

Hexagon Fraud in Detecting Financial Statement Fraud Using the M-Score Model in Property, Real Estate, and Building Construction Companies Listed on the Indonesia Stock Exchange (IDX) 2016-2020

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Abstract: This study aims to empirically prove the effect of financial targets, financial stability, external pressure, nature of industry, rationalization, capability, arrogance, and collusion in detecting financial statement fraud. This study uses a type of quantitative research with hypothesis testing. The population used in this study are property, real estate and building construction companies listed on the Indonesia Stock Exchange for the 2016-2020 period. This study used a purposive sampling method and obtained a sample of 19 companies with 87 data that could be processed. The data analysis method used in this study used logistic regression analysis processed with SPSS 25. The results of this study indicate that the nature of industry and rationalization have an effect on financial statement fraud, while financial targets, financial stability, external pressure, capability, arrogance, and collusion have no effect on financial statement fraud.

Keywords: Financial statement fraud, beneish M-Score, fraud hexagon, nature of industry, rationalization

I. INTRODUCTION

One result of the accounting process is the creation of financial reports, which provide information to stakeholders to use in making financial decisions about a company's performance and financial position. One of the objectives of financial reporting is to provide relevant information to creditors and investors. The information contained in financial reports has an important meaning that motivates managers to work to maintain company performance and ensure the satisfaction of all stakeholders. As a result, accurate financial reports are needed to prevent other parties from making bad decisions (Maryani et al., 2022).

While management anticipates receiving a sizable commission from the company's operating results, shareholders want an increase in the company's performance every year. Therefore, management has the opportunity to commit fraud so that the data in the financial statements appear accurate and satisfactory. In accordance with the agency theory put forward by Jensen and Meckling (1976), which states that shareholders and management have different goals. Compared to management, shareholders have less access to information company internals. Due to mastery of information and access extensive internal, management has taken several into account information that does not need to be known easily by the holder shares to support the manipulation of financial statements. By therefore, will be detrimental to the company and have an impact on a number of parties (Mukaromah& Budi, 2021).

Association of Certified Fraud Examiner (ACFE) defines Fraud is an intentional act that violates the law by falsifying information and presenting it to people others to benefit themselves or a group. According to ACFE Asia-Pacific survey 2022, there are eleven common types of fraud namely corruption, billing, non-cash, expense reimbursement, cash on hand, fraudulent financial statements (financial statement fraud), payroll, check and payment tampering, skimming, cash larceny, and register disbursement. Based on a survey conducted by ACFE, case financial

statement fraud for the Asia-Pacific region reached 11% which is much less when compared to corruption reached 57%, but the losses resulting from practice the fraud resulted in a loss of US\$ 121,000 (ACFE, 2019).

There has been a case of financial statement fraud committed by PT Hanson. The records of the Financial Services Authority (OJK) show that PT Hanson manipulated the sale and purchase of ready-to-use plots (Kasiba) in 2016, causing the gross profit value to increase by IDR 732 billion (CNBC Indonesia, 2021). This has violated PSAK 44 concerning accounting for real estate activities and has manipulated transactions to increase profits which will be detrimental to all parties.

According to Georgios L. Vousinas (2019) to detect fraudulent financial reporting practices, hexagon fraud theory can be used which consists of six components, namely pressure, opportunity, rationalization, capability, arrogance, and collusion.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Basis

2.1.1 Agency Theory

This theory was first put forward by Jensen and Meckling (1976), in this theory explaining a cooperative contractual relationship between the agent and the principle in which there is one or more individuals called the principle delegating decision-making authority to the agent to realize the goals of the principle itself. Basically, the value of the principle-agent relationship is not optimal because the two contracted parties have different interests and information is asymmetric or unequal (Tyge & Petrenko, 2019).

2.1.2 Signaling Theory

Signaling theory is management's view of the company's future prospects to provide guidance for investors (Brigham & Houston, 2014). Signaling theory assumes that managers want to maximize their earnings with firm value information that investors may not have. Based on the existence of asymmetric information, namely a situation where one party has knowledge that may not be owned by another party. If the manager does not provide all known information about the value of the company, asymmetric information will occur that will affect investors' judgments during the decision-making process. Asymmetric information causes management policies to send very important signals to investors or the general public. Investors may anticipate that the signal will provide perspective on the company's prospects. The goal of signaling theory is to reduce information asymmetry for investors (Puspitaningtyas, 2019).

2.1.3 Fraud Hexagon Theory

Fraud theory returns to the development initiated by Georgios L. Vousinas (2019) which is called Fraud Hexagon Theory, in this theory Vousinas adds one component that was not found in the previous theory, namely collusion is a cooperative relationship between several parties both inside and outside the organization. When collusion is in an dishonest environment, the people in it will be influenced to commit negative acts of fraud so that this could become a bad organizational culture. According to Vousinas, it will be easier for someone with a persuasive personality to persuade others to commit fraud. Therefore, in the fraud hexagon theory, there are six components that influence fraud behavior, namely pressure, opportunity, rationalization, capability, arrogance, and collusion (Georgios, 2019).

2.1.4 Financial Statement Fraud

Financial statement fraud, which involves intentional representations including incorrect amounts or omissions in disclosures, so as to deceive users of financial statements, thus affecting perceptions of company performance and profitability, management attempts to manipulate profits and commit fraudulent financial reporting (Jan, 2021). Chan Long Jan also revealed several forms of fraudulent financial reporting:

- a. Manipulation, falsification or destruction of accounting records or relevant evidence,
- b. Intentional and dishonest statements or intentional omissions of transactions, events or other material information and,
- c. Intentional or misleading use, recognition, measurement, classification, expression or disclosure of relevant accounting principles.

2.2 Hypothesis Development

2.2.1 Financial target on financial statement fraud

Financial targets are one of the causes of manager pressure to commit acts of fraud. A manager must be able to achieve company profits in accordance with the targets that have been given. As a result, managers can do all kinds of ways so that these targets can be achieved by making unreasonable misstatements in financial statements that do not reflect the actual state of the company. In previous research regarding the effect of financial targets on financial statement fraud conducted by Tarjo (2021), Chantia (2021), Octaviana (2022), and Shinta & Witosari (2022) showed results that financial targets affect the detection of fraudulent financial reporting of a company.

H₁ : The Financial Target affects the Fraud Financial Statement

2.2.2 Financial stability on financial statement fraud

Financial stability is pressure on management to keep the company's finances stable caused by the demands of investors to survive and continue to invest in the company. The pressure exerted on company management by financial stability can make managers take inappropriate actions by making fraudulent financial reports. Research conducted by Tarjo et al. (2021), Larum et al. (2021), Octaviana (2022), Achmad et al. (2022) and Budiyanto (2022) show results that financial stability affects the detection of fraudulent financial reporting of a company.

H₂ : Financial Stability affects Fraud Financial Statement

2.2.3 External pressure on financial statement fraud

External pressure, namely the pressure of managers to obtain capital in the form of debt from third parties or external companies. These funds are used to become additional capital for the company in carrying out its operational activities to improve the performance and quality of the company, so that this will trigger managers to commit fraud. Previous research by Tarjo et al. (2021), Larum et al. (2021), Chantia (2021), Achmad et al. (2022), and Shinta & Witosari (2022) show that external pressure has an effect on the detection of fraudulent financial reporting of a company.

H₃ : External Pressure affects Fraud Financial Statement

2.2.4 Nature of industry on financial statement fraud

The nature of industry is fraudulent financial reporting by management in terms of estimating bad debts and obsolete inventory accounts to provide investors with an ideal company picture. In previous research regarding the influence of the nature of industry on financial statement fraud conducted by Tarjo et al. (2021), Octaviana (2022), and Shinta & Nugroho (2022) show results that the nature of industry influences the detection of fraudulent financial reporting of a company.

H₄ : Nature of Industry affects Fraud Financial Statement

2.2.5 Rationalization on financial statement fraud

Rationalization is someone's thinking to justify wrong actions and try to cover up these unnatural things by rationalizing them on the basis or basis they adhere to. Research conducted by Agustin et al. (2022) show the results that rationalization has an effect on the detection of fraudulent financial reporting of a company.

H₅ : Rationalization affects Fraud Financial Statement

2.2.6 Capability on financial statement fraud

Capability is a person's capacity to commit planned and systematic fraud because the perpetrator of the fraud has the knowledge and skills needed so that this action cannot be discovered by other people. In previous research regarding the effect of capability on financial statement fraud conducted by Dwiyanjana et al. (2022) showed that capability has an effect on the detection of fraudulent financial reporting by a company.

H₆ : Capability affects Fraud Financial Statement

2.2.7 Arrogance on financial statement fraud

Arrogance is an arrogant trait possessed by a manager, where the manager feels that he is a person who has unlimited power caused by special relationships, or multiple positions. This will create opportunities

for management to easily commit fraud. Previous research by Larum et al. (2021), shows that arrogance has an effect on the detection of fraudulent financial reporting of a company.

H₇ : Arrogance affects Fraud Financial Statement

2.2.8 Collusion on financial statement fraud

Collusion is a collaboration carried out between individuals or several groups for the sake of profit and common goals, in this case the intended purpose is negative which leads to fraud or fraud in financial reporting. Research conducted by Larum et al. (2021), Shinta & Nugroho (2021) and Budiyanto (2022) show results that collusion has an effect on the detection of fraudulent financial reporting of a company.

H₈ : Collusion affects Fraud Financial Statement

III. RESEARCH METHOD

3.1 Research Design

The type of research used in this research is hypothesis testing using a quantitative approach.

3.2 Population and Sample

The population in this study are companies in the property, real estate and building construction sector which are members of the Indonesia Stock Exchange in 2016-2020, namely 19 companies. For the research sample, the researcher used a purposive sampling technique. The following sample criteria are applied to get a good sample:

1. Property, real estate and construction building companies listed on the Indonesia Stock Exchange for the 2016-2020 period,
2. Companies that present successive annual reports during the year of study,
3. Companies that earn profits in the financial statements of the research year period,
4. All useful data to measure all the required research variables.

3.3 Data and Data Sources

The data used in this study comes from secondary data obtained from parties who publish information from the website <https://www.idx.co.id> and the company's official website that can be accounted for. The data collected is in the form of financial reports and annual reports of property, real estate and building construction companies for the 2016-2020 period.

3.4 Variable Operational and Variable Measurement

3.4.1 Dependent Variable

Financial Statement Fraud

Financial statement fraud can be measured using several methods or measurement models, one of which is the method proposed by Beneish (1999) called the Beneish M-Score method which will be used in this study. There are eight ratios used in measuring the Beneish M-Score method in detecting fraud, namely Days Sales in Receivables Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Sales Growth Index (SGI), Depreciation Index (DEPI), Sales General and Administrative Expenses Index (SGAI), Leverage Index (LVGI), and Total Accruals to Total Assets (TATA). The mathematical formula of the Beneish M-Score is as follows:

$$\text{M-Score} = -4.840 + 0.920(\text{DSRI}) + 0.528(\text{GMI}) + 0.404(\text{AQI}) + 0.892(\text{SGI}) + 0.115(\text{DEPI}) - 0.172(\text{SGAI}) + 4.679(\text{TATA}) - 0.327(\text{LVGI})$$

3.4.2 Independent Variable

Financial Target

Financial targets can be measured by assessing the company's profit level for the company's efforts to obtain these benefits, namely Return on Total Assets (ROA) (Skousen et al., 2009). In determining incentives, increasing wages and assessing the ability of managers to carry out their activities, the Return on Total Assets (ROA) ratio can be used :

$$\text{ROA} = (\text{Net Profit}) / (\text{Total Asset})$$

Financial Stability

To measure financial stability, you can use ACHANGE, which is the change in the value of a company's assets over a period of two years (Anjilni, 2021). ACHANGE is calculated using the following formula:

$$\text{ACHANGE} = (\text{Total Asset}(t) - \text{Total Asset}(t-1)) / (\text{Total Asset}(t))$$

External Pressure

When an entity experiences many difficulties in repaying high-risk credit loans, external pressure can occur. If the level of credit risk is high, then the company's inability to repay loans is a source of concern in itself (Hanifa & Laksito, 2015). Leverage is calculated using the following formula:

$$\text{Leverage} = (\text{Total Debt}) / (\text{Total Asset})$$

Nature of Industry

The nature of industry can be measured by the receivable ratio, which assesses changes in company receivables (Skousen et al., 2009). Receivable is calculated using the following formula:

$$\text{Receivable} = (\text{Receivable (t)}) / (\text{Sales (t)}) - (\text{Receivable (t-1)}) / (\text{Sales (t-1)})$$

Rationalization

The company's accrual value is reflected in rationalization involving subjective judgments and decision making (Skousen et al., 2009). The accrual value is the change in operating cash flow into net income with the required number of accounting adjustments (Satwika & Damayanti, 2005). Accrual value (TATA) can be calculated using the following formula:

$$\text{TATA} = (\text{Net Profit-Operating Cash Flow}) / (\text{Total Assets})$$

Capability

Female commissioners have a significant effect on company value because female commissioners are process-oriented, focused and careful at work, so this has an impact on company performance (Aliyu, 2019). In (Meidijati and Amin, 2022) formulates calculations for calculating capability with the ratio of female commissioners to total commissioners (COMW) as follows:

$$\text{COMW} = (\text{Total Female Commissioners}) / (\text{Total Commissioners})$$

Arrogance

In this study, CEO duality was measured using a dummy variable with a score of "1" if the CEO doubles as a commissioner or the CEO has a family relationship with the commissioner (two different individuals) and is given a score of "0" otherwise (Finkelstein and D'Aveni, 1994).

Collusion

Collusion can be measured by political connections as in research (Vousinas 2019) with the provision of using a dummy variable with a score of "1" if the company undertakes project cooperation with the government and is given a score of "0" otherwise. This indicator is used because businesses connected by political means run the risk of exploiting their connections for personal gain, and allowing fraud to occur.

3.5 Data Analysis Method

This research uses logistic regression analysis method. Then the data is processed through SPSS 25 with the theoretical basis obtained. This analysis is used to analyze how much influence the independent variables have on the dependent variable. The dependent variable of this model is financial statement fraud, and the independent variables are financial targets, financial stability, external pressure, nature of industry, rationalization, capability, arrogance, collusion. The regression equation model used to test this hypothesis are:

$$\text{FSF} = \alpha + \beta_1\text{FNT} + \beta_2\text{FNS} + \beta_3\text{EXP} + \beta_4\text{NOI} + \beta_5\text{RZN} + \beta_6\text{CPB} + \beta_7\text{ARG} + \beta_8\text{CLS} + e$$

Information :

FSF	= Financial Statement Fraud
α	= Constant
β	= Regression coefficient
FNT	= Financial Target
FNS	= Financial Stability
EXP	= External Pressure
NOI	= Nature of Industry
RZN	= Rationalization
CPB	= Capability
ARG	= Arrogance
CLS	= Collusion
e	= Residual Error

IV. RESULT ANALYSIS

4.1 Research Sample Determination

Table 4.1 Research Sample Determination

Information	Amount
Property, Real Estate and Building Construction Sector Companies listed on the Indonesia Stock Exchange for the 2016-2020 period	54
Companies that do not present successive annual reports during the year of study	(7)
Companies that do not earn profits in the current year's financial statements	(25)
Companies that do not have the necessary data to measure research variables	(3)
Number of companies that meet the criteria	19
Number of samples (19 x 5 years)	95
Number of data outliers	(8)
Total research sample	87

Based on existing data, 19 companies meet the criteria. The period of this research was five years, so that 95 samples were obtained. During the data processing, 8 data had to be outliers, so that 87 final samples were used in the study.

4.2 Descriptive Statistical Analysis

Table 4.2 Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Target	87	,001	,124	,04457	,032787
Financial Stability	87	-,109	,319	,06705	,076345
External Pressure	87	,079	,854	,47021	,187964
Nature of Industry	87	-,149	,185	,01166	,068162
Rationalization	87	-,096	,069	,00248	,026252
Capability	87	,000	,571	,13126	,154060
Arrogance	87	0	1	,28	,450
Collusion	87	0	1	,41	,495
Financial Statement Fraud	87	0	1	,30	,460
Valid N (listwise)	87				

Source: Secondary Data Processed Author, 2023

The table above presents the following data :

- a) The results of the descriptive statistical analysis of the financial target variable show a minimum value of 0.001 obtained from the company Adhi Karya (Persero) Tbk. in 2020, while the maximum financial target value is 0.124 obtained by Pakuwon Jati Tbk. in 2019 and Roda Vivatex Tbk. in 2016. The average value of the company's financial targets for 2016-2020 is 0.04457 with a standard deviation of 0.032787.
- b) The results of the descriptive statistical analysis of the financial stability variable show a minimum value of -0.109 obtained from the Nusa Raya Cipta Tbk company. in 2020, while the maximum value of financial stability is 0.319 obtained by Wijaya Karya (Persero) Tbk. in 2017. The average value of the company's financial stability in 2016-2020 was 0.06705 with a standard deviation of 0.076345.
- c) The results of the descriptive statistical analysis of the external pressure variable show a minimum value of 0.079 obtained from the company Roda Vivatex Tbk. in 2020, while the maximum external pressure value was 0.854 obtained by the company Adhi Karya (Persero) Tbk. in 2020. The company's average external pressure in 2016-2020 was 0.47021 with a standard deviation of 0.187964.
- d) The results of the descriptive statistical analysis of the nature of industry variable show a minimum value of -0.149 obtained from the company Agung Podomoro Land Tbk. in 2020, while the maximum value of nature of industry is 0.185 obtained by Perdana Gapuraprima Tbk. in 2019. The company's average nature of industry value for 2016-2020 was 0.01166 with a standard deviation of 0.068162.
- e) The results of the descriptive statistical analysis of the rationalization variable show a minimum value of -0.096 obtained from the company Adhi Karya (Persero) Tbk. in 2017, while the maximum rationalization value was 0.069 which was obtained by the Metropolitan Land Tbk company. in 2017.

The average value of the company's rationalization for 2016-2020 was 0.00248 with a standard deviation of 0.026252.

- f) The results of the descriptive statistical analysis of the capability variable show a minimum value of 0.000 obtained from the company Agung Podomoro Land Tbk. in 2016, while the maximum capability value was 0.571 obtained by Ciputra Development Tbk. in 2020. The company's average capability value for 2016-2020 was 0.13126 with a standard deviation of 0.154060.
- g) The results of the descriptive statistical analysis of the arrogance variable show a minimum value of 0 obtained from companies where the CEO does not concurrently serve on the board of commissioners or has no affiliation with the board of commissioners, while the maximum value of arrogance is 1 obtained from companies whose CEO also serves as a board of commissioner or has a relationship affiliation with the board of commissioners. The average value of corporate arrogance for 2016-2020 is 0.28 with a standard deviation of 0.450.
- h) The results of the descriptive statistical analysis of the collusion variable show that a minimum value of 0 is obtained from companies that do not have a project collaboration relationship with the government, while the maximum collusion value is 1 obtained from companies that have a project collaboration relationship with the government. The average collusion value for companies in 2016-2020 is 0.41 with a standard deviation of 0.495.
- i) The results of the descriptive statistical analysis of the financial statement fraud variable show a minimum value of 0 obtained from companies that do not practice fraudulent financial statements, while the maximum value of financial statement fraud is 1 obtained from companies that practice financial statement fraud. The average value of corporate fraud financial statements for 2016-2020 is 0.30 with a standard deviation of 0.460.

4.3 Hosmer and Lemeshow's Goodness of Fit Test

Table 4.3 Hosmer and Lemeshow's Goodness of Fit Test

Step	Chi-square	df	Sig.
1	2,588	8	0,958

Source: Secondary Data Processed Author, 2023

Based on the Hosmer and Lemeshow's Goodness of Fit Test, a significance value of 0.958 was obtained indicating that the model was able to predict the observed value or the model was acceptable because it was in accordance with the observations. because of the sig value. 0.958 is greater than 0.05.

4.4 Overall Model Fit Test

Table 4.4 Overall Model Fit Test

Information	Value
-2 Log Likelihood Block Number 0	106,120
-2 Log Likelihood Block Number 1	78,132

Source: Secondary Data Processed Author, 2023

Based on the test results in the table, the value of -2 logs likelihood block number 0 was obtained at 106.120 while the value of -2 logs likelihood block number 1 was 78.132. This shows the decline in the value of block 0 to block 1, meaning that the model that is hypothesized by fit with better regression data or model.

4.5 Nagelkerke R² Test

Table 4.5 Nagelkerke R² Test

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	78,132 ^a	0,275	0,390

Source: Secondary Data Processed Author, 2023

Based on the summary model table, the Nagelkerke R² value is 0.390. This shows the variability of the dependent variable that can be explained by the independent variable variability of 39% while the remaining 61% is explained by other variables that are not used in this study.

4.6 Classification Test

Table 4.6 Classification Test

Observed	Predicted			Percentage Correct
	Financial Statement Fraud		Not Fraud	
	Not Fraud	Fraud		
Financial Statement	Not Fraud	57	4	93,4
Fraud	Fraud	15	11	42,3
Overall Percentage				78,2

Source: Secondary Data Processed Author, 2023

Based on this table the prediction strength of the regression model to predict the possibility of a company to make a financial statement of fraud by 42.3%. This shows that by using the regression model used there are 11 samples (42.3%) which are predicted to carry out financial statements of fraud out of a total of 26 samples that carry out the financial statement fraud. The strength of the sample model prediction that does not make a financial statement fraud is 93.4 which means that with the regression model used there are 57 samples (93.4%) which are predicted not to make a financial statement fraud out of a total of 61 samples that do not do financial statement fraud.

4.7 Logistic Regression Analysis

Tabel 4.7 Logistic Regression Analysis

	B	S. E.	Wald	df	Sig.	Exp(B)
Financial Target	4,402	11,975	,135	1	,713	81,589
Financial Stability	-7,190	5,172	1,933	1	,164	,001
External Pressure	-1,299	1,885	,475	1	,491	,273
Nature of Industry	16,823	5,566	9,136	1	,003	20245201,58
Rationalization	41,081	16,252	6,389	1	,011	6,941E+17
Capability	2,126	2,316	,843	1	,359	8,383
Arrogance	-,193	,660	,085	1	,770	,825
Collusion	,218	,770	,080	1	,777	1,244
Constant	-1,085	1,128	.925	1	,336	,338

Source: Secondary Data Processed Author, 2023

The regression model resulting from testing the regression model is as follows:

$$FSF = -1,085 + 4,402 FNT - 7,190 FNS - 1,299 EXP + 16,823 NAOI + 41,081 RZN + 2,126 CPB - 0,193 ARG + 0,218 CLS + e$$

From the results of the regression equation can be explained as follows:

- The constant value of -1,085 shows that if financial targets, financial stability, external pressure, nature of industry, rationalization, capability, arrogance, and collusion are assumed to be constant or equal to zero, the financial statement fraud will decrease.
- The coefficient of the target financial variable of 4.402 shows that each target financial increase of 1% will be followed by an increase in the financial statement fraud by 440.2%.
- The external pressure variable coefficient value of -1,229 shows that each external pressure increase by 1% will be followed by a decrease in the financial statement fraud by 122.9%.
- The coefficient value of the Nature of Industry variable of 16.823 shows that each Nature of Industry increase by 1% will be followed by an increase in Fraud's financial statement by 1682.3%.
- The rationalization variable coefficient value of 41,081 shows that each rationalization increase of 1% will be followed by an increase in the financial statement of fraud by 4108.1%.
- Capability variable coefficient value of 2.126 shows that each capability increase of 1% will be followed by an increase in the financial statement fraud by 212.6%.
- The arrogance variable coefficient value of -0.193 shows that each arrogance increase of 1% will be followed by a decrease in the financial statement fraud by 19.3%.
- The coefficient value of the collusion variable of 0.218 shows that each collusion increase of 1% will be followed by an increase in the financial statement fraud by 21.8%.

V. DISCUSSION

1. Effect of Financial Target on Financial Statement Fraud

Based on the results of the regression test of the target financial coefficient of the target variable of 4.402 and a significant level of $0.713 > 0.05$ which means that the target financial variable does not affect the financial statement fraud, so the first hypothesis is not accepted. The results of this study were supported by previous research by Shinta Permata Sari & Nugroho (2020) and Handoko (2021) which stated that the financial target had no effect on the financial statement fraud. This is because Return on Assets can basically be one of the performance measurement indicators. The amount of return on assets will not be a trigger for fraud if the targeted return on asset rate is still quite reasonable. However, this research has different results from previous studies by Shinta & Witosari (2022) which states that financial targets affect the financial statement fraud.

2. Effect of Financial Stability on Financial Statement Fraud

Based on the results of the regression test the coefficient of the financial stability variable regression of -7,190 and a significant level of $0.164 > 0.05$ which means the financial stability variable does not affect the financial statement fraud, so the second hypothesis is not accepted. The results of this study were supported by previous research by Shinta Permata Sari & Nugroho (2020) which stated that financial stability had no effect on the financial statement fraud. The level of fraud of the company's financial statements depends on the stability of the company, when the company's finances are stable, it means the company is able to manage its resources effectively, so it does not require fraud practices in financial statements. However, this research has different results from previous studies by Octaviana (2022) which states that financial stability affects the financial statement fraud.

3. Effect of External Pressure on Financial Statement Fraud

Based on the results of the regression test the external pressure regression coefficient value of -1,229 and a significant level of $0.491 > 0.05$ which means the external pressure variable has no effect on the financial statement fraud, so the third hypothesis is not accepted. The results of this study were supported by previous research by Shinta Permata Sari & Nugroho (2020) and Handoko (2021) which stated that external pressure had no effect on the financial statement fraud. There is a possibility that businesses can pay off their debts, or decide to use other funding options such as assets and the majority of the company under study has a higher asset value compared to the amount of debt owned by the company. However, this research has different results from previous studies by Wulandari & Trisnawati (2022) states that external pressure affects the financial statement fraud.

4. Effect of Nature of Industry on Financial Statement Fraud

Based on the results of the regression test the coefficient of the Nature of Industry variable regression coefficient of 16,823 and a significant level of $0.003 < 0.05$ which means the Nature of Industry variable affects the financial statement fraud, so the fourth hypothesis is accepted. The results of this study were supported by previous research by Mertha Jaya & Poerwono (2019) and Halimah & Supardi (2021) which stated that the Nature of Industry affected the financial statement of Fraud. Accounts receivable are assets with a higher risk of manipulation due to the high value of receivables to sales in a business. Because management may manipulate financial statements to make receivables appear smaller if the company has a high sales rate ratio. However, this research has different results from previous studies by Octani, Dwiharyadi, & Djefris (2021) which states that the nature of industry has no effect on the financial statement of fraud.

5. Effect of Rationalization on Financial Statement Fraud

Based on the results of the regression test of the Rationalization variable regression coefficient value of 16,823 and a significant level of $0.011 < 0.05$ which means the rationalization variable affects the financial statement fraud, so the fifth hypothesis is accepted. The results of this study were supported by previous research by Sihombing & Rahardjo (2014) and Septriani & Desi Handayani (2018) which stated that rationalization in this case total accrual to total assets affect the financial statement fraud. Total accrual is a reflection of overall company activities. The company's accrual level will vary depending on management decisions related to certain policies. With positive research results prove that the company during the year of observation made efforts to increase the company's profits. Earnings management carried out by raising profits occurs because the possibility of management is optimistic in reporting its performance, namely by recognizing the future income into current income. However, this research has different results from previous studies by

Mukaromah & Budiwitjaksono (2021) states that rationalization in this case total accrual to total assets does not affect the financial statement fraud.

6. Effect of Capability on Financial Statement Fraud

Based on the results of the regression test the coefficient value of the capability variable regression is 2.126 and a significant level of $0.359 > 0.05$ which means the capability variable has no effect on the financial statement fraud, so that the sixth hypothesis is not accepted. The results of this study were supported by previous research by Tanjaya & Kwarto (2022) and Kouib & Almulhim (2019) which stated that the capability in this case the Ratio of Female Commissioners to Total Commissioners did not affect the financial statement of Fraud. This is caused by the nature of women who are more diligent, responsible, independent, and more conservative than men. The issue of gender equality in certain countries makes it difficult for women to obtain positions. This causes a tendency for them to avoid fraud that can damage their careers. This finding supports the gender socialization theory which states the difference in value between men and women, where women tend to focus more on building good relations and behave ethically than men. However, this research has different results from previous studies by Meidjati & Amin (2022) which states the capability in this case the Ratio of Female Commissioners to Total Commissioners affects the financial statement fraud.

7. Effect of Arrogance on Financial Statement Fraud

Based on the results of the regression test of the arrogance variable regression coefficient value of -0.193 and a significant level of $0.770 > 0.05$ which means the arrogance variable has no effect on the financial statement fraud, so the seventh hypothesis is not accepted. The results of this study were supported by previous research by Ratnasari & Solikhah (2019) and Precilia & Wahyudi (2022) stated that arrogance had no effect on the financial statement fraud. The higher the position occupied by a CEO, the higher the sense of responsibility he has. From this, the CEO will always maintain its reputation and credibility and stay away from financial reporting fraud. A sense of responsibility of a CEO increases with the level of position he holds. As a result, the CEO will avoid the fraud financial statement practice and always maintain its credibility and reputation. However, this research has different results from previous studies by Sasongko et al (2018) which states that arrogance affects the financial statement fraud.

8. Effect of Collusion on Financial Statement Fraud

Based on the results of the regression test the coefficient value of the colusion variable regression is 0.218 and a significant level of $0.777 > 0.05$ which means the colusion variable has no effect on the financial statement fraud, so the eighth hypothesis is not accepted. The results of this study were supported by previous research by Chantia et al. (2021) and Larum, Zuhroh, & Subiyantoro (2021) which states that Collusion has no effect on the financial statement fraud. This shows that although political factors often affect government cooperation, the implementation process still requires established procedures and meets certain requirements before the business world can be trusted to accept these cooperation. However, this research has different results from previous studies by Shinta Permata Sari & Nugroho (2020) which states that Collusion affects the financial statement fraud.

VI. CONCLUSION

Based on the results of the tests that have been carried out, it can be concluded that:

- 1) The financial target variable does not affect the financial statement fraud.
- 2) The financial stability variable does not affect the financial statement fraud.
- 3) The external pressure variable does not affect the financial statement fraud.
- 4) The nature of industry variable affect the financial statement fraud.
- 5) The rationalization variable affect the financial statement fraud.
- 6) The capability variable does not affect the financial statement fraud.
- 7) The arrogance variable does not affect the financial statement fraud.
- 8) The collusion variable does not affect the financial statement fraud.

The limitations in this study include:

- a) The sample used in this study only includes the Property, Real Estate and Building Construction Sector Company listed on the 2016-2020 Indonesia Stock Exchange, so that the results of this study do not represent the whole company registered on the Indonesia Stock Exchange.
- b) Based on the results of the Nagelkerke R^2 value of 39% while the remaining 61% is explained by other variables

that are not used in this study.

then the suggestions for further research are as follows:

- a) It is expected to use other companies listed on the Indonesia Stock Exchange and can use the latest year of observation period, so that it can include a wider and more renewable sample.
- b) It is expected to increase other variables analyzed can affect the financial statement fraud such as earnings management.

REFERENCES

- [1] Maryani, Neni, Rendi Kusuma Natita, and Tuti Herawati. 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>.
- [2] Mukaromah, Ima, and Gideon Setyo Budiwitjaksono. 2021. "Fraud Hexagon Theory Dalam Mendeteksi Kecurangan Laporan Keuangan Pada Perbankan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2019." *Jurnal Ilmiah Komputersasi Akuntansi* 14 (1): 61-72. <http://journal.stekom.ac.id/index.php/kompakpage61>.
- [3] ACFE. 2000. *Fraud Examiners Manual*. Third Edition. Texas: Association of Certified Fraud Examination.
- [4] Vousinas, Georgios L. 2019. "Advancing Theory of Fraud: The S.C.O.R.E. Model." *Journal of Financial Crime* 26 (1): 372-81. <https://doi.org/10.1108/JFC-12-2017-0128>.
- [5] Tyge Payne, Goerge, and Vans Oleg Petrenko. 2019. "Agency Theory in Business and Management Research." *Business and Management*. <https://doi.org/https://doi.org/10.1093/acrefore/9780190224851.013.5>.
- [6] Puspitaningtyas, Zarah. 2019. "Empirical Evidence of Market Reactions Based on Signaling Theory in Indonesia Stock Exchange." *Investment Management and Financial Innovations* 16 (2): 66-77. [https://doi.org/10.21511/imfi.16\(2\).2019.06](https://doi.org/10.21511/imfi.16(2).2019.06).
- [7] Jan, Chyan Long. 2021. "Detection of Financial Statement Fraud Using Deep Learning for Sustainable Development of Capital Markets under Information Asymmetry." *Sustainability (Switzerland)* 13 (17). <https://doi.org/10.3390/su13179879>.
- [8] Tarjo, Tarjo, Alexander Anggono, and Eklamsia Sakti. 2021. "Detecting Indications of Financial Statement Fraud: A Hexagon Fraud Theory Approach." *AKRUAL: Jurnal Akuntansi* 13 (1): 119-31. <https://doi.org/10.26740/jaj.v13n1.p119-131>.
- [9] Chantia, Dona, Yoyoh Guritno, Retna Sari, and Universitas Pembangunan Nasional Veteran Jakarta. 2021. "Detection of Fraudulent Financial Statements :Fraud Hexagon S.C.C.O.R.E Model Approach." *PROSIDING BIEMA Business Management, Economic, and Accounting National Seminar* 2 (3): 594-613.
- [10] Octaviana, Natasya. 2022. "Analisis Elemen-Elemen Fraud Hexagon Theory Sebagai Determinan Fraudulent Financial Reporting." *Jurnal Akuntansi* 11 (2): 106-21. <https://doi.org/10.46806/ja.v11i2.895>.
- [11] Sari, Shinta Permatasari, and Diana Witosari. 2022. "Fraud Financial Statement Detection: Fraud Hexagon Model Analysis in the Financial Sector Listed on the Indonesia Stock Exchange." *The 4th International Conference on Business and Banking Innovations (ICOBBI)* 4 (1): 45-55.
- [12] Larum, Kordianus, Diana Zuhroh, and Edi Subiyantoro. 2021. "Fraudlent Financial Reporting: Menguji Potensi Kecurangan Pelaporan Keuangan Dengan Menggunakan Teori Fraud Hexagon." *AFRE (Accounting and Financial Review)* 4 (1): 82-94. <https://doi.org/10.26905/afr.v4i1.5957>.
- [13] Achmad, Tarmizi, Imam Ghozali, and Imang Dapit Pamungkas. 2022. "Hexagon Fraud: Detection of Fraudulent Financial Reporting in State-Owned Enterprises Indonesia." *Economies* 10 (1): 1-16. <https://doi.org/10.3390/economies10010013>.
- [14] Budiyanto, Wahyu, and Dewita Puspawati. 2022. "Analisis Fraud Hexagon Dalam Mendeteksi Financial Statement Fraud." *E-Prosiding Akuntansi National Conference on Accounting and Fraud Auditing* 3 (1). <http://trilogi.ac.id/journal/ks/index.php/EPAKT/article/view/1213>.
- [15] Agustin, Maria Dewinta, Fenni Yufantria, and Fedi Ameraldo. 2022. "Pengaruh Fraud Hexagon Theory Dalam Mendeteksi Kecurangan Laporan Keuangan (Studi Kasus Pada Perusahaan Asuransi Yang Terdaftar Di Bursa

- Efek Indonesia Periode 2017-2020)." *Journal of Economic and Business Research* 2 (2): 47-62. <https://doi.org/10.29103/jak.v10i2.7352>.
- [16] Nugroho, Dwiyanjana, and Vera Diyanty. 2022. "Hexagon Fraud in Fraudulent Financial Statements: The Moderating Role of Audit Committee." *Jurnal Akuntansi Dan Keuangan Indonesia* 19 (1): 46-67. <https://doi.org/10.21002/jaki.2022.03>.
- [17] Anjilni, Ratih Qadarti. 2021. "Pengaruh Achange, Oship, Leverage, Dan Receivable Terhadap Fraud." *JABI (Jurnal Akuntansi Berkelanjutan Indonesia)* 4 (1): 104. <https://doi.org/10.32493/jabi.v4i1.y2021.p104-124>.
- [18] Hanifa, Septia Ismah, and Herry Laksito. 2015. "Pengaruh Fraud Iindicators Terhadap Fraudulent Financial Statements: Studi Empiris Pada Perusahaan Yang Listed Di Bursa Efek Indonesia (BEI) Tahun 2008-2013." *Diponegoro Journal of Accounting* 4 (4): 1-15. <https://ejournal3.undip.ac.id/index.php/accounting/article/view/9595/9318>.
- [19] Aliyu, Usman Shehu. 2019. "Board Characteristic and Corporate Environmental Reporting in Nigeria." *Asian Journal of Accounting Research* 4 (1): 2-17. <https://doi.org/10.1108/AJAR-09-2018-0030>.
- [20] Meidijati, and Muhammad Nuryatno Amin. 2022. "Detecting Fraudulent Financial Reporting Through Hexagon Fraud Model : Moderating Role of Income Tax Rate." *International Journal of Social And Management Studies (IJOSMAS)* 3 (2): 311-22.
- [21] Sari, Shinta Permata, and Nanda Kurniawan Nugroho. 2020. "Financial Statements Fraud Dengan Pendekatan Vousinas Fraud Hexagon Model: Tinjauan Pada Perusahaan Terbuka Di Indonesia 26." *1st Annual Conference of Ihtifaz: Islamic Economics, Finance, and Banking*, 409-30.
- [22] Handoko, Bambang Leo. 2021. "Fraud Hexagon Dalam Mendeteksi Financial Statement Fraud Perusahaan Perbankan Di Indonesia." *Jurnal Kajian Akuntansi* 5 (2): 176. <https://doi.org/10.33603/jka.v5i2.5101>.
- [23] Wulandari, Anis Nur, and Rina Trisnawati. 2022. "Analisis Faktor-Faktor Yang Mempengaruhi Kecurangan Laporan Keuangan Dengan Perspektif Fraud Hexagon (Studi Empiris Pada Perusahaan LQ-45 Yang Terdaftar Di Bursa Efek Indonesia Periode 2018-2020)." *Ekonomi Dan Bisnis* 11 (3): 204-16. <https://stiemituqaen.ac.id/ojs/index.php/OJS/article/view/1070>.
- [24] Mertha Jaya, I Made Laut, and Ajeng Ayu Ambarwati Poerwono. 2019. "Penguujian Teori Fraudpentagon Terhadap Kecurangan Laporan Keuangan Pada Perusahaanpertambangandiindonesia." *Akuntabilitas* 12 (2): 157-68. <https://doi.org/10.15408/akt.v12i2.12587>.
- [25] Halimah, Ayu, and Supardi Supardi. 2021. "ANALISIS FRAUD DIAMOND DALAM MENDETEKSI KECURANGAN LAPORAN KEUANGAN (FINANCIAL STATEMENT FRAUD)." *Jurnal Ilmiah Ekonomi Dan Kewirausahaan* 17 (02): 31-46.
- [26] Octani, Jihan, Anda Dwiharyadi, and Dedy Djefris. 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>.
- [27] Sihombing, Kennedy Samuel, and Shiddiq Nur Rahardjo. 2014. "Analisis Fraud Diamond Dalam Mendeteksi Financial Statement Fraud (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010 - 2012)." *Diponegoro Journal of Accounting* 3 (2): 1-12. <http://ejournal-s1.undip.ac.id/index.php/accounting>.
- [28] Septriani, Yossi, and dan Desi Handayani. 2018. "Mendeteksi Kecurangan Laporan Keuangan Dengan Analisis Fraud Pentagon" *11* (1): 11-23. <http://jurnal.pcr.ac.id>.
- [29] Tanjaya, Andreas, and Febrian Kwarto. 2022. "Tata Kelola Perusahaan Dalam Mengurangi Kecurangan Laporan Keuangan (Systematic Literature Review Dengan Metode Meta Sintesis)." *Jurnal Akademi Akuntansi (JAA)* 5 (3): 312-32. <https://doi.org/https://doi.org/10.22219/jaa.v5i3.21248>.
- [30] Ratnasari, Estu, and Badingatus Solikhah. 2019. "Analysis of Fraudulent Financial Statement: The Fraud Pentagon Theory Approach Analisis Kecurangan Laporan Keuangan: Pendekatan Fraud Pentagon Theory." *Gorontalo Accounting Journal* 2 (2): 98-112.

- [31] Preicilia, Claudia, Ickhsanto Wahyudi, and Anita Preicilia. 2022. "Analisa Kecurangan Laporan Keuangan Dengan Perspektif Teori Fraud Hexagon." *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan* 5 (3): 1467-79. <https://doi.org/10.32670/fairvalue.v5i3.2476>.
- [32] Sasongko, Noer, Anna Nurmulina, and Dahlia Fernandez. 2018. "Analysis of Fraud Factors in Financial Statement Fraud." *The Journal of Social Sciences Research*, no. Special Issue 5: 629-34. <https://doi.org/10.32861/jssr.spi5.629.634>.
- [33] Larum, Kordianus, Diana Zuhroh, and Edi Subiyantoro. 2021. "Fraudlent Financial Reporting: Menguji Potensi Kecurangan Pelaporan Keuangan Dengan Menggunakan Teori Fraud Hexagon." *AFRE (Accounting and Financial Review)* 4 (1): 82-94. <https://doi.org/10.26905/afr.v4i1.5957>.