



## The Role of Institutional Ownership in Detecting Fraudulent Financial Reporting: Fraud Heptagon Model Analysis

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### Abstract

Capability, arrogance, ignorance, and greed on Fraudulent Financial Reporting using the Fraud Heptagon model analysis, with Institutional Ownership as a moderating variable. Focused on BUMN in Indonesia from 2018 to 2022, purposive sampling resulted in 141 samples. The regression analysis with Warp PLS version 8.0 software shows that opportunity, capability, and ignorance all have a negative effect on fraudulent financial reporting. This shows they may help reduce the issue. However, pressure, rationalization, arrogance, and greed positively affect Fraudulent Financial Reporting. Specifically, institutional ownership moderates the correlation between Greed and fraudulent financial reporting. These results contribute insight into the dynamics of fraudulent financial reporting activities, emphasizing the need for a comprehensive understanding and robust control mechanisms to prevent fraudulent financial reporting effectively. This research provides implications for investors to be careful in making investments and not tend to look at increasing company stability. However, investors do not need to worry because the tendency for fraud in state-owned companies remains very low.

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## Introduction

Consumers can utilize financial information in financial reports to make decisions (Handoko, 2021). The presentation of financial reports must be by the Conceptual Framework for Financial Reporting, including relevance, appropriate representation, comparability, verifiability, timelines, and understandability (Ratnasari et al. adingatus, 2019). However, shareholders' best interests sometimes align with management's wishes. Based on the 2020 Association of Certified Fraud Examiners (ACFE) report, with 36 cases out of 198 fraud cases and 70% of fraud cases in Indonesia caused by corruption, the Asia Pacific Region has the most fraud cases in Indonesia (Kontan, 2023). The 2019 ACFE study revealed that fraud caused losses of IDR 2,260,000,000 at a rate of 6.7%. This shows an increase in Fraudulent Financial Reporting (FFR) every year. In 2020, the government sector, including BUMN, accounted for 11.1% of losses over IDR 10 billion and 15.9% between IDR 500 million and IDR 1 billion in Indonesia (ACFE Global, 2020). Even though it is small, this state-owned company fraud case is entirely in the public spotlight.

PT Garuda Indonesia was implicated in a financial report manipulation scandal in 2019 due to its recognition of income associated with collaboration with PT Mahata Aero Teknologi for payments that the company would receive after the execution of the agreement (CNN Indonesia, 2019). This impacted PT Garuda Indonesia's profit and loss statement. Then, the case of PT Waskita, which manipulated financial reports by hiding vendor invoices since 2016, caused the debt burden to shrink and the financial condition to be good despite financial difficulties (CNBC Indonesia, 2023). These cases highlight the government's failure to carry out supervision.

FFR is caused by various variables, including Fraud Triangle elements pressure, opportunity, and rationalization (Cressey 1953). As time went by, Wolfe and Hermanson (2004) realized one factor that motivated FFR: capability, which was then added to Fraud Diamond. Then Horwath (2011) extended it again to the Fraud Pentagon, capability, and arrogance. In 2019, Vousinas (2019) transformed the SCORE model into SCCORE, the Fraud Hexagon Model. The model includes pressure, capability, colution, opportunity, rationalization, and ego. Previously, a Fraud Heptagon model was developed by Mohamed and Yusof B (2016), who added ignorance and greed as trigger factors for FFR. The Fraud Heptagon model is still rarely utilized, especially in Indonesia. Pressure, opportunity, rationalization, capability, arrogance, ignorance, and greed represent the Fraud Heptagon Model.

Fraud in financial reports continues to occur, and there are still inconsistencies in research results (Azizah & Reskino, 2023). Previous gaps in the literature regarding theoretical perspectives explaining fraud vary, from detecting the fraud triangle model to detecting FFRs (Owusu et al., 2022; Rahman et al., 2020; Sánchez-Aguayo et al., 2022). Then, a Fraud Diamond Model approach was used to detect FFR (Handoko & Natasya, 2019; Khamainy et al., 2022; Medlar & Umar, 2023). FFR detection using the Pentagon deception model was also carried out by (Achmad, Hapsari, et al. 2022; Wibowo & Putra, 2023). Meanwhile, the Fraud Hexagon model detects FFR (Achmad, Ghozali, et al., 2022). Previously, Handoko et al. (2022) FFR testing has been carried out using the Fraud heptagon model approach, and it has been detected that the Fraud heptagon has a simultaneous influence where Pressure, Opportunity, Rationalization, Capability, Arrogance, Ignorance, and Greed do not affect FFR.

The novel contribution of this research lies in its innovative examination of the moderating role of institutional ownership in the heptagon model of fraud. This approach explains how institutional ownership, with its regulatory and supervisory capacity, interacts with the factors of the heptagon model. This research examines how institutional ownership moderates fraud in state-owned companies and how external entities can influence and mitigate it. This research is important to understand the factors influencing FFR, especially in Indonesian state-owned firms. Identifying these indicators helps firms and regulators avoid fraud and improve financial reporting transparency. The major goal is to examine how institutional ownership moderates the link between model components and FFR in the heptagon fraud model.

## Literature Review

### Heptagon Model of Fraud

The Fraud Heptagon Model identifies the reasons for committing fraud into many moral and environmental elements (Nugroho & Diyanty, 2022). Because financial crime is part of the FFR, it can result in bad moral and environmental problems. A person's moral factors, described by the Fraud Heptagon, are the leading cause of someone committing FFR (Juliani & Ventty, 2022). Fraud Heptagon Model factors show financial stability and external pressures because total assets affect investor attractiveness, which could trigger FFR; Opportunity occurs due to ineffective supervision; Auditors define rationalization as a reasoned defense of unethical behavior; Capability describes the qualities and skills required to commit fraud successfully; Arrogance arises from a sense of superiority towards the immunity of applicable rules or norms; Ignorance, people dismiss contradictory information without trying to grasp it; and Greed to live beyond his means (Mohamed & Yusof B, 2016).

### Hypothesis Development

#### Pressure and Institutional Ownership

According to Abbas (2019), factors such as difficulty paying debts and declining financial conditions due to inflation and recession are the initial pressure to commit fraud. According to the heptagon model, pressure in Fraud Financial issues or economic pressure may lead to fraud or deception. The company will try to maintain financial stability, even if the consequence is a modification of the financial statements. Previous research by Achmad, Hapsari, et al. (2022), Medlar and Umar (2023), Owusu et al. (2022), and Wibowo and Putra (2023) found that FFR has a positive correlation with pressure. The greater the pressure on a company's finances or supervisors, the higher the likelihood of fraud. Anisykurlillah et al. (2022) prove institutional ownership can influence the relationship between Pressure and FFR. The research hypothesis:

**H1a** : *Pressure has a positive and significant effect on FFR.*

**H1b** : *Institutional Ownership moderates the relationship between Pressure and FFR.*

#### Opportunities and Institutional Ownership

The instability of organizational structures, especially top management, arises from ineffective supervision (Handoko et al., 2022). Lack of oversight creates opportunities for fraud. Fraud aspects The heptagon model describes situations when fraudsters may conduct fraud owing to a company's internal control weaknesses. The research results of Puteri (2023) showed that opportunity had a significant effect on FFR. If the audit committee can improve supervision, FFR will be easily detected. The research conducted by Khamainy et al. (2022) proves that the Opportunity variable has a negative effect on FFR detection. According to Sari et al. (2019), Management knows more about the company's status and prospects than the principal. Therefore, they may use financial reports to perpetrate fraud. Higher institutional ownership means tighter FFR detection of corporate governance. The research hypothesis:

**H2a** : *Opportunity has a positive and significant effect on FFR.*

**H2b** : *Institutional Ownership moderates the relationship between Opportunity and FFR.*

#### Rationalization and Institutional Ownership

Rationalization in the Fraud Heptagon model is a mental process in the fraud itself that the fraudulent actions carried out are reasonable or necessary in certain situations. Research by Medlar and Umar (2023), proves that rationalization has a significant and positive effect on FFR detection. According to ACFE (2020), changing auditors can indicate fraud. The more often auditors change, the higher the possibility of fraud. This eliminates any evidence of fraud that previous auditors might have discovered. Meanwhile, research conducted by Handoko (2021) shows that changing auditors has a negative effect on FFR detection. The selfish nature identified in the assumption that performance is based on obtaining rewards makes individuals do various things to improve performance. Institutional ownership reduces problems by contributing to external monitoring (Anisykurlillah et al., 2022). The research hypothesis:

**H3a** : *Rationalization has a positive and significant effect on FFR.*

**H3b** : *Institutional Ownership moderates the relationship between Rationalization and FFR.*

### Capabilities and Institutional Ownership

Fraud capability The Heptagon model refers to an individual's capacity or talent to commit fraud, encompassing technical knowledge, access, and resources. Companies that change managers or directors are suspected of committing fraud. The longer people sit in this position and adapt, the more they can control internal and social situations. This statement is supported by [Medlar and Umar \(2023\)](#) and [Nugroho and Diyanty \(2022\)](#), who state that the fraud index increases as the number of directors increases. Meanwhile, [Achmad, Hapsari et al. \(2022\)](#), [Handoko et al. \(2022\)](#), [Khamainy et al. \(2022\)](#), and [Puteri \(2023\)](#) state that Capability does not affect FFR detection. Institutional ownership can provide a [Ling et al. \(2020\)](#) check and balance against potentially detrimental director changes. Institutional ownership has a long-term interest in ensuring new directors have the integrity and competence to detect fraud. The research hypothesis:

**H4a** : *Capabilities have a positive and significant effect on FFR.*

**H4b** : *Institutional Ownership moderates the relationship between Capability and FFR.*

### Arrogance and Institutional Ownership

Arrogance in the Fraud Heptagon model refers to an attitude of arrogance or excessive self-confidence that a fraudster may have, thus influencing their fraudulent behavior. Research conducted by [Medlar and Umar \(2023\)](#) and [Uciati and Mukhibad \(2019\)](#) stated that more of the CEO photos displayed showed a high level of CEO arrogance. This condition indicates the possibility of fraud due to feelings of superiority due to ineffective internal control due to status and position ([Aprilia & Agustina, 2017](#)). However, [Achmad, Hapsari, et al. \(2022\)](#), [Fathmaningrum and Anggarani \(2021\)](#), and [Puteri \(2023\)](#) found that there was no correlation between the number of CEO photos and fraud. Companies with high institutional ownership can play a role in ensuring that applicable rules and norms are respected and violations do not go unpunished. The research hypothesis:

**H5a** : *Arrogance has a positive and significant effect on FFR.*

**H5b** : *Institutional Ownership moderates the relationship between Arrogance and FFR.*

### Ignorance and Institutional Ownership

Ignorance in the Fraud Heptagon refers to a lack of understanding or knowledge about the risks and consequences of fraudulent acts that influence a person's decisions regarding fraud. Knowledge and information can prevent someone from being uninformed and ignoring facts, resulting in dishonest behavior ([Mohamed & Yusof B, 2016](#)). Therefore, the director position is expected to minimize ignorance regarding corporate governance ([Handoko et al., 2022](#)). Directors can improve employee skills through internal and external experience and training. A structured orientation program is also required for new directors. High institutional ownership often creates greater scrutiny of a company's practices ([Suryani & Rofida, 2020](#)). Organizations with substantial institutional ownership are often more likely to develop a culture that upholds high ethical standards and encourages further education and training for their workforce. The research hypothesis:

**H6a** : *Ignorance has a positive and significant effect on FFR.*

**H6b** : *Institutional Ownership moderates the relationship between Ignorance and FFR.*

### Greed and Institutional Ownership

Greed can be associated with the desire for wealth, possessions, and power. According to [Bishop \(2022\)](#), 70% of fraud cases are committed because of greed. Remuneration is employee payment through bonuses, commissions, overtime, and other financial rewards. When someone performs well or the company achieves its goals, remuneration will be given. Greed in the Fraud Heptagon reflects the drive for excessive financial gain or greed that drives individuals to commit fraudulent acts to gain significant personal gain. This can give rise to greed. The research result of [Mohamed and Yusof B \(2016\)](#), shows that financial statement fraud and compensation are positively correlated. On the other hand, according to [Handoko et al. \(2022\)](#), Greed does not affect FFR detection. The desire to obtain additional funds can encourage deviant behavior. The size of institutional ownership has an impact on supervision The research hypothesis:

**H7a** : Greed has a positive and significant effect on FFR.

**H7b** : Institutional Ownership moderates the relationship between Greed and FFR.

## Methods

This study used the annual reports of state-owned enterprises that are publicly traded on the Indonesia Stock Exchange (IDX) for the 2018-2022 period. Five years were chosen to represent more accurate and relevant results. State-owned companies are used as the research population. Based on data from the Ministry of BUMN in 2022, there are 164 BUMN companies with 108 holding companies and 56 subsidiaries. However, only 25 state-owned companies are registered on the IDX (Kementerian BUMN, 2021).

Moderation model parameter estimation using WarpPLS 8.0 and Partial Least Square-Structural Equation Modeling (PLS-SEM). WarpPLS provides flexibility, especially if the research does not require an in-depth analysis of manifest or indicator variables (Elgarhy & Mohamed, 2023). WarpPLS estimates path coefficient p-values automatically. Most other PLS software supplies the T-Value, so users must compare it to the T Table or get the p-value anew (Kock, 2023). The goodness of fit and the inner model was utilized to analyze the data, but the outer model was ignored. The goodness of fit test is used to determine the viability of the research model—inner model for testing research ideas. Multiple model fit indicators are available via WarpPL, which may be used to compare the optimal model across various models (Christanty et al., 2023). The resulting fit indicators include average R-squared (ARS), average path coefficient (APC), and average variance inflation factor (AVIF). It can also provide output values for the indirect and total effects, p-value, standard error, and effect size.

**Table 1.** Purposive Sampling

NO	Purposive sampling criteria	Total
	<b>Population</b>	25
1	State-owned enterprises are not registered on the IDX in 2018-2022	(2)
2	Companies that do not yet have complete data to calculate M-Score	0
	<b>Total sampling</b>	<b>23</b>
	<b>Observation period (2018-2022)</b>	<b>5</b>
	<b>Number of observations (23x5)</b>	<b>115</b>
	<b>Strange</b>	<b>(1)</b>
	<b>Amount of data</b>	<b>114</b>

Source: Results of secondary data processing in 2023

Meanwhile, the sampling procedure uses a purposive sampling approach with predetermined criteria. The purpose of the purposive sampling technique is to ensure that no member of the population experiences the same changes as the sample (Ghozali I, 2016). Table 1 shows the sampling process

**Table 2.** Operational Definition of Variables

Independent Variable (X)		
Pressure	$\frac{\text{Total Liabilitas}}{\text{Total Asset}}$	(Handoko et al., 2022)
Opportunities	$\frac{\text{Number of Independent Commissioners Ratio}}{\text{Total Commissioners}}$	(Handoko et al., 2022)
Rationalization	Measured using a dummy variable, if there is a change of auditor in the 2018-2022 period, then the code is 1, but if not, then the code is 0.	(Handoko et al., 2022)

Capabilities	Measured using a dummy variable, if there is a change of directors in the 2018-2022 period, then the code is 1, but if not, then the code is 0.	(Handoko et al., 2022)
Arrogance	Measured using photos of CEO changes for the 2018-2022 period.	(Handoko et al., 2022)
Ignorance	$\frac{\text{Number corporate governance courses}}{\text{Total number of B. O. D. s}}$	(Mohamed & Yusof B, 2016)
Greed	$\frac{\text{Actual amounts Executive Directors Rumenerations}}{\text{Profits}}$	(Mohamed & Yusof B, 2016)
Institutional	There is share ownership from other institutions in the company	(Ling et al., 2020)

Source: Results of secondary data processing in 2023

This study uses FFR (Y) because the Beneish M-Score quantifies the dependent variable to identify financial reporting fraud. Companies with  $M > -2.22$  indicate fraud, represented by the number 1, and vice versa (Beneish, 1999). Time series data for 2017-2022 is also used in the FFR variable. The independent variables based on the Heptagon fraud model are Pressure (X1), Opportunity (X2), Rationalization (X3), Capability (X4), Arrogance (X5), Ignorance (X6), and Greed (X7) and Institutional Ownership (Z) as variables moderation.  $M\text{-Score} = -4.84 + 0.920 \text{ DSRI} + 0.528 \text{ GMI} + 0.404 \text{ AQI} + 0.829 \text{ SGI} + 0.115 \text{ DEPI} - 0.172 \text{ SGAI} + 4.679 \text{ TATA} - 0.327 \text{ LVGI}$  (Beneish, 1999).

## Result and Discussion

The descriptive analysis result in Table 4 illustrates the significance of several variable attributes in identifying FFR. FFR has an average chance of occurrence of 27.8%, with significant pressure (61%) and chance (56.5%). Rationalisation has significant variability (11%) and Capability (39%). Arrogance (6.82) and ignorance (3.66) showed significant mean differences. Meanwhile, the variability of greed (12.4) is quite large. Apart from that, support for institutional ownership is also quite significant, with an average of 5.26.

**Table 4.** Descriptive Statistics Results

Variable	elementary				
	N	school	Means	Minimal	Max
<b>False Financial Reporting (Y)</b>	114	0.417	0.278	0	1
<b>Pressure (X1)</b>	114	0.257	0.610	0	1
<b>Chance (X2)</b>	114	0.390	0.565	0.20	2
<b>Rationalisation (X3)</b>	114	0.308	0.11	0	1
<b>Capability (X4)</b>	114	0.491	0.39	0	1
<b>Arrogance (X5)</b>	114	2,515	6.82	0	13
<b>Ignorance (X6)</b>	114	1,913	3,660	0.75	9.1
<b>Greed (X7)</b>	114	0.551	0.124	-0.26	5.28
<b>Institutional Ownership (Z)</b>	114	3,271	5.26	0	9

Source: Results of secondary data processing in 2023

Table 5 shows the model fit results, and the quality index states that the research model meets all requirements. The P-value average Path Coefficient (APC) indicates a causal link between exogenous and endogenous factors, with a substantial  $P \leq 5$  indicating no multicollinearity. Then, the Average Full Collinearity VIF (AVFIF) is significant  $P \leq 5$ , meaning there is no collinearity in the data. Based on these results,

researchers can conclude that the Goodness of Fit Model can be accepted effectively and used for hypothesis testing. Some models that do not meet index requirements do not significantly impact data quality.

**Table 5.** Hasil Uji Model Fit

Model Fit and Quality Indices	Index	Criteria	Result
Average Path Coefficient (APC)	0.108	P=0.060	Meet The Criteria
Average R-Squared (ARS)	0.323	P<0.001	Meet The Criteria
Average Adjusted R-Squared	0.228	P<0.001	Meet The Criteria
Average Block Variance Inflation Factor (AVIF)	1.589	IF<=5, Ideally <=3.3	Fit Models
Average Full Collinearity VIF (AFVIF)	1.398	IF<=5, Ideally <=3.3	Fit Models
Tenenhaus GoF (GoF)	0.569	Small>=0.1, Medium>=0.25, Large>=0.36	Large
Simpson's Paradox Ratio (SPR)	0.714	IF>=0.7, Ideally =1	Fit Models
R-Squared Contribution Ratio (RSCR)	0.924	IF>=0.9, Ideally =1	Fit Models
Statistical Suppression Ratio (SSR)	0.857	IF>=07	Meet The Criteria
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	0.929	IF>=0.7	Fit Models

Source: Results of secondary data processing in 2023

The P value of 0.005 implies that the pressure variable and FFR have a significant relationship, hence **H1a is accepted**. The study's results are similar research by [Achmad, Ghozali, et al. \(2022\)](#); [Achmad, Hapsari, et al. \(2022\)](#); [Medlar and Umar \(2023\)](#); [Owusu et al. \(2022\)](#); [Wibowo and Putra, \(2023\)](#) and contradict research [\(Khamainy et al., 2022\)](#). as a result, stress is an important factor in fraud cases. This is consistent with the Fraud Heptagon Model, which shows that FFR does result from pressure. Then, hypothesis H1b tests Institutional Ownership, which moderates the relationship between pressure and FFR. The result is not statistically significant at 0.466, greater than 0.05. This means that **H1b is rejected**. The relationship between support for the situation faced by managers and their well-being and response to the situation was unrelated to arousal. The results of this research doesn't accept the results of the studies by [Anisykurlillah et al. \(2022\)](#) that institutional ownership can consider the influence of financial stability on FFR.

According to the result, institutional ownership can improve governance, resulting in more effective and efficient business performance. Table 6 shows that **H2a is accepted**, the probability variable's P-value is less than 0.05 or less than 0.001. This shows that the audit committee's level of supervision can reduce FFR risk in accordance with the Fraud Heptagon Model, which states that a lack of supervision can increase the chances of FFR occurring. This statement is in line with research results which [Puteri \(2023\)](#), [Uciati and Mukhibad \(2019\)](#) state that opportunity influences FFR. aTest H2b Institutional Ownership moderates the relationship between opportunity and FFR, obtained a P-value of 0.028, less than 0.05, indicating a moderating effect of institutional ownership on the relationship between opportunity and FFR. **H2b is rejected**. Although institutional ownership has not been able to identify conflicts of interest within the organization, oversight can uncover FFRs.

The p-value associated with the rationalization variable, as presented in Table 6, is 0.144, above the significance threshold of 0.05, so **H3a is rejected**. This means there is no tendency for management to detect FFR, either with high or low rationalization. These results cannot prove the research of [Handoko and Natasya \(2019\)](#) and [Owusu et al. \(2022\)](#) regarding the relationship between rationalization and FFR. Next, test H3b with a P-value of 0.407, which is more significant than 0.05, so **H3b is rejected**. This shows that institutional ownership does not have a moderating influence on the correlation between rationalization and FFR. The

optimal role of institutional ownership cannot influence managers' tendencies to take advantage of opportunities to detect FFR. These results do not align with the research (Anisykurlillah et al., 2022).

Skill level has no impact on FFR. The P value of 0.353, greater than 0.05, indicates this. Because the significant value is more than 0.05, **H4a is rejected**. The size of the director turnover rate does not affect FFR detection (Khamainy et al., 2022). A change in directorship may occur as a consequence of resignation or as an organizational initiative to improve its overall performance. This study's result aligns with research (Medlar & Umar, 2023; Nugroho & Diyanty, 2022; Uciati & Mukhibad, 2019). However, this research contradicts the research (Achmad, Ghozali, et al., 2022; Handoko, 2021). Therefore, the role of optimal institutional ownership cannot influence director turnover on FFR detection. This is because the significance value of H4b is 0.395, which is greater than the significance of 0.05, so **H4b is rejected**. A person's tendency to commit FFR will increase even though they have a low ego for fraud. It means **H5a is accepted**. This result is proven by a significance value of 0.017, which is more significant than 0.05. This result is in line with Uciati and Mukhibad (2019) that people with high levels of narcissism dislike poor performance and negative self-image. In other words, those with high egos need external validation of their leadership prowess. As the Fraud Heptagon Model states, a sense of superiority over the immunity of applicable rules or norms can trigger FFR. There is no correlation between institutional ownership and the relationship between hubris and FFR. The significance value of 0.245 is more significant than 0.05. **H5b is rejected**.

In Table 6, the P-value associated with the Ignorance variable is 0.215, exceeding the significance level of 0.05. Therefore, **H6a is rejected**. This means that developing knowledge through internal training and experience has yet to be able to reduce FFR actions. Often, individuals rely on their ignorance as a basis for rejecting information. These results do not align with research by Nugroho and Diyanty (2022) and Uciati and Mukhibad (2019), who found that ignorance positively affects FFR detection. On the other hand, the hypothesis test for H6b is significant at a P-value of 0.289, which is smaller than 0.05, so **H6b is rejected**. Institutional Ownership assumes responsibility for monitoring and controlling violations and can provide an ideal understanding of managerial activities. Testing of H7a can be seen from the P-value of the greed variable of 0.062, and if it is smaller than 0.05, then **H7a is rejected**. This shows that giving rewards has yet to be able to trigger human greed, and they tend to be dissatisfied with the amount given. This result does not align with research in which Handoko et al. (2022) state that greed does not affect FFR detection. Next, to test H7b, the P-value of 0.253 is more significant than 0.05; therefore, **H7b is rejected**. Although compensation impacts FFR, institutional ownership is unrelated to this correlation.

**Table 6.** Summary of Hypotheses

	<b>Hypothesis</b>	<b>Criteria</b>	<b>Sign</b>	<b>Summary</b>
H1a:	Pressure has a positive and significant effect on FFR.	<0.05	0.005	Accepted
H1b:	Institutional Ownership moderates the relationship between Pressure and FFR.	<0.05	0.466	Rejected
H2a:	Opportunity has a positive and significant effect on FFR.	<0.05	<0.001	Accepted
H2b:	Institutional Ownership moderates the relationship between Opportunity and FFR.	<0.05	0.028	Accepted
H3a:	Rationalization has a positive and significant effect on FFR.	<0.05	0.144	Rejected
H3b:	Institutional Ownership moderates the relationship between Rationalization and FFR.	<0.05	0.407	Rejected
H4a:	Capability has a positive and significant effect on FFR.	<0.05	0.353	Rejected
H4b:	Institutional Ownership moderates the relationship between Capability and FFR.	<0.05	0.395	Rejected
H5a:	Arrogance has a significant positive effect on FFR.	<0.05	0.017	Accepted
H5b:	Institutional Ownership moderates the relationship between Arrogance and FFR.	<0.05	0.245	Rejected
H6a:	Ignorance has a significant positive effect on FFR.	<0.05	0.215	Rejected



H6b:	Institutional Ownership moderates the relationship between Ignorance and FFR.	<0.05	0.289	Rejected
H7a:	Greed has a positive and significant effect on FFR.	<0.05	0.062	Rejected
H7b:	Institutional Ownership moderates the relationship between Greed and FFR.	<0.05	0.253	Rejected

\*(significant at  $p < 0.05$ )

## Conclusions and Recommendations

The research results show that of the seven main factors of the Heptagon Fraud Model, only Pressure, Opportunity, and Arrogance have a stimulus effect in detecting FFR. Meanwhile, other factors such as rationalization, capability, ignorance, and greed have no effect on FFR detection. Institutional Ownership can moderate the relationship between Opportunity and FFR. This means institutional ownership can influence investors' trust in management to manage related shares. This research provides implications for investors to be careful in making investments and not tend to look at increasing company stability. However, investors do not need to worry because the tendency for fraud in state-owned companies remains very low. The limitations of the research lie in the limited sources of information in describing the heptagon fraud model comprehensively. The scope of the research is limited to state-owned companies listed on the IDX. Further research is recommended to add information regarding the Fraud Heptagon model and expand the study size. Additionally, situational variables such as whistleblowing systems and big data are used as moderators.

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