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The Effect of Fraud Hexagon and Earnings Management on Financial Statement Fraud in Pharmaceutical and Cosmetic Companies Listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 Period

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Abstract: This study aims to analyze the effect of Fraud Hexagon and Earnings Management on Financial Statement Fraud in pharmaceutical and beauty sector companies listed on the Indonesia Stock Exchange for the 2022–2024 period. Fraud Hexagon consists of six variables, namely stimulus, capability, opportunity, rationalization, arrogance, and collusion. In this study, stimulus is proxied by financial targets, capability is proxied by changes in directors, opportunity is proxied by nature of industry, rationalization is proxied by auditor changes, arrogance is proxied by calculating the number of CEO pictures, and collusion is proxied by cooperation with the government, while Earnings Management uses the Jones model. The sampling technique used is purposive sampling, resulting in 14 companies as the research sample. The data analysis method used in this study is logistic regression analysis using IBM SPSS 26 software. The results show that the variables financial targets, changes in directors, auditor changes, the number of CEO pictures, and cooperation with the government do not affect financial statement fraud, while nature of industry and Earnings Management have a positive effect on financial statement fraud. Based on these results, it can be concluded that only nature of industry and Earnings Management influence the tendency of financial statement fraud, while the other variables do not show any effect. Future research is recommended to expand the research object, add other variables related to financial statement fraud, and use other detection methods such as the F-Score.

Keyword: Beneish M-Score, Earnings Management, Financial Statement Fraud, Fraud Hexagon, Jones Model.

INTRODUCTION

In facing increasingly intense business competition, companies are required to maintain their performance and the trust of stakeholders. One of the key indicators in assessing a company's performance is the financial statements, which present information regarding the company's financial position and performance over a certain period. Financial statements serve

as a basis for decision-making for various parties, both internal and external to the company; therefore, their presentation must be carried out in a transparent, relevant, and reliable manner (Ikatan Akuntan Indonesia, 2024). In facing increasingly intense business competition, companies are required to maintain their performance and the trust of stakeholders. One of the key indicators in assessing a company's performance is the financial statements, which present information regarding the company's financial position and performance over a certain period. Financial statements serve as a basis for decision-making for various parties, both internal and external to the company; therefore, their presentation must be carried out in a transparent, relevant, and reliable manner (Ikatan Akuntan Indonesia, 2024).

However, in practice, financial statements still have the potential to be manipulated through fraud committed by management to present a better condition of the company than its actual state. According to Auditing Standards (SPA) 240, fraud is an intentional act by individuals or groups within an organization aimed at obtaining unlawful benefits through the manipulation of information or abuse of authority. Fraudulent actions in financial statements can reduce the trust of investors and stakeholders and cause significant losses to various parties (Wulandari, 2022).

Industry	Cases	Billing	Cash larceny	Cash on hand	Check and payment tampering	Corruption	Expense reimbursements	Financial statement fraud	Noncash	Payroll	Register disbursements	Skimming
Banking and financial services	305	12%	12%	18%	14%	44%	6%	5%	16%	4%	4%	8%
Manufacturing	175	27%	6%	4%	7%	55%	17%	6%	29%	10%	1%	9%
Government and public administration	170	24%	15%	8%	14%	52%	15%	4%	15%	18%	4%	11%
Health care	117	38%	9%	8%	12%	47%	21%	1%	22%	16%	2%	9%
Energy	78	19%	8%	9%	8%	60%	13%	4%	29%	10%	3%	6%
Retail	78	17%	10%	13%	5%	40%	6%	0%	32%	3%	9%	14%
Construction	73	38%	12%	7%	19%	52%	25%	10%	25%	23%	4%	23%
Education	70	36%	9%	13%	10%	43%	17%	0%	16%	7%	6%	19%
Insurance	69	19%	6%	6%	20%	49%	12%	9%	16%	10%	6%	9%
Technology	65	28%	9%	2%	9%	65%	11%	3%	32%	14%	0%	5%
Transportation and warehousing	60	18%	10%	18%	7%	52%	12%	2%	33%	10%	3%	7%
Religious, charitable, or social services	58	36%	17%	24%	17%	45%	29%	3%	10%	7%	2%	16%
Information	52	15%	10%	10%	0%	62%	10%	2%	27%	6%	0%	10%

Figure 1. Fraud Cases in the Pharmaceutical and Cosmetics Sector

Source: Association of Certified Fraud Examiners (2024)

The phenomenon of fraud within organizations has become a global concern. Based on the Report to the Nations published by the Association of Certified Fraud Examiners (ACFE) in 2024, fraud is classified into three main types: asset misappropriation, corruption, and financial statement fraud. Although financial statement fraud accounts for only about 1% of total fraud cases, this type of fraud results in the greatest financial losses compared to other types. In addition, approximately 38% of fraud cases involve more than one type of fraud simultaneously, indicating that fraudulent practices often occur in complex and interconnected schemes (ACFE, 2024).

When viewed by industry sector, the healthcare sector, which includes the pharmaceutical and cosmetics industries, ranks fourth with 117 cases or approximately 7.43%

of the total fraud cases reported by ACFE. Within this sector, the most common type of fraud is corruption, followed by billing fraud and financial statement fraud. This condition indicates that the pharmaceutical and cosmetics sector has a relatively high level of vulnerability to fraudulent practices, both in operational activities and in the presentation of financial statements.

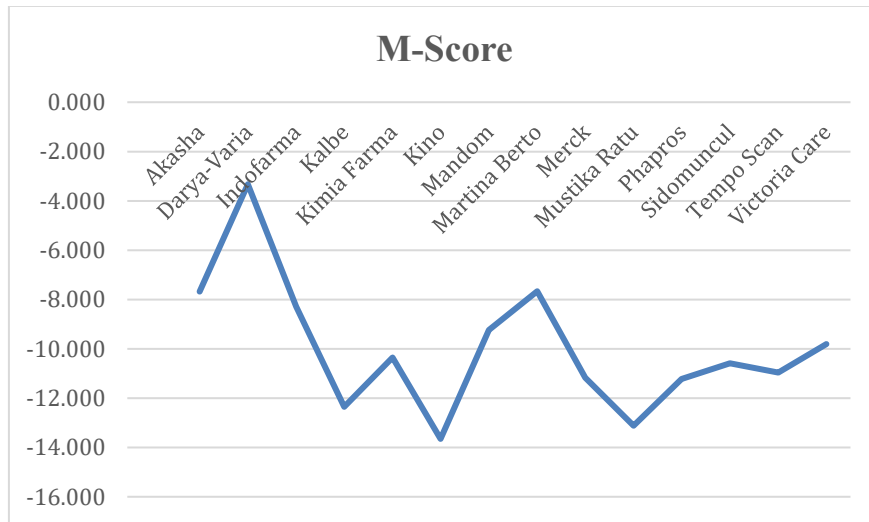


Figure 2. Detection of Financial Statement Fraud in Pharmaceutical and Cosmetic Companies for the 2022–2024 Period Using the M-Score

Source: Financial Statements of Pharmaceutical and Cosmetic Companies Listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 Period (processed data)

The results of detection using the Beneish M-Score model in pharmaceutical and cosmetic sector companies indicate that several companies have M-Score values above the threshold of -2.22 , suggesting the possibility of financial statement manipulation. In addition, analysis using the Jones model also shows indications of earnings management practices in several companies within the sector.

Fraud phenomena also occur in Indonesia, particularly in the pharmaceutical sector. One of the notable cases involves PT Kimia Farma (Persero) Tbk. and PT Indofarma (Persero) Tbk., which have experienced serious financial issues in recent years. Based on the report of the Audit Board of the Republic of Indonesia in the Summary of Audit Results for the Second Semester of 2023, various violations were found in the financial management of PT Indofarma, resulting in indications of state losses amounting to IDR 371.83 billion. In addition, PT Kimia Farma has also faced significant financial pressure, as reflected in the company’s losses over recent years (Romys Binekasri, 2024). Besides these cases, fraudulent practices can also occur at smaller business scales. One example occurred at a cosmetic store in Surabaya, where an employee embezzled company funds totaling IDR 527 million through manipulation of sales reports and misappropriation of transaction proceeds. This case shows that weaknesses in internal control systems can create opportunities for fraud in financial reporting (Bahtiar Rifa’i, 2024).

In addition to fraud cases, market conditions also indicate the pressures faced by companies in the pharmaceutical and cosmetic sectors. Based on data on the market capitalization of pharmaceutical and cosmetic companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 period, several companies experienced significant declines in market capitalization. This decline can create pressure on management to maintain the company’s performance image in the eyes of investors.

Based on these phenomena, this study aims to analyze the effect of the Fraud Hexagon and earnings management on financial statement fraud in pharmaceutical and cosmetic companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 period. The Fraud

Hexagon in this study is proxied by financial targets, changes in directors, the company's ideal condition, auditor changes, the number of CEO photographs, and cooperation with the government. Therefore, this study is expected to provide a more comprehensive understanding of the factors influencing financial statement fraud.

Agency Theory

According to Jensen and Meckling (1976) in (Octaviana, 2022) agency theory explains the contractual relationship between shareholders as principals and management as agents, in which the principals delegate authority to the agents to manage the company's operations and make decisions on their behalf. In this relationship, the agents are responsible for being accountable to the principals for the management of the company. However, in practice, conflicts of interest often arise because principals seek to maximize profits, while agents tend to have personal interests. This condition creates information asymmetry, as management possesses more comprehensive information regarding the company's condition, thereby opening opportunities for financial statement manipulation (Rizkiawan, 2021). Agency theory also explains that decisions made by management will affect the company's condition as reflected in its financial statements (Tasya Kamila & Aina Zahra Parinduri, 2023). According to Eisenhardt (1989), differences in interests between principals and agents can trigger conflicts that have the potential to increase the occurrence of fraud in financial statements.

Financial Accounting

Financial accounting is the process of preparing periodic financial statements aimed at presenting a comprehensive view of an entity's financial condition (Siti Nur Adillah et al., 2023). Through financial accounting, companies can achieve accountability by implementing adequate recording systems and internal controls, ensuring that every transaction is properly recorded and monitored. The implementation of such systems also helps minimize the risk of recording errors and fraud in the company's financial management (Septiana & Zulkifli, 2024). The information generated is then presented in the form of financial statements, which include the financial position, company performance, and cash flows over a certain period, and can be used by various parties such as management, investors, and creditors as a basis for decision-making.

Fraud Hexagon Theory

The Fraud Hexagon Theory developed by Vousinas (2019) is an extension of the Fraud Pentagon model by adding a new element, namely collusion. This model is known as the S.C.C.O.R.E Model, which consists of six factors: pressure (stimulus), capability, opportunity, rationalization, ego, and collusion. The addition of the collusion element aims to explain that fraudulent acts are not only committed individually but can also occur through cooperation between two or more parties who share common interests in committing fraud. Collusion reflects an agreement or collaboration among several parties to carry out actions that may harm others by taking rights that do not belong to them (Annisa & Ghozali, 2020). Therefore, the Fraud Hexagon is considered to provide a more comprehensive explanation of the factors that drive fraud, particularly in the context of financial statement fraud.

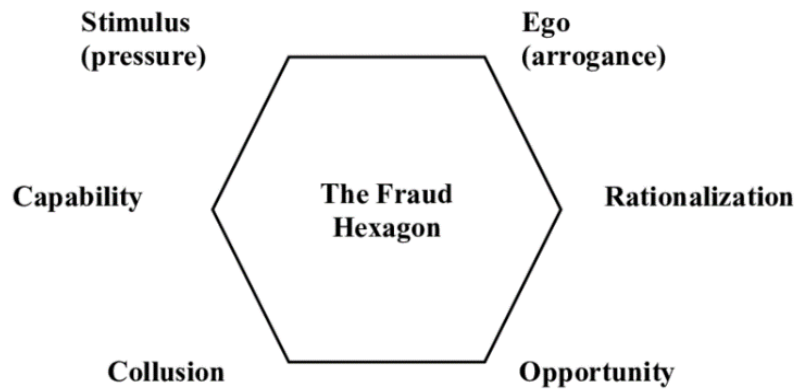


Figure 3. Fraud Hexagon Model (S.C.C.O.R.E)
 Source: ABAC Journal (2024)

1. Pressure

According to Vousinas (2019), stimulus or pressure is a driving force that can motivate individuals or entities to commit fraud, whether arising from financial or non-financial factors. This pressure usually emerges when a company experiences a decline in performance or fails to achieve predetermined targets, prompting management to conceal such conditions through deviant actions (Sugiarti, 2024). The pressure that triggers fraud can originate from various sources, such as work-related pressure, personal pressure, and external pressure that imposes excessive demands on management (Ginting & Daljono, 2023). In the context of financial reporting, such pressure is often associated with the company’s financial stability, financial targets, and demands from external parties that must be met by management. Therefore, pressure is considered one of the factors that can encourage the occurrence of fraud in financial statements (SAS No. 99).

Financial Targeting

Financial targets are objectives that must be achieved by management as a benchmark for company performance in attaining predetermined goals. These targets often create pressure on management to demonstrate good performance and maintain the company’s financial stability. When the targets set are too high or not aligned with the company’s capabilities, such conditions may encourage management to manipulate financial statements in order to appear capable of meeting the established targets (Rizkiawan, 2021). In studies related to financial statement fraud, financial targets are generally proxied by Return on Assets (ROA), which is a profitability ratio used to measure a company’s ability to generate profit through the utilization of its assets (Octaviana, 2022). Therefore, the first hypothesis is:

$$Return\ on\ Asset\ (ROA) = \frac{Net\ Income}{Total\ Assets}$$

H1: Financial Targets Have an Effect on Financial Statement Fraud

2. Capability

Capability in the Fraud Hexagon theory refers to the ability, position, and authority possessed by individuals that enable the occurrence of fraud. Individuals who hold high positions and have worked for a long period within a company generally have a deeper understanding of the company’s internal conditions, thereby having greater opportunities and capabilities to commit fraud when there is sufficient pressure or opportunity (Riduan & Arif, 2024). With the knowledge, access to information, and authority they possess, such individuals can exploit their positions to influence decision-making processes as well as the presentation of financial statements.

Change in Directors

Changes in Directors are often used as a proxy for the capability element in studies on financial statement fraud. Changes in directors may reflect an evaluation of the previous directors' performance and can potentially create information asymmetry within the company. This condition can provide opportunities for internal parties to exploit their access to information for certain interests. Therefore, changes in directors are used as an indicator related to management's ability to influence the financial reporting process and are measured using a dummy variable, coded 1 if there is a change in directors and 0 if there is no change in directors during the research period (Rahmawati & Dita Pramesty, 2024). Therefore, the second hypothesis is:

H2: Changes in Directors Have an Effect on Financial Statement Fraud

3. Opportunity

Opportunity is a condition that provides a chance for an individual to commit fraud. Vousinas (2019) explains that opportunity arises when individuals perceive that fraudulent actions have a low likelihood of being detected. This situation is generally associated with weaknesses in a company's internal control system. When internal controls do not function effectively, various gaps may emerge, such as weak segregation of duties, lack of supervision, or minimal internal auditing. These weaknesses create opportunities for individuals within the company to abuse their authority and commit fraud in financial reporting without fear of sanctions. Therefore, the weaker a company's internal control system, the greater the opportunity for fraud to occur (Sukmajati & Rani, 2025).

Nature of Industry

Nature of Industry describes the ideal condition of a company within a particular industry, which is expected to reflect good performance and profitability (Ainiyah & Effendi, 2021). In the context of financial reporting, this condition is often associated with accounts that rely on management estimates, such as receivables. Changes in or certain levels of receivables can reflect the effectiveness of sales policies, the quality of credit management, and the company's potential financial risks (Novarina & Triyanto, 2022). Because these accounts are based on estimates, they have a higher potential for manipulation and may be used by management to adjust financial statements to appear consistent with expected industry conditions, even if they do not fully reflect the company's actual condition. Therefore, Nature of Industry (NOI) in this study is measured through changes in receivables as an indicator that may signal the likelihood of manipulation in financial statements. Therefore, the third hypothesis is:

$$NOI = \frac{(account\ receivable_{(t)} - account\ receivable_{(t-1)})}{(revenue_{(t)} - revenue_{(t-1)})}$$

H3: Nature Of Industry Have an Effect on Financial Statement Fraud

4. Rationalization

Rationalization in the Fraud Hexagon explains how perpetrators of fraud justify their actions (Octaviana, 2022). In this context, a change in auditor is often viewed as an important indicator, as such changes may be used by management to justify manipulative actions that were previously difficult to carry out under the previous auditor (Syurmita et al., 2024).

Change in Auditors

A change in auditor is considered to create opportunities for management to conceal or divert attention from previous audit findings, as new auditors generally require time to fully understand the company's overall condition (Riduan & Arif, 2024). This adaptation period may be exploited by management to adjust accounting policies or conceal irregularities in financial

statements so that such changes do not raise suspicion. This condition is related to the concept of rationalization in the Fraud Hexagon, where perpetrators perceive such actions as justifiable because they occur within the formal process of auditor transition. In research, change in auditor is commonly proxied using a dummy variable, coded 1 if there is a change in auditor within a given period and 0 if there is no change in auditor (Winata et al., 2024). Therefore, the fourth hypothesis is:

H4: Changes in Auditors Have an Effect on Financial Statement Fraud

5. Arrogancy

Arrogance in the Fraud Hexagon describes an excessive attitude of a leader who perceives themselves as having absolute power, thereby considering rules or internal controls no longer as limitations to their actions (Yulianti et al., 2024). This attitude arises when leaders, particularly CEOs, believe that their position is strong enough to control the company's narrative and make decisions without considering potential ethical or regulatory risks (Safriliana & Ramadhan, 2025).

Frequent Number of CEO's Pictures

Arrogance in the context of corporate governance is associated with the dominance of leaders in decision-making and the tendency to centralize control in a single figure, typically the CEO (Handoko & D I, 2021). This condition may create an organizational environment that is less open to criticism, causing decisions to be based more on the leader's personal perceptions rather than objective considerations. This can potentially weaken the oversight function and lead to the belief that decisions, including manipulative ones, can be justified in order to maintain leadership image (Triyani et al., 2024). In studies on the Fraud Hexagon, the level of arrogance is often proxied by the frequent number of CEO's pictures, which refers to the frequency of the CEO's appearance in annual reports or official company documents. The more frequently the CEO's images appear, the higher the indication that the leader emphasizes self-image, thus this indicator is used to examine its relationship with the potential occurrence of financial statement fraud. Therefore, the fifth hypothesis is:

H5: Frequent Number of CEO's Pictures Has an Effect on Financial Statement Fraud

6. Collusion

Collusion is an agreement between two or more parties to commit fraudulent actions that may harm other parties. In the Fraud Hexagon, collusion is introduced as a new element developed from the Fraud Pentagon, where Voutsinas (2019) emphasizes that collusion plays an important role in facilitating fraud due to structured cooperation among perpetrators. In the context of this study, collusion can be proxied by the existence of cooperation projects between companies and the government, as such relationships may create opportunities for non-transparent practices, certain arrangements, or abuse of authority that can increase the risk of fraud in financial reporting (Syrmita et al., 2024).

Cooperation With The Government

Cooperation between companies and the government can create opportunities for fraud, as government projects generally involve multiple parties and have large contract values (Murnandes & Budyastuti, 2025). These conditions increase the potential for collusion and manipulation practices, especially when internal parties attempt to gain benefits beyond their rights through abuse of authority or manipulation of financial statements (Rizki et al., 2025). In this study, cooperation between companies and the government is proxied using a dummy variable, coded 1 if there is cooperation between the company and the government, and 0 if there is no cooperation during the research period (Munawarah & Fadillah, 2024). Therefore, the sixth hypothesis is:

H6: Cooperation with the Government Has an Effect on Financial Statement Fraud

Earnings Management Using The Jones Model

Earnings management is an action taken by management to increase or decrease earnings in a certain period to meet the interests of management as well as stakeholders (Belkaoui, 2006). This practice is generally carried out through accrual adjustments in the preparation of financial statements so that the company's performance appears to meet the expected targets. To detect such practices, one of the commonly used methods is the Jones Model introduced by Jones (1991), which separates total accruals into discretionary and non-discretionary accruals to determine the extent to which management intervenes in reported earnings. Over time, this model was refined into the Modified Jones Model, which is considered more accurate in measuring discretionary accruals and can help identify earnings manipulation in financial statements (Dechow et al., 1995).

The Modified Jones Model according to (Fiquriansyah et al., 2024) is as follows:

1. Calculating Total Accruals (TAC), which is net income in year t minus operating cash flow in year t , is formulated as:

$$TAC = NI_{it} - CFO_{it}$$

Next, total accruals (TA) are estimated using the Ordinary Least Squares (OLS) method as follows:

$$\frac{TA_{it}}{A_{it-1}} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \beta_2 \left(\frac{\Delta Rev_{it}}{A_{it-1}} \right) + \beta_3 \left(\frac{\Delta PPE_{it}}{A_{it-1}} \right) + \varepsilon$$

2. Using the regression coefficients from the equation above, non-discretionary accruals (NDA) are determined as follows:

$$NDA_{it} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \beta_2 \left(\frac{\Delta Rev_{it}}{A_{it-1}} - \frac{\Delta Rec_{it}}{A_{it-1}} \right) + \beta_3 \left(\frac{\Delta PPE_{it}}{A_{it-1}} \right)$$

3. Finally, discretionary accruals (DA) as a measure of earnings management are calculated as:

$$DA_{it} = \frac{TA_{it}}{TA_{it-1}} - NDA_{it}$$

Description:

DA_{it} = Discretionary Accruals of company i in year t

NDA_{it} = Non-Discretionary Accruals of company i in year t

TA_{it} = Total accruals of company i in year t

NI_{it} = Net income of company i in year t

CFO_{it} = Cash flow from operating activities of company i in year t

A_{it-1} = Total assets of company i in year $t-1$

ΔRev_{it} = Revenue of company i in year t minus revenue in year $t-1$

PPE_{it} = Property, plant, and equipment of company i in year t

ΔRec_{it} = Accounts receivable of company i in year t minus accounts receivable in year $t-1$

ε = error term

The value of discretionary accruals (DA) is used as an indicator of the level of earnings management. A higher DA value (>1) indicates that the company engages in earnings management by increasing reported earnings above the actual level. Conversely, a lower DA value (<1) indicates that the company decreases reported earnings. This assessment refers to the earnings management model using the Modified Jones Model developed by Dechow et al. (1995). Therefore, the seventh hypothesis is:

H7: Earnings Management Has an Effect on Financial Statement Fraud

Financial Statement Fraud

Financial statement fraud is an intentional act carried out through the misstatement or omission of material information in financial statements, resulting in misleading information that can influence the decision-making of financial statement users (Miftahul Jannah & Rasuli,

2021). This practice is generally conducted by management by increasing or decreasing company earnings according to their interests, causing the financial statements to not reflect the company's actual economic condition (Natalia et al., 2021). Such fraud can be carried out through overstatement, such as inflating assets or revenues and reducing expenses or liabilities, or through understatement, which involves decreasing revenues or increasing expenses so that the reported earnings do not align with actual conditions (Novarina & Triyanto, 2022). To detect potential fraud in financial statements, one commonly used method is the Beneish M-Score, a model capable of identifying the likelihood of earnings manipulation by analyzing several variables within financial statements (Ima Mukaromah & Gideon Setyo Budiwitjaksono, 2021). The M-Score model is formulated as follows:

$$M\text{-Score} = -4.840 + 0,920 \text{ DSRI} + 0,528 \text{ GMI} + 0,404 \text{ AQI} + 0,892 \text{ SGI} + 0,115 \text{ DEPI} - 0,172 \text{ SGAI} - 0,327 \text{ LVGI} + 4,697 \text{ TATA}$$

The Beneish M-Score model is used to detect the likelihood of fraud in financial statements by analyzing changes in financial data from year to year. The M-Score value serves as the basis for determining whether a company is indicated to have manipulated its financial statements. Companies with an M-Score value ≥ -2.22 are categorized as having a tendency to commit fraud and are assigned a code of 1, while companies with an M-Score value ≤ -2.22 are categorized as not indicated to commit fraud and are assigned a code of 0 (Ainiyah & Effendi, 2021; Aprilia et al., 2022). This model uses eight financial ratios to detect indications of earnings manipulation, namely Days Sales Receivable Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Depreciation Index (DEPI), Sales Growth Index (SGI), Sales, General and Administrative Expenses Index (SGAI), Total Accruals to Total Assets (TATA), and Leverage Index (LVGI) (Kusumosari & Solikhah, 2021).

Days Sales Receivable Index (DSRI) Days Sales Receivable Index (DSRI) is a ratio that measures changes in receivables relative to sales from one year to the next to identify whether there is an imbalance between the growth of receivables and sales (Annisa & Ghozali, 2020). DSRI is calculated using the following formula:

$$DSRI = \frac{(receivable_{(t)}/revenue_{(t)})}{(receivable/revenue_{(t-1)})}$$

Gross Margin Index (GMI) is a ratio that shows changes in a company's gross profit margin from one year to the next and is used to identify whether there is a decline or abnormal change in the gross margin (Annisa & Ghozali, 2020). GMI is calculated using the following formula:

$$GMI = \frac{(receivable_{(t-1)} - COGS_{(t-1)}/receivable_{(t-1)})}{(receivable_{(t)} - COGS_{(t)}/receivable_{(t)})}$$

Asset Quality Index (AQI) It is a ratio that reflects the quality of a company's non-current assets, particularly the extent to which these assets are expected to provide future benefits, and represents the proportion of deferred costs included in assets (Annisa & Ghozali, 2020). AQI is calculated using the following formula:

$$AQI = \frac{\left(1 - (current\ asset_{(t)} + \frac{fixed\ assets_{(t)}}{total\ assets_{(t)}})\right)}{\left(1 - (current\ asset_{(t-1)} + \frac{fixed\ assets_{(t-1)}}{total\ assets_{(t-1)}})\right)}$$

Sales Growth Index (SGI) It is a ratio that indicates the company's sales growth from year $t-1$ to year t and is used to describe changes in the level of sales between periods (Annisa & Ghozali, 2020). SGI is calculated using the following formula:

$$SGI = \frac{revenue_{(t)}}{revenue_{(t-1)}}$$

Depreciation Index (DEPI) It is a ratio that compares the depreciation rate of a company's property, plant, and equipment (PPE) in the previous year with that in the year suspected of financial statement manipulation. This ratio is used to identify changes in the recognition of depreciation expenses from one period to another (Annisa & Ghozali, 2020). DEPI is calculated using the following formula:

$$DEPI = \frac{(depreciation_{(t-1)}/depreciation_{(t-1)} + fixed\ assets_{(t-1)})}{(\frac{depreciation_{(t)}}{depreciation_{(t)}} + fixed\ assets_{(t)})}$$

Sales, General and Administrative Expense Index (SGAI) It is a ratio that compares selling, general, and administrative expenses to sales in the current year with those of the previous year. This ratio is used to identify whether there are unusual changes in the company's operating expenses that may indicate potential financial statement manipulation (Annisa & Ghozali, 2020). SGAI is calculated using the following formula:

$$SGAI = \frac{(\frac{SGA_{(t)}}{receivable_{(t)}})}{(\frac{SGA_{(t-1)}}{Receivable_{(t-1)}})}$$

Total Accruals to Total Assets (TATA) It is a ratio that measures total accruals relative to total assets to assess the portion of accruals that may be utilized in financial statement manipulation (Annisa & Ghozali, 2020). TATA is calculated using the following formula:

$$TATA = \frac{(net\ income\ for\ the\ year_{(t)} - operating\ cash\ flow_{(t)})}{total\ assets_{(t)}}$$

Financial statement fraud is not influenced by a single factor but can be affected by various interrelated factors. From the perspective of Fraud Hexagon Theory, the potential for fraud can arise from a combination of conditions such as pressure, opportunity, rationalization, capability, arrogance, and collusion that drive individuals or management to manipulate financial statements. Previous studies have shown that various indicators within the fraud hexagon, such as financial targets, change in directors, nature of industry, change in auditors, the frequent number of CEO's pictures, and the company's involvement in government projects, can be used to detect the likelihood of financial statement fraud (Maharani, 2024). Based on this explanation, simultaneous testing is conducted to determine whether Financial Targeting, Change in Directors, Nature of Industry, Change in Auditors, Frequent Number of CEO's Pictures, Cooperation with the Government, and Earnings Management collectively affect financial statement fraud. Therefore, the eighth hypothesis is:

H8: Financial Targeting, Change in Directors, Nature of Industry, Change in Auditors, Frequent Number of CEO's Pictures, Cooperation with the Government, and Earnings Management Simultaneously Have an Effect on Financial Statement Fraud.

The conceptual framework of this study is as follows:

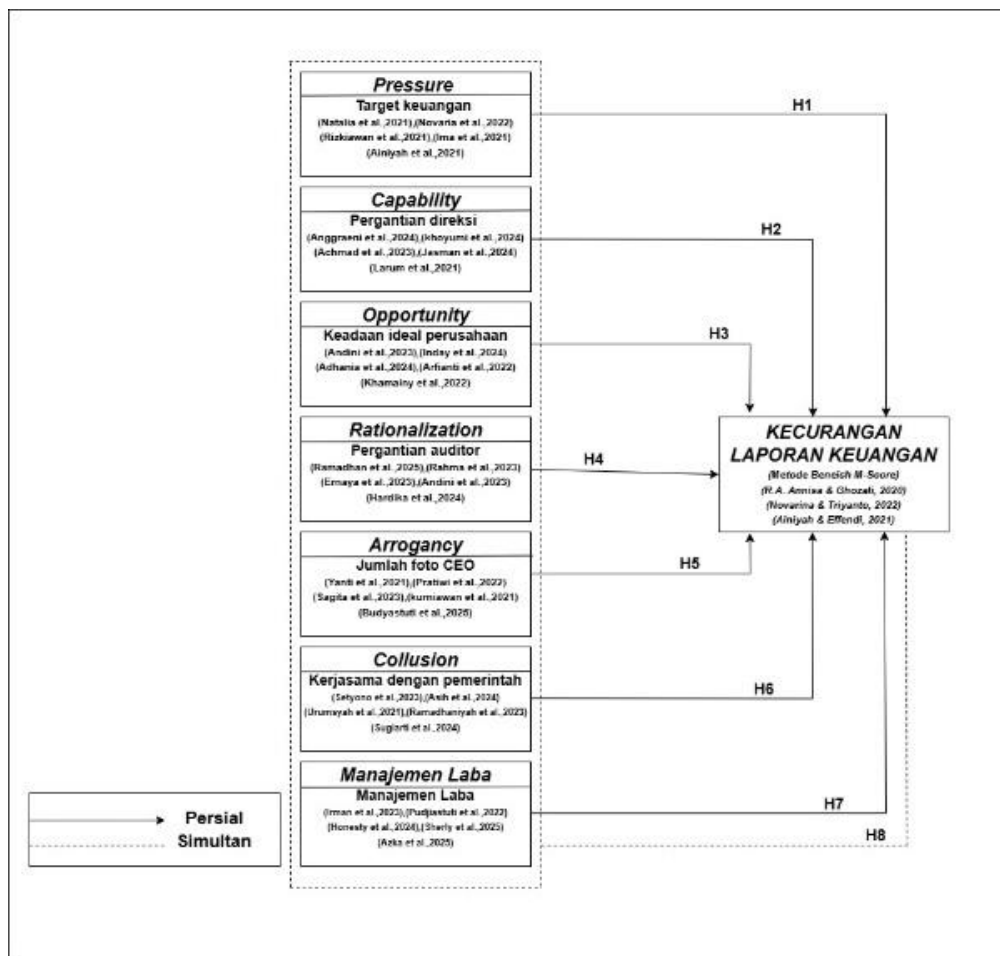


Figure 4. Conceptual Framework
Source: Processed Data by the Researcher

METHOD

The method used in this study is a quantitative approach. According to Sugiyono (2020), the quantitative method is a research method that utilizes numerical data and is analyzed using statistical techniques. This approach employs numerical data processed through relevant statistical methods to test hypotheses, thereby demonstrating the relationships between the variables under study (Boermawan & Arfianti, 2022). In addition, a causal associative problem formulation refers to a research formulation that examines cause-and-effect relationships between independent variables (variables that influence) and dependent variables (variables that are influenced) (Sugiyono, 2020:37).

Data Collection Method

The data collection technique used in this study is the documentation method as a source of secondary data. The data collected consist of financial statements and annual reports of companies for the 2022–2024 period. All documents were obtained through the Indonesia Stock Exchange (IDX) website (www.idx.co.id) as well as the official websites of each company.

This study uses secondary data sources. According to Sugiyono (2020), secondary data are data obtained indirectly by data collectors through available written sources. Secondary data may include documents published through official websites or other media. In this study, the secondary data used consist of financial statements and annual reports of companies for the 2022–2024 period, obtained through the Indonesia Stock Exchange (IDX) website and the official websites of each company.

Data Determination Method

Population

Population is a general area consisting of objects or subjects that have certain characteristics determined by the researcher to be studied and from which conclusions are drawn (Sugiyono, 2020:80). The population in this study consists of pharmaceutical and cosmetic companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. The total population in this study is 18 companies.

Sample

The sample is a part of the population to be studied and has characteristics that are expected to represent the actual population (Sri Panca Setyawati, 2020:25). The sampling technique used in this study is non-probability purposive sampling. Non-probability purposive sampling is a sampling technique that uses certain considerations or criteria (Sugiyono, 2020:85).

The criteria for selecting samples in this study are as follows:

- 1) Pharmaceutical and cosmetic companies listed on the Indonesia Stock Exchange (IDX) for the 2022–2024 period
- 2) Pharmaceutical and cosmetic companies that have complete financial statements for the 2022–2024 period
- 3) Pharmaceutical and cosmetic companies that have complete data for the research variables during the 2022–2024 period

Based on the above criteria, the number of samples in this study is presented in the table below:

Table 1. Sampling Criteria

No	Company Criteria	Number of Companies
1	Pharmaceutical and beauty companies listed on the Indonesia Stock Exchange (IDX) for the period 2022-2024	18
2	Prahmaceutical and beauty companies with complete financial statement for the period 2022-2024	(2)
3	Pharmaceutical and beauty companies with complete research variabel data for the period 2022-2024	(2)
Total sample of companies		14
Total research samples of financial statement and annual reports (14 x 3)		42

Source: Processed By the Researcher

Analysis Design and Hypothesis Testing

This study employs an analytical design consisting of descriptive analysis to describe the characteristics of the research data, logistic regression analysis to examine the effect of independent variables on the dependent variable, and hypothesis testing to determine the level of significance of the relationships among the variables studied. All data processing and analysis in this study are conducted using SPSS software version 26.

Descriptive Statistical Analysis

Descriptive statistical analysis is a technique used to analyze data by describing or presenting the data as they are, without intending to draw generalizable conclusions (Sugiyono, 2020:147). This analysis typically uses measures such as the mean, standard deviation, variance, maximum value, minimum value, and total value to illustrate the characteristics of each research variable (Hardani, Helmina Andriani et al., 2020). In this study, descriptive statistical analysis is used to provide an initial overview of the data for both the dependent and independent variables analyzed.

RESULTS AND DISCUSSION

Table 2. Results of Descriptive Statistical Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Statement Fraud	42	0,00	1,00	0,8810	0,32777
Financial Targeting	42	1,00	32179,00	6211,2619	9260,56200
Change in Director	42	0,00	1,00	0,4524	0,50376
Nature of Industry	42	-1496560,00	77506,00	-38802,9286	233137,07020
Change in Auditors	42	0,00	1,00	0,0476	0,21554
Frequent Number of CEO's Pictures	42	0,00	1,00	0,7143	0,45723
Cooperationwith the Government	42	0,00	1,00	0,3810	0,49151
Earning Manajement	42	-1397218,00	788943,00	-113161,1190	471008,31127
Valid N (listwise)	42				

Source : SPSS Output Result

Binomial Logistic Regression Test

Overall Model Fit

Overall Model Fit assessment in logistic regression analysis is used to determine the influence of independent variables on the dependent variable. The statistics used in evaluating the overall model fit employ the Likelihood function, where the Likelihood function L (LL) represents the probability that the hypothesized model describes the input data (Ghozali, 2018:332).

For hypothesis testing, LL is transformed into -2 Log-Likelihood (-2LL) to test the null and alternative hypotheses. This test is conducted by comparing the -2LL value of the constant-only model (initial model) with the -2LL value of the model including the constant and independent variables, which is distributed as a chi-square (χ^2) with degrees of freedom equal to the difference in df between the two models. If the -2LL value of the constant-only model is greater than the -2LL value of the full model (constant plus independent variables), or if there is a decrease in -2LL, it indicates that the regression model fits the data well (Ghozali, 2018:333).

The hypotheses for evaluating overall model fit are as follows:

H_0 = The hypothesized model fits the data

H_1 = The hypothesized model does not fit the data.

Table 3. Overall Model Fit Results

	Value -2LogLikelihood
-2LogLikelihood awal (Block Number = 0)	30,662
-2LogLikelihood akhir (Block Number = 1)	8,840

Source : SPSS Output Result

Based on Table 3, the overall model test results show a decrease in the -2 Log Likelihood value of 21.882 after the independent variables were included in the model. This decrease indicates that the hypothesized regression model fits the data better, so H_0 is accepted. Furthermore, the decrease in the -2 Log Likelihood value of 21.882 is compared to the Chi-Square table value of 14.067. Since this value is greater than the Chi-Square table value ($21.882 > 14.067$), it can be concluded that the regression model used has a significant effect.

Hosmer and Lemeshow's Goodness of Fit Test

The test developed by Hosmer and Lemeshow in the Goodness of Fit (GOF) is used to assess the agreement between the probabilities predicted by the model and the observed probabilities. If the probability value ≥ 0.05 , the hypothesis is accepted, and the model is considered appropriate or a good fit; conversely, if the probability value ≤ 0.05 , the hypothesis is rejected, and the model is considered not consistent with the data (Hilbe, 2017:88).

The hypotheses used to evaluate the suitability of the regression model with Hosmer and Lemeshow’s Goodness of Fit Test are as follows:

- 1) If the probability value ≤ 0.05 (significant), H_0 is rejected, meaning there is a significant difference between the model and the observed values. Therefore, the Goodness of Fit Test cannot predict the observed values.
- 2) If the probability value ≥ 0.05 (not significant), H_0 is accepted, meaning the model fits the observed values.

Table 4. Hosmer and Lemeshow’s Goodness of Fit Test Result

Step	Chi-Square	df	Sig.
1	1,601	8	0,991

Source : SPSS Output Result

Based on Table 4, the results of the model feasibility test show a significance value of 0.991, which means the significance value is ≥ 0.05 . This indicates that H_0 is accepted, meaning the hypothesis is accepted and the model fits the observed data.

Nagelkerke’s R Square

The determinant coefficient in logistic regression uses Nagelkerke’s R Square, which measures how much the independent variables are able to influence the dependent variable. The value of Nagelkerke’s R Square ranges from 0 to 1. A value close to 0 indicates that the independent variables have limited ability to explain the dependent variable, whereas a value close to 1 indicates that the independent variables have a strong ability to explain the information needed to predict the dependent variable (Ghozali, 2018:333).

Table 5. Coefficient of Determnation Results

Step	-LogLikelihood	Cox & Snell R Square	Nagelkerke R Square
1	8.840 ^a	0,405	0,782

Source : SPSS output result

Based on the results in Table 5, the determinant coefficient test shows a Nagelkerke’s R Square value of 0.782 or 78.2%. This indicates that the independent variables influence the dependent variable by 78.2%, while the remaining 21.8% is affected by other variables not included in this study.

Binomial Logistic Regression Test

According to Ghozali (2018), binomial logistic regression is a data analysis technique used to test the probability of a certain condition occurring in the dependent variable based on predictions from independent variables (Purnama & Sofro, 2024). Logistic regression is employed to examine the relationship between independent and dependent variables and to determine the significance of these variables’ effects, both simultaneously and partially, on the dependent variable (Eddy Roflin et al., 2023:4). The logistic regression model consists of binary logistic regression and multinomial logistic regression. Binary logistic regression is used when the dependent variable is dichotomous, having only two categories represented by 0 and 1, whereas multinomial logistic regression is applied if the dependent variable has more than two categories (Eddy Roflin et al., 2023:4–5). In this study, binary logistic regression is used because the dependent variable is nominal with two categories. The model’s adequacy can be tested using Hosmer and Lemeshow’s Goodness of Fit Test to assess model suitability, while the explanatory power of the independent variables on the dependent variable can be evaluated through Nagelkerke’s R Square (Nurlaelah & Nurlaelah, 2022). The logistic regression model used in this study is as follows.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \varepsilon$$

Explanation of the Variables:

- Y = Likelihood of Financial Statement Fraud
- β_0 = Constant
- $\beta_1 - \beta_6$ = Regression Coefficient of the independent variabel
- X_1 = Financial targeting
- X_2 = Change in Director
- X_3 = Nature of Industry
- X_4 = Change in Auditor
- X_5 = Frequent Number of CEO’s Pictures
- X_6 = Coopertaion With the Government
- X_7 = Earnings Manajement
- ε = Error Term

Table 6. Result of Binomial Logistic Regression Analysis Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a	Financial Targeting	-3,756	1.988	3.570	1	0,376	0,030
	Change in Director	-4,031	3,012	1,791	1	0,181	0,018
	Nature of Industry	21,174	3.206	0,460	1	0,049	8,798
	Change in Auditors	-19,317	30890,244	0,000	1	1,000	0,000
	Frequent Number of CEO’s Pisture	-19,883	9266,160	0,000	1	0,998	0,000
	Cooperation with the Government	22,208	7818,048	0,000	1	0,998	4,466
	Earnings Manajement	15,736	6,596	5.691	1	0,017	0,000
	Constant	24,673	9266,160	0,000	1	0,998	5,784

a. Variable(s) entered on step 1: Financial Targeting, Change in Director, Nature of Industry, Change in Auditor, Frequent Number of CEO’s Pictures, Cooperation with the Government, Earnings Manajement.

Source : SPSS Output Result

Omnibus Test

The Omnibus Test is a statistical test conducted simultaneously (F-test). In this study, the Omnibus Test is used to examine whether the independent variables simultaneously affect the dependent variable (Ghozali, 2018:98). The significance level used is 0.05, and the hypotheses are formulated as follows:

- 1) If the significance value ≤ 0.05 , then H_0 is rejected and H_1 is accepted, meaning the independent variables simultaneously influence the dependent variable.
- 2) If the significance value ≥ 0.05 , then H_0 is accepted and H_1 is rejected, meaning the independent variables do not simultaneously influence the dependent variable.

Table 7. Omnibust Test Result

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	21,822	7	0,003
	Block	21,822	7	0,003
	Model	21,822	7	0,003

Source: SPSS Output Result

Based on Table 7, the Omnibus Test results in this study show a significance value of 0.003, which means the significance value is less than 0.05 ($0.003 \leq 0.05$). This indicates that hypothesis H_1 is accepted, meaning the independent variables simultaneously influence the dependent variable.

Wald Test

The Wald Test is a statistical test conducted partially (T-test). In this study, the Wald Test is used to examine the extent to which each independent variable partially explains the dependent variable (Ghozali, 2018:99). The Wald statistic is calculated by dividing the estimated coefficient by its standard error (Kleinbaum & Klein, 2010:139). The significance level used is 0.05, and the hypotheses are as follows:

- 1) If the significance value ≤ 0.05 , then H_0 is accepted and H_1 is rejected, meaning the independent variable partially influences the dependent variable.
- 2) If the significance value ≥ 0.05 , then H_0 is rejected and H_1 is accepted, meaning the independent variable partially does not influence the dependent variable.

Table 8. Wald Test Result

Hypothesis	Hypothesis Description	B	Sig.	Conclusion
H ₁	Financial targets have a positive effect on the tendency of financial statement fraud	-3,756	0,512	Not Supported
H ₂	Change in directors has a positive effect on the tendency of financial statement fraud	-4,031	0,181	Not Supported
H ₃	The nature of the industry has a positive effect on the tendency of financial statement fraud	21,174	0,049	Supported
H ₄	Change in auditors has a positive effect on the tendency of financial statement fraud	-19,317	1,000	Not Supported
H ₅	Frequent number of CEO's pictures has a positive effect on the tendency of financial statement fraud	-19,883	0,998	Not Supported
H ₆	Cooperation with the government has a positive effect on the tendency of financial statement fraud	22,208	0,998	Not Supported
H ₇	Earnings management has a positive effect on the tendency of financial statement fraud	15,736	0,017	Supported

Source : SPSS Output Result

Based on the results of the logistic regression test in Table 8, it can be seen that out of the seven proposed hypotheses, only two hypotheses are supported, namely H₃ and H₇. The nature of the industry variable has a B value of 21.174 with a significance value of 0.049, which is less than 0.05, indicating that the nature of the industry has a positive and significant effect on the tendency of financial statement fraud. Furthermore, the earnings management variable has a B value of 15.736 with a significance value of 0.017, also less than 0.05, indicating that earnings management has a positive and significant effect on the tendency of financial statement fraud.

Meanwhile, the financial target, change in directors, change in auditors, frequent number of CEO's pictures, and cooperation with the government variables have significance values greater than 0.05, so the proposed hypotheses are not supported. However, the direction of the relationship between variables can still be observed through the B coefficient values in the logistic regression model. According to Ghozali (2018), the regression coefficient (B) in logistic regression shows the direction of the relationship between independent and dependent variables, where a positive coefficient indicates a direct relationship, while a negative coefficient indicates an inverse relationship. Therefore, although some variables have a positive relationship with the tendency of financial statement fraud, the effect is not statistically significant and thus not strong enough to support the hypotheses proposed in this study.

CONCLUSION

Based on the results of the data analysis, several conclusions can be drawn. The financial target and change in directors variables do not affect financial statement fraud. The nature of the industry variable has a positive effect on financial statement fraud, indicating that a company's efforts to maintain a stable appearance can encourage management to manipulate

financial statements. The change in auditors, frequent number of CEO's pictures, and cooperation with the government variables do not affect financial statement fraud because these factors do not directly create opportunities for financial manipulation. Meanwhile, the earnings management variable has a positive effect on financial statement fraud because earnings management practices can be used as a means to manipulate financial information to appear better than the actual condition. Simultaneously, financial target, change in directors, nature of the industry, change in auditors, frequent number of CEO's pictures, cooperation with the government, and earnings management together influence financial statement fraud.

REFERENSI

- ACFE 2024. Occupational Fraud 2022: A Report To The Nations. *Association of Certified Fraud Examiners*, 1–96.
- Ainiyah, L. N., & Effendi, D. (2021). Pengaruh Hexagon Fraud Theory Dalam Mendeteksi Kecurangan Laporan Keuangan (Studi Perusahaan Manufaktur Sub Sektor Food and Beverage Yang Terdaftar Di Bursa Efek Indonesia 2016-2020). *Jurnal Ilmu Dan Riset Akuntansi*, 11(10), 21.
- Annisa, R. A., & Ghozali, I. (2020). Pendeteksian Kecurangan Laporan Keuangan Menggunakan Analisis Beneish M-Score pada Perusahaan Non Keuangan yang Terdaftar di Bursa Efek Indonesia Tahun 2017-2018. *Diponegoro Journal Of Accounting*, 9(3), 1–12. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Boermawan, G., & Arfianti, R. I. (2022). Pengaruh Fraud Triangle Terhadap Kecurangan Pelaporan Keuangan Dengan Beneish M-Score Model. *Journal of Applied Managerial Accounting*, 6(2), 173–186. <https://doi.org/10.30871/jama.v6i2.4009>
- Fiqriansyah, R., Amandayu, I., Br Tarigan, K., & Orchidia, W. (2024). Manajemen Laba dengan Pendekatan Model Jones. *Jurnal Akuntansi Dan Keuangan West Science*, 3(01), 39–46. <https://doi.org/10.58812/jakws.v3i01.910>
- Ginting & Daljono. (2023). Analisis Pengaruh Fraud Hexagon Terhadap Fraudulent Financial Reporting Menggunakan Metode Beneish M-Score. *Diponegoro Journal of Accounting*, 12(3), 1–15. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Ghozali, I. (2018), *Aplikasi Analisis Multivariate Dengan Program Ibm SPSS 25*. Universitas Diponegoro.
- Hardani, S.Pd., M. S., M.S. Nur Hikmatul Auliya, Grad.Cert.Biotech Helmina Andriani, Apt Roushandy Asri Fardani, S.Si., M.Pd Jumari Ustiawaty, S.Si., M.Si Evi Fatmi Utami, M.Farm., and M. I Ko. Dhika Juliana Sukmana, S.Si., M.Sc Ria Rahmatul Istiqomah. 2020. *Buku Metode Penelitian Kualitatif*. Vol.6.
- Hilbe, Joseph M. 2017. *Testing and Fitting a Logistic Model*.
- Handoko, & D I. (2021). *FRAUD HEXAGON DALAM MENDETEKSI FINANCIAL STATEMENT FRAUD*. 5(2), 176–192.
- Hardani, Helmina Andriani, J. U., Utami, E. F., Istiqomah, R. R., Fardani, R. A., Sukmana, D. J., & Auliya, N. H. (2020). Buku Metode Penelitian Kualitatif. In *Revista Brasileira de Linguística Aplicada* (Vol. 5, Issue 1).
- Ima Mukaromah, & Gideon Setyo Budiwitjaksono. (2021). Fraud Hexagon Theory dalam Mendeteksi Kecurangan Laporan Keuangan pada Perbankan yang Terdaftar di Bursa Efek Indonesia Tahun 2015-2019. *Jurnal Ilmiah Komputerisasi Akuntansi*, 14(1), 61–72. <http://journal.stekom.ac.id/index.php/kompak> □page61
- Kleinbaum, David G., and Mitchel Klein. 2010. *Statistics for Biology and Health: Logistical Regression*.
- Mainita Hidayati, S.Sos.,M. ,,CA Dr. Annisa Fitri Anggraeni, SE.,MM.,CIISA Dr. Tiolina Evi, SE., Ak., MM., M. A. Dr. Zara Tania Rahmadi, SE., M. Ak., BKP Dr. Marselinus Asri, SE., M.Si., Ak Zesmi Kusmila, SE., M.S. Nurapni Jmi Putri, S.E., M. Ak Siti Zuhroh, SE., M.S. Dra. Caecilia Sri Haryanti, SE., M.Si., CA Emi Kusmawati, S.E., M.S. Dr.

- Ernawaty Usman, S.E., M.Si, Ak., CA Dr. Jamaluddin, S.E., M.Si., Ak., and M.S. Sunarmin, SE.,M.Ak.,CA., Asean CPA Dr. Muh. Ilham Pakawaru, SE. 2023, *TEORI AKUNTANSI (Pengantar Dan Penerapan Konsep-Konsep Akuntansi)*.
- Maharani, F. (2024). Analisis Efektivitas Distribusi Zakat terhadap Pemberdayaan Mustahik LAZNAS Wahdah Inspirasi Zakat. *Akrual: Jurnal Bisnis Dan Akuntansi Kontemporer*, 47–61. <https://doi.org/10.26487/akrual.v17i01.28407>
- Miftahul Jannah, V., & Rasuli, M. (2021). Pendekatan Vousinas Fraud Hexagon Model dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Studi Akuntansi Dan Keuangan Indonesia*, 4(1).
- Munawarah, I., & Fadillah, M. K. (2024). Monotoring, Auditor Change, Change in Director, Ceo Duality, Dan Political Connection (Persepsi Fraud Hexagon) Terhadap Fraudulent Financial Reporting Pt. Garuda Indonesia (Persero) Tbk. Yang Terdaftar Di Bursa Efek Indonesia Periode 2018-2022. *Jurnal GICI Jurnal Keuangan Dan Bisnis*, 16(1), 74–81. <https://doi.org/10.58890/jkb.v16i1.266>
- Murnandes, M., & Budyastuti, T. (2025). Analisis Fraud Pentagon Dalam Mendeteksi Financial Statement Fraud. *Gorontalo Accounting Journal*, 8(1), 205. <https://doi.org/10.32662/gaj.v8i1.4065>
- Natalia, T. M., Luhgiatno, L., & Mohklas, M. (2021). Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan. *Jurnal Ilmu Manajemen Dan Akuntansi Terapan (JIMAT)*, 12(2), 163–174. <https://doi.org/10.36694/jimat.v12i2.337>
- Novarina, D., & Triyanto, D. N. (2022). Pengaruh Fraud Hexagon Terhadap Kecurangan Laporan Keuangan Pada Perusahaan LQ 45 Yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020. *Jurnal Akuntansi Dan Keuangan*, 10(2), 183. <https://doi.org/10.29103/jak.v10i2.7352>
- Nurlaelah, N., & Nurlaelah, E. (2022). Pengaruh Kualitas Audit Dan Kondisi Keuangan Terhadap Opini Audit Going Concer Pada Perusahaan Manufaktur Sektor Industri Dasar Dan Kimia. *Jurnal Studia Akuntansi Dan Bisnis (The Indonesian Journal of Management & Accounting)*, 10(2), 91–98. <https://doi.org/10.55171/jsab.v10i2.764>
- Octaviana, N. (2022). ANALISIS ELEMEN-ELEMEN FRAUD HEXAGON THEORY SEBAGAI DETERMINAN FRAUDULENT FINANCIAL REPORTING. *Jurnal Akuntansi*, 11(2), 106–121. <https://doi.org/10.46806/ja.v11i2.895>
- Purnama, M. D., & Sofro, A. (2024). Pemodelan Faktor-Faktor Yang Mempengaruhi Indeks Pembangunan Manusia Jawa Timur Dengan Regresi Logistik Ordinal. *MATHunesa: Jurnal Ilmiah Matematika*, 12(3), 654–661. <https://doi.org/10.26740/mathunesa.v12n3.p654-661>
- Roflin Eddy., Freza Riana., Ensiwi Munarsih Priyaan., & Iche Danriyani Liberty. 2023. *Regresi Logistik Biner dan Multinomial*. Pekalongan: PT Nasya Memperluas Manajemen.
- Rahmawati, A., & Dita Pramesty, A. (2024). Financial Sustainability: The Effect Of Fraud Triangle On Financial Statement Fraud. *Dinasti International Journal of Economics, Finance & Accounting*, 5(5), 5357–5371. <https://doi.org/10.38035/dijefa.v5i5.3616>
- Riduan, V. V., & Arif, A. (2024). Pengaruh Financial Stability, Ineffective Monitoring, Change In Auditor, Perubahan Direksi Dan Komite Audit Terhadap Financial Statement Fraud Pada Perusahaan Perbankan. *Jurnal Ilmiah Wahana Pendidikan*, 10(22), 1292–1309.
- Rizki, S. H., Wahyudi, S., & Hakim, L. (2025). *The Role of Anti-Fraud Policies in Moderating the Influence of the Fraud Hexagon on Financial Statement Fraud at Islamic Commercial Banks in Indonesia*. 05(03), 3592–3603.
- Rizkiawan, M. (2021). Analisis Fraud Hexagon dan Tata Kelola Perusahaan Atas Adanya Kecurangan dalam Laporan Keuangan. *Integritas: Jurnal Antikorupsi*, 8(2), 269–282.

- Safrihana, R., & Ramadhan, Y. K. (2025). Financial Statement Fraud: Determinant of Hexagon Fraud Theory with Audit Committee as a Moderating Variable. *Return : Study of Management, Economic and Bussines*, 4(8), 618–632. <https://doi.org/10.57096/return.v4i8.396>
- Septiana, A., & Zulkifli. (2024). Jurnal Riset Akuntansi dan Bisnis Jurnal Riset Akuntansi dan Bisnis. *Jurnal Riset Akuntansi Dan Bisnis*, 18(2), 140–152.
- Siti Nur Adillah, Cici Putri Ardyanti, & Nurlaila Nurlaila. (2023). Implementasi Teori Akuntansi Dalam Perumusan Standar Akuntansi Pelaporan Keuangan. *Jurnal Riset Akuntansi*, 1(2), 199–211. <https://doi.org/10.54066/jura-itb.v1i2.525>
- Sugiarti, R. (2024). Fraud Hexagon Theory Dalam Mendeteksi Fraudulent Financial Statement. *JABE (Journal of Applied Business and Economic)*, 10(3), 295. <https://doi.org/10.30998/jabe.v10i3.23312>
- Sukmajati, D., & Rani, P. (2025). Pengaruh Fraud Hexagon Terhadap Pendeteksian Kecurangan Laporan Keuangan (Studi Empiris Pada Perusahaan Sektor Energi Yang Terdaftar Di Bursa Efek Indonesia Periode 2019-2023). *Jurnal Review Pendidikan Dan Pengajaran*, 8(2), 3867–3874. <https://doi.org/10.31004/jrpp.v8i2.44301>
- Syurmita, S., Nisa, I. S., & Syafei, A. W. (2024). Analisis Pengaruh Teori Fraud Hexagon dalam Mendeteksi Kecurangan Pelaporan Keuangan. *Jurnal Al Azhar Indonesia Seri Ilmu Sosial*, 5(1), 41. <https://doi.org/10.36722/jaiss.v5i1.2710>
- Sugiyono.2020. *Metodelogi Penelitian Kuantitatif. Kualitatif Dan R & D*.
- Tasya Kamila, F., & Aina Zahra Parinduri. (2023). PENGARUH FRAUD HEXAGON TERHADAP FRAUDULENT FINANCIAL REPORTING DENGAN KOMITE AUDIT SEBAGAI VARIABEL MODERASI. *Jurnal Ekonomi Trisakti*, 3(1), 1407–1416. <https://doi.org/10.25105/jet.v3i1.16090>
- Triyani, N., Yusrianti, H., & Thamrin, K. (2024). Collusion, Arrogance, and Pressure on Fraudulent Financial Statements: The Role of Income Tax Rate (Evidence from Indonesia). *International Journal of Economic Behavior and Organization*, 12(3), 114–122. <https://doi.org/10.11648/j.ijebo.20241203.11>
- Winata, L. A., Suhartono, S., & Dema, Y. (2024). Evaluating the impact of hexagon fraud on potential financial statement fraud with audit quality as a moderator. *Jurnal Ekonomi Perusahaan*, 31(1), 84–106. <https://doi.org/10.46806/jep.v31i1.1157>
- Wulandari. (2022). *PENGARUH DIMENSI FRAUD HEXAGON PENDAHULUAN Fraud telah berkembang dan dengan bentuk yang beragam (Shonhadji dan Maulidi , 2021) , Association of Certified Fraud Examiners / ACFE (2020) menyebutkan bahwa dari hasil survey yang mereka lakukan dan dilapo. 6(2), 211–228.*
- Yulianti, Y., Sari, R. N., & Santoso, A. (2024). Financial Statement Fraud Detection: The Hexagon Fraud Model Approach. *Atestasi : Jurnal Ilmiah Akuntansi*, 7(1), 674–686. <https://doi.org/10.57178/atestasi.v7i1.856>