



# Fraud Triangle and Fraudulent Financial Reports: A Review

**Bibian Mwuese Suswam; Prof. Ofili Ugwudioha**

Department of Accounting, Nile University of Nigeria.

## ARTICLE INFO

**Article No.:** 120824192

**Type:** Review

**Full Text:** [PDF](#), [PHP](#), [EPUB](#), [MP3](#)

**DOI:** [10.15580/gjea.2025.1.120824192](https://doi.org/10.15580/gjea.2025.1.120824192)

**Accepted:** 10/12/2024

**Published:** 21/01/2025

**\*Corresponding Author**

Bibian Mwuese Suswam

**E-mail:** [suswambibian@gmail.com](mailto:suswambibian@gmail.com), [Ofili.u@nileuniversity.edu.ng](mailto:Ofili.u@nileuniversity.edu.ng)

[suswambibian@gmail.com](mailto:suswambibian@gmail.com), [Ofili.u@nileuniversity.edu.ng](mailto:Ofili.u@nileuniversity.edu.ng)

**Keywords:** Pressure, Opportunity, Rationalization, Fraud Triangle, Fraudulent Reports

## ABSTRACT

Fraudulent financial reporting poses a significant threat to the integrity of the trust of stakeholders in businesses and the fraud triangle highlights key elements that contribute to the occurrence of fraud in a firm. This paper reviews extant literature on fraud triangle and fraudulent financial reports of firms. Findings shows that fraud is a multifaceted phenomenon, whose contextual factors may not fit into a particular framework. Consequently, the fraud triangle should not be seen as a sufficiently reliable model for anti-fraud professionals. The paper therefore recommends that a study to identify a fraud mechanism to detect and predict fraud in financial statements be carried out.



Article's QR code

## 1.1 INTRODUCTION

Financial reports or statements are made up of records of accounting information of a company for a period of at least one business cycle or one year. Okwo (2022)

opined that companies can reflect how healthy their financial condition and existence of their performance are through financial statements. Therefore, a financial report is an important instrument to its users in evaluating and analyzing the performance of a company in order to

make an informed investment decision. When a financial report is manipulated, it misleads prospective investors and other users of financial statements in making informed decisions (Tanimu et al, 2020). According to Free (2015), fraud has adverse consequences to society and a deteriorating effect on a nation's economy. It brings huge losses, which have a significant effect on the capital market and lead to degradation of shareholder value, a decline in the value of shares, bankruptcy or liquidation, and leads to delisting from the national stock exchange.

Nevertheless, in reality the presentation of financial statements by management to the external parties sometimes is not an assurance that the information in the financial statements is communicated in its true condition. The encouragement or motivation to sometimes redress financial statements to look attractive to various parties often causes companies to manipulate and present fraudulent financial statements (Abirolu & Olorunfemi, 2020). More ethical business practice is most desirable by the public. Ethics should be a basis for doing business to prevent undesirable results and promote unethical practice in businesses. Adhariani and Siregar (2018) noted that non-existence of ethics in an organization can trigger fraud to occur. A deliberate failure to report financial statements can be in the form of material misinterpretation, inappropriate income recognition and excessive asset recognition. PwC's Global Economic Crime and Fraud Survey 2021 shows that the percentage of organizations experiencing fraud has remained proportionately steady since 2018. However, the survey of 1,296 executives across 53 countries and regions found a rising threat from external perpetrators (bad actors) that are quickly growing in strength and effectiveness.

The Lehman Brothers scandal is a good example. The firm hid over \$50 billion in loans disguised as sales. Taking advantage of earning management regarding repurchase agreements. This scandal was reported in 2008. Enron the energy company hid huge debts from its balance sheet, the act resulted in shareholders losing close to \$80 billion, thousands of employees and investors losing their retirement accounts, and many employees losing their jobs WorldCom failure to accurately report line costs by capitalizing instead of expensing them, investors were reported to lose \$180 billion others are Qwest, and Global Crossing are just a few that dissipated billions of dollars and daunted public confidence (Suyanto, 2009). These companies' losses amounted to market capitalization exceeding \$450 billion dollars. And that of HealthSouth Corp financial reporting case involving the company's senior executives in a fraud case of USD 1.4 billion (Brooks & Dunn, 2015). In Mexico in 2009 - 2011, Desarrolladora Homex SAB de CV were on temporary suspension from trading activities due to fake sales of housing units considered to be sold which were not yet constructed (Priantara, 2017). In Indonesia PT Tiga Pilar Sejahtera Food, Tbk for the December 2017 period overstated its financial statements, this condition was revealed by new management who encountered an

overstatement of up to Rp4 trillion in accounts receivable, inventories and fixed assets of the business group, and Rp662 billion in sales posts and Rp329 in EBITDA of business entities (Nanny & Einde 2022).

Nigeria as a country with an unstable economic condition also plagued accounting scandals. In 2021 Nigeria's score in the Corruption Perception Index (CPI) ranked 154 out of 180 countries on the measurement levels of corruption (Transparency International, 2021). The high profile numbers of the accounting fraud scandals in Nigeria is evidenced by the liquidation of popular banks, the cases of bank fraud, tax manipulation and corruption in election of management. Likewise, there were cases of Cadbury Nigeria Plc, in 2006, Starcoms, Afribank Plc, in 2009 African Petroleum, Etisalat, and Capital oil Plc, in 2018.

Based on the cases highlighted above, we can note two dimensions of fraud such as; first, fraud can occur domestically and abroad. Secondly, the scandals of Fraudulent financial report suggested that there is a strong connection between fraud and widespread failures in financial regulation and supervision which proved devastating to the stability of a nation's financial market.

The financial title statements are deliberately pursued by management by a way of engineering the material value of the financial statements. These fraudulent financial statements are pursued by management for several reasons. Extant literature documents potential reasons why management may gravitate to manipulate financial statements. These reasons include avoidance of debt covenant violation meeting or sometimes beating earnings expectation of analysts, improvement in compensation, bonus plan, income smoothing, covering up financial distress Lutfiana and Murtanto (2017) and Sabatian and Hutabarat (2020). This act may be in order to motivate and encourage the financial statements to look good and attract the attention of creditors and potential investors. However, this act has a negative effect on the organizations that pursue financial statements manipulation and the financial markets in general.

It is in view of the above that this paper seeks to reveal extant literature on the nexus between fraud triangle and fraudulent financial reports with a view of bringing out the gaps in literature for further research.

## 2. CONCEPTUAL CLARIFICATION

This section looks at fraud triangle and fraudulent financial reports.

### 2.1 Fraud Triangle

Fraud triangle theory is an idea proposed to investigate the causes of fraud. Reasons people commit fraudulent activities was first examined by Cressey Donald, a criminologist in the 1950s. The idea was later coined by the researcher in 1973, which he called the fraud triangle

or triangle cheating. He carried out research on what drives people to violate trust and indulge in fraud. During his investigations, he cross examined two hundred and fifty criminals whose behavior met two criteria: firstly, a person who must have accepted a position of trust in good faith, and secondly a person who later must have violated the trust.

In an attempt at explaining fraud in accounting, Cressey (1953) proposed the following elements of fraud (Pressure, Opportunity, and Rationalization). The three elements made up what he described as a fraud triangle. The fraud triangle is noted as being capable of explaining the elements that cause fraud. Onibudo (2007) states that, for fraud to occur there must be three elements which he identifies as "WOE". This means the Will, Opportunity and Exit, these in-turn referring to fraud triangle, which is pressure, opportunity and rationalization. The three elements that make up the fraud triangle are discussed thus:

### 2.1.1 Pressure

Huang et al. (2017) view pressure as the most powerful trigger for fraud and can come from both internal and external factors. Internal factors take the form of demands made on employees to achieve particular financial targets and financial stability by the company. Pressure is measured as financial stability, leverage and financial target. According to Okafor and Egbunike (2022), the motive or pressure to commit fraud is perceived in the form of real or perceived financial need or moral needs such as getting back at the employer. By this, an individual feels that he wants to, or has a need to, commit fraud.

Financial Stability is a condition that refers to the safe point of a company financially. Conditions that threaten the financial stability of the company may cause management to indulge in fraudulent financial activities. When financial stability or profitability is below average due to threats by economic conditions, operating entities, or industry, management will experience mounting pressure to commit fraud on their financial statements. Managers are given the responsibility to maintain the company's financial stability (Skousen 2008). Thus, assets are a reflection of the wealth of a company that can be used as a benchmark for investing. Developing companies certainly need a lot of assets to have a favorable look in the eyes of suppliers, creditors and potential investors. If the asset growth rate is negative, it is a signal that the company's financial condition is unstable and is considered unable to operate profitably. Management is usually pressured to show that the company is able to manage the assets to generate profitable revenue.

However, management uses financial statements as a tool to cover up the conditions of poor financial stability by committing fraud. According to Aprilia et al. (2017), the growth of changes in company assets is often utilized as a form of fraudulent financial

reporting by management. Thus, assets can be categorized as fraudulent.

On the other hand, corporate managers that are under excessive pressure require an additional source of funds through debt for running the company in order to stay competitive in the industry. According to Oktarigusta (2017), for this loan to be acquired from the third party, managers must convince the external party of their convenient repayment plan. The pressure from the third party will hence motivate managers to indulge in fraudulent financial reporting, discretionary accruals, which then levels the debt with an increase in discretionary accruals. The presence of leverage encourages management to engage in falsification of the financial statement to create a satisfactory financial position (Baralexis, 2004),

### 2.1.2 Opportunity

Manurung and Hadian (2013) defined opportunity as a situation that vulnerably allows some cheating going on. Opportunities are created by the internal control weaknesses. Of the three categories of fraud Triangle factors (pressure, opportunity and rationalization), chances are that opportunity is the basic thing that can happen at any time. Hence, requires monitoring of organizational structure starting from the top to the bottom. According to Statement of Auditing Standard SAS 99, chances of financial statement fraud with the opportunity factor can occur in three categories. The nature of industry, ineffective monitoring and organizational structure. According to Okafor and Egbunike (2022), the perceived opportunity to commit fraud and get away with it arises as a result of these enabling factors: deficient internal controls and weak corporate governance. When one or two of these factors weigh(s) heavily in the direction of fraud, the probability of fraud increases.

The complexity and industrial regulations become loopholes for companies to commit fraudulent financial reporting (Aulia, 2018 and Rahman et al., 2020). On the other hand, SAS No. 99 states that the nature of the industry is a risk that arises in a company when its operational activities are based on estimates. Companies that use a lot of estimates in their operations are particularly vulnerable to fraud. Companies that use estimates in determining the size of a particular account will pose a greater risk for the company. Companies that have complex transactions and management involvement with subjective considerations will have a higher risk of indulging in fraudulent financial reporting.

### 2.1.3 Rationalisation

According to Okafor and Egbunike (2022), the rationalization of the perpetrator is achieved through finding a morally acceptable excuse that justifies why their action is not considered as a crime. Manurung and Hadian (2013) defined rationalization as the attitude, character or set of ethical values that allow certain parties

to commit acts of fraud. Rationalization is one of the fraud triangle elements that is the most difficult to measure. One of the measures or proxied of rationalization is the level of auditor changes. The external auditor changes in the company could be used to proxy rationalization. Auditor changes is the extent at which external auditor is being substituted could replace fraudulent financial reporting (Abiloru and Olorunfemi 2021). The rate at which company makes changes to external auditors, the higher the chances of companies presenting fraudulent financial reporting. When the auditor changes, rationalization tends to increase. A change of auditor within a company can sometimes represent an attempt to remove traces of fraud, especially if the new auditor is unable to disclose the fraud (Fitri.et al 2019).

## 2.2. Fraudulent Financial Reporting

Financial reports are made up of records of accounting information of a company for a period of at least one business cycle or one year. Companies can reflect how healthy their financial condition and existence of their performance are through financial statements (Okwo, 2022). The overview of financial position and financial performance of a company is very important as it discloses how the former, the current, and the future employers deployed the assets of the companies in generating revenue. The financial statements are to be presented with integrity, accountability and fairness in accordance with Generally Accepted Accounting Principles (GAAP). Intentionally misstating the financial report will indicate fraudulent financial report. Changes made may heedfully be an act of cheating if the manager is aware of the misstatement and has not provided justification in the financial statements (Zimbelman et al., 2014).

IAS 1 also points out a second important role of financial reports. That is, financial reports should show the results of management's stewardship of the resources entrusted to them. To meet this objective, financial reports should provide information about a company's: assets, liabilities, equity, income and expenses, including gains and losses, contributions by owners and distributions to owners in their capacity as owners (owners being defined as holders of instruments classified as equity) and cash flows.

Thus, fraudulent financial reporting is the violation of accounting standards, the omission of existing amounts or the inclusion of fictitious amounts (Arens & Loebbecke, 2000). Fraudulent financial reporting is an omission or elimination of amounts or disclosures that are intentionally carried out to deceive its users. According to Reskino and Anshori (2016), a fraudulent financial report is an act usually carried out by the management that misleads the investors regarding the company performance. This deceptive act is intentionally done to bias the material facts, and to mislead the accounting information that can affect or

change the user's decision and assessment after considering the wrong facts that have been presented.

## 2.3 Theoretical Review

This paper reviews the Agency theory, Pecking order theory, Managerial hegemony theory and Opportunity theory thus:

### 2.3.1 Agency theory

The agency theory was developed by Jensen and Meckling (1976). Agency theory embeds the influential relationship that exists between managers and shareholders of the firm. This relationship has the potential to influence the decision-making process in the firm, which in turn has potential impacts on the firm. Hence, agency theory is concerned with the potential for parties (shareholders and management) to a transaction to have conflicting interests and goals, thereby resulting in actions which produce an outcome which is positive for one party but negative for the other party. Asymmetry in the information available to the different stakeholders, management and shareholders of the company tends to exacerbate the potential for conflict of interest (Garrow & Awolowo, 2018). The most desirable work contract must be able to balance between the shareholders (principals) and the managers (agents).

Asymmetric information always occurs in most of the companies. Managers (agents) dominate information leaving the shareholders out of the equation (Yushita, 2010). This condition can generate some problems making efficient contracts more difficult to achieve by the companies. Information within an organization is very vital to decision making, and management working at the 'coalface' of the operations of the company are privileged to essential information that can be manipulated to maximize their interest at the expense of the principal. The asymmetry information is an opportunity for agents to act fraud on financial statements.

The earnings management action taken by management, if left unchecked and unnoticed by the owner, will ultimately develop into a financial statement fraud that was materially misleading. Ramdany et al (2021) also assert that fraudulent financial reports are done by manipulated figures or window dressing the financial reports. Thus, the performance of the company appears satisfactory rather than actual. This action can be detrimental to the shareholders (principals).

### 2.3.3 Pecking order theory

Pecking order theory is a practical theory in terms of offering a structure for obtaining financing, which was first propounded by Donaldson (1961) then followed by Myers (1984). The theory is based on certain assumptions. First the theory assumes a strict structure that a firm resorts to internal financing at the first instant, then to external financing should the internal financial resources be insufficient. This implies that the cost of

internal financing is quite cheaper than that of the external financing. Secondly, the cost of financing, be it internal or external, is available at all times. Thirdly, the theory assumes that internal financing is subject to the firm's control. Pecking order theory relates to this paper because it constitutes an optimal financing strategy, by using a predetermined order of financing by internal financing (retained earnings) through debt financing and lastly, equity financing. The decision to choose which method of financing may trigger a firm to manipulate her financial statements.

### 2.3.3 Opportunity theory

The opportunity theory was postulated by Cohen et al., (1981) who elaborated on how five opportunity factors: Exposure, Proximity, Guardianship, Target Attractiveness, and Definitional Properties of Specific Crime mediate in an individual. In this context, Exposure refers to the ease of access that fraudsters have in committing financial crimes. They provide a convenient avenue for perpetrators of fraud to channel and manipulate fraudulent proceeds without an immediate detection. The anonymity and agility of these avenues make them a preferred tool for fraudsters seeking to obfuscate the opportunity trail of illegal activities. Then Proximity occurs due to the closeness between the perpetrator of the crime and the target. Guardianship is under the effectiveness of supervision that occurs in a company or organization. Meanwhile, attractiveness targets refer to the fraudster's motives in committing fraud against their victims. A target is usually selected in advance specifically due to the information, items and values they possess. Finally, the Definitional Properties of Specific Crimes is based on the ease with which the perpetrator can break the target. The accessibility of the environment and the vulnerability of how easily susceptible the victims are.

Financial statement is the Definitional Properties of Specific Crimes. Financial statement is an easy place to break into due to a lack of Guardianship. These five factors will cause opportunities for fraud in the company. However, the main factor was fraud due to the weakness of Guardianship in the preparation of financial statements. Because Guardianship only focuses on a portion of financial statement (cash flow sometimes balance sheet), ignoring and not given emphasis on the holistic presentation of the financial statement (Deo & Liu, 2016; Dimitrijevic, 2015; Dimitrijevic et al., 2020; Schilit et al., 2018).

### 2.3.4 Managerial Hegemony Theory

The hegemony theory was postulated by Marxist intellectual Antonio Gramsci (1891–1937). Managerial hegemony theory is focused on the level of managers' domineering structure over the companies' shareholders (Tuttle and Dillard 2007). The theory holds that managers legitimize their overbearing control by selecting cronies and associates who are passive

participants in the governance processes and will never question decisions and actions. Passive investors lack the level of power over management that active investors possess. (Appel et al 2015) because they have invested in some other companies, passive investors likely lack the resources to influence the governance of individual companies. On the other hand, active investors are considered to be inferior as they continue to rely on management with regard to obtaining and analyzing relevant information and insights about the company and its industry. In sum, their existence displays as the symbolic role rather than managing outcomes for the organizational changes and management oversight (Anichebe et al 2019).

This paper is anchored on opportunity theory because the theory is concerned about how five opportunity factors: Exposure, Proximity, Guardianship, Target Attractiveness, and Definitional Properties of Specific Crime mediate in an individual. Management is viewed as Exposure, Proximity, and Target Attractiveness because management has the motivation to benefit itself. The factors of access and proximity to targets make it easy and convenient for management to commit fraud. Investors and auditors are Guardianship. Investors and auditors are saddled with the responsibility to conduct Guardianship so that management does not commit fraud, and effective Guardianship can close the loopholes for fraud.

## 3. EMPIRICAL REVIEW

Macedo et al. (2022) adopted a model to detect financial statement fraud in Portuguese companies by the auditor. The study focused on unlisted Portuguese companies. The study used correlational research design and logistic regression model. The variables in the study are (dependent variable) financial statement and (independent variables) pressure proxied by Company characteristics opportunity proxied by Governance and control mechanism rationalization proxied by Manager and environment characteristics. The study found that financial statements that showed fraud signs and reported lower profitability were also those that showed a lower tendency to take advantage of the chance to pay fewer taxes. Also small-sized reports were a common practice used to justify the non-compliance with the duty of appointing an auditor and to conceal the absence of a fraud detection mechanism. Again, presenting high accounts receivable to justify non-existing assets, or justifying client debt with non-existing commercial transactions, or the fact that the client had already paid but the financial resource was in the possession of a former manager, may all be strong evidence of fraud.

Purba et al. (2022) detected financial statement fraud using fraud triangle and Board of director's attributes analyses. The unit of analysis is companies listed in KOMPAS100, on the Indonesian Stock Exchange. The variables in the study included; Financial statement fraud was proxied by Dechow 's fraud score

model. The fraud triangle components included financial stability, effective rationalization whereas the board of director's attributes analysis covers the number of independent boards and board of director's gender diversity. Model for OLS regression analysis was used in the study. Based on the result reported in the study there is no significant correlation between financial stability and fraudulent financial statements. As reported, the study concluded that companies listed on KOMPAS 100 index did not commit financial statement fraud, most likely due to the efficient and effective internal control that is applied in the company's environment. Effective monitoring (IND) variable is also unlikely to correlate with financial statement fraud. The result suggests that the number of independent directors does not play a significant role in suppressing fraud. Consistently, rationalization (INTREND) has no significant relationship with fraud. The finding of the study suggests that there is no sufficient evidence to conclude that companies listed in KOMPAS 100 index have arranged their profit performance in such a way to receive a greater bonus. The board of director's size (BODSIZE) also has no significant relationship with fraud. Which concluded that the size board of directors does not have any significant impact on financial statement fraud. This result implies that the number of directors who run the company does not contribute to financial statement fraud. Again, the board of director's gender diversity (BODGEND) also does not have a significant impact on fraud. Apparently, the comparison between men and women directors is not relevant.

Renata and Marlinah (2022) evaluated the influence of fraud triangle theory in detecting fraudulent financial statements. The study was conducted in Indonesia on manufacturing companies listed in Indonesia Stock Exchange (IDX) for the period 2019 to 2021. The data of the study was tested using logistic regression analysis. The dependent variable consisted of financial statement fraud proxied by Beneish M - Score Model. Conversely, the independent variables consisted of fraud triangle factors of financial stability proxied by Asset change (ACHANGE), personal financial needs proxied by managerial ownership (OSHIP), external pressure proxied by leverage ratio (LEV) and financial target proxied by Return on Assets (ROA). Nature of Industry proxied by ratio of account receivables (RECEIVABLES), ineffective monitoring proxied by the proportion of independent commissioners. Quality of external auditor proxied by BIG-4, Auditor changes (AUCHANGE) Auditor Opinion. The result of the study showed that financial stability, personal financial needs, nature of industry, and quality of external auditor variables all have an influence on financial statement fraud. On the contrary, external pressure, financial targets, ineffective monitoring, auditor change, and audit opinion have no influence on financial statement fraud.

Saputra and Hermanto (2022) examined the influence of pressure opportunity and financial rationalization on profit management on the manufacturing companies with the food and beverage

sub-sector that have been recorded and listed on the Indonesia Stock Exchange. The study used multiple linear analysis methods with secondary data. The variables in the study included earnings management as the dependent variable, while pressure for financial stability proxied by asset change (ACHANGE), external pressure proxied by leverage (LEV) and financial targets proxied by return on asset (ROA). Opportunity for nature of the industry proxied by inventory ratio (INVENTORY) and effective monitoring proxied by proportion of independent commissioners (DBOUT) and rationalization proxied by auditor change (AUCHANGE) and change of directors (DCHANGE). The result of the study showed a lot of variation based on their individual proxies of pressure, opportunity and rationalization. The financial targets have a negative effect on earnings management. On the contrary, effective monitoring and rationalization have a positive effect on earnings management. However, financial stability, external pressure and the nature of the industry have no effect on earnings management. The result implies that financial stability increases will have a greater influence on the earnings management while external pressure does not provide influence on earnings management.

Sianipar (2022) determined the factors influencing the occurrence of fraud on employee perceptions in the HG Business Group. Research was carried out on employees who work in a national business group with operational areas in Jakarta Special Capital Region, West Java, South Kalimantan and Central Kalimantan. The research method used was quantitative and linear regression analysis was adapted. The variables deployed in the study were; dependent variable fraud and independent variables; pressure, opportunity and justification/rationalization. Based on the result of the study Pressure according to employee perception has a significant positive influence as one of the factors causing fraud, opportunity according to employee perception has a positive insignificant influence as one of the factors causing fraud, and Justification according to employee perception has a significant negative influence as one of the factors causing fraud. All the variables pressure, opportunity and Justification simultaneously give influence as factors causing fraud. Although, pressure is reported to have the most dominant effect.

Siregar and Surianti (2022) evaluated the detection of financial statement fraud in the perspective of fraud triangle infrastructure, utilities and transportation sector companies on the Indonesia stock exchange. The study used linear regression analysis for data analysis. The study used two type of variables the dependent variable financial statement fraud proxied by F-score while the independent variables consisted of pressure; financial stability proxied by asset change (ACHANGE) external pressure proxied by leverage ratio (LEV) and financial target proxied by return on asset (ROA) then, opportunity; ineffective monitoring proxied by independent commissioners and lastly, rationalization proxied by auditor change (AUCHANGE). The result of

the study indicated that although management is faced with pressure when the financial stability of the companies is threatened by the state of the economy, industry and the environment where the companies operate, financial stability has no influence on financial statement fraud. The study also reported that there is always a tendency of fraud on financial statements even when companies have low leverage ratios. This is for the fact that creditors are not interested in the position of leverage (low or high). They are more interested in their relationship with the management. Furthermore, financial target, ineffective monitoring and auditor change all have no effect on financial statement fraud.

Susilo et al (2022) evaluated the effect of fraud triangle on financial statement fraud from several theses of Kwik Kian Gie faculty of economics students and student theses from other campuses in Indonesia. The study used meta-analysis which is a statistical analysis of several large analytical outputs from different studies. The variables consisted of fraudulent financial statements as dependent variable while the fraud triangle element of pressure, opportunity and rationalization as independent variable. In the aspect of pressure financial stability proxied by asset change (ACHANGE), external pressure proxied by leverage (DAR) and financial target proxied by return on asset (ROA). In the aspect of opportunity, the nature of industry proxied by receivable while rationalization proxied by audit opinion. The result of the study concluded that financial stability (ACHANGE), external pressure (DAR), financial target (ROA), nature of industry (RECEIVABLES), and Audit Opinions all have an effect on fraudulent financial statements.

Syamsuddin and Thahir (2022) examined the Fraud Triangle in Detecting Financial Statement Fraud. The study was conducted on manufacturing companies registered in Bursa Efek Indonesia. The research used a descriptive research design and logistic regression analysis. The study also used bound variables (dependent) financial statement fraud and free variables (independent) financial stability, financial target, external pressure, personal financial need, ineffective monitoring, and rationalization. The research revealed that when there is financial stability in a company, a greater return on asset level owned by the company, a higher level of personal financial need, high pressure from outside and the higher the turnover rate of auditors in the company the lower the probability of fraud in financial statements. However, the low and high ineffective monitoring in a company, does not affect the low and high fraud of financial statements.

Rinaldo et al (2022) examined fraud triangle perspective on the tendency of fraudulent financial statements in non-financial state-owned enterprises listed on the Indonesian stock Exchange IDX. The study used logistic regression analysis to analyze its data. The dependent variable consisted of fraudulent financial statement proxied by Dechow F-Score while, the independent variables consisted of the fraud triangle elements pressure; financial stability proxied by total

sales (SALTA), opportunity; nature of industry proxied by Inventory (INVENTORY) and rationalization proxied by external auditor change (AUDCHANGE) with firm size as a control variable. The study revealed that pressure proxied by financial stability and measured using SALTA has a significant negative effect on the tendency of fraudulent financial statements. The pressure that occurs due to financial instability will encourage the tendency of fraudulent financial statements. Thus, companies and investors are expected to be more alert to the potential for fraudulent financial statements if the company's finances are not in a stable condition. Opportunities proxied by the nature of industry and Rationalization proxied by changes in external auditors do not have a significant effect on the tendency of fraudulent financial statements

Utile et al (2022) analyzed fraudulent financial reporting using the fraud triangle as a case study of PT Tiga Pilar Sejahtera Tbk. The statistical instrument employed was linear regression through Excel software. The dependent variable was fraudulent financial report proxied by Beneish M-score model and SAS No.99 fraud risk factor as fraud triangle components pressure; financial target proxied by return on assets (ROA) and external pressure proxied by leverage ratio (LEV) while opportunity; nature of industry proxied by inventory (INVENTORY) and rationalization proxied by audit reports (AUDREPORT). The study revealed that the factors of pressure; financial target and external pressure both have a significant positive effect on indications of manipulation of AISA's financial statements. This proved that low average value of ROA indicates potential pressure felt by management to increase ROA in attracting investors. Opportunity has a significant effect on the indication of AISA's financial statement manipulation and rationalization significantly influenced the manipulation of the financial statements of Tiga Pilar Sejahtera Food Tbk (AISA) in 2003- 2017.

Aprian et al (2023) investigated the effect of financial stability, nature of industry and total accrual on fraudulent financial statements on industry companies listed on the Indonesia Stock Exchange in 2020. The multiple linear regression analysis was used to examine the relationship between variables, while the prerequisite test checked the normal distribution of data, the classic assumption test checked for data acceptability, and the hypothesis test determined the acceptance or rejection of hypotheses. The dependent variable used was fraudulent financial statements, proxied by the Modified Jones model while the independent variables consisted of Financial Stability proxied by asset change (ACHANGE), Nature of Industry proxied by receivables (REC), and Total Accruals (TATA). The result of the study found that Financial Stability (ACHANGE) and Nature of Industry (REC) had a significant impact on fraudulent financial statements. As the company assets increase it presents a higher chance of fraudulent financial statements. Conversely, as a company's assets decline, so do chances of fraudulent financial statements

decline. Again, Total Accruals (TATA) did not have a significant effect on fraudulent financial statements.

Djatnicka et al (2023) used Fraud Triangle Perspective in detecting financial statement fraud using the Beneish m-score model in property and real estate companies. The study was conducted using listed property and real estate companies on the Indonesia stock exchange. The analysis technique in the study used was logistic regression analysis. The dependent variable was financial statement fraud proxied by M-score. On the other hand, the independent variables were financial stability proxied by change in assets (ACHANGE), external pressure proxied by leverage ratio (LEV) and financial target proxied by return on assets (ROA). The results of the study showed that financial stability and financial targets both have a positive effect on fraudulent financial statements. Meanwhile, external pressure has no positive effect on fraudulent financial statements. The study shows that the smaller the leverage, the less likely it is for the firm to violate the credit agreement. Hence, the less leverage, the less likelihood of fraudulent financial reports occurs.

Herbenita et al (2023) examined the potential of fraud financial statements in fraud triangle in manufacturing companies in Indonesia in 2016 - 2020. The study employed logistic regression supported by EVIEWS 12 software to analyze its data. The dependent variable consisted of financial statement fraud while the independent variables in the study consisted of financial stability, financial target, personal financial need, external Pressure, Opportunity, and rationalization. The results of the study indicated that financial stability, financial targets, and personal financial needs significantly affect fraudulent financial statements. In contrast, external Pressure, Opportunity, and rationalization have no significant effect on fraudulent financial reports.

Narsa et al (2023) examined fraud triangle and earnings management based on the modified M-score: on manufacturing companies listed on the Indonesia Stock Exchange in the period 2017–2019. The study was carried out based on the logistic regression test and t-test. The variables used were the dependent variable earnings management proxied modified M-score and independent variable pressure; Financial Stability proxied by assets growth, leverage proxied by total debt and financial target proxied by return on assets (ROA). Opportunity; Nature of Industry proxied by RECEIVABLES and Effectiveness of Supervision proxied by independent commissioner. Rationalization proxied by Auditor Changes. The study reported that financial stability, nature of industry and effectiveness of supervision shows a negative relationship with earning management. The study showed that where there is a high increase in debt that is not matched by an increase in profitability is an indication of manipulation. Hence, it concluded that leverage measurement in an effort to detect fraudulent financial reports is very important. The study pointed out that apparently the company's growth

cannot be measured through profits and total assets alone.

Ricardo and Suhendah (2023) evaluated the effect of the fraud triangle in detecting fraudulent financial reporting in Indonesian banking sector companies. The study was conducted on the banking sector companies registered and listed in Indonesian Stock Exchange & Bank Based on Business Activity II, III, IV group. The study used descriptive data with panel data and combining time series and cross-section aspects. The dependent variable adopted was fraudulent financial reporting proxied by discretionary accruals while the independent variables were the three elements of fraud triangle pressure; external pressure proxied by leverage (LEV) and financial target proxied by return on asset (ROA). Opportunity; monitoring proxied by independent commissioner (DBOUT). Rationalization proxied by auditor change and accrual method. The study documented that the independent variables of external pressure, financial target, accrual method all have significant impact on fraudulent financial reports. Meanwhile the variable monitoring and auditor change reported otherwise. Monitoring does not have a significant effect on fraudulent financial reporting. The reason being that the management still intervenes with independent commissioners' work. The study shows that management will not cooperate in divulging all the necessary information to the independent commissioners and will also try to bribe them. Thus, the commissioners' performance will be clouded by those actions and become ineffective, considering that independent commissioners also have personal interest and goals. While, a new auditor can have their own judgement so that there will still be probabilities for them to find fraudulent financial reporting.

Sudirman (2023) examined the effect of pressure, opportunity, and rationalization on fraudulent financial statements in banking companies in South Sulawesi. The study used quantitative descriptive research method and multiple regression analysis with a significance level of 5%. The variable consisted of fraudulent financial statements and pressure proxied by external pressure, opportunity proxied by ineffective monitoring and rationalization proxied by total accruals. Based on the results of data analysis, the study found that all the components of fraud triangle from Pressure opportunity and rationalization all have a positive effect on fraudulent financial statements.

Tharifah et al. (2023) determined the factors affecting fraud in financial reports with the fraud triangle perspective in (SOE) companies on the Indonesia Stock Exchange. The research was conducted at BUMN companies listed on the Indonesia Stock Exchange. The data analysis technique of multiple linear regression tests using the E-Views software tool was used in the study. The independent variables used in the study were financial stability, external pressure, managerial ownership, financial target, nature of industry, ineffective monitoring, structure organization, Auditors change. The research found that Financial Stability has a positive and

significant effect on fraud financial reporting in state-owned companies listed on the Indonesia Stock Exchange. External Pressure negatively and significantly affects fraud financial reporting in BUMN Companies listed on the Indonesia Stock Exchange. Financial Targets do not affect fraud financial reporting in BUMN Companies listed on the Indonesia Stock Exchange. This was for the pressure element. For the opportunity element, the nature of industry has a negative and significant effect on fraud financial reporting in state-owned companies listed on the Indonesia Stock Exchange. Ineffective Monitoring does not affect fraud financial reporting in BUMN Companies listed on the Indonesia Stock Exchange. Organizational Structure does not affect fraud financial reporting in BUMN Companies listed on the Indonesia Stock Exchange. And the rationalization Change in Auditor does not affect fraud financial reporting in state-owned companies listed on the Indonesia Stock Exchange.

Uwah et al (2023) investigated the accounting ratios and false financial statements detection on firms listed on the Nigerian Exchange Group PLC. Data obtained were analyzed using descriptive statistics, Pearson correlation and Pooled Data Binary logit regression analysis. The variable dependent variable was false financial statements proxied by false probability of false financial statement. While the independent variables consisted of profitability ratios proxied by return on assets (ROA) and leverage ratios proxied by total debt (LEV). The findings of the study suggested that profitability has a positive relationship with false Financial Statement detection. This implies that as returns on assets (ROA) increases, it becomes easier to detect False financial statements (FFS). However, profitability and leverage ratios do not significantly relate to the probability of Financial Statement fraud occurrence.

#### 4. CONCLUSION AND RECOMMENDATION

Based on the works reviewed, the paper concludes that studies on fraud triangle theory are quite limited with most of them concentrating on the examination of few fraud risk factors and some corporate governance (Uwuigbe et al, 2019). Omoolorun and Abilogun (2017) and Aparna (2018) on diamond fraud theory. Also, fraud is a multifaceted phenomenon, whose contextual factors may not fit into a particular framework. Consequently, the fraud triangle should not be seen as a sufficiently reliable model for anti-fraud professionals.

In view of the above, there is a need for a study to identify a fraud mechanism to detect and predict fraud in financial statements.

#### REFERENCES

- Abiloro T, O, A. & Olorunfemi, O, E. (2021) Determinants of fraudulent financial reporting in Nigeria: integrating fraud triangle theory elements. *International Journal of Research and Innovation in Social Science* 5(12), 288-297.
- Adhariani, D., & Siregar, S. V. (2018). How deep is your care? analysis of corporations' "caring level" and impact on earnings volatility from the ethics of care perspective. *Australasian Accounting, Business and Finance Journal*, 12(4), 43–59.
- Anichebe, A. S., Agbomah, D.J. & Agbagbara, E. O. (2019). Determinants of financial statement fraud likelihood in listed firms. *Journal of Accounting and Financial Management*, 5(2), 1-9.
- Cohen, J., Ding, Y., Lesage, C., & Stolowy, H. (2010). Corporate fraud and managers' behavior: Evidence from the press. *Journal of Business Ethics*, 95, 271–315.
- Cressey, D. R. (1950). The criminal violation of financial trust. *American Sociological Review*, 15, 738- 743
- Fitri, F. A., Syukur, M., & Justina, G. (2019). Do the fraud triangle components motivate fraud in Indonesia? *Australasian Accounting, Business and Finance Journal*, 13(4), 63-72.
- Free, C. (2015) Looking through the fraud triangle: A review and call for new directions. *Meditari Accountancy Research*. 23(2), 175-196.
- Huang S. Y., Chi-Chen, L., An-An, C. & David C. Y. (2016) Fraud detection using fraud triangle risk factors. *Springer Science, Business Media New York*. 1-14.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Management behavior, agency costs and ownership structure. *Journal of Financial Economics*, Vol.3 No. pp. 305–360.
- Macedo, P. S. G., Inácio, H. C. & Vieira, E. S. (2022) A model to detect financial statement fraud in Portuguese companies by the auditor. *Contaduría y*, 67(3), 185-209.
- Manurung, D. T. & Hadian, N. (2013). Detection fraud of financial statements with fraud triangle. *In Proceedings of 23rd International Business Research Conference*.
- Nakashima, M. (2017). Can The Fraud Triangle Predict Accounting Fraud? Evidence from Japan. *Unpublished manuscript presented at the 8th International Conference of the Japanese Accounting Review*.
- Narsa, N.P.D.R.H., Afifa, L.M.E & Wardhaningrum, O.A. (2023) Fraud triangle and earnings management based on the modified M-score: A study on manufacturing companies in Indonesia.
- Rahman, A., Deliana, D.& Rihaney,N.(2020) Detection Of Financial Statement Fraud Triangle (Fraud Triangle) In Companies Listed In Indonesia Stock Exchange. *International Journal of Technical Vocational and Engineering Technology*, 2(1), 70-78
- Ramdany., Harmenawati, R. & Samukri (2021) Measuring the Level of Fraud On Financial Statements: Model of Fraud Triangle. (Case Studies on Companies Listed on the Indonesia

- Stock Exchange in 2014-2018) *Jurnal Ekobis: Ekonomi, Bisnis & Manajemen*, 11(1), 133-149.
- Renata, F. & Marlinah, A. (2022). Analisis Teori Fraud Triangle Dalam Mendeteksi Financial Statement Fraud, *E-Jurnal Akuntansi TSM2* (4), 671-86.
- Ricardo, R. & Suhendah, R. (2023) The effect of the fraud triangle in detecting fraudulent financial reporting in Indonesian banking sector companies. *International Journal of Application on Economics and Business*, 1(3) 1307-1317.
- Saputra, A. & Hermanto (2022) Pengaruh tekanan, kesempatan dan rasionalisasi keuangan terhadap manajemen laba: Jurnal Ilmiah Akuntansi dan Keuangan. 5(3), 1714-1724.
- Sianipar, P. B. H. (2022) Factors Influencing the Occurrence of Fraud: Employee Perceptions in the HG Business Group. *The Accounting Journal of BINANIAGA*, 07(1), 71-88.
- Siregar, E. & Surianti, M. (2022) Pendeteksian Kecurangan Laporan Keuangan dalam Perspektif Fraud Triangle pada Perusahaan Sektor Infrastruktur, Utilitas, dan Transportasi di Bursa Efek Indonesia. *Jurnal Akuntansi, Keuangan dan Perpajakan* 5 (1), 27-39.
- 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. *Corporate Governance and Firms Performance*, 13, 23–81.
- Sudirman, I. (2023) Detection of Fraudulent Financial Statements Through Pressure, Opportunity, Rationalization in Banking South Sulawesi. Proceeding Medan International Conference Economics and Business. *Entrepreneurship on Global Economics Development in the Era of Society*, 1(1), 581-590.
- Tuttle, B. & Dillard, J. (2007). Beyond competition: Institutional isomorphism in U.S. accounting research. *Accounting Horizons*, 21(4), 387-410.
- Utie, M. S. & Harahap, S.N. (2020) Analysis of fraudulent financial reporting using the fraud triangle (study case: PT Tiga Pilar Sejahtera Tbk), *Budapest International Research and Critics Institute-Journal*. 5(1).

**Cite this Article:** Suswam, BM; Ugwudioha, O (2025). Fraud Triangle and Fraudulent Financial Reports: A Review. *Greener Journal of Economics and Accountancy*, 12(1): 13-22, <https://doi.org/10.15580/gjea.2025.1.120824192>.