



## THE DIAMOND FRAUD THEORY FOR PROPERTY AND REAL ESTATE TO DETECT FINANCIAL REPORT FRAUD

Erisa Aprilia Wicaksari<sup>1✉</sup>, Syam Widia<sup>2</sup>, Vini Wiratno Putri<sup>3</sup>

<sup>1,2,3</sup>Department of Management, Faculty of Economics and Business, Universitas Negeri Semarang, Indonesia

### Article Information      Abstract

History of article:  
Accepted March 2023  
Approved May 2023  
Published June 2023

Keywords:  
Fraud Diamond,  
Financial Statement  
Fraud, Financial  
Target, External  
Pressure, and  
Capability.

The purpose of this study is to examine the role that fraud diamond components play in identifying financial statement fraud in businesses in the real estate and property sectors. Purposive sampling was employed to choose the sample, and a total of 55 firms were included in the sample. Using the STATA tool, panel data regression was used for the analysis. Financial target, represented by ROA, external pressure, represented by Debt to Equity Ratio, external pressure, represented by Debt to Total Asset Ratio, nature of the industry, represented by Receivable, ineffective monitoring, represented by the number of board directors, ineffective monitoring, represented by Related Parties Receivable, rationalization, represented by Accrual to Total Asset Ratio, represented by Auditor Replacement, represented by Dan Capability are the independent variables in this study. Financial statement fraud is the dependent variable, while earning management is the proxy. The outcome demonstrated that the nature of the industry and rationalization had an impact on financial statement fraud.

✉correspondence Address:  
Jl. Gedung L1, Lantai 1, Kampus Sekaran Gunungpati  
Semarang, Jawa Tengah, Indonesia 50229  
E-mail: [erisa@mail.unnes.ac.id](mailto:erisa@mail.unnes.ac.id)

© 2023 Universitas Negeri Semarang  
e-ISSN 2502-1451

## INTRODUCTION

Siddiq & Achyani (2017) explained that financial statements are the basis for measuring management's performance in making investments in the future. Santoso & Surenggono (2018) stated that companies that are in a developing condition and have strong competitors sometimes provide performance that does not match expectations because on the other hand to grow, develop, and maintain the continuity of the company, management requires additional funds from investors. According to Rezaee (2002), financial statement fraud in addition to having a motive to obtain credit or funding and covering up poor performance is also aimed at maintaining the value of shares. Santoso (2019) states that Fraudulent The property and real estate sector has a role in supporting growth of national economic and is able to become a benchmark for economic growth in the future (Prabowo, 2018).

According to Sandy (2017) this sector absorbs a large number of workers and has a chain effect and a large relationship with other economic sectors so that it has a big impact on financial products.

Several studies have already been conducted on the impact of Diamond Fraud components on Financial Statement Fraud. Research conducted by Muhammad Iqbal, Murtanto (2016) shows financial stability with proxy changes in assets and rationalization with proxy total accrual affects financial statement fraud while external pressure, personal financial need, financial target, nature of industry, ineffective monitoring has no effect. Rahmatika et al.'s research (2019) also shown that while opportunity, rationality, and capacity have no impact on financial statement fraud, pressure and hubris do. In addition, research was also conducted by Zulvi Nurbaiti and Rustam Hanafi (2017) with the results that pressure, opportunity

and Capability did not have a significant effect on accounting irregularities.

Based on the above, researchers conducted a study entitled Financial Statement Fraud Detection Using Diamond Fraud Theory on Property and Real Estate Sector Companies listed on the Indonesia Stock Exchange in 2017, 2018 and 2019. By conducting this study, researchers hope to contribute to understanding for users of financial statements about the potential for fraud, influencing factors, and detection.

## LITERATURE REVIEW

There are many understandings about fraud. Fraud is an unlawful act carried out intentionally for certain purposes (providing false reports against other parties) carried out by people inside or outside the organization to obtain personal or group interests and harm other parties directly or indirectly. Pusdiklatwas BPKP (2002) states that fraud is an act against or against the law carried out by people inside or outside the organization to obtain personal or group interests and harm other parties directly or or indirectly harm other parties. Sawyer's (2004) defines that fraud is an act of violation of the law characterized by fraud, concealment, or breach of trust.

Diamond Fraud Theory is a new view of the fraud phenomenon given by Wolfe and Hemanson (2004) and the renewal of the Fraud Triangle theory by Cressey (1950) with the addition of qualitative fraud risk elements / factors that have a significant relationship with fraud ability / Capability actions. The elements of this theory are pressure, opportunity, rationalization, and capability.

Pressure is the motive / drive to commit unethical behavior / fraud. According to Salman (2005) in Kurniawati and Raharja (2015), incentives that encourage people to commit fraud include lifestyle demands, financial helplessness, gambling, trying to damage the system, and dissatisfaction in work. This deviant behavior is due to a perceived impulse (Arles, 2014). This kind of pressure can occur in all parties in the organization and occurs for various reasons (Ruankaew, 2016).

Opportunity according to Arles (2014) is a condition that allows someone to act incorrectly such as acts of misappropriation. This opportunity can occur due to the influence of weak internal control, uncontrolled supervision, limited access to information, the absence of audit mechanisms and apathy, or the strategic position possessed so that actors freely carry out their actions.

Rationalization attitudes that are often used according to Rini (2012) include only borrowing assets on the grounds that their actions can make loved ones happy. This concept according to Abdullahi, Mansor, and Nuhu (2015) shows that perpetrators formulate some form of morally accepted rationalization before committing unethical behavior.

Ability according to Arles (2014) is the ability or capacity of a person to take advantage of conditions that lead to a situation of deceiving the internal control system with the aim of legalizing things that are actually forbidden.

## Hypotheses Development

Managers will use their best effort to accomplish goals while assessing performance. Measuring the company's utilization of its assets (Return on Assets) is one technique to assess how well it generates profits. Skousen et al. (2009) argue that financial targets can be measured using ROA. In addition, ROA can be used to see the efficiency of assets at work. Pearson (1995) in Ansar (2011) states that companies with low profit levels also encourage disclosing more serving revenues or less serving expenses. As a result, the lower the profit generated by the eating company will encourage the company to commit fraud. According to Kasmir (2008), the average industry standard ROA is 20%.

H1. ROA has a significant positive effect on financial statement fraud.

Lou and Wang (2009) explain that companies with external pressure can see greater material misstatements. This feasibility is measured, one of which is by calculating the leverage ratio, namely the Debt to Equity Ratio (DER). According to Kasmir (2012), the average DER industry standard is 80%. Large external pressure causes the risk of fraud on financial statements.

H2. DER has a significant positive effect on financial statement fraud.

The Debt to Total Asset Ratio (DAR) ratio can also be used to see the feasibility of a company in meeting its requirements or paying its debts. According to Kasmir (Kasmir, 2013: 152) Management feels pressured by the large amount of debt. According to Tessa (2016), this can be one of the concerns for companies and may be one of the causes of financial statement fraud. Martantya (2013) states that companies must save themselves from such conditions in order to still be considered able to repay loans.

Financial statement fraud is more common in businesses with a large debt load. Kasmir (2012) estimates that the typical DER industry norm is 35%.

H3. DAR significantly reduces the likelihood of financial statement falsification.

Opportunity is a condition that allows someone to act inappropriately such as acts of misappropriation (Arles, 2014). This opportunity can occur due to the influence of weak internal control, uncontrolled supervision, limited access to information, the absence of audit mechanisms and apathy, or the strategic position possessed so that actors freely carry out their actions.

H4. RECV has a significant positive effect on financial statement fraud.

Rahmanti (2013) stated that the high level of fraud that occurs in Indonesia is one of them caused by low supervision that creates a gap for someone to commit fraud. Norbarani (2012) explained that the existence of an independent board of commissioners is expected to improve supervision of company performance so as to reduce fraud.

H5. The number of independent board of commissioners has a significant negative effect on financial statement fraud.

Weak and ineffective oversight of financial statements gives managers the opportunity to act aberrantly and increases the potential for fraud. La Porta et al (1999) stated that companies in Indonesia had prepared subsidiaries before going public to buy shares issued by the company. According to Lou and Wang (2009), increasingly complex transactions pose a risk of material misstatement because they are vulnerable to manipulation by management if a higher

percentage of complex transactions arise, the probability of fraud is greater.

H6. Total receivables to special parties have a significant positive effect on financial statement fraud.

Accrual is an accounting method by which receipts and expenses are recognized and recorded when a transaction occurs rather than when cash for a transaction is received or paid. According to Oktarigusta (2017), this is usually used to achieve the desired income.

H7. Total Accrual has a significant positive effect on financial statement fraud.

According Sihombing and Rahardjo (2014) explained that not only does it eliminate traces, auditor replacement is also because the company is not satisfied with the auditor's performance which cannot be intervened by the company to manipulate audit results so that the tendency for fraud to be greater.

H8. Replacement of auditors has a significant positive effect on financial statement fraud.

The company replaces the Board of Directors in the hope of improving previous performance or supervision, but sometimes the replacement is also done to cover up planned irregularities that occur in the company. According to Sihombing (2013), changes in directors can cause initial performance that is not optimal because it requires adaptation time. According to Wolfe and Hermanson (2004) that fraud can occur if done by someone with the right ability to carry out the fraud.

H9. The change of directors has a significant positive effect on financial statement fraud.

Research on the detection of financial statement fraud was quite a lot carried out by previous researchers as follows:

Table 1. Summary of Previous Research

No	Title	Researchers	Research
1	Financial Statement Fraud Detection Using Diamond Fraud	Mafiana Annisya, Lindrianasari, Yuztitya Asmaranti	Analyzing the factors that drive financial statement fraud with Diamond Fraud analysis using a sample of 27 property and real estate companies listed on the IDX for the period 2010 – 2014.
2	Detection of Fraudulent Financial Statement : Can Perspective of Fraud diamond theory be Applied to Property, Real estate, and Building Construction Companies in Indonesia	Dien Novianty, Rahmatika, Maulida Dwi Kartikasari, Dewi Indriasih, Inayah Adi Sari, Armya Mulia	Knowing the influence of Pentagon Fraud theory (pressure, opportunity, rationalization, competence, and arrogance on financial statement fraud: property, real estate, and building construction companies listed on the IDX in 2014 – 2018.

3	Analysis of the Effect of Diamond Fraud in detecting the Level of Accounting Irregularities	Zulvi Nurbaiti, Rustam Hanafi	Analyze factors that affect the level of irregularity of financial statements based on Diamond Fraud variables and samples of non-financial companies listed on the IDX in 2012 – 2014.
4	Analysis of the Effect of Fraud Triangle Factors on Financial Statement Fraud in Property and Real Estate Companies Listed on the Indonesia Stock Exchange	Muhammad Iqbal, Murtanto	Detecting Fraud Financial Statement based on Fraud Triangle Analysis adopted in SAS No.99.
5	Do corporate diversification and earnings management practices affect capital structure?	Ranjitha Ajay and R. Madhumathi	The purpose of this paper is to empirically examine the impact of profit management on capital structure across a company's diversification strategy.

Based on the theory and the previous description, the research model in this study is :

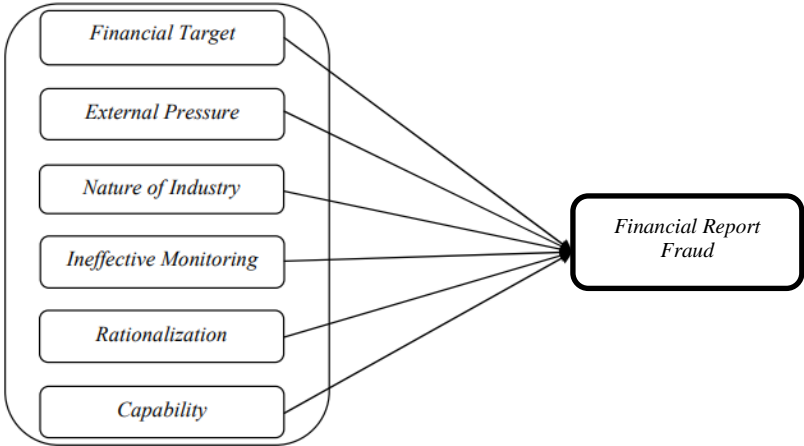


Figure 1. Research Model

METHOD

This study was conducted quantitatively with the use of secondary data. According to Bryman (2005), the research process is carried out from theory, hypothesis, research design, subject selection, data collection, data processing, data analysis, and conclusion writing. All companies in the real estate and property sectors that were listed on the IDX in 2017 through 2019 comprise the study's population. The method used to take samples is purposive sampling, which is a non-random sampling technique where the collection is carried out by setting special characteristics according to the purpose in order to answer the research problem.

Non Random Sampling is a technique where each member of the population sampled is not given the same opportunity, special characteristics are made so that the sample meets the criteria to support the study. There are 55

sample companies from 77 companies on the Indonesia Stock Exchange.

Variables are also often referred to as factors or symptoms to be studied. Sugiyono (2009) argues that this variable is everything that is formed from the determination of the researcher to be studied and conclusions are drawn while according to Sugiarto (2017), the research variable is the character under study and as an identifier / attribute of a group of objects. Quantitative research variables can be divided into two types according to Sugiyono (2009: 61), namely as follows:

1. The independent variables in this study are financial target (X1), external pressure (X2), external pressure (X3), nature of industry (X4), number of independent commissioners (X5), total privileged party receivables (X6), Rationalization (X7), replacement of auditors (X8), and replacement of directors (X9).

2. A dependent is a variable that becomes a result / influenced by an independent variable. The dependent variable in this study is financial statement fraud with profit management proxy (Y).

Step I Calculate Total Accrual

Total Accrual = Net Incomet<sub>t</sub> – Cash Flow from Operation<sub>t</sub>

Step II Estimating Total Accrual use Ordinary Least Square

$$\frac{TACC_t}{A_{t-1}} = \beta_1 \left( \frac{1}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta REV_{t(t-1)}}{A_{t-1}} \right) + \beta_3 \left( \frac{PPE_t}{A_{t-1}} \right)$$

Step III Calculate Nondiscretionary Accruals (NDA)

$$NDA = \beta_1 \frac{1}{A_{t-1}} + \beta_2 \frac{\Delta REV_{t(t-1)} - \Delta REC_{t(t-1)}}{A_{t-1}} + \beta_3 \frac{PPE_t}{A_{t-1}}$$

Step IV Calculate Discretionary Accrual (DA)

$$DAC = \frac{TAC_t - NDA_t}{A_{t-1}}$$

TAC = Total Accrual

At-1 = Total Assets at the end of the previous year

REVt = Current year's revenue  
REVt-1 = Previous year's revenue

REct = Receivables of the current year  
REct-1 = Previous year's receivables

PPEt = Total Fixed Assets at the End of the Current Year

ND = Nondiscretionary Accruals  
DA = Discretionary Accruals

Lou and Wang (2009) in Kurniawati and Raharja (2015), the higher percentage of complex transactions appear, companies have a greater probability of fraud. Young's (2005) case study found that transactions with alleged privileged parties were used to manipulate profits, loot companies, and commit fraud.

According to Setiawati (2001), total accruals can be calculated by Jones' accrual

estimation with the difference in net profit with cash flow from operations.

Mathematical models explain the relationship between variables, regression analysis uses regression equations, which are equations that describe the relationship of two variables. The regression model of this research panel data is as follows:

$$Y = \alpha + \beta_2 DER + \beta_1 ROA + \beta_3 DAR + \beta_4 RECV + \beta_5 BDIND + \beta_6 RECRLTD + \beta_7 AAR + \beta_8 AUDCHG + \beta_9 DIRCHG + e$$

Information:

Y : The dependent variable is Earning Management (TAC)

α : The constant is the value of Y when X = 0

β : Regression coefficient X: The independent variables are financial target (X1), external pressure (X2), external pressure (X3), nature of industry (X4), independent commissioner (X5), total privileged party receivables (X6), Rationalization (X7), change of auditor (X8), and change of directors (X9).

e : Epsilon (influence of other factors)

For analysis, STATA 15 program assistance was used. The panel data regression method will produce Best Linear Unbiased Estimation (BLUE) data if Gauss Markov's assumptions are met, including non-autocorrelation.

RESULTS AND DISCUSSION

As for the independent variable (Y) is Profit Management / Earning Management measured by TAC. The method used in this study was purposive sampling and obtained samples of 55 companies. In this step, data on the average/mean, standard deviation, variance, and maximum-to-minimum of independent variables are visualized, namely financial target (X1), external pressure (X2), external pressure (X3), nature of industry (X4), independent commissioner (X5), total privileged party receivables (X6), Rationalization (X7), change of auditors (X8), and change of directors (X9).

Table 2. Descriptive Statistics Result

Variabel Independen	Mean	Std. Deviasi	Variance	Min	Max
External pressure / DER	0.75	0.72	0.52	0.02	3.92
Financial target / ROA	0.03	0.09	0.00	-0.20	0.90
External pressure / DAR	0.38	0.21	0.47	0.02	1.24
Nature of industry / RECV	0.18	5.23	27.37	-35.70	56.56
Independent commissioner	0.37	0.15	0.02	0	0.75
Total privileged party receivables	0.19	0.84	0.71	0	10.56

Rationalization / AAR	0.03	0.12	0.01	-0.17	1.13
Change of auditors	0.10	0.31	0.09	0	1
Change of directors	0.290	0.455	0.207	0	1

Source : STAT 15.

Based on table 4.5 above, of the 55 companies sampled, mean of the financial target variable is 0.037 which means the amount of profit compared to total assets of 3.7% or Rp.1 total assets only generate 0.037 net profit. This is considered not good because it is below the industry standard average according to Kasmir (2008), the average industry standard ROA is 20%. The minimum ROA is -0.208 (- 20.8%) and the maximum is 0.908 (90.8%). A standard deviation of 0.099 and a mean of 0.037 mean that this data is quite variable because the standard deviation value is greater than the mean.

The mean variable DER is 0.758 which means the amount of debt compared to capital / equity of 75.8% or every Rp.1 capital can cover Rp.0.75 debt. This is considered quite good and almost close to the industry standard average where according to Kasmir (2012), the industry standard average is 80%. The minimum value of DER is 0.024 (2.4%) and the maximum value is 3.928 (392.8%). A standard deviation of 0.721 and a mean of 0.758 mean that the data is less variable because the standard deviation value is less than the mean.

The variable DAR is 0.385 which means the amount of debt compared to total assets of 38.5% or every Rp.1 total assets can cover Rp.0.38 of debt. This is considered good because it is above the industry standard average where according to Kasmir (2012), the industry standard average is 35%. The minimum DAR value is 0.024 (2.4%) and the maximum value is 1.240 (124%). A standard deviation of 0.217 and a mean of 0.385 mean that the data is less variable because the standard deviation value is less than the mean.

The variable RECV is 0.189 which means the amount of receivables this year compared to the previous year's receivables of 18.9%. The minimum RECV is -35,701 (-3570.1%) and the maximum is 56,561 (5656.1%). A standard deviation of 5.232 and a mean of 0.189 mean that this data is quite variable because the standard deviation value is greater than the mean.

The BDIND variable mean is 0.374 which means the number of independent commissioners compared to the total board of commissioners of 37.4%. A standard deviation of 0.154 and a mean of 0.374 mean that the data

is less variable because the standard deviation value is less than the mean.

RECRLTD's variable mean is 0.194 which means total special party receivables compared to total receivables of 19.4%. The minimum BDIND value is 0 (0%) and the maximum value is 10,565 (1056.5%). A standard deviation of 0.846 and a mean of 0.194 mean that this data is quite variable because the standard deviation value is greater than the mean.

The variable AAR has a mean of 0.036 which means the difference between profit and operating cash flow compared to total assets of 3.6%. The minimum AAR is -0.174 (-17.4%) and the maximum is 1.136 (113.6%). A standard deviation of 0.124 and a mean of 0.036 means that this data is quite variable because the standard deviation value is greater than the mean.

The AUDCHG variable has a mean of 0.109 which means that there is an average auditor turnover of 10.9%. The minimum value of AUDCHG is 0 (0%) and the maximum value is 1 (100%). A standard deviation of 0.313 and a mean of 0.109 mean that this data is quite variable because the standard deviation value is greater than the mean.

The DIRCHG variable mean is 0.290 which means that there is an average auditor turnover of 29%. The minimum value of DIRCHG is 0 (0%) and the maximum value is 1 (100%). A standard deviation of 0.455 and a mean of 0.290 mean that this data is quite variable because the standard deviation value is greater than the mean.

The result of the test is that the Prob Value of > F of 0.0208 is less than the  $\alpha$  of 0.05 so that H0 is rejected and H1 is accepted or selected FEM model. The result of the test is that the Prob Value of > F of 0.2370 is greater than the  $\alpha$  of 0.05 so that H0 is accepted and H1 is rejected or selected REM model. This test is to find out if REM or CEM is better to wear. The result of the test is that the Chi-Square > Prob Value of 0.0431 is smaller than the  $\alpha$  of 0.05 so that H0 is rejected and H1 is accepted or selected by the REM model to estimate the effect of diamond fraud elements on financial statement fraud detection. The results of processing the REM estimation model are in accordance with the table as follows:

**Table 3.** REM Estimation Result

R-Square :	Number of Groups	= 55
Between = 0.65	Number of observation	= 164
Within = 0.57	Wald chi2 (9) = 248.91	
Overall = 0.60	Prob > chi2 = 0.00	

EM	Coef.	Std. Err.	Z	P >  z
DER	0.015190	0.020573	0.7	0.46
ROA	0.009166	0.126300	0.0	0.94
DAR	- 0.03635	0.065471	-0.5	0.57
RECV	- 0.000179	0.000049	-3.6	0.00
BDIND	- 0.012438	0.06135	-0.2	0.83
RECRLTD	- 0.003885	0.01369	-0.2	0.77
AAR	1.00868	0.212254	4.7	0.00
AUDCHG	- 0.013369	0.21482	-0.6	0.53
DIRCHG	- 0.014406	0.013073	-1.1	0.27

Source : STATA 15 Output Results

Research according to Setyadi (2014) states that if you use a REM model that uses the GLS method, it can ignore violations of classical assumption tests. According to Handarini (2014), if the best model selected is REM then, heterokedasticity test is not needed because this REM model has used the GLS

method. According to Gujarati and Porter (2012: 471-472) the equation that tests classical assumptions is the Generalized Least Square (GLS) method. Testing was carried out to test the hypothesis of slope regression coefficients individually with the REM method with regression calculations as follows:

**Table 4.** Statistical Test

Variabel	Coef.	Prob.
DER	0.015190	0.46
ROA	0.009166	0.94
DAR	- 0.03635	0.57
RECV	- 0.000179	0.00
BDIND	- 0.012438	0.83
RECRLTD	- 0.003885	0.77
AAR	1.00868	0.00
AUDCHG	- 0.013369	0.53
DIRCHG	- 0.014406	0.27

Source : STATA 15 Output Results

Financial statement fraud is significantly reduced when Return On Asset is used as a stand-in for financial targets under pressure. The ROA coefficient value of 0.009166 with a significance level of 0.942 at  $\alpha = 5\%$  shows that ROA has a positive insignificant effect on the detection of financial statement fraud in the property and real estate sector listed on the IDX in 2017, 2018 and

2019. The results of this study corroborate the research of Sihombing and Rahardjo (2014) but contradict the research of Skousen et al (2008) and Rahmawati et al (2020). Iqbal and Murtanto's (2016) study on ROA proxies also produced inconsequential findings.

The debt to equity ratio (DER), which serves as a stand-in for external pressure on the



pressure element, significantly reduces financial statement fraud. DER has a positive insignificant effect on the identification of financial statement fraud in the property and real estate sector listed on the IDX in 2017, 2018, and 2019, according to the coefficient of DER's value of 0.015190 with a significance level of 0.460 at 5%. Financial statement fraud is more common in businesses with a large debt load. According to the results of this study, DER has no influence in line with several previous studies, including the research of Skousen et al (2009) and Rahmanti (2013) which suggest that leverage has no effect on financial statement fraud. According to Amara et al (2013), companies that perform profit management are not in fraud related to cases of corporate financial pressure.

Debt to Total Asset (DAR) has a large favorable impact on financial statement fraud as a stand-in for external pressure on the pressure element. DAR has a negative inconsequential effect on the identification of financial statement fraud in the property and real estate sector listed on the IDX in 2017, 2018, and 2019, according to the coefficient of DAR's -0.036351 with a significance level of 0.579 at  $\alpha = 5\%$ . According to Skousen (2009), there is something that encourages managers to manipulate information, namely companies have a fear of having difficulty in meeting credit requirements and paying off calculations when due. DAR has no influence linkage where according to Amara et al (2013), companies that carry out profit management are not in fraud related to corporate financial pressure. Research by Mafiana, A. et al (2016) also produced an insignificant influence. According to Prajanto's research (2012) in Rahmanti and Daljono (2013) states that many companies choose to issue shares for additional working capital rather than adding new debt which causes greater company burdens.

Receivable (RECV) has a strong favorable impact on financial statement fraud as a stand-in for the opportunity element's nature of industry. The property and real estate

sector listed on the IDX in 2017, 2018, and 2019 has a considerable negative impact on the identification of financial statement fraud, according to the RECV coefficient value of -0.000179 with a significance level of 0.0000 at  $\alpha = 5\%$ . Receivables are not very reliable, according to Richardson et al. (2004). According to Daniel et al. (2014), high receivables indicate that assets are more susceptible to manipulation. Inventory, according to Ardiyani and Utaminingsih (2015), is a current asset that is particularly prone to theft and fraud since it has a significant impact on the balance sheet and profit and loss.

Financial statement fraud is significantly impacted when the number of Independent Commissioners (BDIBND) is used as a proxy for inefficient monitoring of opportunity factors. The property and real estate sector listed on the IDX in 2017, 2018, and 2019 has a negative negligible influence on BDIND's ability to identify financial statement fraud, according to the BDIND coefficient value of -0.0123889 with a significance level of 0.839 at  $\alpha = 5\%$ . Due to variances in the property, real estate, and banking industries, the findings of the research pertaining to the Board of Commissioners are consistent with those of Skousen et al. (2008) but differ from those of Kusumawardhani (2011) and Rahmawati and Utami (2008).

Financial statement fraud is significantly reduced by using Total Receivables to Special Parties (RECRLTD) as a proxy for inadequate monitoring of opportunity items. The IDX's property and real estate sector listed in 2017, 2018, and 2019 has a negative negligible influence on RECRLTD's coefficient value of -0.0038853 with a significance level of 0.777 at  $\alpha = 5\%$  on the identification of financial statement fraud. According to Lou and Wang (2009), when transactions get more complicated, there is an increased risk of material misstatement because management can manipulate them. If more complex transactions occur, there is also a bigger chance of fraud. The findings of this



study differ from those of Lou and Wang's (2009) study, but they are consistent with Zakaria and Nurbaiti's (2016) finding that businesses engaging in special relationship transactions may not always be complicit in illegal accounting practices.

The amount of financial statement fraud is significantly reduced by using the Total Accrual to Total Asset (AAR) ratio as a stand-in for the rationalization components. AAR has a considerable favorable influence on the identification of financial statement fraud in the property and real estate sector listed on the IDX in 2017 through 2019, according to the AAR coefficient value of 1.008683 with a significance level of 0.0000 at  $\alpha = 5\%$ . Oktarigusta (2017) claims that this is typically done to get the required money. The findings of this study support other studies, such as that of Iqbal and Murtanto (2016), which found that total accruals had a substantial impact. However, they are at odds with those of Skousen, Smith, and Wright (2008).

Financial statement fraud is significantly reduced when the auditor changes (AUDCHG), which serves as a stand-in for the rationalization components. The IDX property and real estate sector listed in 2017, 2018, and 2019 has a negative inconsequential influence on the detection of financial statement fraud, according to the AUDCHG coefficient value of -0.013369 with a significance level of 0.534 at  $\alpha = 5\%$ . In contrary to this study,

Noble's research (2019) asserts that auditor substitution has a favorable impact on financial statement fraud.

Financial statement fraud is significantly reduced by the change of directors (DIRCHG) as a proxy for rationalization components. The property and real estate sector listed on the IDX in 2017, 2018, and 2019 has a negative inconsequential influence on the identification of financial statement fraud, according to the DIRCHG coefficient value of -0.0144061 with a significance level of 0.270 at  $\alpha = 5\%$ . According to Yusroniyah (2017), this situation can provide opportunities for individuals to benefit. According to Sihombing (2013), changes in directors can cause initial performance that is not optimal because it requires adaptation time. This study provides results that the replacement of directors does not have a significant effect in line with the research of Noble (2019) and Puspitadewi and Sormin (2018).

To determine how much of an impact an increase or decrease in the independent variable has on the dependent variable, the coefficient of determination ( $R^2$ ) is determined. The resultant regression equation is superior at predicting the value of the dependent variable, claims Juanda (2009), because the coefficient of determination ( $R^2$ ) identifies one (1). The test for coefficient of determination yielded the following results:

**Table 5.** Test for Coefficient of Determination

R-Square :	Number of Groups = 55
Between = 0.658	Number of observation = 164
Within = 0.575	Wald chi2 (9) = 248.91
Overall = 0.607	Prob > chi2 = 0.000

It is known that the coefficient of determination is 0.575% based on table 4.8. This demonstrates that the independent variable predicts the discovery of financial statement fraud by 57.53%, with additional variables outside of this research influencing the remaining 42.47%.

## CONCLUSSION AND RECOMMENDATION

The following findings were from panel data regression testing with the STATA 15 program: The possibility of financial statement fraud is concurrently influenced by the financial aim (X1), external pressure (X2), external pressure (X3), industry type (X4), ineffective monitoring (X5), ineffective monitoring (X6), rationalization (X7), rationalization (X8), and capability (X9). This is evident from the F statistic value, which is 0.000 less than 0.05, leading to the conclusion that the variable may be utilized to identify fraudulent financial statement activity.

Financial statement fraud is not affected by financial goal variables with ROA proxies (X1). It is clear from the significance level of  $0.94 > 0.05$  that this variable cannot be utilized to identify financial statement fraud.

The DER proxy's external pressure variable (X2) has no impact on the likelihood of financial statement fraud. The significance level of  $0.460 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be utilized to identify financial statement fraud.

The DAR proxy's external pressure variable (X3) has no impact on the likelihood of financial statement fraud. The significance level of  $0.579 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be utilized to identify financial statement fraud.

Financial statement fraud frequency is influenced by the kind of industry variable using RECV proxy (X4). The significance level of  $0.0000 > 0.05$  demonstrates this, leading to the conclusion that this variable may be utilized to identify fraudulent financial

statement activity.

Financial statement fraud is not affected by the BDIND proxy (X5) variable's inadequate monitoring. The significance level of  $0.839 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be utilized to identify financial statement fraud.

Financial statement fraud is not affected by the RECRLTD proxy variable's inadequate monitoring (X6). The significance level of  $0.777 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be used to identify financial statement fraud.

Financial statement fraud is influenced by rationalization variables with AAR proxies (X7). The significance level of  $0.0000 > 0.05$  demonstrates this, leading to the conclusion that this variable can be utilized to identify fraudulent financial statement activity.

There is no correlation between the occurrence of financial statement fraud and the Rationalization variable with the AUDCHG proxy (X8). The significance level of  $0.534 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be used to identify financial statement fraud.

There is no impact of the capability variable with the DIRCHG proxy (X9) on the likelihood of financial statement fraud. The significance level of  $0.270 > 0.05$  demonstrates this, leading to the conclusion that this variable cannot be used to identify financial statement fraud.

The following suggestions can be used to conduct additional research. First, add independent variables including financial stability, personal financial needs, organizational structure and add proxies other than those used in this study. Second, research can use Pentagon Fraud theory, Fraud Scale or White Collar Crime.

## REFERENCES

- ACFE.,2020. *Report To The Nations on Occupational Fraud And Abuse*. Online. *Global Fraud Study*: <https://acfepublic.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf>
- Adnovaldi, Y., & Wibowo, W. (2019). Analisis Determinan Fraud Diamond Terhadap Deteksi Fraudulent Financial Statement. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, 14(2), 125-146..
- Amara, I., Amar, A. B., & Jarboui, A. (2013). Detection of fraud in financial statements: French companies as a case study. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 40-51.
- Ajay, R., & Madhumathi, R. (2015). Do corporate diversification and earnings management practices affect capital structure? An empirical analysis. *Journal of Indian Business Research*.*Journal of Indian Business Research*, 7(4),
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review*, 443-465.
- Cressey, D. R. (1953). "Other People's Money". Montclair, NJ: Patterson Smith, pp.1- 300.
- Dechow, P., Sloan, R., Sweeney, A. (2012). "Detecting Earnings Management." *The Accounting Review*. Volume 70.
- Diany, Y. A., & Ratmono, D. (2014). Determinan kecurangan laporan keuangan: Pengujian teori fraud triangle. *Diponegoro Journal of Accounting*, 3(2), 1048-1056.
- Ghozali, Imam. (2005). Analisis Multivariate dengan Program SPSS. Semarang:Badan Penerbit Undip.
- Indarto, S. L., & Ghozali, I. (2016). Fraud diamond: Detection analysis on the fraudulent financial reporting. *Risk governance & control: financial markets & institutions*, 6(4), 116-123.
- Iqbal, M., Murtanto. (2016). Analisa Pengaruh Faktor-Faktor *Fraud Triangle* Terhadap Kecurangan Laporan Keuangan Pada Perusahaan *Property* dan *Real estate* yang Terdaftar di Bursa Efek Indonesia". Seminar Nasional Cendekiawan.
- Jaunanda, M., Tian, C., & Edita, K. (2020). Analisis Pengaruh Fraud Pentagon terhadap Fraudulent Financial Reporting Menggunakan Benish Model [Analysis Of The Effect of Fraud Pentagon on Fraudulent Financial Reporting Using The Beneish Model]. *Jurnal Penelitian Akuntansi (JPA)*, 1(1), 80-98.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Listyaningrum, D., Paramita, P. D., & Oemar, A. (2017). Pengaruh Financial Stability, External Pressure, Financial Target, Ineffective Monitoring Dan Rasionalisasi Terhadap Kecurangan Pelaporan Keuangan (Fraud) Pada Perusahaan Manufaktur Di Bei Tahun 2012-2015. *Journal Of Accounting*, 3(3).
- Loebbecke, J. K., Eining, M. M., & Willingham, J. J. (1989). Auditors' Experience with Material Irregularities: Frequency, Nature, and Detectability. *Auditing: A Journal of Practice & Theory*, 9(1).
- Lou, Y. I., & Wang, M. L. (2009). Fraud risk factor of the fraud triangle assessing the likelihood of fraudulent financial reporting. *Journal of Business & Economics Research (JBER)*, 7(2), 62-66.

- Mafiana, A., Lindrianasari, & Yuztitya, A. (2016). *Pendeteksian Kecurangan Laporan Keuangan Menggunakan Fraud Diamond*, 23 No.1
- MerthaJaya, I.M.L., Poerwono, A.A.A. (2019). Pengujian Teori *Fraud Pentagon* terhadap Kecurangan Laporan Keuangan pada Perusahaan Pertambangan di Indonesia. *Akuntabilitas: Jurnal Ilmu Akuntansi*. 12(2): 157 – 168.
- Mongrut, S., & Winkelried, D. (2019). Unintended effects of IFRS adoption on earnings management: The case of Latin America. *Emerging Markets Review*, 38, 377–388.
- Noble, M. R. (2019). Fraud diamond analysis in detecting financial statement fraud. *The Indonesian Accounting Review*, 9(2), 121.
- Nurbaiti, Z., & Hanafi, R. (2017). Analisis Pengaruh Fraud Diamond Dalam Mendeteksi Tingkat Accounting Irregularities. *Jurnal Akuntansi Indonesia*, 6(2), 167.
- Omukaga, K. O. (2021). Is the fraud diamond perspective valid in Kenya?. *Journal of Financial Crime*, 28(3), 810-840.
- Oktarigusta, L. (2017). Analisis Fraud diamond untuk mendeteksi terjadinya financial statement fraud di perusahaan (Studi empiris pada perusahaan manufaktur yang terdaftar di BEI tahun 2012-2015). *Jurnal Manajemen Dayasaing*, 19(2), 93-108.
- Pramono Sari, M., Kiswanto, Rahmadani, L. V., Khairunnisa, H., & Pamungkas, I. D. (2020). Detection Fraudulent Financial Reporting And Corporate Governance Mechanisms Using Fraud Diamond Theory Of The Property And Construction Sectors In Indonesia. *Humanities & Social Sciences Reviews*, 8(3), 1065–1072.
- Premananda, N. L. P. U., Budiarta, I. K., Suprasto, H. B., & Badera, I. D. N. (2019). Fraud diamond analysis in detecting fraudulent financial reporting (Study on Indonesian capital market). *International Journal of Sciences: Basic and Applied Research*, 47(2), 84-95.
- Puspitadewi, E., & Sormin, P. (2018). Pengaruh Fraud Diamond Dalam Mendeteksi Financial Statement Fraud: Studi Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2014–2016. *Jurnal Akuntansi*, 12(2), 146-162.
- Rahmatika, D. N., Kartikasari, M. D., Dewi Indriasih, D., Sari, I. A., & Mulia, A. (2019). Detection of Fraudulent Financial Statement; Can Perspective of Fraud Diamond Theory be applied to Property, Real Estate, and Building Construction Companies in Indonesia? *European Journal of Business and Management Research*, 4(6).
- Rashidah Abdul Rahman, Saliza Sulaiman, Eiman Saleh Fadel, & Soheil Kazemian. (2016). Earnings Management and Fraudulent Financial Reporting: The Malaysian Story. *Journal of Modern Accounting and Auditing*, 12(2).
- Rezaee, Z. 2002. *Financial Statement Fraud: Motives, Methodes, Cases and Detection*. *Dissertation.com*: Florida.
- 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*, 13, 53-81.
- 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 (BEI) Tahun 2010-2012. *Diponegoro Journal of Accounting*, 3(2), 657-668.

- Sugiyono. (2010). *Metode Penelitian Pendidikan*. Bandung. Alfabeta.
- Summers, S. L., & Sweeney, J. T. (1998). Fraudulently misstated financial statements and insider trading: An empirical analysis. *Accounting Review*, 131-146.
- Tessa, G. C., & Harto, P. (2016). *Fraudulent financial reporting: Pengujian teori Fraud Pentagon pada sektor keuangan dan perbankan di Indonesia* (Doctoral dissertation, Fakultas Ekonomika dan Bisnis).
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, 74(12), 38-42.
- Ugrin, J. C., Mason, T. W., & Emley, A. (2017). Culture's consequence: The relationship between income-increasing earnings management and IAS/IFRS adoption across cultures. *Advances in Accounting*, 37, 140–151.