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THE INFLUENCE OF THE FRAUD HEPTAGON ON FINANCIAL STATEMENT FRAUD IN ENERGY SECTOR COMPANIES INDONESIA

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Abstract
This study examines the influence of the Fraud Heptagon elements on financial statement fraud among consumer cyclical companies listed on the Indonesia Stock Exchange (IDX) during the 2021 to 2024 period. The Fraud Heptagon expands the Fraud Triangle and Fraud Diamond theories by adding two behavioral aspects, ignorance and greed, to provide a deeper understanding of the psychological drivers of fraud. Using a quantitative approach with purposive sampling, the study focuses on companies that consistently published complete annual reports and recorded positive profits. The research analyzes factors such as financial stability, financial targets, external pressure, personal financial needs, board changes, monitoring effectiveness, and auditor rotation. The findings show that personal financial needs and ignorance significantly increase the likelihood of financial statement fraud, while other variables have no significant effect. This indicates that individual financial pressure and negligence toward internal control systems are the main factors contributing to fraudulent reporting in Indonesia's consumer cyclical sector.

Keywords: Fraud Heptagon, Financial Statement Fraud, Ignorance, Personal Financial Need, Internal Control

1. Introduction

Financial statements are formal records that present a company's financial performance and position within a given period in accordance with PSAK 1 (IAI, 2021). They provide essential information for decision-making (Rizkiawan & Subagio, 2021). However, a positive appearance does not always indicate quality, as manipulation may occur when management hides the company's real condition, reducing transparency and reliability. Fraudulent reporting can harm both corporate financial health and overall economic stability by eroding trust (Mukaromah & Budiwitjaksono, 2021).

The Association of Certified Fraud Examiners (ACFE, 2022) defines fraud as an intentional act of deception or violation of law for personal or collective gain. Similarly, Sagala and Siagian (2021) view fraud as a deliberate act of dishonesty that harms others. According to ACFE, fraudulent acts fall into three main categories: corruption, asset misappropriation, and financial statement fraud. The 2022 ACFE report shows that asset misappropriation occurs in 86% of cases, corruption in 50%, and financial statement fraud in 9%.

PT Adaro Energy Tbk was accused of engaging in transfer pricing and tax evasion by channeling profits to its Singapore-based subsidiary, Coaltrade Services International Pte. Ltd., resulting in an estimated tax shortfall of US$125 million from 2009 to 2017 (Maharani, 2022). Similarly, PT Multi Harapan Utama was suspected of falsifying shipping data and conducting illegal coal exports, causing state losses of around Rp9.3

trillion (Lutfiani, 2022). Meanwhile, PT Timah Tbk was found to have manipulated its 2019 financial statements to hide discrepancies, with further investigations revealing alleged corruption in thin trade management that led to state losses of approximately Rp271 trillion due to environmental damage between 2015 and 2022 (Setiawan, 2024). This study is based on the Fraud Heptagon Theory, a modern framework that expands earlier fraud models to better detect financial statement fraud. The theory identifies seven main elements: pressure, opportunity, rationalization, competence, arrogance, culture, and religiosity (Reskino, 2022).

Empirical findings regarding this factor vary among studies. Octaviani et al. (2024) discovered that financial stability positively influences the likelihood of financial reporting fraud. Conversely, research by Azizah et al. (2025) indicated that financial stability has a negative relationship with fraudulent reporting. Meanwhile, Adhania et al. (2024) reported that financial reporting fraud does not significantly affect financial stability.

In addition, the study conducted by Hakim et al. (2024) on financial targets revealed that this factor positively affects the occurrence of financial statement fraud. However, Octaviana (2022) found a negative relationship between financial targets and fraudulent financial reporting. On the other hand, Handoko (2021) concluded that financial targets do not have a significant influence on financial statement fraud.

The next variable examined is external pressure. Research by Alyani et al. (2023) demonstrated that external pressure has a positive impact on financial statement fraud. In contrast, Setyono (2023) found that external pressure negatively influences the likelihood of fraudulent reporting. Meanwhile, Handoko (2021) suggested that external pressure does not exert a significant effect on financial statement fraud.

Another factor that may motivate fraudulent behavior is change of board, referring to shifts in the company's board of directors. According to Addawiyah et al. (2025), changes in board composition have a positive association with financial statement fraud. Conversely, Purnama (2022) found that changes in the board of directors negatively affect the occurrence of fraudulent reporting. However, Amar et al. (2023) reported that changes in board membership have no significant impact on financial statement fraud.

The subsequent element within the Fraud Heptagon Theory is ignorance. Research conducted by Djami and Murtanto (2024) indicates that ignorance has a notable influence on the likelihood of financial statement fraud. In contrast, findings from Aslamy and Lastanti (2025) suggest that ignorance, or a lack of awareness regarding internal controls, does not significantly affect fraudulent financial reporting.

Another determining factor is greed, which drives individuals to disregard ethical considerations and justify any action necessary to satisfy personal material ambitions. According to Dewi et al. (2020), greed does not significantly influence the occurrence of financial statement fraud. Likewise, research by Aslamy and Lastanti (2025) demonstrates that greed has no meaningful relationship with fraudulent reporting practices.

Effective monitoring also plays a role as a factor influencing the potential for financial statement fraud. The study conducted by Amar (2024) found that inadequate supervision has a positive relationship with fraudulent reporting, indicating that weak oversight mechanisms can increase the likelihood of fraud. Conversely, Adhania (2024) discovered that effective monitoring has a negative impact on financial statement fraud, implying that stronger monitoring systems help mitigate fraudulent behavior. However, research by Putro and Puspawati (2023) concludes that effective monitoring does not have a

significant effect on financial statement fraud.

Research on factors influencing financial statement fraud shows mixed results. Adhania (2024) found that industry characteristics positively affect fraud, while Octani et al. (2022) reported a negative relationship, and Setyono et al. (2025) found no significant effect. Similarly, studies on auditor change show varying outcomes: Setyono et al. (2025) found a positive effect, Addawiyah et al. (2025) a negative effect, and another study by Setyono et al. (2025) indicated no significant influence.

Finally, the frequency of CEO photographs included in company publications is also seen as an indicator of potential fraud. Research by Octani et al. (2022) shows that frequent appearances of CEO images have a positive correlation with financial statement fraud, possibly reflecting managerial arrogance or excessive self-promotion. In contrast, Achmad et al. (2022) reported a negative association, indicating that a higher frequency of CEO photos does not necessarily imply manipulation. Hakim et al. (2024) found that the frequency of CEO photographs displayed does not have a significant effect on financial statement fraud.

2. Theoretical Background

2.1 Agency Theory

Agency theory describes the relationship between principals, who assign authority, and agents, who perform duties and make decisions on the principals' behalf (Sasongko & Wijayantika, 2019). Along with the Theory of Planned Behavior (TPB), it helps explain fraudulent behavior in companies. The theory highlights the potential conflict between owners (principals) and managers (agents), where managers are expected to act in the owners' best interests. However, differing goals and information imbalances can lead to agency problems, creating opportunities for management to commit fraud (Yando et al., 2020).

2.2 Fraud Heptagon

The Fraud Heptagon Model, introduced by Mohamed Yusof in 2016, expands earlier fraud theories such as the Fraud Triangle, Fraud Diamond, and Fraud Pentagon. In his research on financial statement fraud in Malaysia, Yusof found that ignorance and greed also play significant roles in motivating fraudulent behavior. As a result, he proposed the Fraud Heptagon Model, which consists of seven key elements: pressure, opportunity, rationalization, capability, arrogance, ignorance, and greed.

2.3 Financial Stability

Agency theory suggests that conflicting interests between managers and owners can create pressure to meet performance expectations. When financial conditions deteriorate, this pressure intensifies, leading managers to manipulate financial reports to appear stable. Skousen et al. (2009) explain that unstable finances can drive such manipulative behavior, while Bawekes et al. (2018) and Septriyani & Handayani (2018) found that financial stability has a significant impact on the likelihood of fraudulent financial reporting.

Financial instability can drive management to manipulate reports, whereas stability boosts stakeholder confidence (Octani et al., 2022). Research by Kaffah and Afriyenti (2024), Azizah (2024), and Octani et al. (2022) shows a positive relationship between financial stability and the fraud heptagon, suggesting that strong financial performance is associated with greater transparency.

H1: Financial stability has a positive effect on financial statement fraud.

2.4 Financial Target

Agency theory suggests that conflicts occur when principals impose high performance targets, pressuring managers to manipulate financial statements to meet expectations (Skousen et al., 2009). While Apriliana and Agustina (2017) found that high financial targets increase fraud risk, Fatmaingrum and Anggarani (2021) found no significant relationship between the two.

Principals' pursuit of high returns and agents' performance-based rewards make financial targets a strong motivator (Bawokes et al., 2018). However, overly ambitious targets can pressure managers to manipulate financial results. Studies by Hakim et al. (2024), Amar and Iskandar (2023), and Rahayu and Susilowati (2025) found that financial targets, particularly profitability indicators like ROA, significantly increase the risk of fraudulent reporting.

H2: Financial target has a positive effect on financial statement fraud.

2.5 External Pressure

Agency theory explains that external expectations from creditors and investors can pressure management to show strong financial performance, potentially leading to manipulation (Agusutri & Sofie, 2019). However, research by Septriyani and Handayani (2018) and Agusutri and Sofie (2019) found that external pressure may actually reduce fraud due to increased external oversight.

Companies rely on internal and external funding, with the debt-to-asset ratio indicating their financial leverage. A higher ratio reflects greater debt and credit risk, making creditors more cautious. Studies by Alyani et al. (2023), Zahara & Ratnawati (2024), and Khamainy et al. (2022) show that higher external pressure is associated with a greater tendency for financial misreporting.

H3: External pressure has a positive effect on financial statement fraud.

2.6 Personal Financial Needs

Personal financial needs arise when executives' personal finances are closely linked to the company's performance (Skousen et al., 2009). Executives who hold key positions or company shares benefit financially when the firm performs well, but their personal finances suffer when company performance declines (Nugraheni & Triatmoko, 2018).

Personal financial need arises when executives' wealth depends on company performance, giving them strong influence over financial reporting (Skousen et al., 2009; Beasley, 1996; COSO, 1999; Dunn, 2004). Measured through insider ownership (OSHIP), this factor has been found by Skousen et al. (2009), Sari and Nugroho (2020), and Sari and Lestari (2020) to significantly increase the likelihood of financial statement fraud.

H4: Personal financial need has a positive effect on financial statement fraud.

2.7 Change Boards of Director

Agency theory emphasizes that conflicts between shareholders and directors can lead to financial statement manipulation as directors try to present better performance. Replacing or appointing new directors may improve a company's quality and reputation, but changes can also result from misconduct. When directors are involved in fraud, shareholders often replace them to maintain the company's credibility.

Director replacement is generally intended to enhance performance and restore credibility, particularly after suspected fraud. However, studies by Achmad et al. (2022),

Septiningrum and Mutmainah (2022), Sari and Nugroho (2021), Apriliana and Agustina (2017), and Fathmaningrum and Anggarani (2021) found no significant effect on financial statement fraud, whereas Larum et al. (2021) reported a positive relationship, indicating that board changes may sometimes coincide with fraudulent reporting.

H5: Change in directors has a positive effect on financial statement fraud.

2.8 Ignorance

Ignorance refers to a lack of awareness or deliberate disregard for information that should be acknowledged (Heffernan, 2011). In auditing and financial reporting, it occurs when management or auditors ignore signs of fraud to avoid moral or legal consequences, thereby weakening internal controls and increasing the risk of financial statement fraud (Tummler, 2025).

Ignorance refers to a lack of awareness or understanding of the risks and consequences of fraud, influencing unethical decision-making (Satan et al., 2024). Apathy toward anti-fraud measures weakens corporate governance and increases fraud risk. In organizations with low ethical standards, fraudulent acts may become normalized (Djami, 2022).

H6: Ignorance has a positive effect on financial statement fraud.

2.9 Greed

Greed is the excessive pursuit of wealth or power without ethical consideration (Brink et al., 2018). In business, it appears when managers prioritize personal gain over stakeholder interests, often leading them to manipulate earnings for bonuses, job security, or stock price increases, thereby heightening the risk of financial statement fraud (Murphy & Dacin, 2011).

Greed stems from human dissatisfaction, driving individuals to pursue their desires through any means (Qorirah & Syofyan, 2024). Such individuals often feel insecure about their achievements or positions and may act selfishly (Pangaribuan & Pangaribuan, 2025). In agency theory, excessive executive pay can lead to moral hazard, as managers prioritize personal gain over stakeholder interests. High remuneration may push executives to manipulate financial data to maintain or enhance earnings performance (Candra et al., 2024).

H7: Greed has a positive effect on financial statement fraud.

2.10 Effective Monitoring

In agency theory, monitoring is essential to reduce agency costs and prevent opportunistic behavior by managers. Strong oversight minimizes information gaps between owners and management, ensuring aligned interests. However, weak monitoring such as a reduced number of independent commissioners can increase the risk of fraud. Studies by Rizkiawan and Subagio (2021) and Nurbaiti and Arthami (2023) support that ineffective monitoring raises the likelihood of financial statement fraud.

Effective monitoring reduces the likelihood of fraud by ensuring strong oversight mechanisms, such as active internal control units (Ghiffari & Fuad, 2024). Within the agency theory framework, effective supervision—particularly from independent parties helps optimize management practices and limit fraudulent behavior. Research by Aulia & Afiah (2020) and Alzharani et al. (2022) shows that effective monitoring significantly decreases financial statement fraud.

H8: Effective monitoring has a positive effect on financial statement fraud.

2.11 Nature of Industry

Agency theory posits that complex industries increase information asymmetry, giving managers greater discretion that may enable manipulation (Sari & Nugroho, 2020). However, Oktafiana et al. (2019) and Yesiariani & Rahayu (2017) found a negative relationship, suggesting that specific industry characteristics can actually lower fraud.

The Nature of Industry refers to the specific risks faced by sectors experiencing economic downturns. For instance, in the case of uncollectible accounts receivable, companies estimate the balance because payment guarantees from clients are absent. Consequently, the amount of these balances in the financial statements could potentially be manipulated by management without detection. Research by Octaviana (2022), Adhania et al. (2024), and Alyani et al. (2023) found that the nature of the industry has a significant positive effect on the likelihood of fraudulent financial reporting.

H9: Nature of industry has a positive effect on financial statement fraud.

2.12 Change in Auditor

In agency theory, auditors act as external monitors that help reduce information asymmetry and increase the credibility of financial reports. However, frequent auditor changes can weaken this oversight and are often associated with earnings management (Faradzia, 2019; Septriyani & Handayani, 2018).

Rationalization is demonstrated when companies frequently change auditors to conceal fraudulent activities previously discovered by the former auditors (Syahria et al., 2019). Research by Setyono et al. (2023) found that an auditor change positively affects financial statement fraud. This suggests that frequent auditor changes increase the potential for fraud. These findings are supported by Alyani et al. (2023) and Nurbaiti & Putri (2023), who also found a positive relationship.

H10: Auditor changes have a positive effect on financial statement fraud.

2.13 Frequent Number Ceo Picture

According to agency theory, narcissistic CEOs tend to prioritize self-image and may manipulate financial data to appear more successful. The frequent appearance of a CEO's photo in annual reports can reflect this narcissism, indicating strong self-focus and ego. Such behavior highlights a conflict between managerial self-interest and shareholders' demand for transparency, making repeated CEO images a possible signal of fraudulent tendencies.

The frequent number of CEO pictures refers to how often the CEO's photo appears in a company's annual report. The more frequent these photos appear, the higher the perceived level of arrogance and desire for recognition, reflecting an overconfidence that extends beyond effective internal control. Sari & Nugroho (2020) state that frequent CEO photos indicate a high level of superiority. Research by Octani et al. (2022), Dewi & Yuliati (2022), and Bawekes et al. (2018) found that the frequent number of CEO pictures positively affects financial statement fraud.

H11: Frequent number of CEO pictures has a positive effect on financial statement fraud.

3. Methods

3.1 Research Design

This study employs a quantitative research design with a causal associative approach to examine the relationship between the independent variables and the dependent

variable. The research focuses on Consumer Cyclicals companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2024 period. Secondary data were obtained from annual financial reports published on the official IDX website (www.idx.co.id) and the respective companies' official websites.

3.2 Sampling Method

The study focused on Consumer Cyclicals companies listed on the IDX from 2021–2024, using purposive sampling based on Hakim (2023). Samples included firms with complete annual reports, positive profits, and active listings to ensure representativeness of the sector's financial condition. The criteria for sample selection were as follows:

1) Companies in the energy sector that consistently released financial statements throughout the 2021–2024 period.
2) Companies in the energy sector that generated profits during the 2021-2024 period.
3) Companies that had receivables throughout the 2021–2024 period.

3.3 Data Analysis Method

The data analysis in this study employs descriptive statistical analysis and panel data regression. Descriptive analysis aims to examine collected data by organizing it into tables and summaries to identify patterns. Panel data regression combines cross-sectional and time-series data using three models: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM).

Model selection is conducted through two main tests. The Chow test compares CEM and FEM; if the p-value is below 0.05, FEM is selected. The Hausman test compares FEM and REM; if the p-value is below 0.05, FEM is selected; otherwise, REM is selected.

Prior to hypothesis testing, classical assumption tests are conducted to ensure the model is reliable. The normality test ensures normally distributed residuals. The multicollinearity test checks for high correlations among variables; a model is free from multicollinearity if VIF values are below 10 and Tolerance values are above 0.10. The heteroscedasticity test checks for constant residual variance using the Glejser method.

Hypothesis testing includes the F-test for overall model significance, the coefficient of determination (R^2 and Adjusted R^2) to measure explanatory power, and the t-test to examine the individual effect of each independent variable. A p-value below 0.05 indicates significance.

Based on the Chow and Hausman tests, the Fixed Effect Model (FEM) was selected as the most appropriate model for this study.

3.4 Definition and Measurement of Variables

Table1. Definition and Measurement of Variables

No	Variable	Definition	Indicator	Scale
1	F - Score	It represents the combined total of two variables: accrual quality and financial performance.	F - Score=Accrual Quality + Financial Performance Accrual Quality = WC + NCO + FIN / Average Total Assets Financial Performance= Change in Receivable + Change in Inventories + Change in Cash Sales + Change in Earnings.	Ratio

No	Variable	Definition	Indicator	Scale
2	Financial Target	It reflects the profit expected from business operations.	ROA = Net Income / Total Asset	Ratio
3	Financial Stability	It refers to a situation that reflects the stability of a company's financial position.	ACHANGE = (Total Asset (1) –Total Asset (t-1) / Total Asset (t-1)	Ratio
4	External Pressure	it is the pressure from management to meet third-party expectations.	LEVERAGE = Total Liabilities/Total Asset	Ratio
5	Personal Financial Need	It indicates leadership or strategic changes within the company.	OSHIP = Number of Managerial Share / Total Number of Shares	Ratio
6	Change in Direction	It reflects changes in company leadership or key strategies	If there is a change in the board of directors, a code of 1 will be given, and if not, a code of 0.	Nominal
7	Ignorance	It shows management's neglect of ethics and fraud prevention	IGNORANCE = Number of Board Governance Trainings / Number of Board Members	Ratio
8	Greed	It is management's strong drive for personal gain leading to manipulation.	GREED = Director Remuneration / Profit After Tax	Ratio
9	Effective Monitoring	Ineffective monitoring occurs when the company's oversight system and audit committee are weak.	BDOUT= Number of Commissioners Independent / Number of Board of Commissioners	Ratio
10	Ideal Condition	It represents the optimal	NOI =	Ratio

No	Variable	Definition	Indicator	Scale
	of The Company	condition of a company within its industry.	((Receivable(t)/Sales(t)) (Receivable(t-1)/Sales(t-1))	
11	Change in Auditor	Auditor changes can raise the risk of concealing past fraud.	If the company changes its auditor, it will be given the code 1, and if not, code 0.	Nominal
12	Frequent Number CEO Picture	Managerial overconfidence can drive arrogance and financial manipulation.	The total count of CEO images or photographs presented in the annual report.	Nominal

4. Results and Discussion

4.1 Descriptive Statistical Analyzing

Table 2. Descriptive Statistical Results

Variable	Mean	Median	Maximum	Minimum	Std. Dev.
Financial Stability	0.069375	0.060000	0.240000	0.000000	0.062320
Financial Target	0.194600	0.110000	2.700000	-0.890000	0.477374
External Pressure	0.427917	0.480000	0.890000	0.000000	0.228597
Personal Financial Needs	0.080729	0.030000	0.700000	0.000000	0.113316
Change in Board of Directors	0.270833	0.000000	3.000000	0.000000	0.512562
Ignorance	0.804167	0.850000	2.700000	0.000000	0.788725
Greed	0.120313	0.035000	0.860000	0.000000	0.175262
Effective Monitoring	0.397604	0.400000	0.800000	0.000000	0.134483
Ideal Condition of the Company	-0.038542	-0.010000	0.310000	-0.960000	0.161818
Change in Auditor	0.177083	0.000000	1.000000	0.000000	0.383743
Frequency of CEO Pictures	2.447917	2.000000	4.000000	1.000000	0.693880

Source: Processed data using EViews 12 (2025)

4.2 Panel Data Regression Selection Techniques

Table 6. Panel Data Model Selection Test Results

No.	Test Method	Comparison	Result
1	Chow Test	CEM vs FEM	FEM
2	Hausman Test	REM vs FEM	REM
3	Lagrange Multiplier (LM) Test	CEM vs REM	REM

Source: Processed data using EViews 12 (2025)

4.3 Hypothesis Testing

4.3.1 Simultaneous Test (F-Test)

Table 9. F-Test Results

F-statistic	Prob(F-statistic)
1.383140	0.006025

Source: Processed data using EViews 12 (2025)

The F-test results show an F statistic of 1.383140 with a probability of 0.006025 (<0.05), indicating that all independent variables collectively have a significant effect on the dependent variable.

4.3.2 Coefficient of Determination (R^2)

Table 10. Coefficient of Determination Results

R-squared	Adjusted R-squared
0.153350	0.042479

Source: Processed data using EViews 12 (2025)

The R-squared value of 0.153350 indicates that the independent variables explain about 15.33% of the variation in the dependent variable, while the adjusted R-squared of 0.042479 shows the model has modest explanatory power.

4.3.3 Partial Test (T-Test)

Table 11. T-Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Conclusion
KLK (Y)	0.456068	0.231243	1.972250	0.0519	H_1 Rejected
ROA	0.232958	0.681805	0.341678	0.0334	H_2 Accepted
ACHANGE	-0.044515	0.076318	-0.583282	0.5613	H_3 Rejected
LEVERAGE	-0.151097	0.169409	-0.891907	0.3750	H_4 Rejected
OSHIP	0.703620	0.329166	2.137583	0.0355	H_5 Accepted
CID	0.113898	0.072898	1.562443	0.1219	H_6 Rejected
IGNORANCE	-0.087632	0.047900	-1.829461	0.0409	H_7 Accepted
GREED	-0.373231	0.231502	-1.612211	0.1107	H_8 Rejected
BDOUT	0.097779	0.275403	0.355038	0.7235	H_9 Rejected
NOI	-0.137689	0.231048	-0.595932	0.5528	H_{10} Rejected
CHAUD	0.074456	0.097599	0.762879	0.4477	H_{11} Rejected
CEOPIC	-0.001476	0.054738	-0.026972	0.9785	H_{12} Rejected

Source: Processed data using EViews 12 (2025)

The detailed interpretation of the t-test results is as follows:

1) KLK (Y) records a probability value of 0.0519, which exceeds the 0.05 threshold, indicating an insignificant effect on the dependent variable. Accordingly, the first hypothesis (H_1) is rejected.
2) ROA shows a probability value of 0.0334, which is less than 0.05, signifying a statistically significant influence on the dependent variable. This result implies that profitability (ROA) has a significant effect on Y; therefore, the second hypothesis (H_2) is accepted.
3) ACHANGE obtains a probability value of 0.5613, higher than 0.05, suggesting no significant relationship with the dependent variable. Thus, the third hypothesis (H_3) is rejected.
4) LEVERAGE has a probability value of 0.3750, exceeding 0.05, indicating no significant effect on the dependent variable. Hence, the fourth hypothesis (H_4) is rejected.
5) OSHIP yields a probability value of 0.0355, which is below 0.05, demonstrating a significant influence on the dependent variable. This result indicates that ownership structure (OSHIP) significantly affects Y; consequently, the fifth hypothesis (H_5) is accepted.

6) CID presents a probability value of 0.1219, which is greater than 0.05, showing no significant effect on the dependent variable. Therefore, the sixth hypothesis (H_6) is rejected.
7) IGNORANCE records a probability value of 0.0409, which is less than 0.05, implying a statistically significant impact on the dependent variable. Accordingly, the seventh hypothesis (H_7) is accepted.
8) GREED exhibits a probability value of 0.1107, higher than 0.05, indicating an insignificant relationship with the dependent variable. Thus, the eighth hypothesis (H_8) is rejected.
9) BDOUT obtains a probability value of 0.7235, exceeding 0.05, signifying no significant effect on the dependent variable. Therefore, the ninth hypothesis (H_9) is rejected.
10) NOI displays a probability value of 0.5528, which is greater than 0.05, suggesting no significant influence on the dependent variable. Hence, the tenth hypothesis (H_{10}) is rejected.
11) CHAUD shows a probability value of 0.4477, above the 0.05 significance level, indicating no significant impact on the dependent variable. Consequently, the eleventh hypothesis (H_{11}) is rejected.
12) CEOPIC records a probability value of 0.9785, which exceeds 0.05, confirming that this variable does not have a significant effect on the dependent variable. Therefore, the twelfth hypothesis (H_{12}) is rejected.

4.4 Panel Data Regression Analysis

Based on the Chow, Hausman, and Lagrange Multiplier tests, the Random Effect Model (REM) was identified as the most suitable panel data regression approach, and the regression equation was derived from its estimation results.

$$KLK\ (Y) = 0.456068292284 + 0.232958232637*ROA - 0.0445146631003*ACHANGE - 0.151096725432*LEVERAGE + 0.703619614123*OSHIP + 0.11389840446*CID - 0.087631936608*IGNORANCE - 0.373230830628*GREED + 0.0977785999963*BDOUT - 0.137688962965*NOI + 0.0744559244654*CHAUD - 0.0014763814794*CEOPIC + [CX=R]$$

The regression results show that when all independent variables are zero, financial statement quality (FSQ) is 0.4560. Profitability (ROA) positively affects FSQ, where a 1% increase improves quality by 0.2329, indicating better reporting with higher profits. Conversely, auditor change (ACHANGE) and leverage both negatively impact FSQ; each 1% increase reduces quality by 0.0445 and 0.1510, respectively, suggesting that frequent auditor turnover and high debt levels may weaken reporting consistency and transparency.

The regression results show that ownership concentration (OSHIP) strongly improves financial reporting quality, with a 1% increase raising it by 0.7036. Independent committees (CID) and independent board members (BDOUT) also positively influence transparency and oversight. In contrast, ignorance and greed have negative effects, with coefficients of -0.0876 and -0.3732, indicating that higher levels of these traits reduce financial statement quality.

The NOI variable has a negative coefficient of -0.1376, indicating that an increase in noise or information interference in reporting will reduce the quality of financial reports. Conversely, CHAUD has a positive value of 0.0744, indicating that the higher the quality of the auditor, the higher the quality of the financial statements. Finally, CEOPIC has a

very small negative coefficient of -0.0014, which means that the influence of the CEO's position or image on the quality of financial statements is relatively weak and tends to reduce quality insignificantly.

Overall, these results show that the variable with the most positive influence on financial statement quality is OSHIP with the highest coefficient of 0.7036, while the variable that most significantly reduces financial statement quality is GREED with the largest negative coefficient of -0.3732.

4.5 Interpretation of Research Results

4.5.1 The Effect of Financial Stability on Financial Statement Fraud

Based on the results of the regression analysis, the financial stability variable (X_1) exhibits a t-statistic value of 0.341678 and a significance level (Prob.) of 0.0334. Since this probability value is smaller than the predetermined significance threshold of 0.05 ($0.0334 < 0.05$), the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. This result is consistent with previous studies conducted by Kaffah and Afriyenti (2024), Azizah (2024), and Octani et al. (2022), which assert that pressure arising from financial instability tends to increase the likelihood of fraudulent financial reporting. However, this finding diverges from the research of Azizah et al. (2025), which reported that financial stability does not significantly affect financial statement fraud—possibly due to variations in corporate governance mechanisms and the effectiveness of internal control systems across firms.

4.5.2 The Effect of Financial Targets on Financial Statement Fraud

Based on the regression analysis results, the financial target variable (X_2) has a t-statistic value of –0.583282 and a significance value of 0.5613. Since the significance value is greater than the significance level of 0.05 ($0.5613 > 0.05$), the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected. Thus, it can be concluded that financial targets do not have a significant effect on fraudulent financial reporting. This finding is in line with Octaviana's (2022) research, which states that financial targets do not have a significant effect on fraudulent financial reporting because the company's targets are still in line with real conditions and internal controls are functioning well. However, these results differ from the research by Hakim et al. (2024), Amar and Iskandar (2023), and Rahayu and Susilowati (2025), which found that financial targets have a positive effect on financial statement fraud, especially when the targets set are too high or unrealistic.

4.5.3 The Effect of External Pressure on Financial Statement Fraud

Based on the results of the t-test, the external pressure variable (X_3) obtained a t-statistic value of –0.891907 with a significance level of 0.3750. Since this value exceeds the 0.05 significance threshold ($0.3750 > 0.05$), the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1) is rejected. These results indicate that the external pressure variable does not exert a significant influence on financial statement fraud. These findings are in line with research conducted by Octaviana (2022), which shows that external pressure does not affect financial statement fraud, where external pressure does not always correlate directly with fraud if the company is able to maintain operational stability and has good governance. However, these results contradict the research by Zahara and Ratnawati (2024) and Khamainy et al. (2022), which states that external pressure, as evaluated by the leverage ratio, affects fraud in financial reporting.

4.5.4 The Effect of Personal Financial Need on Financial Reporting Fraud

Based on the t-test results, the personal financial need variable (X_4) obtained a t-statistic value of 2.137583 with a significance level of 0.0355. Because the significance value is less than 0.05 (0.0355 < 0.05), the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This indicates that personal financial need has a positive and significant effect on financial statement fraud. Empirically, these results are in line with the research of Skousen et al. (2009), Sari and Nugroho (2020), and Sari and Lestari (2020), which found that personal financial need has a positive influence on management's tendency to commit fraud. However, these findings differ from the research by Andhania et al. (2024), which states that personal financial needs do not have a significant effect because companies already provide adequate compensation and welfare.

4.5.5 The Effect of Change Boards of Directors on Financial Statement Fraud

Based on the results of the t-test, the change in the board of directors' variable (X_5) obtained a t-statistic value of 1.562443 with a significance level of 0.1219. Since this value exceeds the 0.05 significance threshold (0.1219 > 0.05), the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1) is rejected. These findings indicate that changes in the board of directors do not have a significant effect on financial statement fraud. These findings are consistent with the study conducted by Amar et al. (2023), which demonstrated that board turnover does not significantly influence financial statement fraud. However, they contrast with the research findings of Addawiyah et al. (2025) and Purnama (2022), which indicate that board turnover—when assessed through the leverage ratio—has a significant effect on financial statement fraud.

4.5.6 The Effect of Ignorance on Financial Statement Fraud

Based on the results of the t-test, the ignorance variable (X_6) obtained a t-statistic value of -1.829461 with a significance level of 0.0409. Since this value is smaller than the 0.05 significance threshold (0.0409 < 0.05), the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. These findings indicate that ignorance has a positive and significant effect on financial statement fraud. Empirically, these results are in line with the research by Djami and Murtanto (2024), which found that ignorance has a positive influence on management's tendency to commit fraud. However, these findings differ from the research by Aslamy and Lastanti (2025), which states that ignorance does not have a significant effect because companies have provided adequate compensation and welfare.

4.5.7 The Effect of Personal Greed on Financial Statement Fraud

Based on the results of the t-test, the greed variable (X_7) obtained a t-statistic value of -1.612211 with a significance level of 0.1107. Since this value exceeds the 0.05 significance threshold (0.1107 > 0.05), the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1) is rejected. These findings indicate that the greed variable does not have a significant influence on financial statement fraud. This finding is in line with research conducted by Dewi et al. (2022), which shows that greed does not affect financial statement fraud. However, these results contradict the research by Aslamy and Lastanti (2025), which states that greed influences financial statement fraud.

4.5.8 The Effect of Effective Monitoring on Financial Statement Fraud

Based on the t-test results, the effective monitoring variable (X_8) has a t-statistic value of 0.355038 and a significance value of 0.7235. This significance value is greater than the significance threshold of 0.05 (0.7235 > 0.05), so the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected. This means that effective monitoring does not have a significant effect on financial statement fraud. These findings are in line with research conducted by Putro and Puspawati (2023), which shows that effective monitoring has no effect on financial statement fraud. However, these results contradict the research of Amar (2024) and Adhania (2024), which states that effective monitoring has an effect on financial statement fraud.

4.5.9 The Effect of Nature of Industry on Financial Statement Fraud

Based on the results of the t-test, the nature of industry variable (X_9) obtained a t-statistic value of -0.595932 with a significance level of 0.5528. Since this value exceeds the 0.05 significance threshold (0.5528 > 0.05), the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1) is rejected. These findings indicate that the nature of industry variable does not exert a significant influence on financial statement fraud. Empirically, these results are in line with the research of Octaviana (2022), Adhania et al. (2024), and Alyani et al. (2023), who found that the nature of industry has a positive influence on management's tendency to commit fraud. However, these findings differ from the research by Sari and Nugroho (2020), which states that the nature of the industry has no significant effect because companies have provided adequate compensation and welfare.

4.5.10 The Effect of Change in Auditor on Financial Statement Fraud

Based on the t-test results, the change in auditor variable (X_{10}) has a t-statistic value of 0.762879 and a significance value of 0.4477. This significance value is greater than the significance threshold of 0.05 (0.4477 > 0.05), so the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected. This means that change in auditor does not have a significant effect on financial statement fraud. However, if it is done as a form of good corporate governance, then a change in auditor can actually strengthen the monitoring mechanism and reduce the risk of fraud. Therefore, the interpretation of this variable needs to consider the regulatory context, auditor independence, and the company's motivation for changing auditors. These findings are in line with research conducted by Septriani and Handayani (2018), which shows that changes in monitoring do not affect financial statement fraud.

4.5.11 The Effect of Frequent CEO Turnover on Financial Statement Fraud

Based on the results of the t-test, the frequency of CEO pictures variable (X_{11}) exhibits a t-statistic value of -0.026972 and a significance level of 0.9785. Since this value exceeds the established significance threshold of 0.05 (0.9785 > 0.05), the null hypothesis (H_0) is accepted, while the alternative hypothesis (H_1) is rejected. These results are consistent with the study conducted by Sari and Nugroho (2020), which found that the frequency of changes in CEOs does not significantly influence financial statement fraud. However, these findings are not in accordance with the research of Octani et al. (2022) and Dewi and Yuliati (2022), who demonstrated that a high frequency of CEO turnover has a significant impact on the occurrence of financial statement fraud.

5. Conclusion

This study aimed to examine the effect of financial stability, financial targets, external pressure, personal financial needs, change in board of directors, ignorance, greed, effective monitoring, nature of industry, change in auditor, and frequency of CEO pictures on financial statement fraud. Based on the analysis of Consumer Cyclicals companies listed on the IDX from 2021-2024, the following conclusions are drawn.

Financial stability has a significant positive effect on financial statement fraud, indicating that unstable financial conditions increase fraud risk. Financial targets, external pressure, change in board of directors, greed, effective monitoring, nature of industry, change in auditor, and CEO picture frequency do not have significant effects. Personal financial needs and ignorance have significant positive effects on financial statement fraud.

These findings suggest that companies should strengthen internal controls, improve financial stability, and enhance employee training on accounting standards to reduce fraud risk. Regulators should increase oversight of companies where management has high personal financial needs.

The study has limitations, including a limited sample (Consumer Cyclicals sector only), a short observation period (2021-2024), and modest explanatory power (Adjusted R^2 = 4.25%). Future research should expand to other sectors, extend the observation period, and include additional variables such as corporate governance mechanisms and whistleblowing systems. Despite these limitations, this study provides empirical evidence on the determinants of financial statement fraud in the Indonesian capital market.

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