

## DETECTING FRAUDULENT FINANCIAL REPORTING IN STATE-OWNED COMPANY: HEXAGON THEORY APPROACH

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### ABSTRACT

This study aims to investigate the impact of the hexagonal fraud theory in the detection of fraud in the financial statements of state-owned enterprises (BUMN). This study is a quantitative approach whose data comes from the company's annual financial statements published by the Indonesia Stock Exchange (IDX) using multiple regression analysis techniques. The results of the study explain that simultaneously Financial Stability (Stimulus), External Pressure (Stimulus), Nature of Industry (Opportunity), Auditor Change (Capability), Change of Directors (Rationalization), Number of CEO Images (Arrogance), and Cooperation with Government Projects (Collusion) has a positive effect in detecting fraudulent financial statements of SOEs. Partially Financial Stability, External Pressure, Nature of Industry, Change of Directors, and Cooperation with Government Projects have a positive effect in detecting fraudulent financial statements of SOEs. Changes in Auditors and the Number of CEO Images have no effect in detecting fraudulent financial statements in BUMN for the 2012-2019 period. The results of this study can provide an overview of the factors that may cause fraudulent financial statements in SOEs. It is hoped that the results of this study can provide input to interested parties in strategic decisions.

**Keywords:** Fraud, hexagon theory, financial reporting

### INTRODUCTION

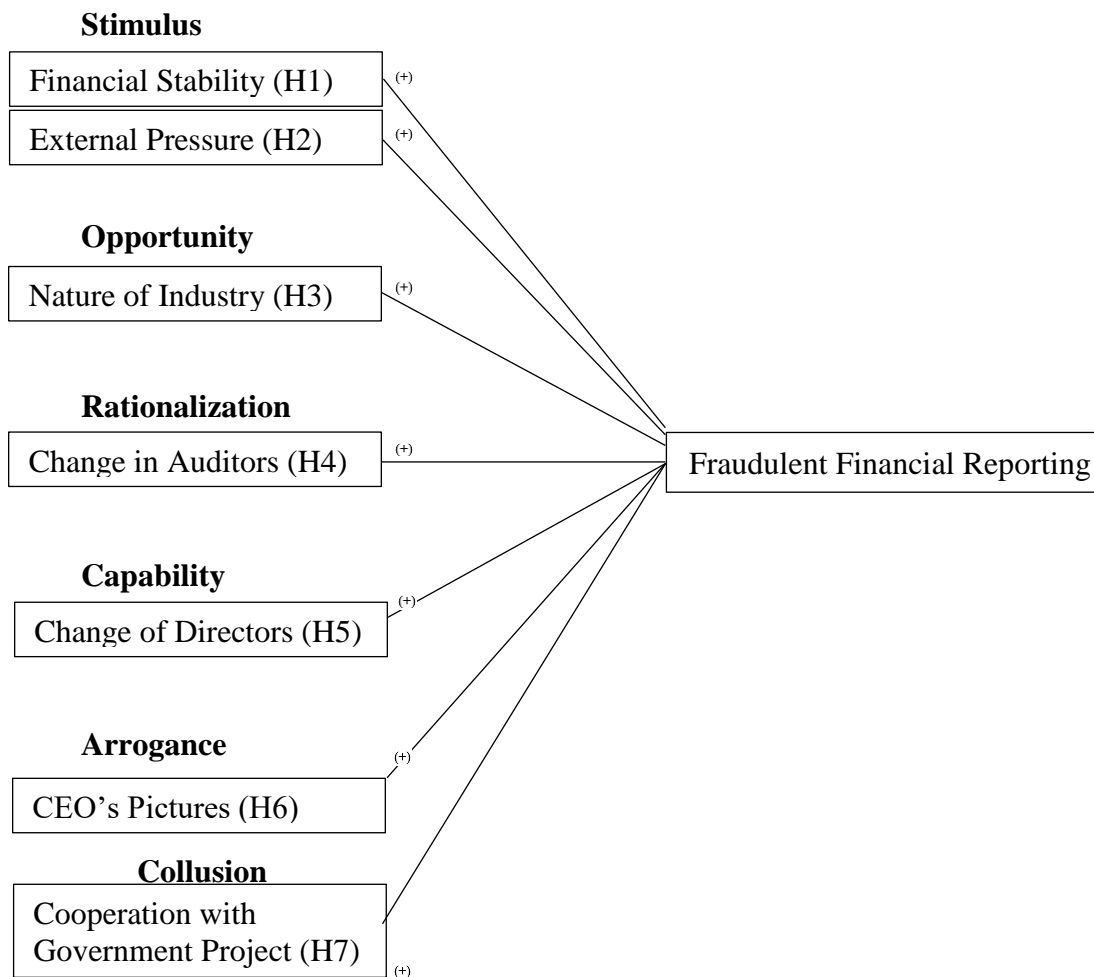
Financial statements are often issued to provide information and guidance about a company's financial position performance and cash flows. One of the bases for making managerial decisions is financial statements, which are used by the company's management. Its data is obtained for the assessment of the organization's operations. It enables the identification of the causes of discrepancies from previously established parameters as well as the discovery of untapped production reserves. Annual reports of many companies are often used by statistical agencies for various developments to determine the direction and level of product development. Even so, there are some parties who intentionally making fraudulent acts in the reporting of financial statements.

Fraud is an action that is carried out intentionally and the action results in a loss to some parties or institutions, whether it was done for personal or other reasons. Fraud is defined as an act committed outside the realm of generally accepted accounting principles. Fraud includes illegal acts that are deliberately carried out, hidden, and get benefits by converting them into cash or other valuables. This action is done internally and externally, on purpose, and hidden. Fraud is a knowing misrepresentation of the truth or concealment or hiding something of a material fact to induce another to act to his or her determination. Regarding financial reporting, an intentional act of fraud that leads to the falsification of financial statements which are an audit subject is described as a fraudulent act by one or more members of management, those in charge of governance, employees, or outsiders. (AICPA, 2020). The description of fraudulent financial reporting by the Association of Certified Fraud Examiners (ACFE) is a purposeful distortion of a company's financial position by intentionally omitting or reducing the number of disclosures in financial statements to deceive financial statement users. The misstatements in fraudulent financial reports are made with the intent of manipulating the users of financial reports.

Manipulation or forgery of accounting records, misstatements, or purposeful omissions from financial reports, and/or misapplication of accounting rules are some of the sources of this misrepresentation. Fraud on financial reports can result in the overstatement of their financial condition so that their financial reports can look good in public view. However, the increase in fraudulent financial reporting can disadvantage the public who heavily on taking their decisions based on the financial statements. Bologna (2006), Rahmanti (2013) declares fraud as a criminal act intended to provide financial benefits to the perpetrator. For an example, in presenting financial statements, there is flexibility for management in determining the methods and estimates used. The flexibility provided can make the management more efficient in increasing the enterprise's worth and is considered positively based on the market. However, it can lead to opportunistic behavior of the management to benefit its personal interests to the detriment of the company and shareholders in general. Opportunistic managerial behavior might increase the likelihood of fraudulent financial reporting. Fraud Hexagon Model was developed by Vousinas (2019) which contained six factors that are always present in a case of fraud, namely collusion, opportunity, stimulus, ego, capability, and rationalization. These six conditions are the factors of fraud in various situations. Accounting fraud rates are high in Indonesian enterprises, both government and privately owned. In 2020, the Corruption Perception Index (CPI) gives Indonesia a score of 37, placing it 102nd out of 180 countries in terms of corruption. (Transparency International, 2020). The number of cases involving corruption and fraudulent acts, such as the liquidation of several banks, management filed by state-owned and private companies to court, banking crime cases, tax manipulation, and others (Wilopo, 2006). The occurrence of undetectable fraud can give adverse effects and defects on the financial reporting process. It becomes necessary to be able to spot fraud immediately, since the condition is critical to detect fraud in an organization or company to ensure the organization's or firm's continuation and financial reports serve as a means of communication between management and investors, as well as a tool for policy and decision-making. It can be concluded that in-depth audit research is needed to enable auditors to detect possible fraud. This

evidence is required to have a better knowledge of fraud detection. This study focuses on fraud hexagon analysis which is coined by Vousinas (2019). Although fraud hexagon analysis is extensively used, little is known about its capacity to detect substantial misstatements in actual accounting data.

The framework in this study is as follows, based on the theoretical basis given previously:



**Figure 1**  
**Research Framework**

## **THEORITICAL FRAMEWORK AND HYPOTHESIS**

### **Agency Theory**

Agency Theory is a contract-based relationship between the principal and the agent, who are both members of the company. According to Supriyono (2018) relationship is maintained for the principal to assign an agent to make the best decisions possible by prioritizing the company's profits to reduce expenses. The purpose of agency theory is to increase people's ability to evaluate the environment in which they must make decisions (both principals and agents) (the belief revision

role). The latter evaluates the consequences of earlier decisions to make the distribution of outcomes between principal and agent more efficient and consistent with the work contract (performance evaluation role).

### **Fraud Hexagon Theory**

The fraud triangle discovered by Cressey (1953) is the basis of the fraud hexagon model. Vousinas (2019) coined the fraud hexagon theory, which is now widely utilized by practitioners as a method of identifying fraud. According to Vousinas, there are six elements that encourage someone to commit fraud, namely financial problems (stimulus), the ability of the fraud perpetrator to commit fraud without being known (capability), the opportunity to commit fraud (opportunity), people who believe that internal control does not apply to them and have a superiority complex that leads to greed (ego), An agreement between two or more people to commit fraud (collusion) and to justify fraud (rationalization).



**Figure 2**  
**Fraud Hexagon Model**

Source: Vousinas (2019)

Stimulus is when the company's performance is below the industry average (Skousen et al, 2019). In general, it is caused by financial needs and situational pressures that arise because of financial obligations exceeding the capacity limit that must be completed by management. SAS no. 99 states there are four types of stress that may result in fraud in financial statements, namely financial stability, external pressure, personal financial need, and financial targets. The term capability refers to a party's ability to commit fraud in the company environment. One example that effectively demonstrates this principle is when a change in the board of directors occurs which is a form of conflict of interest (Sari & Nugroho, 2020). Opportunity is a situation or condition that allows the occurrence. Opportunities occur because of internal control flaws, insufficient managerial monitoring, or abuse of power or position. Opportunities are the result of circumstances that provide time to commit fraud. The nature of the industry variable is used to proxy the opportunity element. Annisya et al. (2016) argue that the nature of the industry is a key opportunity factor as it relates to the economic and regulatory environment of the industry in which the company operates which will affect the company's position.

The perpetrator seeks justification for his acts, rationalization is one of the key factors in the occurrence of fraud. This justification can happen at times the perpetrator feels entitled to something more (position, salary, promotion). The change in auditor variable is used to proxy the rationalization element. The arrogance stated here is the mindset of someone who believes that internal controls and corporate wisdom do not apply, and that is not obligated by them, therefore he does not believe he has committed fraud. A frequent number of CEO pictures is a proxy for the ego element or known as arrogance in the fraud hexagon theory because the greater number of CEO photos displayed in a report can indicate a high level of CEO arrogance in the company. According to Vousinas (2019), many types of fraud and organized crime are motivated by collusion such as collusion or cooperation between two or more people to commit crime or fraud.

### **Fraudulent Financial Reporting**

Fraudulent financial reporting is defined as an intentional or negligent act that results in the misstatement of financial statements by act or omission. An independent auditor must pay close attention to any fraudulent financial reporting that occurs in a company. The overview of fraudulent financial reporting, namely:

- a. Activities that falsify, remodel, and manipulate financial statements.
- b. Intentional Negligence or wrongdoing in classifying events, transactions, accounts, or other important information from the financial statements.
- c. Actions in the form of procedural errors that are carried out consciously on the use of accounting principles and guidelines, policies, and procedures that are used to calculate the value, recognize, report, and disclose economic events and business transactions.
- d. Intentional negligence of disclosures that violate accounting principles and related financial policies and values.

Fraudulent financial reporting can happen in any company, anytime and anywhere. According to SAS No. 99 and SPAP, an independent auditors are responsible for detecting all forms of fraud when examining financial statements.

### **Fraud Score Model**

The fraud score model is a fraud detection model elaborated for financial statements that use logistic probability scaling techniques (Dechow et al. 2011) built on the study developed by Benish (1997). Skousen and Twedt (2009) mainly developed the F-Score for the benefit of investors in detecting fraud in such funds. The F-Score approach combines two factors: quality and financial performance. The higher the F score the higher the probability of fraud (Skousen and Twedt, 2009).

### **Accrual Quality**

Revenues and expenses are only recognized in cash basis accounting when cash is received and issued. In accrual-based accounting, Transactions that affect the company's financial statements are recognized in the period in which they occur, rather than when cash is received or issued. Data presented on an accrual basis shows relationships that might help anticipate the future,

making it more useful for decision-making. As a result, the accrual basis is extensively utilized and conforms to accounting standards (Fajarwati, 2010). Accruals are then divided into two types. First, non-discretionary accruals (normal accruals). Fair accruals are recognized and are subject to widely accepted accounting standards or regulations. The second is discretionary accruals (abnormal accruals). Recognition of accruals that are without non-control and management options.

## **Financial Performance**

Financial performance is a collection of variables that measures a company's financial performance on multiple dimensions and evaluates whether management makes purposeful misstatements to hide the company's poor performance (Dechow et al, 1996; Beneish, 1997). Such as change in receivable, change in inventory, change in cash sales, change in earnings (Burgstahler and Dichev, 1997)

## **The Relationship between Financial Stability (Stimulus) on Detecting Fraudulent Financial Reporting**

If the value of the company's asset growth fluctuates management will be under pressure to change the financial statements to make the asset growth appear stable. Back then business owners always wanted to keep their companies financially stable. The existence of such pressures indicates the possibility of management fraud. Financial stability is expressed as a percentage change in total assets. The greater the change in the percentage of total assets the greater the possibility of fraudulent financial statements. Research hypotheses based on the above description:

H<sub>1</sub> : Financial Stability (Stimulus) has a positive effect on detecting fraudulent financial reporting.

## **The Relationship between External Pressure (Stimulus) on Detecting Fraudulent Financial Reporting**

Aprilia (2017) explains that pressure from external parties will cause management to seek loans from other parties, so that companies can compete competitively. This pressure will be a trigger for the management to engineer the company's financial statements. If the value of the company's leverage ratio is high, it means that the company has a large debt. The company has the risk of failing to pay its debts that becomes a pressure for management. Based on the description above, the study hypothesis is:

H<sub>2</sub> : External Pressure (Stimulus) has a positive effect on detecting fraudulent financial reporting.

### **The Relationship between Nature of Industry (Opportunity) on Detecting Fraudulent Financial Reporting**

Corporate receivables provide insight into the nature of the industry. Receivables cannot be separated from the calculation of the estimated allowance for bad debts. Consequently, there may be opportunities for fraudulent financial reporting. Management may use the accounts as a tool to make misleading financial reports in the preparation of financial statements due to discretion in calculating account values. Based on the above description the research hypothesis is:

H<sub>3</sub> : Nature of Industry (opportunity) has a positive effect on detecting fraudulent financial reporting.

### **The Relationship between Change in Auditors (Rationalization) on Detecting Fraudulent Financial Reporting**

According to SAS No. 99, the change of auditors in the company can be an indication of fraud (Skousen, Smith, & Wright, 2009). The previous auditors may be more able to detect any possible fraud committed by management, either directly or indirectly. However, with the change of auditors, the possibility of fraud will increase (Yesiariani & Rahayu, 2016). Based on the description above, the study hypothesis is:

H<sub>4</sub> : Change of Auditors (Rationalization) has a positive effect on detecting fraudulent financial reporting.

### **The Relationship between Change of Directors (Capability) on Detecting Fraudulent Financial Reporting**

Wolfe and Hermanson (2004) define board turnover as a form of conflict of interest in which an individual's position or position provides the ability to create or exploit opportunities for fraud within the organization. Therefore, director turnover is used as a proxy for effectiveness (Sihombing 2014). Frequent changes of directors are indicative of financial statement fraud. Based on the statement above the research hypothesis is:

H<sub>5</sub> : Change of Directors (Capability) has a positive effect on detecting fraudulent financial reporting.

### **The Relationship between the Number of CEO's Pictures (Arrogance) on Detecting Fraudulent Financial Reporting**

As more and more photos of CEOs appear on company financial statements, CEOs will appear increasingly arrogant. The reason is that the CEO wants to publicize his position within the company and let as many people as possible know about it. Because of his status and position, the CEO can bypass all corporate rules and internal controls. Based on the above description the research hypotheses are:

H<sub>6</sub> : Number of CEO's picture (Arrogance) has a positive effect on detecting fraudulent financial reporting.

### The Relationship between Cooperation with Government Project (Collusion) on Detecting Fraudulent Financial Reporting

Political projects are seen as beneficial for businesses because they facilitate borrowing money from third parties or contracting with the government. According to Yusrianti et al (2020) working on government projects can lead to financial fraud. The company's participation in government programs emphasizes the company's efforts to contribute to development projects and improve its performance. Based on the above statement the research hypotheses are as follows:

H<sub>7</sub>: Cooperation with Government Project (Collusion) has a positive effect on detecting fraudulent financial reporting.

### RESEARCH METHOD

The study is quantitative-descriptive using case studies. A case study is a research or study of a specific nature; that can be done qualitatively or quantitatively, with individual or group targets, and it can even be done online. The data for case studies is gathered from a variety of sources, and the findings of this study only relate to the situations that were investigated. The topic we will examine in this study is the Hexagon Theory of Fraud. which is pressure (Financial Stability and External Pressure), Opportunity (Nature of Industry), Rationalization (Change in Auditors), Capability (Change of Directors), Arrogance (Number of CEO's Pictures), and Collusion (Political Connections) as independent variables (X), and fraudulent financial reporting as dependent variable (Y).

### Operationalization of Research Variables

Operationalization of variables in this study can be explained as follows:

**Table 1**  
**Operationalization of Research Variables**

Variable	Indicator	Scale
<b>Independent Variables (X)</b>		
Stimulus		
Financial Stability (X1.1) • Skousen et al (2008)	$ACHANGE = \frac{(Total\ Assets\ (t) - Total\ Assets\ (t - 1))}{Total\ Assets\ (t - 1)}$	Ratio



External Pressure (X1.2) • Subramanyam (2014).	$\text{Leverage (LEV)} = \frac{\text{Total Debt}}{\text{Total Equity}}$	Ratio
Opportunity		
Nature of Industry (X2) • Herdiana (2018) • Tuanakotta (2010)	$\begin{aligned} \text{RECEIVABLE} \\ &= \frac{\text{Receivable (t)}}{\text{Sales (t)}} \\ &- \frac{\text{Receivable (t - 1)}}{\text{Sales (t - 1)}} \end{aligned}$	Ratio
Rationalization		
Change in Auditors (X3) • Sihombing, (2014) • Bonner (1998)	Assessed using a dummy variable, provided that: If the company changes its auditors is coded 1 and 0 it doesn't during 2012-2019.	Nominal
Capability		
Change of Directors (X4) • Sihombing, (2014)	If the company changes its directors is coded 1 and 0 it doesn't during 2012-2019.	Nominal
Arrogance		
Number of CEO's Pictures (X5) • Devy (2017)	Calculate the number of CEO photos included in the Annual Report during 2012-2019. Based on the following conditions: Not showing photos : code 1 1-3 CEO Photos : code 2 4-7 CEO Photos : code 3 8-10 CEO Photos : code 4 ≥ 11 CEO Photos : code 5	Nominal
Collusion		

Corporation with Government Project (X6) <ul style="list-style-type: none"> <li>• Achmad (2022)</li> </ul>	By looking at the existence or absence of cooperation with the government established by the company for a certain period, with the following conditions: If the company cooperates with government projects is coded 1 and 0 it doesn't during 2012-2019.	Nominal
<b>Dependent Variable (Y)</b>		
Fraudulent Financial Reporting (Y) <ul style="list-style-type: none"> <li>• Dechow et al (2012)</li> <li>• Skousen and Twedt, 2009)</li> </ul>	<b>The determination of Fraud and Non-Fraud:</b> $F\text{-Score} = RSST \text{ Accrual} + \text{Financial Performance}$ F-score is assessed using a dummy variable, provided that: If the company is indicated doing FFR, then it is coded 1 ( $F\text{-Score} > 1.00$ ) If the company is not indicated doing FFR, then it is coded 0 ( $F\text{-Score} < 1.00$ )	Nominal

### Population and Sample

The population of this study is state-owned companies listed on the Indonesian Stock Exchange through [www.idx.co.id](http://www.idx.co.id) and obtained from the official company website. Due to the adjustment of previous studies 2012-2019 was selected. The sampling procedure used in this study is non-probability with a purposive sampling technique. The determination of the sampling standard is shown in the table below.

**Table 2**  
**Purposive Sampling**

Sample Criteria	Total
<b>Number of public companies listed in IDX as of 2019</b>	21
The number of state-owned companies listed on the IDX that did not publish an annual report during the study period	-
The number of state-owned companies that did not publish financial statements in Rupiah currency	(3)
The number of companies that do not have complete data related to research variables	(1)
<b>Number of Sample</b>	<b>17</b>

Year of Observation	8 years
Total Sample (8 x 18)	136

## DATA ANALYSIS AND DISCUSSION

### Data Analysis

#### Descriptive Analysis

To find out the description of the data from each of the variables studied, a descriptive analysis was carried out. The descriptive statistical analysis used includes the average, maximum, minimum, and standard deviation values. The summary of test results is presented in the table below:

**Table 3**  
**Descriptive Analysis of Research Variables**  
**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ACHANGE (X <sub>1</sub> )	136	-0,10	1,42	0,2096	0,22478
DER (X <sub>2</sub> )	136	0,09	11,40	2,6530	2,92022
RECEIVABLE (X <sub>3</sub> )	136	-18,61	419,45	3,3517	36,08802
ΔCPA (X <sub>4</sub> )	136	0,00	1,00	0,2132	0,41111
DIR_CHANGE (X <sub>5</sub> )	136	0,00	1,00	0,2721	0,44667
CEOPIC (X <sub>6</sub> )	136	2,00	4,00	2,4559	0,52870
POLITICAL (X <sub>7</sub> )	136	0,00	1,00	0,7721	0,42106
F-SCORE (Y)	136	-1,29	7,93	0,6892	1,74949
Valid N (listwise)	136				

Source: Data is processing

#### Normality Test

The normality assumption test aims to test whether the residual value ( $e_i$ ) in the regression model is normally distributed or not. A good regression model should have normally distributed residuals. One way to detect this normality problem can be to use the p-plot graph method and the Kolmogorov-Smirnov method as the reinforcement of the results, provided that the value of Sig. > 0.05, it can be concluded that the assumption of normality has been met. The test results are displayed as follows:



**Figure 2**  
**Normality Test P-Plot Graph**

Source: Data is processing

### Multiple Linear Regression

The results of multiple linear regression calculations using SPSS 22.0 software are presented in the table below.

**Table 4**  
**Multiple Linear Regression Test Results**  
**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.	Correlations Zero-order
	B	Std. Error	Beta	t		
1 (Constant)	-1,644	0,660		-2,490	0,014	
Achange (X <sub>1</sub> )	1,432	0,591	0,184	2,422	0,017	0,274
Der (X <sub>2</sub> )	0,214	0,047	0,358	4,592	0,000	0,412
Receivable (X <sub>3</sub> )	0,007	0,004	0,153	1,985	0,049	0,313
ΔCpa (X <sub>4</sub> )	-0,481	0,317	-0,113	-1,516	0,132	-0,096
Dir_Change (X <sub>5</sub> )	0,732	0,292	0,187	2,508	0,013	0,166
Ceopic (X <sub>6</sub> )	0,327	0,255	0,099	1,285	0,201	0,053
Political (X <sub>7</sub> )	0,699	0,314	0,168	2,223	0,028	0,223

a. Dependent Variable: F-SCORE (Y)

Source: Data is processing

The multiple linear regression equation that explains the effect of Stimulus, Opportunity, Rationalization, Capability, Arrogance and Collusion on Fraudulent Financial Reporting is as follows:

$$Y = -1,644 + 1,432 X_1 + 0,214 X_2 + 0,007 X_3 - 0,481 X_4 + 0,732 X_5 + 0,327 X_6 + 0,699 X_7 + e$$

Statistically, the values in the regression equation above can be explained as follows:

- 1) The constant -1,644 represents the estimated value of false financial reports that control factors such as financial stability, external pressures, the nature of the industry, changes in auditors, changes in directors, the image of the CEO, government programs score is 0 (zero).
- 2) The regression coefficient of financial stability is 1.432 which is a positive value. This shows that all increases in financial stability and other independent variables are assumed to be constant and fraudulent financial reporting is expected to increase by 1.432.
- 3) The regression coefficient for external pressure is 0.214 and each increase in external pressure and other independent variables has a positive value predicting an increase in fraudulent financial reporting by 0.214.
- 4) The regression coefficient of the industry characteristics is 0.007 which has a positive value which means constant when the industry and other independent variables increase, and the number of Fraudulent Financial Reporting is positively and expected to increase by 0.007.
- 5) The regression coefficient of auditor turnover is -0.481 and is negative suggesting that any increase in auditor turnover and other independent variables are held constant and reduce fraudulent financial reporting by 0.481.
- 6) The regression coefficient for directional change is 0.732 and has a positive value. This means that all changes in directors and other independent variables are assumed to be stationary and fraudulent financial statements are expected to increase by 0.732.
- 7) CEO photos have a 0.327 regression coefficient with a positive value that predicts that an increase in CEO photos and other independent variables will increase fraudulent financial statements through 0.327 which are considered stable.
- 8) The regression coefficient for government project cooperation is 0.699 and financial statement fraud is predicted to increase by 0.699 whenever government project cooperation and other independent variables are held constant.

### **Coefficient of Determination**

The coefficient of determination is a number that shows the contribution of the influence given by the independent variables namely Stimulus, Opportunity, Rationalization, Capability, Arrogance and Collusion to the dependent variable, namely Fraudulent Financial Reporting. The test results are shown in the table below.

**Table 5**  
**Coefficient of Determination**  
**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,575 <sup>a</sup>	0,330	0,293	1,47055

a. Predictors: (Constant), POLITICAL (X7), DIR\_CHANGE (X5), DER (X2), ΔCPA (X4), ACHANGE (X1), CEOPIC (X6), RECEIVABLE (X3)

b. Dependent Variable: F-SCORE (Y)

Source: Data is processing

The value of R Square ( $R^2$ ) obtained is 0.330 which shows the ability of the independent variable in explaining the dependent variable or in other words Stimulus, Opportunity, Rationalization, Capability, Arrogance and Collusion simultaneously contribute 33% influence on Fraudulent Financial Reporting, while ( $1 - R^2$ ) the remaining 67% is a major contribution to the effect was provided by other factors that were not investigated.

### T Test (Partial)

The  $t_{table}$  value used as a critical value in the next hypothesis test is 1.657 obtained from the t distribution table with  $df (n - (k+1)) = 128$  at a significance level ( $\alpha$ ) of 5% for one-tailed testing (one tailed). The formulation of the partial hypothesis to be tested is as follows: The test results are summarized in the table below:

**Table 6**  
**Partial Hypothesis Testing Results (t Test)**

Model	$t_{count}$	$t_{table}$	$\alpha$	Sig.t	Decision	Conclusion
$X_1 \rightarrow Y$	2,422	1,657	0,05	0,017	<b>Ha accepted</b>	<b>Significant</b>
$X_2 \rightarrow Y$	4,592	1,657	0,05	0,000	<b>Ha accepted</b>	<b>Significant</b>
$X_3 \rightarrow Y$	1,985	1,657	0,05	0,049	<b>Ha accepted</b>	<b>Significant</b>
$X_4 \rightarrow Y$	-1,516	1,657	0,05	0,132	<b>Ha rejected</b>	<b>Not Significant</b>
$X_5 \rightarrow Y$	2,508	1,657	0,05	0,013	<b>Ha accepted</b>	<b>Significant</b>
$X_6 \rightarrow Y$	1,285	1,657	0,05	0,201	<b>Ha rejected</b>	<b>Not Significant</b>
$X_7 \rightarrow Y$	2,223	1,657	0,05	0,028	<b>Ha accepted</b>	<b>Significant</b>

Source: Data is processing

### F Test (Simultaneous)

The statistical test simultaneous hypothesis used F test. The  $F_{table}$  value used as a critical value in this simultaneous hypothesis test is 2.082 which is obtained from the attachment of the F distribution table with  $df_1 (k) = 7$  and  $df_2 (n - (k+1)) = 128$  at a significance level ( $\alpha$ ) of 5%.

The formulation of the simultaneous hypothesis to be tested is as follows:

Ho :  $\beta_i = 0$  Financial Stability, External Pressure, Nature of Industry, Change in Auditors, Change of Directors, CEO's Pictures, and Cooperation with Government Project simultaneously does not have a significant effect on Fraudulent Financial Reporting.

Ha :  $\beta_i \neq 0$  Financial Stability, External Pressure, Nature of Industry, Change in Auditors, Change of Directors, CEO's Pictures, and Cooperation with Government projects also have a significant impact on financial reporting fraud. The level of significance ( $\alpha$ ) used is 5% or 0.05. Simultaneous test decision making criteria (F Test):

- 1) Reject Ho and Accept Ha if  $F_{count} > F_{table}$
- 2) Accept Ho and Reject Ha if  $F_{count} < F_{table}$

The test results are summarized in the following table:

**Table 7**  
**Results of Simultaneous Hypothesis Testing (F Test)**  
**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	136,391	7	19,484	9,010	0,000 <sup>b</sup>
Residual	276,803	128	2,163		
Total	413,194	135			

a. Dependent Variable: F-SCORE (Y)

b. Predictors: (Constant), POLITICAL (X7), DIR\_CHANGE (X5), DER (X2),  $\Delta$ CPA (X4), ACHANGE (X1), CEOPIC (X6), RECEIVABLE (X3)

Source: Data is processing

Based on the table above, the  $F_{count}$  obtained is 9.010 with a Sig value.  $0.000 < 0.05$  (a). Due to the value of  $F_{count} > F_{table}$  ( $9.010 > 2.082$ ), with a confidence level of 95% it can be decided to accept Ha and reject Ho which means Financial Stability, External Pressure, Nature of Industry, Change in Auditors, Change of Directors, CEO's Pictures, and Cooperation with Government Project simultaneously has a significant influence on Fraudulent Financial Reporting.

## Discussion

The ratio of changes in total assets is used to measure the company's financial stability. The results of this study support the study of Skousen et al (2008) which states that the higher the rate of change in the firm's total assets (ACHANGE) the more likely the company's financial statements are to be fraudulent.

An increase in the number of receivables of a company from year to year indicates that the cash turnover in the company is not going well. If the company wants to attract investors, then one of the efforts to achieve this goal is by manipulating the number of trade receivables either by manipulating the maturity date or by eliminating receivables with long collection periods (Wild, 2008). So, whether there is a change of auditors or not, management does not have the potential to commit fraud, and rationalization of fraud does not become a management culture.

Companies usually change directors for the purpose of improving the company because the new directors are considered better than the previous directors. This can encourage directors to do everything they can to ensure that their performance is better than that of previous directors. The findings of this study support Achmad (2022) study showing that repeated CEO images have no effect on financial statement fraud. This value means that the number of the CEO's pictures has no effect on the potential for detecting fraudulent financial statements, because no matter how many photos of the CEO, it will not cause the CEO's arrogance to lead to the potential for fraudulent financial statements.

The results of this research are consistent with research conducted by Sari (2020). This research presents empirical proof that the company's efforts to take part in the project were prompted by its acquisition of cooperation with government projects. In general, the company earns a large income so that it shows good company performance which is conveyed through the company's annual report.

## **CONCLUSION, IMPLICATION, SUGGESTION AND LIMITATION**

Based on the results of the data research and the above discussions, the following conclusions can be drawn:

- a) Financial stability, external pressure, the nature of the industry, change in directors, and cooperation with government projects have a positive and significant effect on detecting fraudulent financial reporting.
- b) Change of auditors and number of CEO's pictures have no significant effect on detecting fraudulent financial reporting.
- c) Stimulus, Opportunity, Capability, Rationalization, Arrogance, and Collusion simultaneously have a significant positive effect on detecting fraudulent financial reporting.

The researcher realizes that this research has many shortcomings, especially the limitations of this study. The limitations of this study can be reduced in future studies. The following are some of the limitations of this study as follows:

- a) The sample in the study is the state-owned companies listed on the BEI are not nearly half of the number of state-owned companies that exist.
- b) There are limitations to the measurement of the rationalization variable as measured by changes in auditors. This measurement is considered less effective for detecting the potential for fraudulent financial statements. The changes of auditors are not only done with the aim of



exploiting the weaknesses of the auditor's performance but for other reasons. One of them is in accordance with the regulations set by the Ministry of Finance of the Republic of Indonesia that must rotate Auditors Independent every 5 years.

- c) The measurement of arrogance variable as measured by the number of CEO's pictures is limited due to the possibility of the company's provisions to publish the required number of directors' photos.

For the next study, it is recommended to choose a larger number of samples and similar industries. Regarding fraudulent financial reporting, further researchers are advised to use a combination of qualitative and quantitative methods. Many elements of fraud are difficult to measure if only using quantitative methods, such as elements of rationalization, capability, and arrogance. Adding proxies for necessary variables such as institutional stock ownership or measurements such as the Total Accrual Ratio. The accrual concept allows management to manipulate revenue recognition even though it has not received cash from customers for a wider scope.

## REFERENCES

- Devy, K. L. S., Wahyuni, M. A., & Sulindawati, N. L. G. E. (2017). Pengaruh frequent number of ceos picture, pergantian direksi perusahaan dan external pressure dalam mendeteksi fraudulent financial reporting (studi empiris pada perusahaan farmasi yang listing di bei periode 2012-2016). *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, 8(2).
- Bonner, S. E., Palmrose, Z. V., & Young, S. M. (1998). Fraud type and auditor litigation: An analysis of SEC accounting and auditing enforcement releases. *Accounting Review*, 503-532.
- ACFE, (2020). Survei Fraud Indonesia 2019. *Indonesia Chapter #111* 53: 1–76.
- ACFE. (2016). The Fraud Tree. December, 1–13.
- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon fraud: Detection of fraudulent financial reporting in state-owned enterprises Indonesia. *Economies*, 10(1), 13.
- Achmad, T., Ghozali, I., & Pamungkas, I. D. (2022). Hexagon Fraud: Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia. *Economies*, 10(1), 1–16. <https://doi.org/10.3390/economies10010013>
- Afrianto, D. (2016). Direksi Timah Dituding Manipulasi Laporan Keuangan. [www.economy.okezone.com](http://www.economy.okezone.com). Diakses pada 17 Mei 2020 Retrieved from <https://economy.okezone.com/read/2016/01/27/278/1298264/direksi-timah-dituding-manipulasi-laporan-keuangan>.
- Annisya, M., & Asmaranti, Y. (2016). Pendeteksian Kecurang Laporan Keuangan Menggunakan Fraud Diamond. *Jurnal Bisnis dan Ekonomi*, 23(1).
- Aprilia, R., Hardi, H., & Al-Azhar, A. (2017). Pengaruh Financial Stability, Personal Financial Need, Ineffective Monitoring, Change in Auditor Dan Change in Director Terhadap

Financial Statement Fraud Dalam Perspektif Fraud Diamond (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efe (Doctoral dissertation, Riau University).

- Arens, A. A. (2014). *Auditing and assurance services : an integrated approach*. Pearson.  
<https://library.ui.ac.id/detail?id=20373522>
- Beneish, M. D. (1997). Detecting GAAP violation: Implications for assessing earnings management among firms with extreme financial performance. *Journal of accounting and public policy*, 16(3), 271-309.
- Bologna, J. (2006). *Fraud auditing and forensic accounting*. John Wiley & Sons, Inc.
- Brian A. G. (2014). *Black's Law Dictionary*. St. Paul, MN: Thomson Reuters.
- Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of accounting and economics*, 24(1), 99-126.
- Cressey, Donald R. (Donald Ray), 1919-1987. (1973). *Other people's money; a study in the social psychology of embezzlement*. Montclair, N.J. :Patterson Smith,
- Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting material accounting misstatements. *Contemporary accounting research*, 28(1), 17-82.
- Fajarwati, D., & Sambodo, S. D. (2010). Pengkajian tentang Penyusunan dan Penyajian Laporan Keuangan pada Lembaga Keuangan Syariah. *JRAK: Jurnal Riset Akuntansi Dan Komputerisasi Akuntansi*, 1(2), 15-31.
- Faradiza, S. A., & Suyanto. (2017). Fraud Diamond : Pendeteksi Kecurangan Laporan Keuangan. *Fraud Diamond: Pendeteksi Kecurangan Laporan Keuangan*, November, 196–201.
- Ghozi, S., & Hermansyah, H. (2018). Analisis Regresi Data Panel Profitabilitas Bank Pembangunan Daerah (BPD) di Indonesia. *Jurnal Matematika*, 8(1), 1.  
<https://doi.org/10.24843/jmat.2018.v08.i01.p93>
- Hadi, M. S. W., & Kirana, D. J. (2021). Pendeteksian Fraudulent Financial Reporting Dengan Fraud Hexagon Pada Perusahaan di Indonesia. *Business Management, and Accounting National Seminar*, 2, 1036–1052.  
<https://conference.upnvj.ac.id/index.php/biema/article/view/1672/1218>
- Herlina Nadziliyah, N. S. P. (2022). Analisis Fraud Hexagon Terhadap Financial Statement Fraud Pada. *Accounting and Finance Studies*, 2(1), 21–39. <https://doi.org/10.47153/afs21.2702022>
- Herdiana, R., & Sari, S. P. (2018). Analisis fraud diamond dalam mendeteksi financial statement fraud (studi empiris perusahaan manufaktur yang terdaftar di bursa efek indonesia periode 2015-2017). In *Seminar Nasional dan Call for Paper III Fakultas Ekonomi* (pp. 402-420).
- Himawan Albertus, F. A. K. (2019). Analisis Pengaruh Financial Stability, Ineffective Monitoring Dan Rationalization Terhadap Integritas Laporan Keuangan Dalam Perspektif Fraud Triangle pada Perusahaan Manufaktur Yang Terdapat Di Bursa Efek Indonesia Periode 2012-

2016. *ESENSI: Jurnal Manajemen Bisnis*, 22(2), 162–188. <https://ibn.e-journal.id/index.php/ESENSI/article/view/166>
- Kurnia, A. A., & Anis, I. (2017). *Analisis Fraud Pentagon dalam Mendeteksi Kecurangan Laporan Keuangan Simposium Nasional Akuntansi XX*. 1–30.
- Maryani, N., Kusuma Natita, R., & Herawati, T. (2022). Fraud Hexagon Elements as a Determination of Fraudulent Financial Reporting in Financial Sector Services. *Budapest International Research and Critics Institute Journal*, 5(1), 4300–4314. <https://doi.org/10.33258/birci.v5i1.4136>
- Miftahul Jannah, V., Andreas, A., & Rasuli, M. (2021). Pendekatan Vousinas Fraud Hexagon Model dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Studi Akuntansi Dan Keuangan Indonesia*, 4(1), 1–16. <https://doi.org/10.21632/saki.4.1.1-16>
- Novita, N. (2019). Teori Fraud Pentagon dan Deteksi Kecurangan Laporan Keuangan. *Jurnal Akuntansi Kontemporer*, 11(2), 64–73. <https://doi.org/10.33508/jako.v11i2.2077>
- Octani, J., Dwiharyadi, A., Djefris, D., Akuntansi, J., & Padang, N. (2021). Analisis Pengaruh Fraud Hexagon Terhadap Fraudulent Financial Reporting Pada Perusahaan Sektor Keuangan yang Terdaftar di Bursa Efek Indonesia Selama Tahun 2017-2020. *Jabei*, 1(1), 36–49. <https://akuntansi.pnp.ac.id/jabei>
- Rahmanti, M. M., & Daljono, D. (2013). Pendeteksian Kecurangan Laporan Keuangan Melalui Faktor Risiko Tekanan dan Peluang (Studi Kasus pada Perusahaan yang Mendapat Sanksi dari Bapepam Periode 2002–2006) (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- Sagala, S. G., & Siagian, V. (2021). Pengaruh Fraud Hexagon Model Terhadap Fraudulent Laporan Keuangan pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar di BEI Tahun 2016-2019. *Jurnal Akuntansi*, 13(2), 245–259. <https://doi.org/10.28932/jam.v13i2.3956>
- Sari, S. P., & Khoiriah, N. (2021). Hexagon Fraud Detection of Regional Government Financial Statement as A Fraud Prevention on The Pandemic Crisis Era. *Wacana.Ub.Ac.Id*, 24(2), 90–96. <https://wacana.ub.ac.id/index.php/wacana/article/view/897>
- Sari, S. P., & Nugroho, N. K. (2021, March). Financial Statements Fraud dengan Pendekatan Vousinas Fraud Hexagon Model: Tinjauan pada Perusahaan Terbuka di Indonesia. In *Annual Conference of Ihtifaz: Islamic Economics, Finance, and Banking* (pp. 409-430).
- Septriani, Y., & Desi Handayani, dan. (2018). *Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon*. 11(1), 11–23. <http://jurnal.pcr.ac.id>
- Shi, Wei, Brian L. Connelly, and Robert E. Hoskisson. 2017. External Corporate Governance and Financial Fraud: Cognitive Evaluation Theory Insights on Agency Theory Prescriptions. *Strategic Management Journal* 38: 1268–86
- Sihombing, K. S., & Rahardjo, S. N. (2014). Analisis Fraud Diamond dalam Mendeteksi Financial Statement Fraud (Studi Empiris pada Perusahaan manufaktur yang Terdaftar di Bursa Efek

- Indonesia Tahun 2010 – 2012). *Diponegoro Journal of Accounting*, 3(2), 1–12.  
<http://ejournal-s1.undip.ac.id/index.php/accounting>
- Skousen, C. J., & Twedt, B. J. (2009). Fraud score analysis in emerging markets. *Cross Cultural Management: An International Journal*.
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. In *Corporate governance and firm performance*. Emerald Group Publishing Limited.
- Subramanyam, K.R. (2014). Analisis laporan keuangan. Edisi Kesebelas. McGraw-Hill Education, New York
- Supriyono, R.A. 2018. Akuntansi Keperilakuan. Yogyakarta: UGM Press
- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372–381. <https://doi.org/10.1108/JFC-12-2017-0128>
- Wild, J., & Subramanyam, K. R. (2009). Financial Statement Analysis, Edition 10th. *English: Mcgraw-Hill Companies*.
- Wilopo, W. (2006). Analisis faktor-faktor yang berpengaruh terhadap kecenderungan kecurangan akuntansi: studi pada perusahaan Publik dan badan usaha milik negara di Indonesia. *The Indonesian Journal of Accounting Research*, 9(3).
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud.
- Yesiariani, M., & Rahayu, I. (2016). analisis fraud diamond dalam mendeteksi financial statement fraud (studi empiris pada perusahaan lq-45 yang terdaftar di bursa efek indonesia tahun 2010-2014). *Simposium Nasional Akuntansi XIX, Lampung*, 1-21.
- Yusrianti, H., Ghozali, I., & Yuyetta, E. N. (2020). Asset misappropriation tendency: Rationalization, financial pressure, and the role of opportunity (study in indonesian government sector). *Humanities & Social Sciences Reviews*, 8(1), 373-382.
- Zack, G. M. (2012). Financial Statement Fraud. *Financial Statement Fraud*, 269–273. <https://doi.org/10.1002/9781118527436>
- Zelin, C. (2018). Analisis fraud pentagon dalam mendeteksi kecurangan laporan keuangan dengan menggunakan fraud score model.
- Tuanakotta, T. M. 2010. Akuntansi Forensik dan Audit Investigatif.. Edisi 2. Salemba Empat Jakarta