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# Fraudulent Financial Statements Detection Using Fraud Triangle Analysis: Institutional Ownership as A Moderating Variable

## Indah Anisykurlillah <sup>1⊠</sup>, Muhammad Noor Ardiansah <sup>2</sup>, and Afifah Nurrahmasari <sup>3</sup>

- <sup>1,3</sup>Department of Accounting, Faculty of Economics, Universitas Negeri Semarang, Indonesia
- <sup>2</sup>Department of Accounting, Politeknik Negeri Semarang, Indonesia

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#### **ABSTRACT**

**Purpose:** This study investigates the empirical evidence of financial targets, financial stability, external pressure, the nature of the industry, and rationalization's influence on financial statement fraud, with institutional ownership as a moderating variable.

Method: The population's study included 58 publicly listed companies on the Indonesia Stock Exchange and formed the LQ45 in 2016–2018. Purposive sampling was used on 29 companies, and descriptive and regression analyses were performed using SPSS. Findings: The results showed that financial targets have a positive effect on financial statement fraud, and the industry's nature has a negative effect on financial statement fraud. In contrast, financial stability, external pressure, and rationalization do not implicate financial statement fraud. In addition, institutional ownership could undermine the effect of financial targets on financial statement fraud. Still, it could affect financial stability, external pressure, industry nature, or rationalization of financial statement fraud. Users of financial statements concentrate on the level of corporate profit because the extent of manipulation indicates that.

**Novelty:** The research initiates an initial study that examines the engagement of institutional ownership as a moderating variable because it not only increases but also risks the possibility of fraud in the financial statements, which reflect financial performance.

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## INTRODUCTION

Financial statements provide essential information about the company's activities during a specific period for both internal and external parties. Financial statements are determined by the Indonesian Institute of Accountants (IAI) and prepared based on Financial Accounting Standards. According to IAI, the financial statements present its financial position, financial performance, and cash flow (Maulana et al., 2018). This statement assists most users in making economic decisions and demonstrates management stewardship by using resources entrusted to financial statement users.

Therefore, the financial statements presented must comply with the Conceptual Framework of Financial Reporting, which consists of fundamental qualitative characteristics: relevance and precision, comparability, verifiability, propriety, and understanding (Ratnasari & Solikhah, 2019). The financial statements motivate managers to improve the company's performance through information quality that is complete, integrity, and reasonable (Mukhibad et al., 2019). The company's existence is dependent on the ability of investors, lenders, and policymakers to assess its financial performance and raise capital (Zimbelman, 1997).

However, not all company management realizes the importance of a financial statement. There is often a deliberate misstatement in describing an enterprise's financial position and performance. Misstatements can result from manipulation, falsification, or changes to financial statement data (Masengeli et al., 2019). Companies preparing to go public typically attempt to provide the best possible impression of their organization in addition to encouraging investors and generating revenues. Due to this reality, some managers can attempt to deceive in their financial statements (Nguyen, 2008).

Fraud is meaningfully manipulating or misrepresenting, or using underhanded or dishonest methods to eliminate money, property, or legitimate rights belonging to others due to an action or the fatal effect of the deed itself

\_Address: Kampus UNNES, Sekaran, Kec. Gunungpati, Kota Semarang, Jawa Tengah 50229, Indonesia

<sup>\*</sup> E-mail: indah\_anis@mail.unnes.ac.id

(Carcello & Hermanson, 2008). Meanwhile, according to the Association of Certified Fraud Examiners (ACFE), fraud is an intentional act or misrepresentation committed by persons or entities with the knowledge that the deception defeats individuals, entities, or other parties (ACFE, 2020). Therefore, individuals and groups can deceive to obtain money, property, or services, avoid payments or services, or for personal gain. The ACFE classifies fraud into three types: financial statement fraud, asset misappropriation, and corruption (Wells, 2008). The ACFE survey explained that financial statement fraud has the most significant loss impact. Fraudulent financial statements are not detected early but become significant scandals detrimental to many parties (Septriyani & Handayani, 2018).

Accounting scandals related to financial statement fraud have been widely reported and resulted in a company's bankruptcy. The bankruptcy of large companies due to financial statement fraud hits developed countries where financial governance is relatively better. The cases of Worldcom, Enron, Global, and Adelphia in the USA and Olympus, Toshiba, and Nissan Mitsubishi in Japan became a phenomenon of financial statement fraud (Mukhtaruddin et al., 2020). In 2009, the Ministry of State-Owned Enterprises officially deactivated three PT Waskita Karya (Persero) directors due to overstating net profit in the 2004–2007 financial statements. It was found in the re-examination that an excess recording of IDR 400 billion occurs due to interest conflicts between management and public accountants (Idhom, 2014). PT Garuda Indonesia stumbled into a financial statement fraud scandal in 2019. This case relates to violations of OJK Regulation Number 29/POJK.04/2019 concerning annual reports of issuers or public companies (Amuna & Mouamer, 2020). In the examination, the Ministry of Finance found violations related to revenue recognition in the cooperation agreement with PT Mahata Aero Teknologi, which was not following applicable accounting standards. Therefore, Garuda Indonesia is subject to a fine of Rp 100 million (Dewi, 2019).

Therefore, it is necessary to detect financial statements' deception. SAS No.99 was issued to increase the effectiveness of auditors in detecting fraud by assessing the risk factors of financial statement fraud. The fraud triangle analysis from Cressey (1953) formulated some cheating risk factors that became the basis for SAS No. 99. According to Cressey's theory (1953), three conditions are always present in fraud: pressure, opportunity, and rationalization, referred to as the "fraud triangle," are risk factors for the emergence of fraud in various situations (Cressey, 1953; Fisher, 2015). The first condition is financial pressure perceived by the fraud perpetrator, which he cannot disclose to others. The second condition is the opportunity to commit fraud, as perceived by the perpetrator of cheating. The third condition, rationalization, is a justification that is whispered to fight the conscience of the cheater (Tuanakotta, 2007).

Several studies using the fraud triangle perspective still provide inconsistent findings. Tiffani & Marfuah (2015) study stated that financial stability and external pressure variables positively affect financial statement fraud, while effective monitoring has a negative impact. Meanwhile, other variables do not affect the lack of financial statements. Reskino & Anshori (2016) researched another fraud triangle approach to show that financial targets positively affect financial statement fraud, while ineffective monitoring has a negative effect. The variables of financial stability, rationalization, and auditor industry specialization do not affect financial statement fraud. The following research is a study from Muhandisah & Anisykurlillah (2016) that shows that financial stability, the industrial environment, and rationalization positively affect the prediction of financial statement fraud. Nugraha & Susanto's (2018) study using the fraud triangle theory shows that rationalization significantly affects financial statement fraud. Financial stability, external pressure, financial targets, the nature of the industry, ineffective monitoring, and organizational structure do not affect financial statement fraud significantly. Maulana et al. (2018) also examined financial statement fraud using a fraud triangle theory, and the results show that financial stability, external pressure, audit delay, and audit opinion positively affect financial statement fraud.

Another research study from Akbar (2017) regarding fraud in manufacturing companies presents the result that rationalization significantly positively affects financial statement fraud, while financial stability and financial targets do not significantly affect financial statement fraud. Kristianti (2018) research on non-financial companies listed on the Indonesia Stock Exchange proves that financial stability, external pressure, and personal financial need positively affect fraudulent financial reporting. Fraudulent financial reporting is harmed by the organizational structure, the element of opportunity (Said et al., 2017). The rationalization element, such as auditor switching, positively affects fraudulent financial reporting. Meanwhile, financial targets, the nature of the industry, and ineffective monitoring have no effect (Manurung et al., 2015). According to other findings of the previous research, there are still many inconsistent results; hence, it is clear that this issue requires additional investigation.

This research also added institutional ownership variables as moderation variables because external institutions own shared ownership—the higher the institution's institutional ownership, the greater the control and supervision of the company (Akbar, 2017). Shareholders engage as principals and management as agents on the inside of a firm. Their interaction arises from the corporate distinction between the company's interests and management's. Management is an entity contracted by the principal to perform for their benefit as their agent (Ghafoor et al., 2019; Kolsi & Grassa, 2017). By investing in a business and anticipating better investment returns, shareholders aim to strengthen their well-being. In the meantime, managers are responsible for preserving and managing the interests of shareholders because shareholders have supplied a source of funding for the sustainability of the company's operations, but managers also enhance their government benefits.

The study's purpose is to analyze the influence of financial targets, financial stability, external pressure, the

nature of the industry, and rationalization on the prediction of financial statement fraud and test the effect of institutional ownership moderation on the relationship. Initially, institutional ownership was used as a moderation variable on several variables, including financial targets, financial stability, external pressure, the nature of the industry, and rationalization.

This study applies the Fraud Triangle Theory to detect financial statement fraud. The fraud triangle theory is the initiator of other theories to determine whether or not this theory is still relevant in detecting financial statement fraud. The fraud triangle theory cannot be studied directly; therefore, it must develop variables and proxies to be used. Independent variables that will be used for pressure factors are financial targets, financial stability, and external pressure (Evana et al., 2019; Maulana et al., 2018; Siahaan et al., 2019).

Management will attempt to keep the company's performance always improving from the previous year. This condition creates pressure on management as it performs the activities, especially concerning the financial performance that allows fraud in its reporting. These study results are consistent with research conducted by Reskino & Anshori (2016), Nugraheni & Triatmoko (2017), and Septriani & Handayani, (2018), which state that financial targets positively affect financial statement fraud, defined as the first hypothesis.

## H<sub>1</sub>: Finansial targets positively affect financial statement fraud

Companies that are at a low level of stability will not immediately make changes to the company's performance growth. It is recognized that such actions will deteriorate the company's financial condition in the future. The company will attempt to maintain financial stability, although the consequence is to make some modifications to financial reporting, which is identified as reporting fraud. The results of this study are in line with research conducted by Skousen et al., (2009), Tiffani & Marfuah (2015), Muhandisah (2016), and Septriani & Handayani (2018) which state that there is an influence between financial stability on financial statement fraud, which defined as second hypothesis.

## H<sub>2</sub>: Financial stability positively affects financial statement fraud

When a company obtains a loan, there are most likely two reasons, which are an unpredictable decline in revenue and operational financing for company development. In general, companies take loans to expand their business, so the ratio of debt to assets becomes relatively more visible (Suyoto, 2009). The increase in third-party funds that must be accounted for in operations also increases pressure on management Skousen et al. (2019). The increased responsibility for management's performance due to external funds exposes the risk of outright fraud to maintain sustainable performance. Thus, defines the third hypothesis as external pressure has a significant positive effect on financial statement fraud

## H<sub>2</sub>: External pressure positively affects financial statement fraud

Management is entrusted by investors to manage the company and will therefore do various efforts to perform favorably in front of investors. If the condition of the company's industry is decreasing, then management will potentially take advantage of it to commence fraud. Conversely, if industry conditions are favorable, the possibility of fraudulent financial statements will be less. This indicates that management will logically maintain the performance reported in finance which has the potential to encourage fraud in the process. The results of this study are following research conducted by Tiffani & Marfuah (2015), Wahyuni & Budiwitjaksono (2017), and Septriani & Handayani (2018) which state fourth hypothesis as the nature of the industry has a significant positive effect on financial statement fraud.

## H<sub>4</sub>: The nature of the industry positively affects financial statement fraud

In the assumptions of the Fraud Triangle theory, human nature emphasizes that humans have personal interests. Management will attempt to demonstrate the best performance as a form of accountability of the authority to investors. As is the case in determining the company's accrual rate, it will depend on the company's management policy. Policies in determining the level of accruals are often used by management to commit fraud. If the accrual rate is high, then there are indications of fraud. On the other hand, if the accrual rate is low, the occurrence of fraudulent financial statements will be small. This indicates that rational changes in the level of total accruals trigger the occurrence of fraudulent financial statements (Tiffani & Marfuah, 2015, Reskino & Anshori, 2016, and Yendrawati, 2019). Thus it can define as the fifth hypothesis as rationalization has a significant positive effect on financial statement fraud

## H<sub>5</sub>: Rationalization positively affects financial statement fraud

The role of institutional ownership as a moderating variable in this study affects weakening the effect of financial targets on financial statement fraud. High institutional ownership has more optimal supervision of company management so that management tries to improve company performance, one of which is by meeting established targets (Darmayanti et al., 2019). Institutional ownership can reduce the effect of financial targets on financial statement fraud is stated as the sixth hypothesis.

## H.: Institutional ownership weakens the influence of finansial targets on financial statement fraud

Referring to agency theory, management is always required to always show that the company is always in a stable state. When the company is in a stable condition, it will affect the increase in company value in the view of investors. The role of institutional ownership is very influential because the greater the institutional ownership, the more monitoring of the company will increase so that management performance will be better and make investors more confident in the company (Ghafoor et al., 2019; Kolsi & Grassa, 2017). It could be formulated that institutional ownership can reduce the effect of financial stability on financial statement fraud as the 7th hypothesis.

## H,: Institutional ownership weakens the influence of finansial stability on financial statement fraud

Agents are frequently under pressure from principals to obtain additional funds to complete the company's operations (Sari et al., 2019). Excessive pressure to obtain additional funds from third parties can encourage management to commit fraudulent financial statements (Ghafoor et al., 2019). The amount of institutional ownership has an impact on supervision so that third parties' funds can be justified so that the 8th hypothesis formulated as institutional ownership can moderate the effect of external pressure on fraudulent financial statements.

## H<sub>s</sub>: Institutional ownership moderates the influence of external pressure on financial statement fraud

The nature of the industry has a relationship with agency theory due to asymmetric information between the agent and the principal. Management as an agent has more extensive information about the company's condition and prospects than the principal so the overvaluation of accounts in the company's financial statements can be utilized by management as an opportunity to commit fraud in the financial statements. The role of institutional ownership is influential because the greater the institutional ownership, the higher the supervision of the company so that it can minimize the existence of fraudulent financial statements (Akbar, 2017; Evana et al., 2019; Ghafoor et al., 2019). Thus, the 9th hypothesis formulated as institutional ownership can reduce the influence of the nature of industry on financial statement fraud.

## H<sub>o</sub>: Institutional ownership weakens the influence of the nature of industry on financial statement fraud

In this study, rationalization is related to the assumptions upon which agency theory is derived, that humans have a selfish nature as identified in the presumption that the performance performed by management is based on gaining appreciation from the principal. Therefore, management does various things to improve company performance, including the possibility of deceit and manipulation in financial statements (Akbar, 2017; Darmayanti et al., 2019). Institutional ownership has a role in reducing agency problems since institutional share ownership can contribute to external monitoring, so that management will not engage in actions that are disadvantageous to shareholders(Kolsi & Grassa, 2017). The 10th hypothesis formulated as institutional ownership can reduce the effect of rationalization on financial statement fraud.

## H<sub>10</sub>: Institutional ownership weakens the influence of rationalization on financial statement fraud

#### **RESEARCH METHODS**

The population of this study is companies listed on the Indonesia Stock Exchange (IDX) during 2016 and 2018 with financial data for quantitative analysis. These companies are established for their liquidity and market capitalization, which reflect the financial condition, growth potential, and transaction value of the exchange. A sample of companies was selected that are listed as LQ45 companies due to their capital contribution and influence on public trust. LQ45 companies are sensitive to the pressures, stability, and nature of the industry and are at risk of altering financial statements to maintain earnings consistency for investors to continue investing in the company.

The reason for selecting the 2016-2018 period is that many local and foreign companies have committed financial statement fraud in this year's range. Purposive sampling is used to get a representative unit analysis based on specific criteria that have already been set as follows: the financial report published every year in February and August, and it stayed in business from 2016 to 2018; during the period from 2016 to 2018, the company releases annual reports and financial statements, the company's financial statements were shown in units of the rupiah currency and the company gives researchers all the information they need. The following summary of operational definitions is presented in table 1.

Moderated regression analysis is used to test the hypothesis of the presented model, with prior compliance with the classical assumptions of the model. In this study, it used an absolute value difference test. The absolute value difference test is carried out to find the difference in the standardized absolute value between the two independent variables. The hypothesis tested is the direct effect of the financial target, financial stability, external pressure, nature of the industry, and rationalization as independents variable on the fraud financial statement, and the next step identifies the direction of the moderating effect of institutional ownership on the influence each relationship of the independent variable on the dependent variable.

Table 1. Variable Operational Definition

Variable	Definition	Measurement	Scale
Fraud Financial Statement	Deliberate misstatement of financial statements through the omission of some crucial disclosures		Ratio
Financial Targets	Targets set to measure management performance	ROA= Net Profit After Tax / Total Assets (Skousen et al. , 2009)	Ratio
Financial Stability	A state of affairs that demands the financial condition of the company in a stable condition	ACHANGE= (Total Assets year t – Total Assets year t-1 / Total Assets year t-1) (Skousen et al., 2009)	Ratio
External Pressure	Excessive pressure for management to meet the requirements or expectations of third parties	LEV = Total Debt / Total Assets (Skousen et al., 2009)	Ratio
Nature of Industry	The ideal state of an enterprise in the industry	RECEIV= (Receivable t / Sales t) – (Receivable t-1 / Sales t-1) (Skousen et al., 2009)	Ratio
Rationalization	Justification of fraudulent acts committed as acceptable.	TATA= (Income Before Extraordinary Items – Cash Flow From Operation) / (Total Assets t) (Skousen et al., 2009)	Ratio
Institutional Ownership	The existence of share ownership from other institutions in the company	INST= (Shares Owned by Other Institution) / Shares Outstanding (Apriliana & Agustina, 2017)	Ratio

#### **RESULTS AND DISCUSSIONS**

Based on table 3, the frequency distribution of the financial target variable of 16.7% is classified as low, while financial stability of 39.9% is classified as low. The external pressure of 35.65% is classified in the low category because it is under 50%. The rationalization variable is classified as a low level, which is 28.8%, while the nature of the industry is in the medium category because those with a receivable level of 87.7% are still below 90%. The results of the frequency distribution of institutional ownership show a low, which is 50.7%.

The moderation regression analysis determines whether the moderating variable strengthens or weakens the relationship between the independent and dependent variables. The classical assumption test consists of normality, multicollinearity, autocorrelation, and heteroscedasticity tests. The normality test is used to determine whether the data is typically distributed. Table 2 shows that the Kolmogorov-Smirnov value is 0.090 and the asymp sig value is 0.200, which is greater than 0.05, indicating that residual data is normally distributed.

Table 2 also shows that there are no independent variables with a tolerance value of less than 0.10, meaning there is no correlation between independent variables. The test results also showed the VIF value of the absence of multicollinearity between independent variables in the regression model because the VIF value was more than one but less than 10. So it can be concluded that there is no multicollinearity in the model. The autocorrelation test in this study was carried out using the Durbin-Watson test (DW test). Based on Table 2, the Durbin-Watson value of 1.878 is greater than the upper limit of dU 1.802 and less than 4 - 1.802 (4-dU); it can be concluded that there is no autocorrelation in the regression model. The heteroskedasticity was performed with the Glejser test are resulted in table 2. Based on the Glejser test, the significance values of each independent variable: financial targets (ROA), financial stability (ACHANGE), external pressure (LEV), nature of the industry (RECEIV), rationalization (TATA), and institutional ownership (INST) are all greater than the significance value of 0.05. It can be concluded that there is no heteroscedasticity problem.

The moderation regression analysis was used to test the effect of institutional ownership as a moderating variable on financial targets, financial stability, external pressure, the nature of the industry, and the rationalization of financial statement fraud. The following result is shown in table 3. The financial targets coefficient (ROA) of 0.155 (0.002) is significant and indicates that financial targets affect financial statement fraud. The financial stability coefficient (ACHANGE) of 0.043 (0.281) is insignificant and suggests that financial stability does not affect financial statement fraud. The external pressure coefficient (LEV) of 0.058 (0.460) is insignificant and demonstrates that external pressure does not affect financial statement fraud. The nature of the industry (RECEIV) of -0.340 (0.001) indicates that the nature of the industry affects financial statement fraud. A rationalization coefficient (TATA) of -0.086 (0.132) is insignificant and presents that rationalization does not affect financial statement fraud.

Table 2.	Classical	Assumption	Test Results
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Table 2. Classical Assumption Test Results	37.1		
Items	Value		
Multicollinearity Test	Tolerance	VIF	
ROA	.401	2.494	
ACHANGE	.752	1.330	
LEV	.643	1.554	
RECEIV	.962	1.040	
TATA	.422	2.369	
INST	.659	1.517	
Heteroskedasticity Test			
	t	Sign	
ZROA	.588	.558	
ZACHANGE	183	.855	
ZLEV	516	.608	
ZRECEIV	.743	.460	
ZTATA	-1.000	.321	
Normality Test			
Statistical Test of Kolmogorov-Smirnov Test		0.090	
Asymp. Sig. (2-tailed)		0.200	
Autocorrelation Test			
Durbin-Watson		1.878	

Source: SPSS output, 2021.

The financial targets coefficient of -0.137 (0.021) is significant and points out that financial targets undermined by institutional ownership affect financial statement fraud. The financial stability coefficient of 0.002 (0.973) is insignificant and shows that financial stability is not moderated by institutional ownership of financial statement fraud. The coefficient of an external pressure of -0.003 (0.967) indicates that external pressure does not moderate institutional ownership financial statement fraud. The coefficient of the nature of the industry of -0.015 (0.835) is insignificant and shows that the nature of industries does not moderate by institutional ownership affecting financial statement fraud. The coefficient of rationalization of 0.174 (0.024) is significant and indicates that the rationalization enhances by institutional ownership affects financial statement fraud.

Table 3 demonstrates that financial targets significantly affect financial statement fraud, resulting in  $H_1$  being accepted. This study indicates that the greater the company's financial target, the greater the chance of financial statement fraud. The high percentage of ROA levels in the low category is due to the low-profit margins of research sample companies. A case like this can pressure management to meet profit expectations like the previous year's. Management will be tempted to lie on financial statements. The return on assets (ROA) utilized as a proxy for financial targets in this study illustrates how efficiently the assets have operated or how much the rate of return on assets owned by the company has increased as a measure of operational effectiveness (Manurung & Hadian, 2013; Puspitadewi & Sormin, 2018; Skousen et al., 2009).

The management strategy will prepare every effort to improve the company's performance, especially in the past year. This fact is all in response to the growing pressure placed on businesses to live up to their obligations. This finding is following the fraud triangle analysis which emphasizes that pressure, in this case, proxied by ROA, has a significant positive impact on financial statement fraud. Management is responsible for improving the company's performance and ensuring it is in another financial situation. In addition, management is required to perform following the established regulations. Consequently, when the firm's profit is low, it is characterized in such a way that it meets predetermined targets in addition to gaining positive feedback from investors. The findings of this research are consistent with those found in existing studies by Reskino & Anshori (2016) and Septriyani & Handayani (2018), all of which concluded that financial targets play a role in the commission of financial statement fraud.

Table 3. Moderated Regression Analysis Test

Variables	Frequency	Coefficient	t	Sig.	Hypothesis	Decesion
(Constant)		.042	.900	.371	,	
ZROA	16.7%	.155	3.164	.002	${f H}_1$	Accepted
ZACHANGE	39.9%	.043	1.088	.281	${ m H_{_2}}$	Rejected
ZLEV	35.6%	.058	.743	.460	$H_3$	Rejected
ZRECEIV	87.7%	340	-3.423	.001	${ m H_4}$	Accepted
ZTATA	28.8%	086	-1.527	.132	$\mathrm{H}_{\scriptscriptstyle{5}}$	Rejected
ZROA_ZINST		137	-2.372	.021	$H_6$	Accepted
ZACHANGE_ZINST		.002	.034	.973	$\mathrm{H}_{_{7}}$	Rejected
ZLEV_ZINST		003	041	.967	$H_8$	Rejected
ZRECEIV_ZINST		015	209	.835	$\mathrm{H}_{\scriptscriptstyle{9}}$	Rejected
ZTATA_ZINST		.174	2.310	.024	$\mathbf{H}_{10}$	Accepted
R <sup>2</sup>	46.2%					

Hypothesis 2 was rejected and defined no significant relationship between financial stability and financial statement fraud. This conclusion demonstrates that a firm's ability to facilitate financial statement fraud will not be affected by the company's high or low financial stability. The total asset change ratio determines whether the company is ready to expand its assets or is experiencing a decline in asset management between the current year and the previous year (Kusuma Indar Prehantika, 2016). This test determines whether the company is financially reliable. The fact that the company has not been sufficient to retain the same level of financial security in its operations is reflected in the consistent rise or fall in its assets each year. The pressure affecting managerial performance might be a factor in the company's financial stability. Management will commit fraud on the financial accounts even though they have done everything in their power to ensure that the company is in a secure financial position. According to Skousen et al. (2009a), when a firm has slower-than-average growth in its assets, the management will most likely falsify its financial records to improve its prospects. Nonetheless, the results of this study contradict the statement. This result is possible due to companies with low financial stability, but similar entities in the same industry also have low stability. Therefore, the management is not worried about losing investors because the state of financial stability experienced is the same as that of other competitors.

Companies with low stability or under the average will not immediately change the company's assets growth because this will aggravate the company's future financial condition. Companies will manipulate the asset growth to show their financial stability and find it challenging to acquire funds or investments from internal and external parties. The company has a challenge to develop, which will impact its worst financial stability in the future. The results are consistence with considerable research, such conducted by Afrialdi (2019), Reskino & Anshori (2016), and Yendrawati et al. (2019) that there was no influence between financial stability and financial statement fraud.

Hypothesis 3 states that external pressure positively affects financial statement fraud and is rejected. It indicates that high and low external pressures would not affect its ability to commit financial statement fraud. The level of debt ratio (leverage) in this study was not affected by financial statement fraud because the level of debt ratio was relatively low. The findings exposed that high leverage, as a proxy for external pressure, does not pressure management to commit financial statement fraud, whereas low leverage does. It can be caused by the fact that the company is getting a loan for two reasons: an unpredictable decrease in income and operational financing for the company's development.

Usually, companies get loans for business expansion and automatically make a high debt-to-asset ratio (Putra, 2012). Operational funds from external parties will increase production and sales, increasing profits and pressure management to decrease fraud. In addition, obtaining company funds is not only through debts to outside parties; it can also reissue shares to obtain a source of funds from investors. The results are coherent with research conducted by Afrialdi (2019), Reskino & Anshori (2016), and Yendrawati et al. (2019), which stated that there was no influence between external pressure and financial statement fraud. According to the findings of this study, the high-low debt ratio cannot always be used to detect financial statement fraud.

Hypothesis 4 expresses that the industry's nature positively affects financial statement fraud. The result was indicated that  $H_4$  rejected because the nature of the industry proxied by the percentage of changes in receivables to sales (receivable) at the average industry level. When the company has a high receivables ratio, it can be interpreted that the accounts receivable will reduce the cash amount used for its operational activities. Limited cash can be an encouragement for management to commit financial statement fraud. This study's level of receivables ratio tested no positive effect on financial statement fraud because the level of receivables ratio was classified as moderate average at the industry level. The study's results are related to agency theory, where management is a party trusted by

investors to manage the company.

Therefore, the management will perform various measures to present the best performance to investors. If the company's condition degenerates, the management will use it to commit fraud. Otherwise, if the industry conditions are good h, the chances of financial statement fraud will be low. This result indicates that changes in the receivables ratio during the study year did not trigger the occurrence of financial statement fraud. The study results are consistent with research conducted by Septriyani & Handayani (2018), Tiffani & Marfuah (2015), and Wahyuni et al. (2018), which stated that there was no influence between the nature of the industry and financial statement fraud. According to the findings of this study, the high-low receivables ratio cannot always be used to detect financial statement fraud.

The study's results show that the rationalization proxied with total accruals (TATA) percentage does not affect financial statement fraud, so H<sub>5</sub> is rejected. This result indicates that the rate of total accruals is below the industry average. The accrual method recognizes or records receipts and expenses when transactions occur, not when cash is received or paid. Management frequently manipulates revenue by recording receipts when transactions occur to achieve the desired profit. Therefore, when the company has a high total accrual ratio, it can be interpreted that fraud may occur. However, the level of the total accrual ratio was not affected by financial statement fraud because the level of the total accrual ratio was relatively low. The study's results are related to agency theory, where several assumptions underlie this theory, one of which is the assumption of human nature (Ermongkonchai, 2010).

The assumption of human nature emphasizes self-interest, making management demonstrate the best performance as an authority and accountability toward investors. The company's management policies will determine the accrual rate of the enterprise and use policies to determine the accrual level to commit fraud. Indication of fraud will be shown if there is a high accrual rate. This result indicates that the change in the level of total accruals did not stimulate the occurrence of financial statement fraud. The study's results are consistent with Tiffani & Marfuah (2015) who stated there was no relation between rationalization and financial statement fraud. The study results confirmed that the ratio of accrual levels could not be used constantly as the financial statements fraud indicator.

This study used a moderation regression model. The analysis results suggest that financial targets significantly influenced financial statement fraud, and then the financial target undermined by institutional ownership in a significant negative value. The result shows that institutional ownership can deliberate the influence of financial targets on financial statement fraud, so  $H_6$  is accepted. Management is an agent appointed by the shareholder (principal), who is given the task and authority to manage the company. Management must consistently implement the tasks with the best performance to achieve the financial targets (Peecher et al., 2007). Otherwise, management is also self-interested in getting bonuses or commissions for their performance, so the targets increase the possibility of financial statement fraud. Financial targets directly affect financial statement fraud and institutional ownership as a moderating variable deliberate the financial targets' influence on financial statement fraud. High institutional ownership has more optimal supervision to improve the best performance. The possibility of institutional ownership undermines the influence of financial targets on financial statement fraud because high financial targets indicate excessive pressure on management, which will do everything possible to achieve these targets and indirectly increase financial statement fraud.

Hypothesis 7 states that institutional ownership can undermine the effect of financial stability on financial statement fraud. The direct effect results in a significant value and the undirect shows that the financial stability is positively moderated by institutional ownership, so  $H_{\gamma}$  is rejected. It means that the stability of a company's finances and the institutional ownership role in supervising its performance cannot be a benchmark for fraudulent financial statements. Management is always required to remain to show the stability of a company. When the company is stable, it will affect the increase in its value for investors. The institutional ownership role is influential because it will increase the monitoring process so that management performance will improve and investors will have more trust. The stable condition and high institutional ownership will help the company avoid financial statement fraud. Financial stability in this study does not directly impact financial statement fraud. The results showed that the existence of institutional ownership could not determine the intensity of the influence of financial stability on financial statement fraud (Apriliana & Agustina, 2017; Khaddafi et al., 2018).

Based on the financial stability frequency distribution results, the study sample was included in the category with a low level of company stability of 60.3%. Meanwhile, the result of the distribution of institutional ownership frequency is 50.7% and is classified as low. The results stated that institutional ownership could not moderate the effect of financial stability on financial statement fraud predicted because the level of institutional ownership in the sample was relatively low, so the monitoring conducted was not optimal. Another possibility is that the amount of institutional ownership has not changed, whereas 15 of the 29 sample companies whose institutional holdings did not change, and the shares outstanding did not increase during the year of observation. The constant number of institutional holdings and outstanding shares causes insignificant results.

Hypothesis 8 states that institutional ownership can weaken the influence of external pressure on financial statement fraud. The regression analysis of the effect of external pressure on financial statement fraud and how institutional ownership moderated resulted in insignificant direct and indirect effects of institutional ownership moderation, so  $H_8$  is rejected. The results contradict the agency theory, which states that the company's survival is in the agent while the principal is under pressure to find additional funds for operational activities (Apriliana & Agustina,

2017; Khaddafi et al., 2018). Excessive pressure from third parties can stimulate management to conduct financial statement fraud. Hypothesis testing can be interpreted to mean that the financial statement fraud presence is unaffected by high and low external pressure moderated by institutional ownership. Institutional ownership is likely unable to moderate the effect of financial stability on financial statement fraud because the number of institutional owners in the research sample has not changed. There were 15 of the 29 sample companies whose institutional holdings did not change, and the shares outstanding during the year of observation did not increase.

Hypothesis 9 states that institutional ownership can weaken the influence of the nature of industry on financial statement fraud. The results of the moderating regression analysis presented a significant value of institutional ownership in influencing the nature of the industry on financial statement fraud. Therefore, institutional ownership undermines the influence of the nature of the industry on financial statement fraud, so  $H_9$  is accepted. The nature of industry relates to agency theory because it reflects the asymmetric information between the agent and the principal. Management, as an agent, has broader information about the state and prospects of the company than the principal. The determination value more significant than the calculated point based on the company's financial statement estimation can be used to commit financial statement fraud. Institutional ownership is very influential because the more significant the ownership, the more it will increase monitoring, and it can minimize the existence of financial statement fraud that the management will encourage (Khaddafi et al., 2018).

The nature of the industry has a direct negative impact on financial statement fraud, and it showed that the existence of institutional ownership could weaken the influence of the nature of the industry on financial statement fraud. This result also indicates that the rate of change in receivables is on par with the industry average. The difference in the condition of receivables at the LQ45 Company makes changes in receivables unable to detect financial statement fraud. Otherwise, the assessment of subjective accounts is inevitable in the company's operational activities, so it cannot provide an opening for management to commit fraud on the financial statements. Then, institutional ownership gave more optimal supervision and monitoring to deliberate further the relationship between the nature of the industry and financial statement fraud.

The regression analysis result of hypothesis 10 confirmed an insignificant direct effect on the rationalization of financial statement fraud but a significant result moderated by institutional ownership moderating rationalization on financial statement fraud; therefore, H<sub>10</sub> is accepted. Rationalization is related to an agency theory, namely the assumption of human nature, which emphasizes that humans have the nature to be self-interested. This fact is connected to the management's assumption that the performance performed is based on getting appreciation from the principal (Kim et al., 2019). Therefore, the management justifies all actions to improve the company's performance, including committing financial statement fraud. Institutional ownership has a role in reducing agency problems because institutional ownership of shares can help monitor the company so that management will not act detrimentally toward shareholders. In this study, rationalization has no direct impact on financial statement fraud. The results showed that the existence of institutional ownership could weaken the intensity of the influence of rationalization on financial statement fraud. However, this study's accrual level is relatively low, so it does not trigger financial statement fraud. The company's fairly good accrual conditions, coupled with the more optimal supervision of institutional ownership, further weaken the influence of rationalization on financial statement fraud.

## CONCLUSIONS

The results show that financial targets have a positive effect on financial statement fraud but the nature of the industry negatively affects financial statement fraud. Financial stability, external pressure, and rationalization do not affect financial statement fraud. Additionally, institutional ownership can undermine the influence of financial targets on financial statement fraud but cannot debilitate the influence of financial stability, external pressure, the nature of the industry, or the rationalization of financial statement fraud.

The sample used in this study has covered all sectors, but the short study period indicates that only a few variables affect financial statement fraud. The limitation of the study period, which is only three years, provides the potential for limited data analysis over time. A long period of data analysis will provide a higher level of accuracy in the determination of the independent variables in the regression. The low R2 level of only 46.2% is an indication of the need for this. Further recommendations were to increase the number of samples and extend the study period, by at least five years. Due to the relatively limited value of determination in the following study, adding other variables that can affect financial statement fraud, which is a strong determinant of financial statement fraud. Several studies on the development of the fraud triangle, including the fraud diamond, include the opportunity proxied by the effectiveness of supervision, the organizational structure, and the change of auditors, which is recommended. Other theories such as the fraud hexagon add capability, ego and collusion that can strengthen the existence of internal control in this study. Researchers are further advised to develop this study by using other moderating variables, such as capability or financial distress, to influence independent variables on financial statement fraud.

## **REFERENCES**

ACFE. (2020). Report To the Nations 2020 Global Study on Occupational Fraud and Abuse. Afrialdi, H. (2019). Analisa Fraud Triangle Terhadap Manipulasi Laporan Keuangan pada Perusahaan yang Terdaftar di Bursa

- Efek Indonesia pada Tahun 2012-2016. repository.uib.ac.id. http://repository.uib.ac.id/id/eprint/2000
- Akbar, T. (2017). the Determination of Fraudulent Financial Reporting Causes By Using Pentagon Theory on Manufacturing Companies in Indonesia. International Journal of Business, Economics and Law, 14(5), 106–112.
- Amuna, Y. M. A., & Mouamer, F. A. (2020). Impact of Applying Fraud Detection and Prevention Instruments in Reducing Occupational Fraud: Case study: Ministry of Health (MOH) in Gaza Strip. International Journal of .... https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3643587
- Apriliana, S., & Agustina, L. (2017). The Analysis of Fraudulent Financial Reporting Determinant through Fraud Pentagon Approach. Jurnal Dinamika Akuntansi, 9(2), 154–165. https://doi.org/10.15294/jda.v7i1.4036
- Carcello, J. J. V, & Hermanson, D. D. R. (2008). Fraudulent Financial Reporting: How Do We Close the Knowledge Gap? In ... Studies (White Papers) ... (Issue November, pp. 2–23). pdfs.semanticscholar.org. https://pdfs.semanticscholar.org/f4bf/b3c2730f6cceab7d3d957aed3776da96738f.pdf
- Cressey, D. R. (1953). Other people's money; a study of the social psychology of fraud embezzlement (Issue 1). Montclair, NJ Smith.
- Darmayanti, Y., Setiawan, I., & Ethika, E. (2019). Determinan Financial Statement Fraud Dengan Menggunakan Pendekatan Fraud Triangle. Akuntabilitas, 13(1), 1–18. https://doi.org/10.29259/ja.v12i2.9339
- 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
- Dewi, K. R. (2019). Sederet Kasus yang Menjerat Maskapai Garuda Indonesia. Kompas.Com.
- Ermongkonchai, P. (2010). Understanding Reasons for Employee Unethical Conduct in Thai Organizations: A Qualitative Inquiry. Contemporary Management Research, 6(2). https://doi.org/10.7903/cmr.3550
- Evana, E., Metalia, M., Mirfazli, E., Georgieva, D. V., & Sastrodiharjo, I. (2019). Business Ethics in Providing Financial Statements: The Testing of Fraud Pentagon Theory on the Manufacturing Sector in Indonesia. Business Ethics and Leadership, 3(3), 68–77. https://doi.org/10.21272/bel.3(3).68-77.2019
- Fisher, K. (2015). The Psychology of Fraud: What Motivates Fraudsters to Commit Crime? SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2596825
- Ghafoor, A., Zainudin, R., & Mahdzan, N. S. (2019). Corporate fraud and information asymmetry in emerging markets: Case of firms subject to enforcement actions in Malaysia. Journal of Financial Crime, 26(1), 95–112. https://doi.org/10.1108/JFC-11-2017-0107
- Idhom, A. M. (2014). Tren Korupsi di Perguruan Tinggi Meningkat. Tempo.Com. https://koran.tempo.co/read/berita-utama-jateng/351402/tren-korupsi-di-perguruan-tinggi-meningkat?
- Khaddafi, M., Wahyuddin, Heikal, M., Falahuddin, & Maulida, R. (2018). Effect of corporate governance mechanism, independence and management of earnings integrity of financial statements (In manufacturing companies listed on the stock exchange). Quality Access to Success, 19(164), 94–97.
- Kim, J., Kim, H. J., & Kim, H. (2019). Fraud detection for job placement using hierarchical clusters-based deep neural networks. Applied Intelligence, 49(8), 2842–2861. https://doi.org/10.1007/s10489-019-01419-2
- Kolsi, M. C., & Grassa, R. (2017). Did corporate governance mechanisms affect earnings management? Further evidence from GCC Islamic banks. International Journal of Islamic and Middle Eastern Finance and Management, 10(1), 2–23. https://doi.org/10.1108/IMEFM-07-2015-0076
- Kristianti, N. M. (2018). Implementasi Fraud Risk Assessment untuk menemukan risiko fraud signifikan pada siklus pembelian dan pembayaran: studi kasus pada Toko Online Esgotado. repository.unpar.ac.id. http://repository.unpar.ac.id/handle/123456789/7895
- Kusuma Indar Prehantika, F. (2016). Deteksi Financial Statement Fraud Dengan Model Beneish M-Score. Jurnal Akuntansi Unesa, 5(1), 1–22. https://ejournal.unesa.ac.id/index.php/jurnal-akuntansi/article/view/18481
- Manurung, D., Suhartadi, A. R., & Saefudin, N. (2015). The Influence of Organizational Commitment on Employee Fraud with Effectiveness of Internal Control and Organizational Justice as a Moderating Variable. Procedia Social and Behavioral Sciences, 211, 1064–1072. https://doi.org/10.1016/j.sbspro.2015.11.142
- Manurung, D. T., & Hadian, N. (2013). Detection Fraud of Financial Statement with Fraud Triangle. In Proceedings of 23rd International Business Research Conference. repository.widyatama.ac.id. https://repository.widyatama.ac.id/xmlui/handle/123456789/3554
- Masengeli, G., Kiragu, D. N., & Kamau, R. (2019). Effect of Financial Misstatement and Corruption on Fraud Risk among State Corporations in Mombasa County in Kenya. In International Journal of Academic Research in Accounting, Finance and Management Sciences (Vol. 8, Issue 4). repository.dkut.ac.ke. https://doi.org/10.6007/ijarafms/v8-i4/5184
- Maulana, M. A., Nurjanah, I., & Nurjanah, Y. (2018). Financial Reporting for Micro Small and Medium Enterprises Towards Industrial Revolution Era 4.0. Icams, 1, 31–37.
- Muhandisah, Z., & Anisykurlillah, I. (2016). Predictive Analysis of Financial Statement Fraud with Fraud Triangle Perspective. Accounting Analysis Journal, 5(4), 381–388.
- Mukhibad, H., Anisykurlillah, I., Nurkhin, A., & Jayanto, P. Y. (2019). Can social performance improve financial performance and increase customers trust? International Journal of Financial Research, 10(4), 37–45. https://doi.org/10.5430/ijfr. v10n4p37
- Mukhtaruddin, Sabrina, E., Hakiki, A., Saftiana, Y., & Kalsum, U. (2020). Fraudulent financial reporting: fraud pentagon analysis in banking and financial sector companies. In Issues in Business Management and Economics (Vol. 8, Issue 2, pp. 12–24). https://www.journalissues.org/IBME/
- Nguyen, K. (2008). Financial Statament Fraud: Motive, Methodes, Cases and Detection. In Florida (online). books.google.com. https://books.google.com/books?hl=en&lr=&id=L\_M67eWgX-sC&oi=fnd&pg=PA1&dq=asset+misapropriation&ot s=Q7K5xRFimi&sig=M0GmG7Z6nAeDyTh0kFDGex5A5xg
- Nugraha, S., & Susanto, E. (2018). The Fraud Behavior From The Perspectives Of The Fraud Triangle: An Indonesian Case. Advances in Social Science, Education and Humanities Research, 191(1), 113–120. https://doi.org/10.2991/aapa-

- Peecher, M. E., Schwartz, R., & Solomon, I. (2007). It's all about audit quality: Perspectives on strategic-systems auditing. Accounting, Organizations and Society, 32(4–5), 463–485. https://doi.org/10.1016/j.aos.2006.09.001
- Puspitadewi, E., & Sormin, P. (2018). Pengaruh Fraud Diamond Dalam Mendeteksi Financial Statement Fraud. Jurnal Akuntansi, 12(2), 146–162. https://doi.org/10.25170/jara.v12i2.86
- Putra, Y. H. S. (2012). Praktik Kecurangan Akuntansi Dalam Perusahaan. El Muhasaba: Jurnal Akuntansi, 1(1). https://doi.org/10.18860/em.v1i1.1878
- Ratnasari, E., & Solikhah, B. (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.
- Reskino, R., & Anshori, M. F. (2016). Model Pendeteksian Kecurangan Laporan Keuangan dengan Analisis Fraud Triangle. In Jurnal Akuntansi Multiparadigma. repository.uinjkt.ac.id. https://doi.org/10.18202/jamal.2016.08.7020
- Said, J., Alam, M. M., Ramli, M., & Rafidi, M. (2017). Integrating ethical values into fraud triangle theory in assessing employee fraud: Evidence from the Malaysian banking industry. Journal of International Studies, 10(2), 170–184. https://doi.org/10.14254/2071-8330.2017/10-2/13
- Sari, N. S., Sofyan, A., & Fastaqlaili, N. (2019). Analysis Of Fraud Diamond Dimension In Detecting Financial Statement Fraud. Jurnal Akuntansi Trisakti, 5(2), 171. https://doi.org/10.25105/jat.v5i2.4861
- Septriyani, Y., & Handayani, D. (2018). Mendeteksi Kecurangan Laporan Keuangan dengan Analisis Fraud Pentagon. Jurnal Akuntansi, Keuangan Dan Bisnis, 11(1), 11–23. http://jurnal.pcr.ac.id
- Siahaan, M., Umar, H., & Purba, R. B. (2019). Fraud Star Drives To Asset Misappropriation Moderated By Internal Controls. Journal of Southwest Jiaotong University, 54(4), 1–10. https://doi.org/10.35741/issn.0258-2724.54.4.24
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009a). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. In Corporate Governance and Firm Performance (Issue 99, pp. 53–81). http://dx.doi.org/10.1108/S1569-3732(2009)0000013005
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009b). Detecting and Predicting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99 in Corporate Governance and Firm Performance. In International Journal of Quality & Reliability Management (Vol. 32, Issue 3). https://doi.org/10.1108/S1569-3732(2011)0000014001
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2011). List of Contributors. In International Journal of Quality & Reliability Management (Vol. 32, Issue 3, pp. vii–viii). https://doi.org/10.1108/s1569-3732(2011)0000014001
- Tiffani, L., & Marfuah, M. (2015). Deteksi financial statement fraud dengan analisis fraud triangle pada perusahaan manufaktur yang terdaftar di bursa efek Indonesia. Jurnal Akuntansi & Auditing Indonesia, 19(2), 112–125. https://doi.org/10.20885/jaai.vol19.iss2.art3
- Tuanakotta, T. (2007). Akuntansi Forensik dan Audit Investigatif. In Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Wahyuni, S., Fadah, I., & Tobing, D. S. (2018). Pengaruh Kompetensi Sumber Daya Manusia dan Pemanfaatan Teknologi Informasi Terhadap Kualitas Laporan Keuangan Melalui Pengelolaan Barang Milik Daerah. BISMA: Jurnal Bisnis Dan Manajemen, 12(1), 66–80.
- Wells, J. T. (2008). Corporate fraud handbook: prevention and detection. In Choice Reviews Online (Vol. 45, Issue 07). books. google.com. https://doi.org/10.5860/choice.45-3883
- Yendrawati, R., Aulia, H., Prabowo, H. Y., Indonesia, U. I., Indonesia, U. I., & Indonesia, U. I. (2019). Detecting the Likelihood of Fraudulent Financial Reporting: Asia-Pacific Management Accounting Journal, 14(1), 44–68. http://arionline.uitm.edu.my/ojs/index.php/APMAJ/article/view/858
- Zimbelman, M. F. (1997). The Effects of SAS No. 82 on Auditors' Attention to Fraud Risk Factors and Audit Planning Decisions. Journal of Accounting Research, 35(82), 75. https://doi.org/10.2307/2491454