



Research Article

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## Fraud Pentagon: Detection of Financial Statement Fraud in a Firm

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### Abstract

The study examines conceptually the detection of financial statements fraud using fraud pentagon. The study discusses the relationship between fraud pentagon and financial statement fraud. The methodology adopted in this study is library research whereby relevant and extant literature related to the elements in fraud pentagon were reviewed in relation to financial statements fraud. In the search for literature, it was observed that the various elements of fraud pentagon such as pressure (financial targets, financial stability, institutional ownership and external pressure), opportunity (ineffective monitoring and nature of industry), rationalization (auditor switching and change of director), competence (the changes in the company directorship and the proportion of independent directors in the board) and arrogance (frequent number of CEO's picture and CEO duality) significantly affect financial statements fraud. This study recommends that fraud pentagon should be given the statutory support in order to address financial statements fraud.

**Keywords:** Fraud Pentagon and Financial Statement fraud

### 1. Introduction

Financial statement provides high-quality reporting information which is primarily financial in nature and useful for economically informed decision making. Therefore, the significance of financial reporting cannot be underestimated, and providing high quality financial reporting information is important since it will positively influence the providers of capital and other stakeholders in making investments, credit, and other similar resource allocation decisions which in turn enhances the overall business performance. The financial statements of an entity should be prepared with integrity and easy to understand by the whole stakeholders (Norwani, Mohamad & Chek, 2011).

The stakeholders rely on the financial statement which is expected to provide credible information about the corporate activities that took place in the organisation throughout the financial year (Vassiljev & Alver, 2016). In this era of globalization, the financial statements become very significant where the information communicated is used as the basis for making investment decisions. Unfortunately, the information contained in the financial statements may be vulnerable to the extent that the information presented has the likelihood of being bias. Consequently, this is often known as financial statement fraud where management uses accounting principles and guidelines in financial reporting to mislead financial report users to misunderstand the company's economic and financial performance (Dechow, Ge, Larson & Sloan, 2007).

Financial statement fraud refers to a global element that dwindles and plunges the net earnings and resources, legitimacy and reputation of the organisations into economic extinction wherever and whenever it happens (Nindito, 2018). Unfortunately, financial statements fraud accumulates investors' losses, having failed to achieve returns on their investments. Therefore, financial statement fraud has resulted in financial losses in most organisations (Ibadin & Ehigie, 2019). Corporate history, therefore, has experienced in the universal economic system various significant stages of scandals and financial statements fraud. However, financial statement fraud is a spall of a wide circle called fraud (Vassiljev & Alver, 2016).

The advancement in the detection and prevention of the causes of fraud started with the fraud triangle theory and then shifted towards the theory of fraud diamond but currently the theory of fraud pentagon has tried to redefine and refine the research on the detection of financial statement fraud. The concept of fraud triangle was developed by a criminologist called Cressey in 1953, who argued that someone does something (including cheating) due to underlying reasons which then results in trust violation; hence trust becomes a professional hazard. Furthermore, fraud diamond was developed to provide understanding for other factors that influence fraudulent behaviours. The theory of fraud diamond consists of pressure, opportunity, rationalization, and capability. It is said that pressure refers to the incentive to engage in fraudulent practices, meanwhile, opportunity opens the doorway to fraud, and incentive and rationalization can draw the person toward it. However, based on the fraud diamond theory, the fraudster also must have the capability to recognize the open doorway as an opportunity and to take advantage of it. Following the development of the fraud pentagon, Tugas (2012) proposed fifth element in fraud pentagon concept, which is the external regulatory influence, was captured succinctly in Ehigie and Ibadin (2015) when the external environment in which external regulating influence was considered. But, the new theory which explores more on the factors of fraud is Crowe's fraud pentagon theory that was developed by Crowe in 2011.

Moving ahead, studies previously conducted on corporate financial statement fraud were dominated by fraud triangle model as well as the fraud diamond model. Studies such as Ardiyani and Utaminingsih (2015), Abayomi (2016), Iqbal and Murtanto (2016) and Kusumawardhani (2013) research on fraud triangle and financial statement fraud while Ehigie and Ibadin (2015) and Sihombing and Rahardio (2014) examined with a proposal to include workplace environment fraud diamond but fraud pentagon have been examined by the following strand of studies such as Akbar (2017); Aprilia (2017); Apriliana and Agustina (2017); Christian, Basri, and Arafah, (2019); Heny Sri and Zenni (2020); Mukhtaruddin, Sabrina, Hakiki, Saftiana and Kalsum (2020); Nanda, Zenita, and Salmiah (2019); Nindito, (2018); Pera, Yossi, Irda and Desi (2017); Puspitha and Yasa (2018); Sarpta (2018) that try to confirm the effect of the five determinants in the fraud pentagon on the detection of financial statement fraud, consequently, these studies disclosed mixed and inconsistencies in their various findings which have motivated the study. This study therefore focuses on examining the effect of determinants of fraud pentagon model on the detection of financial statement fraud in firm.

The study is divided into the following; section one as stated above introduces this study, furthermore, section two discusses the financial statement fraud, while section three talks about fraud pentagon, then section four examine fraud pentagon and financial statement fraud, section five concludes this study.

## 2. Financial Statements Fraud

Financial statements fraud refers to the act of presenting financial accounting data that does not represent the actual and present performance and financial position of an organisation which cause the reported financial information not to be adequate and reliable for effective-decision-making (Omar, Mohamad, & Hesri, 2010). The nature of financial statement fraud is viewed from the perspective that it is a fraud committed when the annual audited financial statements is made up of misrepresented material facts or where the material facts have not been sufficiently and adequately disclosed in the annual financial statements of the company (Goel & Gangolly, 2011). The financial statements that have been manipulated have the likelihood of making investors to suffer huge losses hence, therefore, the invested capital will not attract any returns to the stakeholders' investment (Apriliana & Agustina, 2017). The body of Association of Certified Fraud Examiners (2016) in their pronouncement, mentioned that financial statement fraud is committed by the executives or the managers and employees and we refer to them as the perpetrators of fraud.

Quraini and Rimawati (2018) averred that financial statement fraud is misreporting that is intentionally committed in financial statement in a bid to mislead the financial statements users. In addition, financial statement fraud is normally committed due to the push to attain the goals and expectations of the management. Therefore, it is purposed to mislead the various investors and creditors by raising up the assets value and income recognition, and otherwise reducing the liability value and boosting up operational and production cost (Priantara, 2013).

The Association of Certified Fraud Examiner (ACFE, 2016) mentioned that financial statement fraud is the presentation of the company's financial situation with intentional misstatements by omitting the values of certain elements within the statements and with the intention of misleading the users of the financial statements. Financial statement fraud in the form of misstatements can either be overstated or understated and can also be committed by concealing the actual positions of the organisation. Financial statements fraud is motivated, encouraged and influenced by the diverse parties associated to the company which include those that are internal (such as employees and management) and those that are external to the company (such as vendors, customers and bankers) (Pera, Yossi, Irda, & Desi, 2017). These various drives and motivations for the financial statement fraud present a financial statement that looks good and can attract the attention of existing and potential investors. Dabor and Adeyemi (2009) emphasized that when there is separation of ownership from control in a business enterprise, as in the limited liability companies, there is the tendency for managers of these companies to engage in financial statements fraud to protect their interest at the detriment of the interests of the owners of the companies. The constant thing in financial statement fraud is change as it is a dynamic process that has multi-layers and penetrates into corporate procedures while the fraudsters find modern approaches to commit fraud and conceal their traces (Vousinas, 2019). Financial statement fraud results in huge losses in most organizations where fraud has occurred.

More so, the collapses of great companies such as AIG, Adelphia, Enron, WorldCom, Xerox, Lehman Brothers, and Freddie Mac, all in the United States of America- Amir-Mansour (in Iran), Anglo Irish Bank (in Ireland), Barlow Clowes and Thomas Cook Group Plc (in United Kingdom), Biovail (in Canada), Tyco International (in Bermuda) and Halliburton in Nigeria, has led to losses that worth billions of dollars and naira. Therefore, resulting in a long-term effect that is detrimental to all parties such as investors, stakeholders, the company itself, and even to the public (Ibadin & Ehigie, 2019).

## 3. Fraud Pentagon

The fraud pentagon model was developed by Crowe Horwath in 2011 to address the limitations in the fraud triangle and fraud diamond theories respectively. Furthermore, Crowe (2011) demonstrated the fraud pentagon model using the five factors that cause financial statement fraud, they include,

pressure, opportunity, rationalization, competence and arrogance. But the first three elements in fraud triangle were first put forward by Cressey (1953) in the fraud triangle model. The fraud triangle model can be remodelled and reshaped into fraud pentagon model that can detect financial statement fraud in a firm (Crowe, 2011). Whereas the features that support fraud detection include competence and arrogance. However, competence is a factor of opportunity that is capable of controlling the internal control and other situations in the company for its financial gain while arrogance involves the behaviour of greed, seniority and superiority by the executors of financial statement fraud (Crowe, 2011). The elements of fraud pentagon (such as pressure, opportunity, rationalisation, capacity and arrogance) are discussed below.

Pressure is the motivation to commit fraud and it has financial and non-financial nature (Vousinas, 2019). Therefore, pressure takes various forms such as high financial needs, need to report better results and pressure to meet set targets, frustrations related work environment, professional aspiration and the desire to reach it as fast as possible, while sometimes it is just a person's desire to prove he/she can defeat the system (Vousinas, 2019). In another view, Lou and Wang (2009) argued that organisations may hold incentives to manipulate earnings under the occurrence of the likely resulting situation such as; one, where the financial constancy of the organisation is endangered by economy and industry; two, when the management is pressured to meet the outlooks of stakeholders; and three, when the management or directors' personal financial state is overwhelmed by the entity's financial performance. Besides, pressure as an element of fraud pentagon is examined using the following factors financial target, financial stability, external pressure and institutional ownership (Akbar, 2017; Maghfiroh, Ardiyani & Syahnita, 2015; Sihombing & Rahardjo, 2014; Widarti, 2015). The factors of pressure such as financial target, financial stability, personal financial needs, external pressure and institutional ownership are discussed below.

Financial targets can be frequently expressed using the short-term targets that take occurs within organization in order to attain a targeted level of profitability. Furthermore, financial targets in a firm may motivate fraudulent intended employees to commit fraud, it puts pressure on them and because of the push to succeed employees will commit fraud (Diany & Ratmono, 2014). Pera, Yossi, Irda and Desi (2017) in another perspective maintained that better performance of management is determined by higher Return on Assets (ROA) (Widarti, 2015), therefore, this means that the wholistic business operations of the organisation have been efficient and effective. Therefore, better return on investments attracts the investors to invest in the company, consequently increasing the value of shares. However, targeting higher ROA, may make the management to manipulate the financial statements. Nindito (2018) showed that the better the company's internal financing ability, the less the likelihood of financial statement fraud, meaning that, companies with poor internal financing capability are likely to be highly dependent on external financing. Annisya and Asmaranti (2016); Apriliana and Agustina (2017) disclosed that where Return on Assets (ROA) proxied financial targets, it has no effects on financial statement fraud.

While, Sihombing and Rahardjo (2014); Apriliana and Agustina (2017) obtained a result that the quality of financial reporting improves corporate operational quality (such as modernising the information systems, executive search and employees' recruitment, and appropriate organisation's policy) in problem solving. The pursuit of firms to meet analyst expectations create undue pressure that consequently leads to significant increase in abnormal annual returns. Again, the target by management to attain the market standards and the controlling analyst expectations in the future results into high abnormal annual returns (Kaszniak & McNichols, 2002). In another perspectives (Lopez and Rees, 2002) in their studies demonstrated that when a firm's multiple earnings is applied to unexpected earning, it is significantly increases more than the negative unexpected earnings. Financial statements fraud is motivated when there is pressure on the company's management to meet analyst estimated earnings (Apriliana & Agustina, 2017).

Financial stability is described as the financial situation of an organisation in order to meet third party's requirement. Meanwhile, if an organisation maintains a constant financial condition, the value will increase, therefore rewarding the creditors, investors and the general public. Consequently,

it put pressure on the management to commit financial statement fraud when financial stability and or profitability are threatened by an economic, industrial, or operating entity situation. (Skousen, Smith & Wright, 2008). SAS No. 99 emphasized that management faces pressure to engage in financial statement fraud when it is envisaged that economic factors, industrial factors and other business variables are threatening their company's financial stability and profitability which may in turn ceased their corporate existence. The study of Sihombing and Rahardjo (2014) proxies financial stability using changes in total assets and they disclosed that changes in total assets affects financial statement fraud.

The frequent pressure experienced by companies are sometimes from external parties who provides them with additional finances as debts or external financing sources in order to remain competitive in the industry (Skousen, Smith & Wright, 2008). Pera, Yossi, Irda and Desi (2017) averred that leverage ratio discloses the total debt of the company. Therefore, a firm that experiences large debt alongside higher risk of losses may likely possess the potential for financial statement fraud since the company is faced with the challenge of reporting a robust and attractive profits in order to convince the creditors and other debt financiers that they have the capacity to pay owed debts. The high debt profile of the company indicates that in the near future the company will be unable to secure credit facilities since it could not offset the previous debt therefore resulting in high credit risk. In addition, a company's failure to pay off the debts or other long-term financial obligations will degenerate in to external pressure (Skousen, Smith & Wright, 2008). More so, management drive to explore business opportunities (such research and development, and capital expenditure financing) in order to remain competitive in the industry may motivate them to depend on external source of finance (Skousen, Smith & Wright, 2008). The motive to commit financial statement fraud get its leverage when management seek to access cheaper cost of capital or the possibility of breaching debt agreement. External pressure is calculated using leverage ratio which is stated as the ratio of total debt divided by total assets. Indarto and Ghozali (2016) disclosed that financial statements fraud is significantly affected by external pressure. However, Pera, Yossi, Irda, and Desi (2017) shows that the relationship between the external pressure and the detection of financial statements fraud is in the opposite direction. The study of Oktarigusta (2017) revealed that financial statement fraud is not caused or affected by external pressure.

More so, institutional ownership within the company may create undue pressure on the company itself (Akbar, 2017). However, occurrence of pressure is due to the fact that management have higher responsibility due to the commitments it owes not only to the individuals, but also to the institution. In most cases, the larger shareholdings are owned by institutions rather than the individuals and this therefore pushes the management to conduct many businesses in order to achieve wonderful results that will enable them not only to make more profit but also to retain their investors and not to lose them and to achieve this goal the management engage in the window dressing of the financial statements through manipulation. The pressure from the higher percentage of the institutional shareholders may likely affect the process of preparing financial statements. It is apparent that the management engages (Boediono, 2005) in the perpetuation of financial statement fraud.

However, previous studies such as (Akbar, 2017; Diany and Ratmono, 2014) show that pressure is positively related to financial statements fraud with a significant influence. Therefore, an increase in pressure translates to an increase in financial statements fraud. This therefore means that some companies have the likelihood of committing financial statements fraud when they are faced with the pressures that arise as a result of financial targets, financial stability and pressure from institutional ownership (Diany & Ratmono, 2014).

Opportunity is a weakness in the internal control system that allows the management to commit financial statements fraud. Companies with weak internal controls indicate that they have many loopholes that provide opportunity for management to manipulate financial statements (Nindito, 2018). Again, Lou and Wang (2009) advocated that opportunities may result from the various environments that encourage different chances to perpetuate financial statement fraud.

However, most intricated transactions are followed with great inherent risk due to the partaking in high notch of management verdict and partiality (Diany & Ratmono, 2014); also, complex business dealings may present high risks of substantial misstatement due to financial statement fraud because of its susceptibility to manipulation by management. A company with good corporate governance mechanisms will reduce the potential for financial statement fraud (Beasley, Corecello, Hermanson & Lapidés, 2000) while fraud companies have poor governance in the year prior to fraud detection (Farber, 2005). The position advanced in the study of Lou and Wang (2009) indicated that controversial financial reporting transactions may be followed with high corporate internal risk as a result of its involvement in high level sentimental management judgement. Furthermore, controversial financial transactions are associated with material misstatement risk resulting into financial statements fraud since it is susceptible to management manipulations.

Besides, the internal auditor is significant in the support of the internal control functions. However, the internal auditor is anticipated to perform an effective role in deterrence, detection, and reporting of financial statement fraud. Beasley, Carcello and Hermanson (2000) discovered that the existence of internal audit in fraud companies was less common when compared to non-fraud companies. Again, high internal auditor frequent removal and appointment unfolds that the organizational structure of a firm is wobbly. Moreover, internal control mechanisms are lacking as a result of high turnover rates of internal auditor. The turnover incidence of internal auditor is well-defined by the number of internal auditor switch within the past years of business events (Beasley, Carcello & Hermanson, 2000). Akbar (2017) mentioned that, the number of members in the audit committee and the nature of industry are the two factors that proxies opportunity. The factors of opportunity such as ineffective monitoring, internal control weakness, multiple directorship, board of director turnover and nature of industry are discussed below.

Pera, Yossi, Irda and Desi (2017) opine that, ineffective monitoring refers to the conditions in which there is absence of an effective accounting and internal control systems in an organisation, thus, this enhances the perpetration of financial statements fraud. More so, the board of directors of the company is shadow with duty of the implementing corporate strategy, conduct oversight function and implementing accountability. However, Sambera and Meiranto (2013) argued that an independent board of directors increases corporate effective supervision in an organisation specifically when oversight functions are carried out on the management, mostly when the independent directors singular stand which make nobody being able to influence it decisions (Sihombing & Rahardjo, 2014). According to Skousen, Smith and Wright (2008) companies with a smaller number of independent board of directors have the likelihood of committing financial statement fraud. Pera, Yossi, Irda and Desi (2017) in their study maintained that infective monitoring shows a positive relationship with financial statement fraud. Interestingly, a board with an independent director as a member will enhance the credibility of assurance on the board's oversight functions. Nevertheless, the weakness in corporate monitoring result in fraudulent practices that is carried out by the management who act defiantly by perpetuating financial statement fraud in the organisation (Sambera & Meiranto, 2013). However, the agency theory has explained that the company performance increases when the owners and other stakeholders conduct effective monitoring of the company's operations. More so, the internal control and accounting systems effectiveness determines how efficiently and effectively the monitoring of the company will be within the organisation.

Unfortunately, weaknesses in the internal controls create opportunity for management to manipulate transactions and report there-of a fraudulent financial statement. More so, in most cases, the audit committee existence is obviously anticipated to mitigate the incident of financial statements fraud, consequently, therefore the weak supervision on the part of audit committee members creates the vacuum for management to commit financial statement fraud. Annisya, Lindrianasari and Asmaranti (2016) support the position that opportunity factor has significant effect on financial statement fraud.

The nature of industry refers to the ideal condition and comfortable financial position of the



firms position in the industry (Pera, Yossi, Irda, and Desi, 2017). Specifically, account receivables are one of the determinants of the nature of industry that provide considerations that a company has an attractive and better financial position. Skuosen, Smith and Wright (2008) averred that a better company is the one that will compress the account receivables value in order to increase the company's revenue flow of cash. Critically, a company with large accounts receivables values to sales indicates a that account receivables is a current asset with high risk of financial statement fraud (Dalnial, Kamaluddin, Mohd-Sanusi & Khairuddin, 2014). For instance, where a company's high account receivables to sales ratio indicates that the company's management is likely to be engaged in financial statement fraud. Sihombing and Rahardjo (2014) in their view maintained that financial statement fraud is positively influenced by the nature of the industry whereas the nature of the industry is measured with variations in the account receivables to sales ratio.

The review of various estimates in the financial statements (such as obsolete inventories, depreciation and bad debts) eventually opens the doors for management to manipulate financial statements, this may be in the form of falsifying the value of economic useful life of the company's assets. However, the nature of industry provides the windows that enhances the likelihood of financial statement fraud. Therefore, inventories are forms of current assets and it is selected as a signal among the factors that affect financial statement fraud due to its exposure to theft and fraud, however, the quantities of a company's inventories are normally huge and has immense impact on both the statement of financial position and the statement of profit or loss (Ardiyani & Utaminingsih, 2015). Pera, Yossi, Irda, and Desi (2017) indicated that there is opposite directional relationship between the nature of the industry and financial statement fraud.

Rationalisation is a justification for an unethical behaviour that have committed against the company by the management (Pera, et al. (2017). Rationalisation, Lou and Wang (2009) emphasized that boldness or self-assurance leads one or more individuals to sensibly perpetuate fraud and at the same time justify their unethical actions. Management integrity and attitude are major determinants of the quality of financial statement, however, if the manager's veracity is queried, the dependability and trustworthiness of financial statement is disbelieved. According to Skousen, Smith and Wright (2008) rationalization is said to have a subjective judgment for the company and where the judgment is subjective the decision made is sentimentally influenced and therefore reflects in the firm's accrual figure. In a tensed competitive social and corporate environment where profit is sought at any cost by an organisation, it is therefore easier to admit fraud as an acceptable way and manner to achieve business targets. Following therefore, rationalization consists in the possibilities managers have to justify their fraudulent acts to themselves. The resignation of an auditor proxied rationalisation and it was discovered that it is positively associated with financial statement fraud (Shu, 2000). Interestingly, the number of auditors switch, audit opinion, related parties transactions, founders on board, change of director and accrual levels are proxies for rationalization and these are discussed as follows.

An independent auditor is a relevant supervisor on financial reporting and the relationship between manager and auditor denotes the rationalization of firm management. Lou and Wang (2009) predict that change in auditor is directly connected to the likelihood of fraud. Yet, Shu (2000), also, discovered that auditor's resignation is directly associated to likely litigation. However, the numbers of auditor switch in the corporate financial as a measure for rationalization therefore forecast that change of auditors in the event year is positively correlated to the likelihood of financial statements fraud (Lou & Wang, 2009).

Skousen and Wright (2006) opine that the accruals level is management's approach of making decisions which concern financial statements. Earnings management is viewed as normal when performing the operations of the company then more serious actions might be the company's next step. The excessive use of accruals is often noted in auditing reports (Skousen & Wright, 2006).

Capability/Competence is the employee's ability to override internal controls, develop a more sophisticated concealment strategy and further control the social situation to his or her advantage. The occurrence of financial statements fraud arises from the capability of a company officer who has

a significant function and role in the firm to coordinate the fraudulent intent. However, capability refers to the high-level capability and position of the fraudster committing financial statement fraud in an organisation. Therefore, the positions of the Chief Executive Officer (CEO), executive directors and regional/function heads in most cases may be a fundamental decisive determinant in the occurrence of financial statement fraud. These company officers thereby use the advantages of his/her offices to lure their colleagues to carefully manipulate the company's financial statements. However, some prior studies which relates to capability, the studies disclosed that capability has a positive significant relationship with the likelihood of financial statements fraud (Abdullahi, Mansor & Nuhu, 2015). Furthermore, the changes in the company directorship, CEO age, CEO education, CEO tenure and the proportion of independent directors in the board is used to proxy capability. These are discussed as follows.

However, the change in a company's directorship involves transfer of duties and responsibilities from an existing and retiring director to a newly appointed director with the corporate aim of improving the company's performance and efficiency (Lou & Wang, 2009). In contrary view (Nurbaiti & Hanafi, 2017) opined that a change in the company board directorship may result into a stressful period that has negative effects and may open an opportunity for the occurrence of financial statement fraud. Therefore, this is consistent with the findings of the study of Nurbaiti and Hanafi (2017) that states that the change of corporate directorship has a significant effect on the level of accounting irregularities. Financial statement fraud can be minimized by better supervision mechanism, hence, the believed that an independent board improves the effectiveness and efficiency of supervision of the company. Moreover, the inclusion of outside directors in the company improves the effectiveness of the board in oversight managerial functions to prevent and detect financial statements fraud. Accordingly, the increasing percentage of independent board of directors significantly influence the level of fraudulent financial reporting (Wilopo, 2004).

In most companies, frequent changes in directorship positions are among the company's strategies and medium of improving corporate performance and the effectiveness of periodic reporting in the organisation. However, the fraud pentagon model states that the ability and position possessed by corporate board in the company makes available to it more financial and economic information that enable them to perpetuate financial statement fraud. Therefore, the shareholders at the annual general meeting determine the changes that will take place in the various directorship roles in the company. The changes in the diverse directorship positions in the company has a close relationship with corporate interest and politics which may result in conflict of interest (Saputra, 2016). Interesting to note that, directorship change in a company may result into conditions that may create enabling opportunities for the individuals to achieve their desired advantage which is unethical. Ruankaew (2016) also proves that the change of corporate directorship has effect on financial statement fraud.

Arrogance as an element of fraud pentagon involves the personal behavior and display of greed, superiority and seniority resulting from the executed financial crimes by the top management believing that there is inadequate application of the company's policies and procedures (Crowe, 2011). Specifically, the determinants of arrogance are the frequency count of CEO's picture, CEO narcissism, CEO political connections and CEO Duality. It is prevalent and found directly among persons occupying top management portfolio in an organisation (Tessa & Harto, 2016). For instance, CEO may tend to be more zealous to display the status and position he occupies in the company because they are afraid of losing their relevance (such as their original status and positions) in the company. In another perspective, the organisational performance may be affected by the CEO arrogance which may further create opportunity for the likelihood of financial statement fraud. Tessa and Harto (2016) found that the frequent number of CEO's pictures as an indicator of arrogance has an effect on financial statement fraud. Arrogance is proxy by CEO duality, CEO duality, CEO narcissism, CEO political connections and CEO pictures and these are discussed as follows.

CEO duality is the characteristic that ascertains the existence and non-existence of leadership that doubles as the chairman and CEO in a corporate board (Apriliana & Agustina, 2017). Ruankaew



(2016) was of the view that when a company Chief Executive Officer occupies double leadership positions in an organisation's board, it is an indication of a CEO that has strong and significant influence on the organisation's policies and procedures. Furthermore, management override may arise from such circumstances, therefore empowering the CEO to commit financial statements fraud in the company. Sitorus, Firlri and Ramadhan (2017) disclosed that the likelihood of financial statement fraud is significantly influenced by CEO duality.

Explaining the measurement of arrogance, fraud pentagon model employed the number of CEO photographs that form part of the contents of the annual financial statements of an organisation. Apriliana and Agustina (2017) opines that most CEO uses this medium to expose his/herself to the public the corporate seat he occupies in the organisation and chases the retention of the portfolio. Therefore, the height of arrogance which may be indicated by greed, seniority and superiority may result in the likelihood of financial statement fraud in the organisation because the CEO believes that no internal control procedures apply to him, hence overrides the control. Marks (2012) argues that there is the likelihood that the CEO will do everything in his power in order to maintain his position and place, while Tessa and Harto (2016) has proved that the numbers of CEO's photos have a significant effect on financial statements fraud. Interestingly, a Chief Executive Officer (CEO) who dominates the pages of the audited financial statements with many of his photos indirectly indicates the greediness, superiority and seniority of the Chief Executive Officer. The study supports the view that the duties and responsibilities of corporate leaders are primary determinants of successful organisational performance, thus, good and responsible leaders does crave for honour and respect from the employees, he believes in togetherness and participate in building the corporate image.

#### **4. Fraud Pentagon and Financial Statement Fraud**

Nanda, Zenita and Salmiah, (2019) disclosed that pressure, opportunity, arrogance and rationalization have significant negative relationship with financial statements fraud while competence shown no significant relationship with financial statements fraud. Therefore, the human attributes which include pressure, arrogance and rationalization may motivate management of a firm to commit financial statements fraud. Heny, Sri and Zenni (2020) averred that financial target, external pressure, quality of external auditor, change in auditor and the board directors have insignificant relationship with financial statements fraud while the frequent number of CEO's photograph has effect on financial statement fraud.

However, Yuniarti, Sari, Kesuma and Damayani, (2018) shows that nature of industry significantly influences financial statement fraud in a firm, whereas the other independent variables such financial stability, financial target, external pressure, managerial ownership, ineffective monitoring, change in auditor, change in directors, and frequent number of CEO's picture have no influence on financial statement fraud.

Meanwhile, Puspitha and Yasa, (2018) proved that external pressure, ineffective monitoring, auditor switching, change of director, and frequent number of CEO's picture can predict financial statement fraud, while, financial stability, personal financial needs, financial targets, nature of industry, and organizational structures cannot predict financial statement fraud. In addition, Christian, Basri and Arafah, (2019) proved empirically that financial targets, personal financial needs, external pressure, financial targets, ineffective monitoring, nature of industry, multiple directorship, board of director turnover, auditor switching, audit opinion, related parties transactions, founders on board, change of director, CEO age, CEO education, CEO tenure, frequent number of CEO's picture, CEO narcissism and CEO political connections have significant effect on corporate fraud.

The study of Sarpta (2018) proxied rationalization by auditor opinion which show influence on financial statement fraud while pressure was proxied by financial stability and external pressure, opportunity was proxied by ineffective monitoring, capability was proxied by change of directors, and arrogance which was proxied by the frequent number of CEO's picture show no influence on financial statement fraud. More so, Mukhtaruddin, Sabrina, Hakiki, Saftiana and Kalsum (2020) shows that

financial targets, external pressure, ineffective monitoring, auditor change, changes in directors, and numbers of CEO's pictures have no significant relationship with financial statement fraud. Lou and Wang (2009) stated that pressure proxied by analyst forecast error and directors pledged ratio significantly affect financial statement fraud while, opportunity proxied by related party transaction significantly affect financial statement fraud, in addition, earnings restatement and auditor changes serving as a proxy for rationalization significantly affect financial statement fraud.

## 5. Conclusion

This study reviewed the determinants of financial statement fraud using the fraud pentagon theory. In the study, the fraud triangle model was x-rayed in line with Cressey 1953 element of fraud triangle that indicate trust violation by fraudulent individuals that occupy positions of trust. While, the fraud diamond model was an extension of fraud triangle that had the inclusion of capability element as developed by Wolfe and Hermanson in 2004. Furthermore, the paper examined the weaknesses of the aforementioned model as observed in the information exploration of the existing and relevant literature. The study supports the position that the fraud pentagon model propounded by Crowe (2011) expanded the fraud diamond by introducing the element of arrogance. The study, therefore observed that pressure is measured by variables such as financial stability, financial target, institutional ownership and external pressure, therefore the study believes that these are sufficient and reliable in detecting the likelihood of financial statement fraud. More so, the study reviewed opportunity and observed that it is measured by variables such as the number of the audit committee members and nature of industry, the study confirmed that these factors are imperative in the prevention and detection financial statement fraud in an organisation. Further, the study observed that rationalization measured with variables such as the number of auditors switch and accrual levels helps to detect the likelihood of financial statement fraud. In addition, further observation discloses that competence is measured by variable such as change of corporate directorship, the study supports that this has significant influence on the detection of the likelihood of financial statement. Finally, arrogance is measured by variable such as CEO's pictures, the study joined the view that this has significant effect on the likelihood of detecting financial statements fraud. The study contributes to the literature of fraud pentagon by supporting the argument that fraud pentagon model is sufficient and reliable in the detection of the likelihood of financial statement fraud.

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