Detecting Fraudulent Financial Reporting The Construction Sector In Indonesia: Fraud Triangle

Eko Pujiyono[1]*, Indira Januarti[2]

AFILIASI:
[1,2]Master of Accounting, Faculty of Economics and Business, Diponegoro University

***KORESPONDENSI:**

THIS ARTICLE IS AVAILABLE IN: https://e-journal.umc.ac.id/index.php/JPK

DOI: 10.32534/jpk.v11i2.5894

CITATION:
Yono, E. P., & Indira, I. J. (2024). Detecting Fraudulent Financial Reporting The Construction Sector In Indonesia: Fraud Triangle . Jurnal Proaksi, 11(2). https://doi.org/10.32534/jpk.v11i2.5894

Riwayat Artikel :
Artikel Masuk:
12 Juni 2024

Di Review:
16 Juni 2024

Diterima:
30 Juni 2024

Abstrak

Kategori kecurangan yang memiliki jumlah kerugian terbesar adalah kecurangan laporan keuangan. Selain merugikan perusahaan secara finansial, laporan keuangan yang curang juga dapat mengancam keberlangsungan perusahaan. Tujuan dari penelitian ini adalah untuk menguji pengaruh target keuangan, stabilitas keuangan, tekanan eksternal, sifat industri dan rasionalisasi terhadap kecurangan laporan keuangan (F-Score) pada perusahaan sektor konstruksi di Indonesia. Penelitian ini bersifat kuantitatif, dengan jenis data sekunder. Jumlah sampel yang digunakan 83 dari total perusahaan sektor konstruksi. Metode analisis yang digunakan adalah regresi logistik. Hasil penelitian menunjukkan bahwa stabilitas keuangan berpengaruh positif, sedangkan target keuangan, tekanan eksternal, sifat industri dan rasionalisasi berpengaruh negatif dan tidak signifikan terhadap kecurangan pelaporan keuangan.

Kata Kunci: Teori Fraud Triangle, Konstruksi, Kecurangan

Abstract

The category of fraud that has the largest number of losses is financial statement fraud. Apart from being financially detrimental to a company, fraudulent financial reports can also threaten the company's sustainability. Examining the influence of financial targets, financial stability, external pressure, industry nature and rationalization on financial report fraud (F-Score) in construction sector companies in Indonesia is the aim of this research. This research is quantitative, with secondary data types. The number of samples used was 83 from the total construction sector companies. The research results show that financial stability has a positive effect, while financial targets, external pressure, nature of industry and rationalization have a negative and insignificant effect on fraudulent financial reporting.

Keywords: Theory Fraud Triangle, Construction, Fraud

INTRODUCTION

Fraudulent financial reporting is a category of fraud with the largest number of losses compared to asset misappropriation or corruption. ACFE said losses arising from fraudulent financial reporting reached $776,000/case (Association of Certified Fraud Examiners, 2024). Financial statement fraud is a deliberate action by someone to manipulate financial report information and data (Setyono et al., 2023). Kassem & Omoteso (2023); Cheliatsidou et al., (2023); serta Mandal & Amilan (2023) Fraudulent financial reporting can have a negative impact on investor confidence, the quality and reliability of financial reports and can damage the global economic system. Globally, fraudulent financial reporting cases often occur in construction sector companies, with the number of cases reaching 73 cases (ACFE, 2024). According to Li et al., (2023) this case does not only occur in Indonesia, but other countries also experience the same thing. The case in the construction sector in Indonesia occurred in PT. Waskita Karya and PT. Wijaya Karya in 2023 which is suspected of having manipulated financial reports by not recording bills from third parties since 2016 which resulted in the company's debt burden appearing to decrease but what actually happened was that the company was unstable. Apart from that, the construction sector has an important role in the success of national strategic projects such as IKN, transportation infrastructure, development of industrial areas and the latest issue related to the Tapera program. This program requires a large budget and has the potential for fraud.

Cressey (1953) explained that there are three factors that cause fraud, namely pressure, opportunity and rationalization (fraud triangle theory). These three factors are the basis for the current fraud theories. This shows that the factors that cause fraud in the fraud triangle are still relevant to the current development of fraud motives. Yusrianti et al., (2020) said that the fraud triangle theory has been used as a basis by many previous researchers and used as a reference in audit standard statements, including No. 99 issued by the American Institute of Certified Public Accountants (AICPA). In Indonesia, the fraud triangle theory has been internalized in Public Accountant Professional Standards (SPAP) Number 70 to assess fraud risk factors in the audit process. Rahman & Jie (2024) said that these three factors can be used to predict potential fraud in a company as stated in the International Auditing and Assurance Standards Board in 2009.

The application of the fraud triangle in this research can be seen from each causal factors. According to Sukmadilaga et al., (2022) pressure factors can be financial or non-financial, financial pressure is financial needs, company targets, debt and incentives. Non-financial is a non-conducive work environment and individual conflicts between employees. In this research, pressure is represented by financial stability, financial targets and external pressure. Empirically, there are differences in results between previous researchers. Demetriades & Owusu-Agyei (2022); Naldo & Widuri (2023); Tarjo et al., (2021) say that financial targets have a positive effect, however Achmad et al., (2023); Nurhakim & Harto (2023); Setyono et al., (2023); Sholikatun & Makaryanawati (2023) said that financial targets had a negative influence. Financial stability according to Aulia Haqq & Budiwitjaksono (2020); Medlar & Umar (2023); Wijaya & Witjaksono (2023); Yadiati et al., (2023); Sari et al., (2024) has a positive. However Ghaisani et al. (2022); Putri & Januarti (2023); Yarana (2023) states that it has a negative influence. External pressure according to Achmad et al., (2022); Agusputri and Sofie (2019); Kusumawati et al., (2021); Tarjo et al., (2021) has a positive influence. But according to Bifadli et al., (2023); Imtikhani & Sukirman (2021); Setyono et al., (2023); Sholikatun & Makaryanawati (2023) said external pressure had a negative influence on fraudulent financial reporting.

Opportunity factors arise due to the implementation of an ineffective internal control system (Alfarago & Mabrur, 2022). The opportunity factor in this research is represented by nature of industry. Tarjo et al., (2021) said that nature of industry is the ideal condition in a company. According to Khamainy et al., (2022); Yadiati et al., (2023); Yusrianti et al., (2020) the nature of the industry has a positive influence. However Aulia Haqq & Budiwitjaksono (2020); Wilantari & Ariyanto

(2023) argue that nature of industry has a negative influence. The rationalization factor can be interpreted as a justification for the fraudulent actions committed (Alfarago & Mabrur, 2022). According to Achmad et al., (2022); Yarana (2023) rationalization has a positive influence. However Putri & Januarti (2023); Sholikatun & Makaryanawati (2023) argue that rationalization has a negative influence. Empirically, research on detecting financial statement fraud has been carried out before, but the objects used are not the same.

Previous researchers tended to use manufacturing, banking, mining, state-owned companies, health and LQ 45 companies (Achmad et al., 2023; Sari et al., 2024; Setyono et al., 2023; Imtikhani & Sukirman, 2021; Sholikatun & Makaryanawati, 2023; Yanti et al., 2023; Medlar & Umar, 2023; Sudrajat et al., 2023). As for the construction sector, there is no such thing yet, Even though currently construction sector companies in Indonesia have an important role in supporting the government's development programs. This research uses the construction sector as the research object and sample. The aim of this research is to examine the influence of pressure (financial target factors, financial stability, external pressure), opportunity (industry nature), and rationalization on fraudulent financial reporting (F-Score) in construction sector companies in Indonesia. It is hoped that this research can contribute to the development of the fraud triangle theory in detecting fraudulent financial reporting.

LITERATURE REVIEW

Fraud Triangle Theory

White collar crime is the main basis in fraud theory (Tuanakotta, 2010). Cressey (1953) believes that fraud can be caused by three things. Advantage of this theory is because this theory is used as a reference in global audit standards (Yusrianti et al., 2020). Rahman & Jie (2024) said that the three factors in the fraud triangle have been used to predict the potential fraud in China. The large risks arising from fraud require management to mitigate and investigate the causal factors. Detecting and identifying causal factors is important to minimize risks for the company. The factors in the fraud triangle are interrelated. This can be described when someone is under pressure because they are in debt to a third party and then they find out that internal control has not been effective, after which they rationalize or justify that what they did was not a violation, so fraud will occur (Rahman & Jie, 2024). The implementation of the Fraud Triangle can be understood and seen from the variables in this research.

Fraudulent Financial Reporting

Fraudulent financial reporting is a deliberate action by someone to manipulate financial report information and data to gain personal gain and harm others (Putri & Januarti, 2023). According to SAS No. 99 financial reporting fraud, namely planned errors to deceive users of financial reports (Tarjo et al., 2021). The impact of losses arising from fraudulent financial reporting is the largest from 2018 to 2024 (ACFE, 2018; 2020; 2022; 2024). Company management carries out financial manipulation due, among other things, to an assessment of the performance of the entity/institution/company based on financial reports. So this encourages company management to do everything possible, including carrying out fraudulent financial reporting so that the financial reports presented can attract the attention of investors (Nurhakim & Harto, 2023). There are various motives for fraudulent financial reporting, including manipulating data, falsifying evidence or changing information in company annual reports (Achmad et al., 2022). Fraudulent financial reporting has become a real threat to business people, investors and other users of financial reports, because the impact can threaten the reputation and sustainability of the company (Alfarago & Mabrur, 2022). Apart from that, according to Zenzerović & Šajrih (2023) fraudulent financial reporting in companies also affects public trust in investment interest in companies. Naldo & Widuri (2023) say that in organizational structures, positions that have great authority and responsibility, such as company executives, shareholders, company management, have the potential to violate existing regulations in the company. This is reinforced by the results of the ACFE survey which states that the parties who often violate company policies and laws are company managers (ACFE, 2022).

Hypothesis Development

Financial targets against fraudulent financial reporting

Financial target can be interpreted as profit determined by the company. Achieving targets in a company is the responsibility of company management. Financial targets will become pressure when the principal is unrealistic in determining targets so that so that management has the intention to commit fraud in order to achieve the targets expected by the principal. According to Achmad et al., (2023); Naldo & Widuri (2023) financial targets are measured using return on assets (ROA). The use of ROA is intended to find out how effective management is in gaining profits from the company's resources or wealth. A high ROA value can lead to fraudulent financial reporting, because company management will try in every way to exceed the target in order to obtain incentives from this achievement. This is consistent and in line with research conducted by Demetriades & Owusu-Agyei (2022); Naldo & Widuri (2023); Sudrajat et al., (2023); Tarjo et al., (2021); Yarana (2023) which states that the financial target has a positive hypothetical direction.
H_1= Financial targets have a positive effect on the possibility of fraudulent financial reporting

Financial stability against fraudulent financial reporting

Financial stability is a description of a company's stable financial condition (Kusumawati et al, 2021). This statement is in accordance with SAS No. 99. For investors, financial stability in a company is their basis for deciding to invest. This is done because companies that have stable financial conditions can provide large profits for investors. However, if the economic conditions in a country are unstable, this can affect the company's financial stability. Therefore, this can put pressure and stimulate management to take fraudulent or manipulative steps in order to provide financial stability in accordance with investor expectations. According to Achmad et al., (2023); Khamainy et al., (2022) financial stability is measured using total assets if there is a significant increase in the number of company assets, this indicates the potential for fraudulent financial reporting. According to Aulia Haqq & Budiwitjaksono (2020); Medlar & Umar (2023); Sari et al., (2024); Wijaya & Witjaksono (2023); Yadiati et al., (2023) financial stability has a positive effect on fraudulent financial reporting.
H_2= Financial stability has a positive effect on the possibility of fraudulent financial reporting

External pressure against fraudulent financial reporting

External pressure occurs when a company cannot meet the expectations of external parties (Achmad et al., 2023; Sholikatun & Makaryanawati, 2023). Pressure from external parties can be illustrated when a company needs capital to expand the market, increase the amount of production and purchase equipment and other things. This of course requires large funds/budget. If finances are insufficient, the company needs funds from creditors to meet the budget requirements. Through these funds, it is hoped that large profits can be generated for the company. However, when reality does not match what was planned, this creates pressure for the company, whether it is pressure to fulfill debt obligations as well as pressure from high expectations from third parties. According to Sholikatun & Makaryanawati (2023) external pressure is measured using leverage with the assumption that if the company's debt ratio is high then the potential for the company not being able to fulfill its obligations is also high. So it can also be interpreted that the possibility of the company committing fraud to fulfill the obligations and expectations of external parties is also high. According to Achmad et al., (2022); Agusputri & Sofie, (2019); Kusumawati et al., (2021); Tarjo et al., (2021) external pressure positive effect on fraudulent financial reporting.
H_3= External pressure has a positive effect on the possibility of fraudulent financial reporting.

Nature of industry against fraudulent financial reporting

The nature of industry in this research is used as a proxy for opportunity factors. Sholikatun & Makaryanawati (2023) argue that ideal conditions are a reflection of the nature of the industry. This ideal condition can be described when company management can reduce the amount of trade receivables so that cash flow in the company increases (Tarjo et al., 2021). Apart from that, ideal company conditions are a factor that investors consider when investing. So the company will take any steps and efforts to create ideal conditions as desired by investors. In the fraud triangle theory, opportunities arise because companies do not implement effective internal controls. Meanwhile, in this research, opportunities arise because there is an opportunity for company management to estimate the amount of uncollectible receivables. Khamainy et al., (2022) uses accounts receivable to measure the nature of industry . According to Khamainy et al., (2022); Yadiati et al., (2023); Yusrianti et al., (2020) the nature of the industry shows a positive influence.

H_4= The nature of industry has positive effect on the possibility of fraudulent financial reporting

Rationalization against fraudulent financial reporting

Rationalization is an attempt to justify a violation committed (Kalovya, 2023). In the fraud triangle theory, rationalization is related to the fraud perpetrator's efforts to convince himself that what he is doing is a normal thing and not an act against the law. Rationalization of fraudulent financial reporting occurs when company management adopts policies related to the application of the accrual principle in the company. Through the use of the accrual principle, company management can manipulate company profits (Sholikatun & Makaryanawati, 2023). Therefore, rationalization is calculated using total accruals to total assets (Achmad, Hapsari, et al., 2022; Ghaisani et al., 2022). This ratio is based on one of the assessment indicators contained in the Beneish M-score. In the opinion of Achmad et al., (2022); Yarana (2023) rationalization has a positive effect on fraudulent financial reporting. Based on this, the hypothesis developed in this research is:

H_5= rationalization has a positive effect on the possibility of fraudulent financial statements

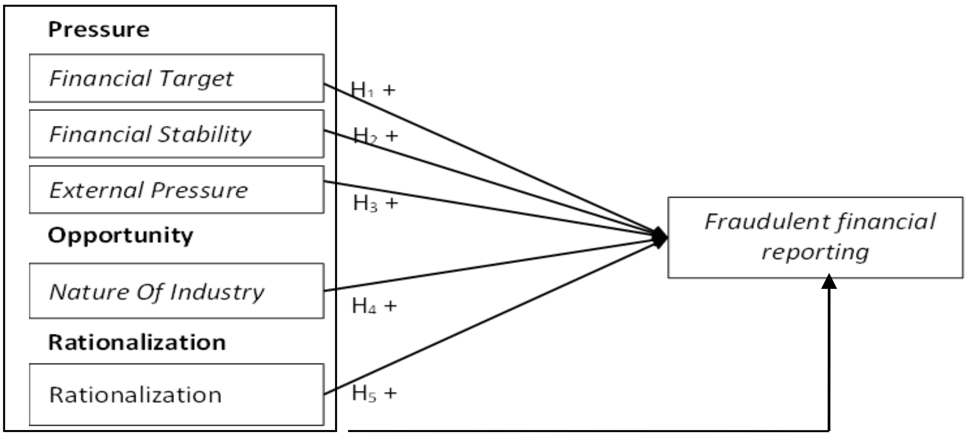

Figure 1: Research Framework

Source: processed by researchers, 2024

RESEARCH METHODS

This research is quantitative research with secondary data in the form of annual reports from construction sector companies in Indonesia 2020-2023. Data was obtained from the Indonesian stock exchange website, the company's official website or Bloomberg. This research uses a saturated sample or census. The analysis method in this research uses logistic regression because the dependent variable is a dummy variable. If a company has an F-score value > 1, it means the company is indicated or has the potential to carry out fraudulent financial reporting, but if the value is < 1, it means the company is not indicated to have carried out fraudulent financial reporting. The regression equation used are as follows:

$$Ln = \frac{FFR}{1-FFR} = \alpha + \beta_1 ROA + \beta_2 ACHAGEA + \beta_3 LEVERAGE + \beta_4 RECEIVABLE + \beta_5 TATA + \varepsilon$$

Information:

FFR	= Fraudulent Financial Reporting
α	= Constant
β1- β5	= Regression coefficient
ROA	= Financial Targets
ACHAGEA	= Financial Stability
LEVERAGE	= External Pressure
RECEIVABLE	= Nature Of Industry
TATA	= Rationalization
ε	= Error

Table 1. Measurement of Variable

Variables	Measurements	Source
Fraudulent Financial Reporting	F-score = Accrual quality + Financial performance	Dechow et al., (2011)
Financial target	ROA= Net income / Total Asset	Achmad et al., (2023)
Financial Stability	ACHAGEA= Total asset t – Total Asset t-1 / Total Asset t	Achmad et al., (2023)
External Pressure	LEVERAGE = Total liabilities / Total Asset	Achmad et al., (2023)
Nature Of Industry	RECEIVABLE= Accounts receivable t / Sales t - Accounts receivable t-1 / Sales t-1	(Khamainy et al., 2022)
Rationalization	TATA= Total Accrual / Total Assets	(Putri & Januarti, 2023)

Source: Data processed, 2024

RESULTS AND DISCUSSION

Results Sample Determination

Based on sampling analysis using the census, it is known that the number of samples used was 83 samples. There were 11 samples that could not be used because the financial reports were not available, could not be found or the company had not published its financial reports. Sample details for each year of observation can be seen in table 2.

Table 2. Saturation Sampling Results

No	Description	Registered	Which is used
1	Number of companies in year 2020	19	17
2	Number of companies in year 2021	23	23
3	Number of companies in year 2022	25	24
4	Number of companies in year 2023	27	19
	The total samples used		83

Source: Data processed, 2024

Descriptive Statistics

Table 3. Descriptive Statistics

Description	N	Min	Max	Mean	Std. Deviasi
Financial Target	83	-3.39	1.16	-0.09	0.57
Financial Stability	83	-3.78	0.36	-0.10	0.55
External Pressure	83	0.12	1.37	0.58	0.22
Nature Of Industry	83	-4.58	14.25	0.18	1.75
Rationalization	83	-3.65	0.45	-0.07	0.43

Source: Data processed SPSS 26, 2024

The descriptive statistics results in table 3 show that the average value of the independent variable shows a low position. For the smallest minimum value -4.58, the highest maximum value is 14.25 and the maximum standard deviation value is 1.75.

Table 4. Classification Matrix From F-score Results

				Classification Table[a]		
Observed				Predicted		
			Frequency	Tendency to fraudulent financial reporting		Percentage Correct
				No Indicated Fraud	Indicated fraud	
Step 1	Y	Not Indicated Fraud	20	13	7	65.0
		Indicated Fraud	63	3	60	95.2
	Overall Percentage					88.0

Source: Data processed SPSS 26, 2024

Based on the regression model matrix classification, 65% of the total sample of 20 samples according to the f-score results was not indicated to have committed financial statement fraud. From the prediction results for the total sample, there were 7 samples that were predicted to be indicated as having committed fraud, while 13 samples were predicted to have no indication of having committed fraud. Meanwhile, the f-score results for samples indicated to have committed fraud were 95.2% of the total sample of 63 with 60 samples indicated fraud, the other 3 samples were not indicated fraud.

Results Log likelihood, Hosmer Lemeshow test , R Square and Omnibus Tests of Model Coefficients

The overall model fit test results showed that the log likelihood block number 0 value was 91,855 and the log likelihood block number 1 value was 64,335, there was a decrease in these results so that the model used was fit. As for the results of the Hosmer test and Lemeshow test in this study obtained a significant value of 0.595, so it can be said that the model is fit or there is no significant difference between the model and the data used in this study. Meanwhile, for the R square test results, the Nagelkerke R Square value was 0.551, which means that the independent variable was able to explain 55.1% of the dependent variable, while the rest was explained by other variables outside of this research. Simultaneous test results have a Chi-square value of 38.179 and a significant value of 0.000, meaning that all independent variables have a simultaneous effect on fraudulent financial reporting.

Table 5. Logistics Regression

	Coefficient	S.E.	Wald	df	Sig
ROA	-0.17	0.67	0.06	1	0.80
ACHAGEA	2.42	1.12	4.67	1	0.03
LEVERAGE	-11.22	2.84	15.56	1	0.00
RECEIVABLE	0.14	0.37	0.15	1	0.70
TATA	-2.00	1.40	2.05	1	0.15
Constant	8.67	2.06	17.72	1	0.00

Source: Data processed SPSS 26, 2024

DISCUSSION

Financial targets against fraudulent financial reporting

The financial target factor has a significance value of 0.80, the value is > 0.05, the coefficient value is -0.17. These results indicate that financial targets outlined in profitability have a negative effect then, hypothesis is rejected. ROA in this study shows low results, indicating that the target set by the company is low. Likewise, the F-score results show that the potential for fraud is low. The results of this research support the Fraud Triangle theory, when management is not under pressure then the possibility of this condition occurring is also small and conversely if management feels pressured then this condition is very likely to occur. Another factor that may be the cause of this is because the company implements effective and efficient policies so that it can reduce the number of costs incurred. Apart from that, competent human resources are a determining factor in achieving financial targets so that it does not become a pressure for the company. The results of this research support the research Demetriades & Owusu-Agyei (2022); Naldo & Widuri (2023); Tarjo et al., (2021); Yarana (2023). However, this result also contradicts the research results of Khamainy et al., (2022); Setyono et al., (2023); Sholikun & Makaryanawati (2023) which says that financial targets have a negative effect.

Financial Stability against fraudulent financial reporting

The financial stability factor obtained a significant value of 0.03, which means <0.05, the coefficient value was 2.42. So the proposed hypothesis is accepted. The research results show that the total asset value is low so the potential for fraud is low. These findings correspond to the fraud triangle. Financial stability will become a pressure when management wants to always display stable financial conditions even though economic conditions are not good. Therefore, management will manipulate the financial reports presented. Aulia Haqq & Budiwitjaksono (2020); Medlar & Umar (2023); Sari et al., (2024); Wijaya & Witjaksono (2023); Yusrianti et al., (2020) stated financial stability has a positive and significant. However, according to Achmad et al., (2023); Khamainy et al., (2022); Naldo & Widuri (2023); Putri & Januarti (2023); Setyono et al., (2023) financial stability has a negative influence.

External Pressure against fraudulent financial reporting

The external pressure factor has a sig value of 0.000, which means <0.05, while the coefficient value is -11.22. These results indicate that external pressure has a negative effect on fraudulent financial reporting. So the hypothesis is rejected. The debt ratio in this study has a low value so the potential for fraudulent financial reporting is low. The results of this study contradict the fraud triangle theory. Because the debt ratio in the sample companies is low, creditors do not hesitate to provide debt to the company because the risk of not being able to pay it is small. Apart from that, in this research companies tend to optimize financing from internal sources to meet their needs so that the company's debt ratio remains stable. On the other hand, the low debt owned by the company has an impact on increasing the reputation and trust of capital owners. These findings are in line with research conducted by Imtikhani & Sukirman (2021); Khamainy et al., (2022); Naldo & Widuri (2023) which states that external pressure has a negative effect. However Kusumawati et al., (2021); Tarjo et al., (2021); Yadiati et al., (2023) said external pressure had a positive effect.

Nature Of Industry against fraudulent financial reporting

Based on the results of the nature of industry regression test, it obtained a significant value of 0.70 with a coefficient value of 0.14. These results show that the nature of industry does not have a significant effect on fraudulent financial reporting. So the proposed hypothesis is rejected. An increase in the amount of trade receivables cannot illustrate or indicate that the company has committed fraud in preparing financial reports. The integrity of company management is the foundation in running the company's business. This finding is not in line with or does not cloud the fraud triangle. Apart from that, the company's stable condition indicates that there is good corporate governance and reliable risk management so that there is very little chance of company management committing fraudulent financial reporting. The results of this study are consistent with Setyono et al., (2023); Agusputri & Sofie (2019); which states that the nature of industry has a negative effect. This contradicts research by Khamainy et al., (2022); Tarjo et al., (2021); Yadiati et al., (2023); Yusrianti et al., (2020) said nature of industry has a positive influence, which is not in line with the results of this research.

Rationalization against fraudulent financial reporting

The results of the regression test on the rationalization factor show a significant value of 0.15 or > 0.05, with a coefficient value of -2.00. Based on these results, rationalization has a negative direction and does not have a significant influence on the dependent variable. So the proposed hypothesis is rejected. This can be interpreted as meaning that the existence of the authority to make policies by management in implementing the accrual principle in the company cannot encourage company management to cheat in preparing financial reports. This is because the company management has good work professionalism so they prioritize good output by complying with existing policies and regulations in the company. The results of this study are not consistent with the fraud triangle theory. However, these results support his research Sholikatun & Makaryanawati (2023); Situngkir & Triyanto (2020) stated that rationalization does not have a significant effect. However, according to Achmad et al., (2022); Ghaisani et al. (2022) stated that the rationalization of their research results was not in line with or contradicted the findings of this research.

CONCLUSION

Based on the results of the hypothesis testing above, it can be concluded that the factor that has a positive and significant influence on fraudulent financial reporting is the financial stability factor, this is because management wants to always display stable financial conditions even though economic conditions are not good, so management manipulates financial reports. Financial targets do not have a significant effect because the company implements effective and efficient policies so that it can reduce the amount of costs incurred. Apart from that, the company has competent human resources, making it easier to achieve targets. External pressure that does not indicate fraudulent financial reporting is when the company's debt ratio is low, so that the company does not receive pressure from external parties or in other words the company does not experience difficulty paying debts. Nature of industry does not have a significant influence because company management has high integrity and loyalty to the company so that company management will not take actions that could harm the company. Likewise, rationalization has a negative and insignificant effect on fraudulent financial reporting because the company has implemented professionalism in running the business, so the potential for the condition to occur is low

SUGGESTION

1. Practical suggestions: To minimize the occurrence of fraudulent financial reports in construction sector companies, it is necessary to detect if there is a significant increase in total assets. Even though ROA, leverage and receivables have no effect on fraudulent financial statements, this is still important for companies to be aware.
2. Theoretical Suggestions: The limitations of this research relate to the small sample. Suggestions for further research are to increase the sample size by using the construction sector in other countries so that the sample used is more comprehensive.

REFERENCE

ACFE Global. (2020). Report to the Nations on Occupational Fraud and Abuse: 2020 Global Fraud Study. *Association of Certified Fraud Examiners, Inc.*, 1–88. Retrieved from https://www.acfe.com/report-to-the-nations/2020/

Achmad, T., Ghozali, I., Helmina, M. R. A., Hapsari, D. I., & Pamungkas, I. D. (2023). Detecting Fraudulent Financial Reporting Using the Fraud Hexagon Model: Evidence from the Banking Sector in Indonesia. *Economies*, *11*(1), 1–17. https://doi.org/10.3390/economies11010005

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

Achmad, T., Hapsari, D. I., & Pamungkas, I. D. (2022). Analysis of Fraud Pentagon Theory to Detecting Fraudulent Financial Reporting using F-Score Model in State-Owned Companies Indonesia. *WSEAS Transactions on Business and Economics*, *19*, 124–133. https://doi.org/10.37394/23207.2022.19.13

Agusputri, H., & Sofie, S. (2019). Faktor - Faktor Yang Berpengaruh Terhadap Fraudulent Financial Reporting Dengan Menggunakan Analisis Fraud Pentagon. *Jurnal Informasi, Perpajakan, Akuntansi, Dan Keuangan Publik*, *14*(2), 105–124. https://doi.org/10.25105/jipak.v14i2.5049

Alfarago, D., & Mabrur, A. (2022). Do Fraud Hexagon Components Promote Fraud in Indonesia? *Etikonomi*, *21*(2), 399–410. https://doi.org/10.15408/etk.v21i2.24653

Association of Certified Fraud Examiners (ACFE). (2018). *Report To the Nations 2018 Global Study on Occupational Fraud and Abuse*. 1–80.

Association of Certified Fraud Examiners (ACFE). (2022). Occupational Fraud 2022: A Report to the nations. *Association of Certified Fraud Examiners*, 1–96.

Association of Certified Fraud Examiners (ACFE). (2024). The Nations Occupational Fraud 2024 :A Report To The Nations. *Association of Certified Fraud Examiners*, 1–106.

Aulia Haqq, A. P. N., & Budiwitjaksono, G. S. (2020). Analisa teori fraud pentagon sebagai pendeteksi kecurangan pada laporan keuangan. *Journal of Economics, Business, & Accountancy Ventura*, *22*(3), 319–332. https://doi.org/10.14414/jebav.v22i3.1788

Bifadli, I., Hardi, H., & Putra, F. (2023). Deteksi Financial Statement Fraud Dengan Analisis Fraud Hexagon. *Jurnal Akuntansi Bisnis*, *16*(2), 112–129. https://doi.org/10.30813/jab.v16i2.3585

Cheliatsidou, A., Sariannidis, N., Garefalakis, A., Azibi, J., & Kagias, P. (2023). The international fraud triangle. *Journal of Money Laundering Control*, *26*(1), 106–132. https://doi.org/10.1108/JMLC-09-2021-0103

Cressey, D. R. (1953). Other People's Money: A Study in the Social Psychology of Embezzlement. *New York: The Free Press.*

Dechow, P. M., Ge, W., Larson, C. R., & Sloan, R. G. (2011). Predicting Material Accounting Misstatements. *Contemporary Accounting Research*, *28*(1), 17–82. https://doi.org/10.1111/j.1911-3846.2010.01041.x

Demetriades, P., & Owusu-Agyei, S. (2022). Fraudulent financial reporting: an application of fraud diamond to Toshiba's accounting scandal. *Journal of Financial Crime*, *29*(2), 729–763. https://doi.org/10.1108/JFC-05-2021-0108

Ghaisani, H. M., Triyono., & Bawono, A. D. B. (2022). Analysis of Financial Statement Fraud: The Vousinas Fraud Hexagon Model Approach and the Audit Committe as Moderating Variable. *The International Journal Of Business Management and Technology*, *6*(6), 115–125. Retrieved from https://www.theijbmt.com/archive/0948/531684957.pdf

Imtikhani, L., & Sukirman, S. (2021). Determinan Fraudulent Financial Statement Melalui Perspektif Fraud Hexagon Theory Pada Perusahaan Pertambangan. *Jurnal Akuntansi Bisnis*, *19*(1), 96–113. https://doi.org/10.24167/jab.v19i1.3654

Kalovya, O. Z. (2023). Determinants of occupational fraud losses: offenders, victims and insights from fraud theory. *Journal of Financial Crime*, *30*(2), 361–376. https://doi.org/10.1108/JFC-10-2019-0136

Kassem, R., & Omoteso, K. (2023). Effective methods for detecting fraudulent financial reporting: practical insights from Big 4 auditors. *Journal of Accounting Literature*, 1–24. https://doi.org/10.1108/jal-03-2023-0055

Khamainy, A. H., Ali, M., & Setiawan, M. A. (2022). Detecting financial statement fraud through new fraud diamond model: the case of Indonesia. *Journal of Financial Crime*, *29*(3), 925–941. https://doi.org/10.1108/JFC-06-2021-0118

Kusumawati, E., Yuliantoro, I. P., & Putri, E. (2021). Pentagon Fraud Analysis in Detecting Fraudulent Financial Reporting Using F-Score Model. *JURNAL Riset Akuntansi Dan Keuangan Indonesia*, *6*(1), 74–89. https://doi.org/10.31002/rak.v5i2.3658

Li, J., Li, N., Xia, T., & Guo, J. (2023). Textual analysis and detection of financial fraud: Evidence from Chinese manufacturing firms. *Economic Modelling*, *126*(106428), 1–11. https://doi.org/10.1016/j.econmod.2023.106428

Mandal, A., & Amilan, S. (2023). Preventing financial statement fraud in the corporate sector: insights from auditors. *Journal of Financial Reporting and Accounting*, 1–25. https://doi.org/10.1108/JFRA-02-2023-0101

Medlar, I., & Umar, H. (2023). Fraud diamond analysis of financial statement fraud. *Journal of Management*, *13*(3), 2132–2143. https://doi.org/10.35335/enrichment.v13i3.1572

Naldo, R. R., & Widuri, R. (2023). Fraudulent Financial Reporting and Fraud Hexagon: Evidence from Infrastructure Companies in ASEAN. *Economic Affairs (New Delhi)*, *68*(3), 1455–1468. https://doi.org/10.46852/0424-2513.3.2023.14

Nurhakim, A. L., & Harto, P. (2023). Kecurangan, BUMN Fraud Pentagon: Deteksi Kecurangan Laporan Keuangan Pada Badan Usaha Milik Negara. *E-Jurnal Akuntansi*, *33*(2), 311–330. https://doi.org/10.24843/eja.2023.v33.i02.p03

Putri, N. S., & Januarti, I. (2023). Perspektif Fraud Diamond dalam Mendeteksi Kemungkinan Kecurangan Laporan Keuangan. *E-Jurnal Akuntansi*, *33*(3), 619–633. https://doi.org/10.24843/eja.2023.v33.i03.p03

Rahman, M. J., & Jie, X. (2024). Fraud detection using fraud triangle theory: evidence from China. *Journal of Financial Crime*, *31*(1), 101–118. https://doi.org/10.1108/JFC-09-2022-0219

Sari, M. P., Sihombing, R. M., Utaminingsih, N. S., Jannah, R., & Raharja, S. (2024). Analysis of Hexagon on Fraudulent Financial Reporting with The Audit Committee and Independent Commissioners as Moderating Variables. *Quality - Access to Success*, *25*(198), 10–19. https://doi.org/10.47750/QAS/25.198.02

Setyono, D., Hariyanto, E., Wahyuni, S., & Pratama, B. C. (2023). Penggunaan Fraud Hexagon dalam Mendeteksi Kecurangan Laporan Keuangan. *Owner*, *7*(2), 1036–1048. https://doi.org/10.33395/owner.v7i2.1325

Sholikatun, R., & Makaryanawati, M. (2023). Determinan Kecurangan Laporan Keuangan (Perspektif Fraud Hexagon Theory). *EKUITAS (Jurnal Ekonomi Dan Keuangan)*, *7*(3), 328–350. https://doi.org/10.24034/j25485024.y2023.v7.i3.5484

Situngkir, N. C., & Triyanto, D. N. (2020). Detecting Fraudulent Financial Reporting Using Fraud Score Model and Fraud Pentagon Theory : Empirical Study of Companies Listed in the LQ 45 Index. *The Indonesian Journal of Accounting Research*, *23*(3), 373–410. https://doi.org/10.33312/ijar.486

Sudrajat, S., Suryadnyana, N. A., & Supriadi, T. (2023). Fraud Hexagon: Detection of Fraud of Financial Report in State-owned Enterprises in Indonesia. *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara*, *9*(1), 87–102. https://doi.org/10.28986/jtaken.v9i1.1358

Sukmadilaga, C., Winarningsih, S., Handayani, T., Herianti, E., & Ghani, E. K. (2022). Fraudulent Financial Reporting in Ministerial and Governmental Institutions in Indonesia: An Analysis Using Hexagon Theory. *Economies*, *10*(86), 1–14. https://doi.org/10.3390/economies10040086

Tarjo, T., Anggono, A., & Sakti, E. (2021). Detecting Indications of Financial Statement Fraud: a Hexagon Fraud Theory Approach. *AKRUAL: Jurnal Akuntansi*, *13*(1), 119–131. https://doi.org/10.26740/jaj.v13n1.p119-131

Tuanakotta, T. M. (2010). Akuntansi Forensik & Audit Investigatif. *Penerbit Salemba Empat*, 944 Hlm. Retrieved from https://penerbitsalemba.com/

Wijaya, T., & Witjaksono, A. (2023). Unmasking Financial Deception: Unraveling the Fraud Hexagon'S Influence on Detecting Financial Statement Fraud in Indonesian Public Companies. *Journal of Applied Finance and Accounting*, *10*(1), 47–56. https://doi.org/10.21512/jafa.v10i1.9927

Wilantari, N. M., & Ariyanto, D. (2023). Determinan Fraud Hexagon Theory dan Indikasi Financial Statement Fraud. *E-Jurnal Akuntansi*, *33*(1), 87–103. https://doi.org/10.24843/eja.2023.v33.i01.p07

Yadiati, W., Rezwiandhari, A., & Ramdany. (2023). Detecting Fraudulent Financial Reporting In State-Owned Company: Hexagon Theory Approach. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, *10*(1), 128–147. https://doi.org/10.30656/jak.v10i1.5676

Yanti, H. B., Mayangsari, S., Wiyono, S., Noor, I. N., Siregar, M., & Desiani, I. (2023). Prediction of Financial Reporting Fraud With Crowe'S Fraud Pentagon Model. *Media Riset Akuntansi, Auditing & Informasi*, *23*(1), 183–202. https://doi.org/10.25105/mraai.v23i1.17293

Yarana, C. (2023). Factors Influencing Financial Statement Fraud: An Analysis of the Fraud Diamond Theory from Evidence of Thai Listed Companies. *WSEAS Transactions on Business and Economics*, *20*, 1659–1672. https://doi.org/10.37394/23207.2023.20.147

Yusrianti, H., Ghozali, I., Yuyetta, E., Aryanto, & Meirawati, E. (2020). Financial statement fraud risk factors of fraud triangle: Evidence from Indonesia. *International Journal of Financial Research*, *11*(4), 36–51. https://doi.org/10.5430/ijfr.v11n4p36

Zenzerović, R., & Šajrih, J. (2023). Financial statements fraud identifiers. *Economic Research-Ekonomska Istrazivanja*, *36*(3), 1–13. https://doi.org/10.1080/1331677X.2023.2218916