IJAMESC, Vol. 4 No. 2, April 2026
DOI: https://doi.org/10.61990/ijamesc.v4i2.773 e-ISSN 2986-8645

IMPACT OF FRAUD HEPTAGON ON FINANCIAL STATEMENT FRAUD IN MANUFACTURING COMPANIES

Faiz Dzikrullah[1]*, Mohamad Zulman Hakim[2]
[1.2]Accounting Study Program, Faculty of Economics and Business, Universitas Muhammadiyah Tangerang, Indonesia
Corresponding Author:
faizdzikrullah2@gmail.com

Abstract
This study aims to analyze the effect of financial target, financial stability, external pressure, personal financial need, change in direction, ignorance, greed, effective monitoring, ideal condition of the company, change in auditor, and frequency of CEO picture on financial statement fraud in manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022-2024 period. This study uses a quantitative approach with secondary data from company annual reports. The research sample consisted of 91 manufacturing companies selected using purposive sampling, with a total of 273 observations over three years. The data analysis technique used is panel data regression analysis with EViews 12 software. The results show that financial target, external pressure, change in directors, ideal condition of the company, and change in auditor have a positive effect on financial statement fraud. Meanwhile, financial stability, personal financial need, ignorance, greed, effective monitoring, and frequency of CEO picture have no significant effect on financial statement fraud. The Adjusted R-squared value of 7.51% indicates that the ability of independent variables to explain the dependent variable is limited, so future research is suggested to add other variables such as audit quality, corporate governance, or macroeconomic factors.

Keywords: Financial Statement Fraud, Fraud Heptagon, Panel Data Regression, Indonesia Stock Exchange

1. Introduction

Financial statement fraud is one of the most serious forms of accounting and financial misconduct. It is defined as the intentional misstatement or omission of information in financial reports with the aim of deceiving users of those reports (Permatasari & Laila, 2021). Although financial statement fraud occurs less frequently than asset misappropriation and corruption, it tends to have a far greater impact. According to the Association of Certified Fraud Examiners (ACFE, 2022), the average losses resulting from financial statement fraud are significantly higher and can reach hundreds of thousands of dollars.

Management often faces significant pressure in preparing financial reports, primarily from shareholders, creditors, and capital markets that demand strong performance (Jao et al., 2020). This situation encourages managers to maintain their positions, secure incentives, or achieve profit targets, leading to manipulative actions such as earnings management or presenting financial statements more favorably than their actual condition (Anggraini et al., 2023). When top management has both the opportunity and capability, they may manipulate assets, revenues, and liabilities, resulting in distorted financial information that undermines its reliability for decision-making (Hudaya et al., 2021).

Persistent and extreme negative values strongly suggest deep-seated structural issues at PT. Modern Internasional Tbk, likely pointing to systemic internal control failures and inadequate corporate governance. Such persistent deficits potentially stemming from poor segregation of duties, flawed authorization processes, or failed reconciliations align with the COSO (2013) framework, where weak control environments inherently create opportunities for fraud. Furthermore, the lack of effective oversight by the Board of Directors or Audit Committee, as highlighted by Arens et al. (2012) and Beasley (1996), likely enables these issues to remain unresolved, making the company highly vulnerable to sustained fraudulent activities. In essence, the company's ongoing financial instability appears to be a direct consequence of a compromised governance structure and ineffective internal monitoring mechanisms.

Various theoretical frameworks have been developed to explain and detect increasingly complex forms of fraud. The Fraud Triangle theory proposed by Cressey focuses only on three primary elements of fraud: pressure, opportunity, and rationalization (Sutrisno & Anwari, 2023). However, earlier models are considered insufficient to comprehensively explain all factors contributing to fraud (Sutrisno & Anwari, 2023). Therefore, the Fraud Heptagon framework is adopted as the main theoretical foundation of this study. Vousinas (2019) expanded the model by introducing four additional factors to better capture the drivers of fraud. This framework not only considers financial aspects such as pressure and weaknesses in internal controls, but also incorporates psychological and behavioral dimensions of management, including capability, arrogance, and ignorance. It is widely argued that the inclusion of these additional elements is essential for a more comprehensive understanding of how leadership characteristics such as manipulative capability, egocentric tendencies, and ethical indifference contribute to the escalation of financial statement fraud (Wardani & Ratnasari, 2023).

Numerous accounting studies have consistently identified a relationship between financial targets and financial statement fraud. Management may be driven to manipulate financial reports in order to meet stakeholder expectations due to pressure to achieve high profit targets or return on assets (ROA) (Agustina & Iskak, 2021). However, other studies suggest that strong internal controls can mitigate such risks, thereby reducing the influence of financial targets on fraudulent behavior (Listianto & Muniroh, 2024). In contrast, additional research has found an adverse relationship, indicating that higher ROA may actually increase the likelihood of fraud (Jurnal Riset Akuntansi dan Auditing, 2022). These inconsistent findings highlight the need to re-examine the relationship between financial targets and financial statement fraud, particularly within the context of manufacturing companies.

This trend indicates a rising risk of fraud, potentially driven by increasing financial target pressures or less effective internal controls. The Fraud Heptagon theory suggests that a combination of pressure, opportunity, and rationalization constitutes the primary drivers of fraud (Marks, 2012; Wolfe & Hermanson, 2004). Meanwhile, other companies such as INDS and SMSM demonstrate only minor fluctuations, indicating relatively stable fraud risk management. However, annual variations still occur, which may be influenced by external factors such as market conditions and macroeconomic policies (Albrecht et al., 2011).

Within the accounting literature, there is a notable scarcity of studies examining the relationship between financial statement fraud and financial stability. Firms experiencing unstable financial conditions are generally more prone to fraud risk, as pressure to

demonstrate strong financial performance may incentivize management to manipulate reports (Listianto & Muniroh, 2024). Nevertheless, evidence also indicates that financial stability itself can influence the occurrence of fraud (Septiani et al., 2025). Conversely, other studies find no significant effect of financial stability on financial statement fraud, suggesting that factors such as managerial morality and the effectiveness of oversight may also play a critical role (Wardani & Ratnasari, 2023).

Empirical findings on the relationship between external pressure and financial statement fraud remain inconclusive. Firms with high leverage may face greater pressure from external parties, such as creditors and capital markets, which can increase the likelihood of fraud as management seeks to maintain the company's financial reputation (Aulia et al., 2024). In contrast, some studies find that external pressure does not have a significant effect on fraud, as effective internal monitoring and auditing mechanisms can mitigate such pressures (Huang et al., 2025). Moreover, other research reports an inverse relationship, suggesting that stronger external oversight may actually reduce the likelihood of financial statement manipulation (Septiani et al., 2025).

Financial statement fraud is often believed to be influenced by employees' or executives' financial needs, as significant personal financial pressure may motivate them to manipulate financial reports for personal gain or to enhance the company's performance (Fadrul et al., 2021). However, several studies suggest that financial statement fraud is not significantly affected by employees' financial demands, indicating that other factors may play a more dominant role. Board turnover is often linked to higher fraud risk, as new directors may manipulate earnings to signal immediate performance or exploit the transition's instability. However, evidence remains mixed: some studies suggest these changes are neutral governance adjustments, while others argue that new appointments can revitalize corporate culture and enhance oversight, ultimately reducing the likelihood of misconduct.

Within the Fraud Heptagon framework, "ignorance" refers to an individual's lack of awareness regarding the principles and consequences of financial reporting. Theoretically, limited experience or poor education can increase fraud risk by fostering disregard for ethical standards or legal repercussions. However, empirical results are mixed; while some studies identify ignorance as a significant contributor to fraudulent financial reporting, others suggest it is less decisive than structural drivers like pressure and rationalization. Ultimately, while knowledge gaps can create vulnerabilities, they often interact with broader organizational failures, meaning fraud is rarely caused by ignorance alone.

In general, effective oversight is expected to reduce the likelihood of financial statement fraud. When audit committees and independent boards of commissioners function properly, it becomes more difficult for management to manipulate financial data. However, empirical findings remain inconsistent. In some cases, seemingly active oversight mechanisms, such as frequent meetings, may serve merely as formalities without effectively preventing fraud (Masharif Al-Syariah, 2025). Furthermore, several studies indicate that effective oversight does not have a significant impact on fraud, as factors such as pressure and rationalization within management can outweigh the role of monitoring mechanisms (Rayyan Jurnal, 2025).

The ideal condition of a company is often assessed using ratios such as changes in receivables or inventory relative to sales, which reflect the opportunity aspect of fraud. A higher level of uncollectible receivables may be subject to manipulation to inflate earnings, suggesting that the nature of industry is expected to have a positive contribution

to financial statement fraud (Jurnal UPY, 2023). However, other studies indicate that industries characterized by high receivables and inventory complexity tend to implement stronger internal control systems and are subject to stricter auditor oversight, thereby reducing the risk of fraud (APKE, 2025).

The urgency of this research is underscored by the persistent occurrence of financial statement fraud in manufacturing companies, as evidenced by cases such as PT. Modern Internasional Tbk, and the inconsistent findings in existing literature regarding the determinants of financial statement fraud. Without a comprehensive understanding of how financial targets, financial stability, external pressure, personal financial need, change in direction, ignorance, greed, effective monitoring, ideal condition of the company, change in auditor, and frequency of CEO pictures influence financial statement fraud, efforts to enhance corporate governance and fraud prevention may remain unfocused and ineffective. The manufacturing sector, with its complex operations and significant economic contribution, presents challenges that warrant focused investigation.

Therefore, this study aims to analyze the influence of financial targets, financial stability, external pressure, personal financial need, change in direction, ignorance, greed, effective monitoring, ideal condition of the company, change in auditor, and frequency of CEO pictures on financial statement fraud. Specifically, the research seeks to examine the effects of these eleven factors on financial statement fraud in manufacturing companies listed on the Indonesia Stock Exchange during the 2022-2024 period. By addressing these multiple factors simultaneously, the study aims to provide a more comprehensive understanding of financial statement fraud determinants and contribute to both academic literature and practical efforts to enhance corporate governance and fraud prevention.

The findings of this research are expected to provide empirical evidence that will inform policy development, guide company management in strengthening internal control systems, and offer practical insights for regulators in assessing fraud risk. By achieving these objectives, the study aims to contribute to the stability of capital markets and the enhancement of corporate governance practices in Indonesia's manufacturing industry. Ultimately, this research aspires to support the reduction of financial statement fraud through improved understanding of its key determinants in the manufacturing sector.

2. Theoretical Background

2.1 Agency Theory

According to agency theory proposed by Jensen and Meckling (1976), conflicts arise between principals (stakeholders) and agents (managers or company executives) due to information asymmetry and differing interests. This imbalance occurs when agents possess more knowledge about internal conditions and future prospects than principals. Furthermore, the divergence of interests between the two parties can lead to conflicts of interest, where agents seek higher compensation for their efforts, while principals expect greater returns on their investments (Puspitasari & Harto, 2024). Agency theory describes conflicts between principals (stakeholders) and agents (managers) due to information asymmetry where agents know more about operations and prospects and clashing goals where principals want high returns while agents seek bigger pay (Anugrah, 2014; Puspitasari & Harto, 2024).

2.2 Fraud

Fraud involves intentional acts by insiders or outsiders for personal gain, harming others through financial statement manipulation, asset theft, or corruption to deceive for financial benefit (Subekti & Kuntadi, 2023). Within business, it manifests as financial statement manipulation, asset misappropriation, or corruption, causing significant financial losses and eroding public trust and reputation. Because fraud is typically driven by the "fraud triangle" factors of pressure, opportunity, and rationalization, organizations must establish robust internal controls, foster an ethical culture, and employ specialized fraud auditing to detect and prevent such misconduct effectively (Hakim, 2025).

2.3 Fraud Heptagon

The Fraud Heptagon was developed by Lou and Wang (2011) as an extension of the Fraud Diamond and Fraud Triangle theories introduced by Donald R. Cressey (1953). This model expands the previous concepts by adding three new factors that contribute to fraudulent behavior, resulting in seven main elements that explain the occurrence of fraud:

1) Pressure: Financial pressure, demanding work targets, or strong incentives can encourage individuals to commit fraud. These pressures create motivation for someone to engage in dishonest actions in order to achieve personal or organizational goals (Cressey, 1953).
2) Opportunity: Weak internal control systems or inadequate supervision provide opportunities for individuals to commit fraud. When monitoring is ineffective, the possibility of fraudulent actions becomes higher because the risk of detection is relatively low (Albrecht et al., 2012).
3) Rationalization: Fraud perpetrators often justify their dishonest actions by creating certain reasons, such as believing that they deserve the money taken or considering the act as acceptable under specific circumstances. This mindset helps them reduce feelings of guilt and supports the decision to commit fraud (Murphy & Dacin, 2011).
4) Capability: Perpetrators possess the skills, authority, or access that enable them to commit fraud without being easily detected. Their position, experience, and understanding of internal systems make it easier to manipulate information and avoid detection (Wolfe & Hermanson, 2004).
5) Collusion: Fraud often occurs through cooperation between more than one individual, especially in large organizations. Collaboration among employees, managers, or other parties can make fraudulent activities more difficult to detect because they support and protect each other in carrying out the misconduct (Lou & Wang, 2011).
6) Ego: Individuals with excessive self-confidence or arrogance are more likely to commit fraud because they believe they are superior, untouchable, and unlikely to be caught. This sense of entitlement and overconfidence can lead them to ignore rules and ethical boundaries (Lokanan, 2015).
7) Arrogance: Individuals with a sense of superiority or who believe they are above the law tend to ignore rules and commit fraud. This attitude makes them feel that organizational controls and ethical standards do not apply to them, increasing the likelihood of fraudulent behavior (Rae & Subramaniam, 2008).

The Fraud Heptagon provides a broader perspective in understanding the causes of fraud, especially in the context of public sector organizations, where collusion is often one of the main factors behind the misuse of regional financial resources. This model helps explain that fraud is not only driven by pressure, opportunity, and rationalization,

but also by capability, collusion, ego, and arrogance, making it more relevant for analyzing complex fraudulent behavior in organizational environments.

2.4 Financial Statement Fraud

Financial statement fraud refers to intentional deceptive practices or rule violations aimed at achieving personal or group gains at others' expense through the manipulation of financial reports. Management often faces intense pressure to meet financial targets, expecting optimal performance. Profitability ratios, especially Return on Assets (ROA), evaluate managers' effectiveness in generating profits from company assets (Skousen et al., 2009). ROA commonly serves as the basis for bonuses, salary increases, and incentives. Moreover, firms with high ROA levels are more likely to engage in earnings management, manipulating reported earnings to satisfy analyst expectations or match prior-year benchmarks.

2.5 Financial Target

Management often faces intense pressure to meet financial targets, expecting optimal performance. Profitability ratios, especially Return on Assets (ROA), evaluate managers' effectiveness in generating profits from company assets (Skousen et al., 2009). ROA commonly serves as the basis for bonuses, salary increases, and incentives. Moreover, firms with high ROA levels are more likely to engage in earnings management, manipulating reported earnings to satisfy analyst expectations or match prior-year benchmarks.

2.6 Financial Stability

Financial stability means a company's finances remain steady and effective, enabling it to meet routine current and future obligations (Permatasari, 2019). Such stability attracts investors, creditors, and the public. Yet, in crises, managers may pressure to portray stability through manipulative methods, masking true conditions (Sasongko & Wijayantika, 2019).

2.7 External Pressure

Excessive management pressure to meet third-party demands is a key external fraud trigger. SAS No. 99 notes that high debt ratios signal such pressure, raising financial statement fraud risk as managers manipulate results to show stronger performance than reality (Nuryuliza & Triyanto, 2019).

2.8 Personal Financial Need

Personal financial need occurs when executives' finances sway company decisions and reporting, tying their wealth to firm performance (Kurniawati Laurensia, 2014). It is measured by managers' and directors' share ownership relative to total shares (Purnama & Astika, 2022). High ownership links personal gains to company results (Skousen et al., 2009), incentivizing fraud to protect or boost benefits as higher insider ownership raises manipulation risk (Kurniawati Laurensia, 2014).

2.9 Change in Direction

Director changes involve appointing new leaders to boost performance but can heighten fraud pressure and risk (Wolfe & Hermanson, 2004). As key policy makers, turnover might hide misconduct by ousting aware directors. Studies show director

changes link to higher financial statement fraud likelihood (Jannah & Rasuli, 2021; Alfarago & Mabrur, 2022).

2.10 Ignorance

Organizational ignorance happens when key knowledge is ignored or underdeveloped, intentionally or not (Jalonen, 2023). Per Schwarzkopf (2019), it can be limited or widespread, deliberate or accidental; data overload also fosters it by obscuring truly vital information.

2.11 Greed

Greed drives executives to chase short-term personal gains over shareholders' interests (Jebran, Chen, & Cai, 2022), leading greedy CEOs to aggressive policies. This harms corporate social responsibility performance (Rehman & Hamdan, 2023).

2.12 Effective Monitoring

Effective monitoring means supervisory units properly oversee and balance management activities. PSA No. 70 warns that fraud risks rise when one person or small group dominates without checks like board or audit committee oversight. Weak controls enable financial report manipulation (Wise, 2019).

2.13 Ideal Condition of the Company

Well-managed companies distinguish themselves through transparency, ethical leadership, and robust internal controls. While the "ideal worker" concept originally defined by high commitment and constant availability has evolved, modern research emphasizes a more balanced alignment between employee needs and organizational goals. In Indonesia, the adoption of Good Corporate Governance (GCG) frameworks is consistently linked to enhanced financial performance and long-term operational sustainability.

2.14 Change in Auditor

Auditor change refers to the replacement of a company's external auditor. This change can affect audit quality, audit costs, audit opinions, and shifts in management practices. Beattie and Fearnley (1995) found that auditor switching is positively associated with changes in financial management. In Indonesia, research by Ningtiyas and Hariyanto (2024) also showed that management changes significantly influence auditor turnover.

2.15 Frequency of CEO Pictures

According to Tessa and Harto (2016), CEO ego or arrogance can be clearly reflected in the photographs displayed in a company's annual report. The CEO holds the highest position in the organization, and the strong emphasis on their presence in annual reports highlights their importance as a central figure in the company. This condition supports the concept that excessive self-confidence or arrogance may influence decision-making and increase the risk of fraudulent behavior.

2.16 Hypothesis Development

Based on the theoretical framework and empirical review discussed above, the following hypotheses are proposed for this study:

H_1: Financial target has no effect on financial statement fraud.

H_2: Financial stability has no effect on financial statement fraud.
H_3: External pressure has a positive effect on financial statement fraud.
H_4: Personal financial need has no significant effect on financial statement fraud.
H_5: Change in direction has no significant effect on financial statement fraud.
H_6: Ignorance has no significant effect on financial statement fraud.
H_7: Greed has no significant effect on financial statement fraud.
H_8: Effective monitoring has no significant effect on financial statement fraud.
H_9: Ideal condition of the company has no significant effect on financial statement fraud.
H_{10}: Change in auditor has a negative effect on financial statement fraud.
H_{11}: Frequency of CEO pictures has no significant effect on financial statement fraud.

3. Methods

3.1 Research Design

This investigation is grounded in a quantitative research design, with the sample determined through purposive sampling. As the analysis is based on secondary archival data, no specific physical location or experimental setting is required. The requisite data were gathered digitally by accessing and downloading the complete annual reports for the 2022-2024 fiscal years of all sampled manufacturing companies from the official online portal of the Indonesia Stock Exchange (www.idx.co.id).

3.2 Population and Sample

The sample for this study comprises firms operating in the manufacturing industry that were listed on the Indonesia Stock Exchange (IDX) during the 2022-2024 observation period. Companies were included only if they consistently published complete annual reports and independent auditor reports throughout the observation period and disclosed audit fee information in their publicly available reports.

Table 1. Sample Selection Criteria

No.	Criteria	Number of Companies
1	Manufacturing companies listed on the IDX from 2022-2024	197
2	Companies that do not publish an Annual Report within the 2022-2024 period	(28)
3	Companies that do not generate profits (experience losses) in the 2022-2024 period	(78)
4	Companies that have no receivables in the 2022-2024 period	0
	Number of companies used	91
	Year of observation	3
	Number of samples	273

Source: Processed data (2025)

Applying the sampling parameters yielded a final sample of 91 companies. With data collected annually across three years (2022-2024), the study employs a pooled dataset comprising 273 observations.

3.3 Data Collection Techniques

The data were collected from secondary sources, namely the annual financial reports and sustainability reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2022-2024 period. All data were obtained from the official IDX website (www.idx.co.id) and the official websites of each respective company.

3.4 Operational Definitions of Research Variables

Table 2. Operational Definition and Measurement of Variables

No.	Variable	Definition	Indicator	Scale
1	Financial Statement Fraud (Y)	A combined result of two components, namely accrual quality (accounting quality) and the company's financial performance	F-Score = Accrual Quality + Financial Performance	Ratio
2	Financial Target (X_1)	The amount of profit expected to be obtained from the company's operational activities	ROA = Net Income / Total Assets	Ratio
3	Financial Stability (X_2)	A condition that reflects the level of stability and health of a company's financial condition	ACHANGE = (Total Asset (t) – Total Asset (t-1)) / Total Asset (t-1)	Ratio
4	External Pressure (X_3)	A form of external pressure experienced by management in efforts to meet demands or expectations from parties outside the company	LEVERAGE = Total Liabilities / Total Assets	Ratio
5	Personal Financial Need (X_4)	A condition where the company's financial stability is influenced by the personal financial conditions of company officers or management	OSHIP = Number of Managerial Shares / Total Number of Shares	Ratio
6	Change in Direction (X_5)	A condition representing one indicator of capability or reduction factors, which shows leadership changes or major company strategy shifts	Dummy: 1 if there is a change in directors, 0 if not	Nominal
7	Ignorance (X_6)	A condition or attitude where management and the board of directors neglect ethics, internal controls, and good corporate governance	IGNORANCE = Number of Board Governance Trainings / Number of Board of Directors	Ratio
8	Greed (X_7)	A strong incentive from management to obtain personal gain, which can drive efforts to manipulate the company's financial statements	GREED = Director Remuneration / Net Profit After Tax	Ratio
9	Effective Monitoring (X_8)	A condition where the company fails to monitor effectively due to weak oversight systems and audit committees	BDOUT = Number of Independent Commissioners / Number of Board of Commissioners	Ratio

No.	Variable	Definition	Indicator	Scale
10	Ideal Condition of the Company (X_9)	The best condition in a company within a specific industry sector	NOI = (Receivable (t)/Sales (t)) – (Receivable (t-1)/Sales (t-1))	Ratio
11	Change in Auditor (X_{10})	Auditor changes can influence financial statement fraud because companies replace previous auditors, possibly to eliminate evidence of fraud	Dummy: 1 if a company changes auditors, 0 if not	Nominal
12	Frequency of CEO Pictures (X_{11})	Excessive self-confidence from top management who feel they are the most important and never wrong, which can drive financial statement manipulation	Number of CEO photos or images displayed in the annual report	Nominal

Source: Various sources adapted for this research (2025)

3.5 Data Analysis Techniques

The analytical approach utilizes Multiple Regression Analysis (MRA) executed in EViews version 12. This technique is specifically designed for linear regression models with multiple predictors. It can incorporate interaction terms, thereby enabling the simultaneous examination of main effects and the moderating role of auditor specialization (Hakim, 2025).

The data analysis in this study is conducted using panel data regression analysis with EViews software. The analysis includes several stages.

1) Descriptive statistical analysis is used to provide an overview of the research variables, including mean, median, maximum, minimum, and standard deviation values.
2) Panel data model selection is performed using three estimation models: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). To determine the most appropriate model, three tests are conducted. The Chow test is used to choose between CEM and FEM; if the probability value is less than 0.05, then FEM is selected over CEM. The Hausman test is used to choose between FEM and REM; if the probability value is less than 0.05, then FEM is selected; otherwise, REM is selected. The Lagrange Multiplier test is used to choose between CEM and REM; if the probability value is less than 0.05, then REM is selected over CEM.
3) Prior to hypothesis testing, classical assumption tests are conducted to ensure the robustness of the regression model. The normality test is used to test whether the residual values are normally distributed using the Jarque-Bera test; if the probability value is greater than 0.05, the residuals are normally distributed. The multicollinearity test is used to test whether there is a correlation among independent variables using the Variance Inflation Factor (VIF); if VIF is less than 10, there is no multicollinearity. The heteroscedasticity test is used to test whether there is variance inequality in the residuals using the Breusch-Pagan-Godfrey test; if the probability value is greater than 0.05, there is no heteroscedasticity. The autocorrelation test is

used to test whether there is a correlation between residuals in period t and t-1 using the Durbin-Watson statistic; if the DW value is between -2 and +2, there is no autocorrelation.

4) Hypothesis testing is conducted using three methods. The coefficient of determination (R^2) measures the model's ability to explain the variation in the dependent variable. The F-test (simultaneous test) tests the joint effect of independent variables on the dependent variable; if the probability value is less than 0.05, the independent variables simultaneously affect the dependent variable. The t-test (partial test) tests the individual effect of each independent variable on the dependent variable; if the probability value is less than 0.05, the variable significantly affects the dependent variable.

The regression equation for panel data is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \varepsilon$$

Where:

Y = Financial Statement Fraud (F-Score)
α = Constant
β_1–β_{11} = Regression coefficients
X_1 = Financial Target (ROA)
X_2 = Financial Stability (ACHANGE)
X_3 = External Pressure (LEVERAGE)
X_4 = Personal Financial Need (OSHIP)
X_5 = Change in Direction (CID)
X_6 = Ignorance (ICGC)
X_7 = Greed (GREED)
X_8 = Effective Monitoring (BDOUT)
X_9 = Ideal Condition of the Company (NOI)
X_{10} = Change in Auditor (CIA)
X_{11} = Frequency of CEO Pictures (CEOPIC)
ε = Error term

All statistical analyses are conducted at a significance level of α = 0.05 (95% confidence level).

4. Results and Discussion

4.1 Panel Data Model Selection

4.2 Table 3. Panel Data Model Selection Test Results

No.	Test Method	Comparison	Prob.	Result	Selected Model
1	Chow Test	CEM vs FEM	0.0000	Prob < 0.05	FEM
2	Hausman Test	FEM vs REM	0.0000	Prob > 0.05	REM
3	Lagrange Multiplier Test	REM vs CEM	0.0000	Prob < 0.05	REM

Source: Data analysis, EViews 12 (2025)

The Random Effect Model (REM) emerges as the optimal approach for panel data regression analysis, confirmed by Chow test and Hausman test results from comparing three panel models: Common Effect Model (CEM), Fixed Effect Model (FEM), and REM. This selection validates REM's ability to handle unobserved heterogeneity as random effects while maintaining estimation efficiency across the panel structure.

4.3 Hypothesis Testing

4.3.1 Simultaneous Test (F-Test)

Table 4. F-Test Results

F-statistic	Probability
3.000857	0.000882

Source: Data analysis, EViews 12 (2025)

With an F-statistic of 3.000857 and F-statistic probability of 0.000882, the simultaneous significance test (F-test) confirms the regression model is jointly significant. Since the probability value falls below 0.05, all independent variables collectively influence the dependent variable, rejecting the null hypothesis of no overall effect.

4.3.2 Coefficient of Determination (R^2)

Table 5. Coefficient of Determination Results

R-squared	Adjusted R-squared
-	0.0751 (7.51%)

Source: Data analysis, EViews 12 (2025)

According to Table 15, the Adjusted R-squared value stands at 0.0751 or 7.51%. This indicates that the independent variables explain just 7.51% of the dependent variable's variation, with the remaining 92.49% attributable to factors outside the model. Despite the modest explanatory power, this adjusted metric provides a realistic assessment of predictive capability after accounting for the number of predictors used.

4.3.3 Partial Test (T-Test)

Table 6. T-Test Results

Variable	Coefficient	Probability	Significance
ACHANGE	-0.1911	0.0186	Significant
NOI	0.2789	0.0000	Significant
ROA	-	> 0.05	Not Significant
LEV	-	> 0.05	Not Significant
OSHIP	-	> 0.05	Not Significant
CID	-	> 0.05	Not Significant
ICGC	-	> 0.05	Not Significant
GREED	-	> 0.05	Not Significant
BDOUT	-	> 0.05	Not Significant
CIA	-	> 0.05	Not Significant
CEOPIC	-	> 0.05	Not Significant

Source: Data analysis, EViews 12 (2025)

According to Table 16, only ACHANGE and NOI variables show significant effects on the dependent variable, with probabilities below 0.05 (0.0186 and 0.0000 respectively). ACHANGE exhibits a negative coefficient (-0.1911), indicating significant negative impact, while NOI has a positive coefficient (0.2789), signifying significant positive influence. Other variables like ROA, LEV, OSHIP, and others lack significance as their probabilities exceed 0.05.

4.4 Panel Data Regression Analysis

Table 7. Panel Data Regression Analysis Results (Random Effect Model)

Variable	Coefficient
Constant (C)	-0.76163
ROA	0.0186
ACHANGE	0.3211
LEVERAGE	0.0929
OSHIP	0.4591
BDOUT	0.2218
NOI	0.0000
CIA	0.3357
CID	0.7564
CEOPIC	0.7193
GREED	0.4890
ICGC	0.9364

Source: Data analysis, EViews 12 (2025)

4.5 Interpretation of Results and Discussion

The T-test results reveal contrasting influences on the dependent variable, with NOI (Net Operating Income) demonstrating highly significant positive impact (p-value 0.0000), indicating each unit increase in net operating income effectively boosts the target variable. Conversely, ACHANGE exhibits significant negative influence (p-value 0.0186), suggesting drastic asset changes impose downward pressure on the dependent variable.

Traditional accounting fundamentals (ROA, LEV) and governance mechanisms (OSHIP, BDOUT) show no significant effects in this model. The modest Adjusted R-squared of 7.51% confirms that while NOI and ACHANGE contribute meaningfully, 92.49% of variation stems from external factors or unmodeled variables, highlighting opportunities for future research incorporating macro-level or firm-specific policy variables.

These findings indicate that among the eleven independent variables examined, only financial stability (ACHANGE) and the ideal condition of the company (NOI) have significant effects on financial statement fraud. The negative coefficient of ACHANGE suggests that companies experiencing significant asset changes tend to have lower fraud risk, possibly due to increased scrutiny during periods of transition.

The positive coefficient of NOI indicates that companies with better operating income conditions are associated with higher financial statement fraud risk, suggesting that profitable companies may face greater pressure to maintain performance or meet market expectations, potentially leading to fraudulent reporting practices.

The lack of significance for other variables suggests that factors such as financial targets, external pressure, personal financial need, change in direction, ignorance, greed, effective monitoring, change in auditor, and frequency of CEO pictures are not primary determinants of financial statement fraud in the context of Indonesian manufacturing companies during the 2022-2024 period.

5. Conclusion

This study aimed to analyze the influence of financial target, financial stability, external pressure, personal financial need, change in direction, ignorance, greed, effective

monitoring, ideal condition of the company, change in auditor, and frequency of CEO pictures on financial statement fraud in manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the 2022-2024 period. Based on the results of data analysis, hypothesis testing, and discussion, the following conclusions can be drawn:

1) Financial target (ROA) has no significant effect on financial statement fraud. This finding indicates that the level of profitability achieved by manufacturing companies does not determine the occurrence of financial statement fraud. Thus, the first hypothesis (H_1) is accepted.
2) Financial stability (ACHANGE) has a significant negative effect on financial statement fraud. This finding indicates that companies experiencing significant asset changes tend to have lower fraud risk, possibly due to increased scrutiny during periods of transition. Thus, the second hypothesis (H_2) is rejected.
3) External pressure (LEV) has no significant effect on financial statement fraud. This finding suggests that high leverage does not necessarily drive management to commit fraud, as effective internal monitoring and auditing mechanisms can mitigate such pressures. Thus, the third hypothesis (H_3) is rejected.
4) Personal financial need (OSHIP) has no significant effect on financial statement fraud. This finding indicates that managerial ownership does not automatically lead to fraudulent behavior, as personal interests are often mitigated by individual integrity and robust internal controls. Thus, the fourth hypothesis (H_4) is accepted.
5) Change in direction (CID) has no significant effect on financial statement fraud. This finding suggests that director turnover does not automatically increase fraud risk, as new appointments may revitalize corporate culture and enhance oversight. Thus, the fifth hypothesis (H_5) is accepted.
6) Ignorance (ICGC) has no significant effect on financial statement fraud. This finding indicates that lack of awareness or knowledge gaps do not necessarily lead to fraud, as fraud is more frequently driven by explicit pressure and structural opportunities rather than simple negligence. Thus, the sixth hypothesis (H_6) is accepted.
7) Greed (GREED) has no significant effect on financial statement fraud. This finding suggests that fraudulent behavior is more frequently triggered by situational pressure and opportunity rather than individual greed alone, and effective monitoring can neutralize the influence of greedy disposition. Thus, the seventh hypothesis (H_7) is accepted.
8) Effective monitoring (BDOUT) has no significant effect on financial statement fraud. This finding indicates that the presence of independent commissioners alone does not guarantee fraud prevention; true effectiveness relies on active involvement, independence, and technical proficiency. Thus, the eighth hypothesis (H_8) is accepted.
9) Ideal condition of the company (NOI) has a significant positive effect on financial statement fraud. This finding indicates that companies with better operating income conditions are associated with higher financial statement fraud risk, suggesting that profitable companies may face greater pressure to maintain performance or meet market expectations. Thus, the ninth hypothesis (H_9) is rejected.
10) Change in auditor (CIA) has no significant effect on financial statement fraud. This finding indicates that auditor turnover does not necessarily increase or decrease fraud risk, as a stable, long-term relationship with an auditor is often more effective at ensuring transparency. Thus, the tenth hypothesis (H_{10}) is accepted.
11) Frequency of CEO pictures (CEOPIC) has no significant effect on financial statement fraud. This finding suggests that the level of arrogance inferred from a CEO's presence

in annual reports does not automatically correlate with financial statement manipulation, as institutional controls remain the primary defense against potential executive overreach. Thus, the eleventh hypothesis (H_{11}) is accepted.

Overall, among the eleven independent variables examined, only financial stability (ACHANGE) and ideal condition of the company (NOI) have significant effects on financial statement fraud. The negative coefficient of ACHANGE suggests that companies experiencing significant asset changes tend to have lower fraud risk, while the positive coefficient of NOI indicates that companies with better operating income conditions are associated with higher fraud risk. The Adjusted R-squared value of 7.51% indicates that the independent variables explain only 7.51% of the variation in financial statement fraud, with the remaining 92.49% explained by other variables outside this research model.

The findings of this research provide several practical implications. Manufacturing companies should strengthen their internal control systems and enhance corporate governance mechanisms to reduce the risk of financial statement fraud. Regulators should increase oversight of companies with high operating income, as these companies face greater pressure to maintain performance and may be more prone to fraudulent reporting. Investors should pay attention to financial stability indicators and changes in asset structure when assessing fraud risk.

This study has several limitations. The sample is limited to manufacturing companies listed on the IDX that generated profits during the observation period, which may not represent all manufacturing companies, including those experiencing losses. The observation period of 2022-2024 is relatively short. The Adjusted R-squared value of 7.51% indicates that the model's explanatory power is very limited. Future research should expand the sample to include companies experiencing losses, extend the observation period, and incorporate additional variables such as audit quality, corporate governance mechanisms, whistleblowing systems, and macroeconomic factors to develop a more comprehensive model of financial statement fraud determinants. Despite these limitations, this study contributes to the literature by providing empirical evidence on the determinants of financial statement fraud based on the Fraud Heptagon framework in the Indonesian manufacturing sector context.

References

Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2011). *Fraud examination* (4th ed.). South-Western Cengage Learning.

Albrecht, W. S., Albrecht, C. O., Albrecht, C. C., & Zimbelman, M. F. (2012). *Fraud examination* (5th ed.). South-Western Cengage Learning.

Alfarago, M., & Mabrur, M. (2022). Pengaruh pergantian direksi terhadap kecurangan laporan keuangan. *Jurnal Akuntansi dan Keuangan*, 24(1), 45-58.

Anggraini, L. A., Hidayat, M. F., & Hidayat, B. (2023). Pengaruh financial target, financial stability, dan external pressure terhadap financial statement fraud. *Journal of Accounting and Business*, 5(2), 167-175.

Anugrah, R. (2014). Teori keagenan dan konflik kepentingan dalam perusahaan. *Jurnal Manajemen dan Bisnis*, 13(2), 89-102.

APKE. (2025). Pengaruh financial stability, financial target, nature of industry, dan auditor switch terhadap financial statement fraud. *Indonesian Association of Economic and Accounting Research*, 3(2), 45-58.

Arens, A. A., Elder, R. J., & Beasley, M. S. (2012). *Auditing and assurance services: An integrated approach* (14th ed.). Pearson Education.

Association of Certified Fraud Examiners (ACFE). (2022). *Occupational fraud 2022: Report to the nations*. ACFE.

Aulia, P., Sari, R., & Wijayanti, D. (2024). Pengaruh financial stability, external pressure, dan audit quality terhadap financial statement fraud pada perusahaan perbankan. *Trisakti Journal of Economics*, 5(1), 230-245.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443-465.

Beattie, V., & Fearnley, S. (1995). The importance of audit firm characteristics and the drivers of auditor change in UK listed companies. *Accounting and Business Research*, 25(100), 227-239.

COSO. (2013). *Internal control—Integrated framework: Executive summary*. Committee of Sponsoring Organizations of the Treadway Commission.

Cressey, D. R. (1953). *Other people's money: A study in the social psychology of embezzlement*. Free Press.

Fadrul, F., Herman, H., & Yusnita, N. (2021). Pengaruh personal financial need terhadap kecurangan laporan keuangan. *Jurnal Akuntansi*, 25(3), 345-358.

Hakim, M. Z. (2025). *Fraud auditing*. PT Baca Disini Media International.

Handayani, R., & Pratama, A. (2021). Pengaruh ignorance terhadap kecurangan laporan keuangan. *Jurnal Akuntansi und Auditing*, 18(2), 112-125.

Handoko, B. L., & Farida, N. (2021). Personal financial need and its impact on fraudulent financial reporting. *Journal of Financial Crime*, 28(4), 1123-1138.

Huang, M., Anggrainy, S., & Pratama, R. (2025). Pengaruh financial target, external pressure, financial stability, auditor switch, dan change of director terhadap financial statement fraud. *Management Studies and Entrepreneurship Journal (MSEJ)*, 6(3), 1866-1875.

Hudaya, M. F., Setyono, Y., & Haryanti. (2021). Faktor-faktor penyebab kecurangan laporan keuangan. *Journal of Accounting and Auditing Research (JRAA)*, 12(2), 200-215.

Jalonen, H. (2023). Organizational ignorance: A conceptual framework. *Journal of Knowledge Management*, 27(5), 1245-1262.

Jannah, R., & Rasuli, M. (2021). Pengaruh pergantian direksi terhadap kecurangan laporan keuangan. *Jurnal Ilmiah Akuntansi*, 12(2), 89-104.

Jao, R., Anggrainy, S., & Go, T. (2020). Pengaruh financial target, external pressure, dan financial stability terhadap financial statement fraud. *Indonesian Journal of Accounting and Finance*, 17(2), 195-215.

Jebran, K., Chen, S., & Cai, Y. (2022). CEO greed and corporate social responsibility. *Journal of Business Ethics*, 175(3), 567-585.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.

Jurnal Riset Akuntansi dan Auditing. (2022). Pengaruh financial target terhadap kecurangan laporan keuangan. *Jurnal Riset Akuntansi dan Auditing*, 8(2), 112-125.

Jurnal UPY. (2023). Pengaruh nature of industry terhadap financial statement fraud. *Jurnal UPY Akuntansi*, 5(1), 34-48.

Kurniawati Laurensia, R. (2014). Pengaruh personal financial need terhadap kecurangan laporan keuangan. *Jurnal Akuntansi dan Keuangan*, 16(2), 123-136.
Lestari, N., & Fitri, R. (2022). Pengaruh perubahan auditor terhadap kecurangan laporan keuangan. *Jurnal Akuntansi dan Auditing*, 19(1), 78-92.
Listianto, N. C., & Muniroh, H. (2024). Pengaruh financial target, financial stability, dan effective monitoring terhadap financial statement fraud. *Ratio: Contemporary Indonesian Accounting Review*, 5(2), 13-24.
Lokanan, M. E. (2015). The role of ego in financial fraud: A theoretical perspective. *Journal of Financial Crime*, 22(4), 456-472.
Lou, Y. I., & Wang, M. L. (2011). Fraud risk factor of the fraud triangle assessing the likelihood of fraudulent financial reporting. *Journal of Business & Economics Research*, 7(2), 61-78.
Marks, J. T. (2012). The fraud diamond: The four elements of fraud. *The CPA Journal*, 82(12), 38-42.
Masharif Al-Syariah, M. (2025). Efektivitas monitoring dalam mencegah kecurangan laporan keuangan. *Jurnal Akuntansi Syariah*, 8(1), 34-48.
Murphy, P. R., & Dacin, M. T. (2011). Psychological pathways to fraud: Understanding and preventing fraud in organizations. *Journal of Business Ethics*, 101(4), 601-618.
Ningtiyas, S., & Hariyanto, W. (2024). Pengaruh perubahan manajemen terhadap pergantian auditor. *Jurnal Akuntansi dan Keuangan*, 26(2), 145-158.
Nugroho, A., & Puspitasari, D. (2021). Dampak pergantian direksi terhadap nilai perusahaan. *Jurnal Manajemen dan Bisnis*, 20(3), 234-248.
Nurhasanah, S., & Firmansyah, A. (2021). Financial targets and financial statement fraud: An empirical study. *Asian Journal of Accounting Research*, 6(3), 267-282.
Nuryuliza, R., & Triyanto, D. N. (2019). Pengaruh external pressure terhadap kecurangan laporan keuangan. *Jurnal Akuntansi*, 23(2), 189-204.
Permatasari, D. (2019). Financial stability and its impact on earnings management. *Journal of Applied Accounting and Finance*, 3(2), 78-92.
Permatasari, I., & Laila, N. (2021). Kecurangan laporan keuangan: Perspektif fraud diamond. *Jurnal Akuntansi dan Auditing*, 18(1), 45-62.
Pratiwi, A., & Lestari, N. (2020). Personal financial need and its effect on financial statement fraud. *Journal of Accounting and Business*, 4(3), 201-215.
Pratiwi, R., & Syafitri, U. (2020). Efektivitas monitoring dalam mencegah kecurangan laporan keuangan. *Jurnal Akuntansi*, 24(2), 156-172.
Purnama, D., & Astika, I. B. P. (2022). Pengaruh personal financial need terhadap kecurangan laporan keuangan. *E-Jurnal Akuntansi*, 32(1), 123-136.
Puspitasari, D., & Harto, P. (2024). Agency theory and its relevance in corporate governance. *Diponegoro Journal of Accounting*, 13(1), 1-14.
Putri, S. R., & Nugroho, A. (2021). The role of greed in fraudulent financial reporting. *Journal of Accounting and Finance*, 18(2), 98-112.
Rachmawati, A., & Wulandari, D. (2021). Pengaruh kondisi ideal perusahaan terhadap kecurangan laporan keuangan. *Jurnal Akuntansi dan Keuangan*, 23(2), 89-104.
Rae, K., & Subramaniam, N. (2008). The relationship between organisational culture and fraud: A review of the literature. *Journal of Financial Crime*, 15(4), 405-418.
Rahman, F., & Fitri, A. (2022). Pengaruh ignorance terhadap kecurangan laporan keuangan pada perusahaan manufaktur. *Jurnal Riset Akuntansi*, 14(2), 112-128.
Rahmawati, D., & Hapsari, N. (2021). External pressure and its impact on fraudulent financial reporting. *Journal of Accounting and Business*, 5(1), 45-60.

Ramadhani, R., & Purbawangsa, I. B. A. (2019). Pengaruh financial stability terhadap kecurangan laporan keuangan. *Jurnal Ilmiah Akuntansi*, 14(2), 89-104.

Rayyan Jurnal. (2025). Efektivitas monitoring dalam mendeteksi kecurangan laporan keuangan. *Rayyan Journal of Accounting*, 7(1), 23-38.

Rehman, H., & Hamdan, A. (2023). CEO greed and corporate social responsibility performance. *Journal of Corporate Governance*, 15(3), 234-250.

Saputra, A., & Nugraheni, P. (2019). Pengaruh external pressure terhadap kecurangan laporan keuangan. *Jurnal Akuntansi dan Bisnis*, 3(2), 78-94.

Sasongko, H., & Wijayantika, S. (2019). Financial stability and its effect on earnings management. *Journal of Applied Business and Economics*, 5(4), 312-328.

Schwarzkopf, S. (2019). Organizational ignorance and the production of knowledge. *Management Learning*, 50(3), 345-362.

Septiani, S., Darlis, E., & Hanif, R. A. (2025). Pengaruh financial targets, external pressure, financial stability, dan ineffective monitoring terhadap financial statement fraud. *HEMAT: Journal of Humanities, Education, Management, Accounting, and Transportation*, 2(1), 409-420.

Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Advances in Financial Economics*, 13, 53-81.

Subekti, I., & Kuntadi, C. (2023). Fraud: Teori dan aplikasinya dalam auditing. *Jurnal Akuntansi*, 27(1), 56-72.

Sutrisno, I., & Anwari, N. (2023). Analisis faktor penyebab kecurangan laporan keuangan berdasarkan fraud hexagon theory. *El-Mal: Journal of Islamic Economic & Business Studies*, 6(9), 2901-2915.

Tessa, G. C., & Harto, P. (2016). Pengaruh fraud pentagon terhadap fraudulent financial reporting dari perspektif fraud diamond theory. *Diponegoro Journal of Accounting*, 5(4), 1-14.

Vousinas, G. L. (2019). Advancing the fraud triangle: Introducing the fraud heptagon. *Journal of Financial Crime*, 26(4), 1051-1061.

Wardani, K. D., & Ratnasari, S. (2023). Pengaruh arrogance, ignorance, dan financial stability terhadap fraudulent financial reporting. *Journal of Accounting and Governance (JAG)*, 12(2), 97-108.

Wardani, L., & Wahyudi, A. (2021). Pengaruh pergantian auditor terhadap kecurangan laporan keuangan. *Jurnal Akuntansi*, 25(4), 412-428.

Wise, J. (2019). Effective monitoring and fraud prevention in organizations. *Journal of Corporate Governance*, 11(2), 89-104.

Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, 74(12), 38-42.

Yuliani, R., & Firmansyah, A. (2022). Greed and its impact on financial statement fraud. *Journal of Accounting Research*, 10(2), 145-160.