	-0,154	-0,005	-0,171	0,171	1,000	-0,054	0,137	-0,134	-0,143
X9	-0,317	0,133	-0,245	0,239	0,106	-0,031	0,049	-0,054	1,000	-0,148	0,547	-0,018
X10	-0,041	0,015	-0,077	-0,060	-0,039	-0,034	-0,079	0,137	-0,148	1,000	-0,144	0,579
X11	-0,396	-0,314	-0,595	0,538	0,338	-0,273	0,241	-0,134	0,547	-0,144	1,000	0,076
X12	0,095	-0,187	0,200	0,380	-0,032	-0,186	0,081	-0,143	-0,018	0,579	0,076	1,000

Table 5. Performance heteroscedasticity test results

Heteroskedasticity Test: Glejser

F-statistic	1.871665	Prob. F(12,24)	0.0924
Obs*R-squared	17.88677	Prob. Chi-Square(12)	0.1192
Scaled explained SS	14.85271	Prob. Chi-Square(12)	0.2496

Test Equation:
Dependent Variable: ARESID
Method: Least Squares
Date: 07/11/22   Time: 23:26
Sample: 1 40
Included observations: 37

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.816566	2.477616	-1.136805	0.2668
X1	1.111369	0.445315	2.495691	0.1098
X2	61.57102	60.84602	1.011915	0.3217
X3	0.831920	1.004783	0.827960	0.4159
X4	-12.22994	5.979190	-2.045417	0.0519
X5	-0.043698	0.083132	-0.525639	0.6040
X6	-0.070766	0.060646	-1.166874	0.2547
X7	0.342620	0.485253	0.706065	0.4869
X8	-0.252644	0.088940	-2.840608	0.0900
X9	0.003161	0.004986	0.633981	0.5321
X10	0.132897	0.112994	1.176146	0.2511
X11	0.049802	0.087037	0.572197	0.5725
X12	-0.000615	0.001130	-0.544394	0.5912
R-squared	0.483426	Mean dependent var		0.175938
Adjusted R-squared	0.225140	S.D. dependent var		0.166349
S.E. of regression	0.146430	Akaike info criterion		-0.734697
Sum squared resid	0.514603	Schwarz criterion		-0.168699
Log likelihood	26.59189	Hannan-Quinn criter.		-0.535156
F-statistic	1.871665	Durbin-Watson stat		2.632679
Prob(F-statistic)	0.092445			

4.1.1.4 Autocorrelation test

From the autocorrelation test in Table 5, the Durbin Watson value of the regression results in this study is 2.047502, where the value is between 1.54 to 2.46 so that in accordance with the provisions in the Table, this regression model has no autocorrelation.

Table 6. Performance autocorrelation test results

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.500097	Prob. F(2,22)	0.6132
Obs*R-squared	1.608995	Prob. Chi-Square(2)	0.4473
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 07/11/22 Time: 23:13			
Sample: 1 40			
Included observations: 37			
Presample and interior missing value lagged residuals set to zero.			
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.548401	5.196597	-0.105531	0.9169
X1	0.491363	1.007476	0.487717	0.6306
X2	98.04604	150.7984	0.650180	0.5223
X3	-0.451655	2.128548	-0.212189	0.8339
X4	-0.315960	13.01072	-0.024285	0.9808
X5	0.140995	0.207512	0.679457	0.5039
X6	0.051205	0.132655	0.385998	0.7032
X7	0.255956	1.046637	0.244551	0.8091
X8	0.043244	0.190889	0.226542	0.8229
X9	-0.001182	0.010491	-0.112623	0.9114
X10	-0.023164	0.238221	-0.097237	0.9234
X11	0.004130	0.182247	0.022662	0.9821
X12	0.000564	0.002452	0.229969	0.8202
RESID(-1)	0.298102	0.272114	1.095507	0.2851
RESID(-2)	-0.354587	0.353183	-1.003976	0.3263
R-squared	0.043486	Mean dependent var	-2.33E-15
Adjusted R-squared	-0.565204	S.D. dependent var	0.243897
S.E. of regression	0.305135	Akaike info criterion	0.754809
Sum squared resid	2.048359	Schwarz criterion	1.407884
Log likelihood	1.036036	Hannan-Quinn criter.	0.985048
F-statistic	0.071442	Durbin-Watson stat	2.047502
Prob(F-statistic)	0.999996		

Table 7. Metode Fixed Effect (FEM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.369608	7.354362	-0.322204	0.7505
X1	-3.802890	0.928059	-4.097681	0.0005
X2	99.21903	115.8108	0.856734	0.4013
X3	-2.061875	2.265445	-0.910141	0.3731
X4	8.418024	18.80389	0.447675	0.6590
X5	0.068220	0.152212	0.448189	0.6586
X6	-0.192030	0.110793	-1.733238	0.0977
X7	0.421938	0.896569	0.470614	0.6428
X8	-0.330706	0.173534	-1.905715	0.0705
X9	0.006398	0.009341	0.684937	0.5009
X10	0.191785	0.250210	0.766496	0.4519
X11 (Control)	1.268645	0.812561	1.561292	0.1334
X12 (Control)	-0.250040	0.132656	-1.884870	0.0734

4.1.2 Metode Fixed Effect (FEM)

Based on the Fixed Effect (FEM) method above, this study uses multiple regression with a hexagonal fraud approach for hypothesis testing and the results is displayed at the Table 1. Of the 10 hypotheses and 2 control variables (Size and Firm Age) proposed, it was found that there was 1 variable that had a negative influence toward the report fraud. financial statements and others have no influence toward the financial statements.

4.2 Discussion

4.2.1 Effect of financial stability on fraudulent financial statements

The financial stability test shows a negative value of regression coefficient -3.802 and also a value of significance of 0.0005 with a significance value of less than 0.05, it meand that H1 is getting rejected. This hall means that external pressure has a negative effect on financial statement fraud. Thus a stable financial condition on asset growth, profitability that can attract investors does not affect the existence of fraud. Because companies that have stable financial conditions and good economic conditions will be more likely to maintain the company's image than to commit fraud. The higher stability of the financial condition, the lower the chance of committing fraud.

4.2.2 Effect of personal financial need on fraudulent financial statements

Personal financial need test shows a regression coefficient value of 99.219 and a value of significance is 0.401>0.05, it means that H2 is getting rejected. This hall means that personal financial need gives no effect on fraud of financial statement. This is probably due to the difference in the ratio between projected personal individual needs and also PFNP compared to fraud of financial statement that uses a dummy that is too far away.

4.2.3 Effect of External pressure on fraudulent financial statements

external pressure test shows a negative value of regression coefficient of -2.061 and also a value of significance is 0.373 with a significance value of more than 0.05, then H3 is rejected. This hall means that external pressure has no effect on fraud of financial statement and supports research by Ratnasari and Solikhah [1] So there is a possibility that the company has the ability to pay high debt or the company chooses another source of funding such as stock issuance.

4.2.4 Effect of financial targets on fraudulent financial statements

The results of statistical testing of financial targets show that the value of regression coefficient 8.418 and the value of significance 0.659<0.05, then H4 is getting rejected, meaning that the financial target gives no influence toward the fraud of financial statement. The results is different with the research by Ratnasari and Solikhah [1]. High financial targets allow fraudulent financial statements to occur, because in order to achieve these targets, management may take unreasonable actions. There is no effect of ROA that becomes a proxy for financial targets on financial statement fraud because managers think that the company's return on assets target is still considered reasonable and can be achieved by managers.

4.2.5 Effect of Capability on fraudulent financial statements

According to the capability test results, the regression coefficient is 0.068 and the significance level is 0.658, which means it is less than 0.05, then H5 is getting rejected so that capability gives no influence toward the fraud of financial statement. This result supports by [15], and [16]. The board of directors is maintained for a long time, usually because it has the ability to maintain the best condition of the company. This capability is needed especially to face increasingly fierce business competition

4.2.6 Effect of nature of industry effect capability on fraudulent financial statements

The Nature of Industry test shows that the regression coefficient value is -0.192 with a value of significance 0.097>0.05. The results of banking companies show that nature of industry gives no influence toward the fraud of t financial sttaement. This result revealed due to the ratio of changes size during the observation year and it has never triggered the management in committing fraud. The difference from the nature of the industry in companies of banking sector usually get the accounts receivable to be unable used in detecting fraud. Thus, hypothesis 5 (H5) is rejected. Manufacturing companies also prove

that H5 is rejected, it stated that there is noot found any influence between the nature of industry toward the fraud of financial statements.

4.2.7 Effect of effective monitoring on fraudulent financial statements

Effective monitoring testing obtained a value of regression coefficient 0.421 and a value of significance is 0.642>0.05 then H7 is getting rejected, meaning that effective monitoring has not influence toward the fraud of financial statement. This results is inline with [16]. This shows that the number of independent commissioners who supervise management is not a matter of too much concern, in fact the most important thing is the effectiveness from the board of commissioners.

4.2.8 Effect of rationalization on fraudulent financial statements

The test results on the ratinalization factor showed a negative value of regression coefficient -0.330 and vaue of level0.070>0.05, then H8 is getting rejected so that rationalization has no effect on fraud of financial statement. The results obtained is supported by [17]. Rationalization is done so as not to leave an audit trail on the company's financial activities. Management performs rationalization because it seeks a justification for the attitude of the fraudulent financial statements. The management believes that the actions taken are not a form of fraud, but it is their right given their great service and contribution to the company.

4.2.9 Effect of arrogance on fraudulent financial statements

It can be seen that arrogance has this. This shows that arrogance gives no influence toward the fraud of financial statements. This results are contrary to the hypothesis that has been formed by [18] authors who say that arrogance gives such a positive influence toward the fraud of financial statements. The results also revealed that the frequency of the appearance of CEO photos in the company's annual report does not always indicate that the CEO has a high attitude of arrogance and has the opportunity to commit fraud.

4.2.10 Effect of Collusion on fraudulent financial statements

The tresult of the test results that thhe collusion factor show the regression coefficient value of

0.191 with a level of significanc 0.451>0.05, then H10 is rejected so that collusion has no effect on fraudulent financial statements. This indicates that the political connection as measured by the dummy variable has no effect on fraudulent financial statements. This study shows that there is no significant effect that collusion is proxied by political connections on financial statement fraud. This is because the management who is connected to politics does not necessarily take advantage of their position for personal and group gain, so that political connections do not affect financial statement fraud.

5. CONCLUSION

According to the analysis and testing of panel data regression proccess, it is seen that personal financial need, external pressure, financial target, capability, nature of industry, effective monitoring, rationalization, ego, and collusion gives no infuenc etoward the on financial statement fraud. While financial stability has a negative influence toward the fraudulent financial statements.

6. RECOMENDATIONS

This study is related to the fraudulent financial statements that cause a decrease in credibility, and trust from external parties to the company's finances, this research it is suggested to establish a good internal control structure, so that the goals that have been set can be earned, the company assets securityis guaranteed and operations can run effectively and efficiently, management needs on purpose to help establishing the structujcontrol structure to prevent fraud. After establishing the internal control structure, the company is advised to streamline control activities and improve organizational culture, as well as streamline the internal audit function for fraud detection.

DISCLAIMER

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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